The efficacy of
holistic learning strategies
in the development of church leaders
in Mozambique: an action research approach

by

M. Margaret Scott

Submitted in fulfillment
of the requirements for the degree of

Philosophiae Doctor (PhD)

in

the Faculty of Education

at the

University of Pretoria

Supervisor: Dr. P. H. du Toit

March 2006

DECLARATION

I declare that "The efficacy of holistic learning strategies in the development of church leaders in Mozambique: an action research approach" is my own work and that all sources were acknowledged.

………………………………..…   …………………………………
      signature   date

Student Number 23315556

The efficacy of
holistic learning strategies
in the development of church leaders
in Mozambique: an action research approach

by

M. Margaret Scott

Degree: Philosophiae Doctor
Department: Curriculum Studies
Supervisor: Dr. P. H. du Toit

SUMMARY

This Participatory Action Research (PAR) project focused on "holistic learning" which includes "social" and "spiritual" learning and "whole-brained" learning. Broadly interpreting and applying the four-quadrant brain model of Herrmann (1994), and other models of the brain, my study seeks to understand *whether*, *to what extent* and *how* learning can be advanced by deliberately employing holistic learning strategies to narrow the gap between theory and practice, between left-brain and right-brain learning, and between cognition and emotion. I introduced *tri-dimensional (3-D) practice* as the combination of using *holistic learning strategies* in *cooperative learning groups* within *spiritual learning environments.*

The site of this PAR study was the network of cooperative learning groups in Mozambique within the educational system of the Church of the Nazarene. Facilitators were trained to use six specific "holistic learning strategies": *group discussions* of various types, *praxis* (as reflection-dialogue-action), *teamwork*, *rehearsing integrity*, *singing-for-learning* and *classical spiritual disciplines* within *cooperative learning groups*, also a holistic learning strategy. These aspects are typical of the widely used model of Theological Education by Extension (TEE), refined in this study. According to data gathered in a large hybrid survey, 97% of the 595 respondents to this question responded favourably in terms of the skills of these facilitators even though the average number of years of their formal schooling, 7.7, would normally be considered "minimal".

The study generates findings to support the position that holistic learning strategies enhance the quality of adult learning, at least in settings like those in Mozambique in which the facilitation of learning was 1) bilingual (Portuguese and maternal language), 2) focused on learners who are leaders-in-training, 3) deliberate in spiritual content and ambient, and 4) conducted by minimally-schooled facilitators in cooperative learning groups. The findings, from the responses recorded in qualitative phases of the research, corroborated by descriptive statistics, indicate that the efficacy of holistic learning strategies is related to certain modes of mental activity like whole-making, categorising, and others.

This PAR project was conducted within an original research framework, Arboric Research, which takes into account the dynamic, fluid and organic nature of human systems, recognising that infrastructures in which the research takes place are different at the end of the study than at the beginning, like observing the "sap" within a growing grapevine or a tree.

Key terms: Participatory Action Research, whole-brain learning, brain-based learning, spiritual learning, adult learning, hemispheric asymmetry reduction, Theological Education by Extension (TEE), Mozambique*,* facilitation of learning, Arboric Research Design.

TABLE OF CONTENTS

Deleted:

Chapter 3 Participatory Action Research (PAR)
                Framed as Arboric Research

Chapter 4 Empirical Research Findings

Chapter 5 Synthesis and Conclusions

List of Tables

viii

List of Visuals

List of Figures

Appendices

Acknowledgments

Sculpture expresses. Sculpture in southern Africa frequently expresses a theme which was new to me when my husband and I moved from Romania to Mozambique in 2000. The sculptures, usually of ebony, stand vertically as intricately carved tubes of people piled up one on top of another. At the outdoor artisans fair, I asked a craftsman to tell me who the people are. He explained that "we" are the people at the top, the present generation; the other figures below "us" represent those, living now and in previous generations, who helped us to live and to stand. Connectedness to those living and to those whose lives before ours contributed to who we are – this theme in sculpture introduced me to the friendly worldview which affects me everyday as I live and work among Mozambicans and as I present this report to you of research conducted in their setting.

I have been told that "PhD programmes produce people not papers". Therefore, in a truly African way, I gratefully acknowledge the large, intricate "pile of people" who are part of me completing this work:

- the esteemed educators who lifted me higher in order to see the vision they had for education by extension in Mozambique, all "reverends" of the Church of the Nazarene: P. Ken Walker, Paulo Moises Sueia, Simeão Mandlate
- others who also learned from the three above and who became my colleagues, co-researchers, co-facilitators of the vision: Filimão Chambo, Bonifácio Mirashi, Eugénio Duarte, Margarida Langa, Albino Banda, Glória Macia, Lévy Mahalambe, Jr., Manuel Vale Afonso, Josias Langa, Enoque Sombreiro, João Manonga, Joinha Chaguala, Benjamim Baera, Carlos Raimundo, Gabriel Leme, Sérgio Pereira
- our missionary colleagues, who taught us the practics of happy living in Mozambique: the Restricks, Fillmores, Perkins, Troutmans, Bauzas, Moshers and Buchanans
- the 1,800 monitors, learners, leaders across the country who have cooperatively put up with five years of questions and surveys
- the excellent men and women of God, Mozambicans and non-Mozambicans, who make systems of education in the Church of the Nazarene responsive to the demands and the ideals of holistic ministry
- academic advice and guidance from all of the faculty members at the University of Pretoria, investing time in the PhD support sessions, and particularly the Dean, Dr. Jonathan Jansen, who chiseled and shaped the final product, and my supervisor, Dr. Pieter du Toit, who has been unswervingly patient, encouraging and optimistic about the process and product of the research as well as the person (me)
- unique, personal, responsive administrative assistance from Ms. Jeannie Beukes
- our children, Andrea Scott Popa, Cristian Popa, Megan and David Scott and their little daughters, our granddaughters, who encouraged their mom/grandma to "write her book" when Stateside in their homes and never once complained
- technical and home-making help that our sons, Joel and Nathan Scott, gave when they came to visit in Mozambique
- our "forever friend", Linda Braaten, for helps too varied and frequent to mention
- my pastors and friends, Randy and Robbie Craker, always with us, wherever we live
- Betty Harris Hillery, my mom, the "excellent elder" and ultimate journalist, soon to complete 60 years of writing for our hometown newspaper, Jo Scott Mills, my other mom, the excellent home-maker, our dads, passionate about their hobbies, wives and children, George Harris and Paul Scott; our bonus dads, John Hillery and Will Mills
- God, giver of everything we have to write about, and who gave me…
- Jon Scott, my co-adventurer in life's journey. What a joy to ride with you!

My deepest thanks to each of you.

Chapter 1 Orientation to the Study

1.1   Introduction

This Participatory Action Research (PAR) study questions the efficacy of holistic learning strategies to promote the learning of developing leaders in the context of a developing country. My study seeks to understand whether, to what extent and how learning can be advanced by deliberately employing holistic learning strategies to narrow the gap between theory and practice, between left-brain and right-brain learning, and between cognition and emotion.

I open the field of adult education to *tri-dimensional (3-D) practice* as the dynamic combination of *holistic learning strategies* in *cooperative learning groups* within *spiritual learning environments*. I examine the relationship of each of the three constructs to holism and discuss the limitations of each. From a virgin research context extending throughout Mozambique, I gather empirical evidence which explores the efficacy of holistic learning strategies within 3-D practice with adult learners as administered by facilitators with minimal academic preparation.

My study also undertakes to test and refine the widely used model of Theological Education by Extension (TEE) by giving attention to problems cited by Kornfield (1976) and Gatimu, Gachegoh, Oyiengo, Kithome and Suwa (1997), and to apply my empirical research to issues cited by Brookfield (1995). Each of these issues will be briefly discussed in Section 1.3.

1.2   Critical Questions

In order to logically explore the efficacy of holistic learning strategies within the conditions of the research context, I formulated research questions to guide the study. "*How do holistic learning strategies facilitate adult learning?*, the major research question, would have been presumptuous to ask without first asking, *if*, in fact, holistic learning strategies are likely to facilitate adult learning. If they do facilitate learning, then the major question has a logical base – *How* do they facilitate adult learning?

Another preliminary question guided attention during the study to certain limitations that were inherent in it: *To what extent can holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers?* The wording of this second question recognises that the minimal preparedness of the trainers who utilise the holistic learning strategies must always be taken into consideration. The minimal formal schooling of the facilitator/trainers would probably mean that certain holistic learning strategies would be more accessible to them than others. The *extent* to which holistic learning strategies advance learning infers quantitative response but an accurate resting base line for the "learning" of the research population scattered across Mozambique was not possible to measure so findings towards the answering of *extent* are inferred, not measured numerically or comparatively.

1

1.3 Rationale

The rationale for this study has three sources. First is the contextual rationale because a global paradigm shift is taking place in the religious / societal / educational context of the research population of learners, who are introduced in the following paragraph, a shift which opens the door for them to engage in learning as they have not been able to do previously. The second rationale is described in Section 1.3.2 and is pragmatic – to refine, within the confines of the contexts of Mozambique, with a model which has had success with similar populations in other places with facilitators of other training. The third rationale is scholarly, contributing to research on *adult learning* or *learning,* particularly as related to recommendations by Brookfield (1995), as briefly explored in Section 1.3.3.

1.3.1 The Contextual Rationale

The title of my research [italics mine], "The efficacy of holistic learning strategies in the development of *church leaders in Mozambique*: an action research approach" implies the contextual rationale. Most of the learners are members of the Church of the Nazarene in Mozambique, and all of them are enrolled in the educational system of this international denomination which makes the Church of the Nazarene their over-arching theological and educational context, as well as one of their social contexts. The learners in the population are called church leaders in *development* because they are either in the process of being prepared for positions of leadership or they are already serving in positions for which they have had little or no training.

In the 1980s, the Church of the Nazarene began to face the reality that the dozens of Nazarene educational programmes which were preparing pastors for life-long ministry were inadequate at several points. The first lack was quantitative; there were not enough programmes to train pastors for the explosive growth taking place in some of the more remote and less developed regions of the globe (Walker 2000, RIIE 2003). Other problems in these areas included too few trainers qualified to train pastors and little material developed for pastoral training. At the other extreme, head-knowledge seemed to have taken priority over heart-experience as pastors were succumbing to moral failures; others had excellent academic records but failed in ministerial skills like how to care for their parishioners or how to run a board meeting. Still others seemed to know enough and to know how but lacked an awareness or ability to read their context, so failed at relevance (Vail 2000, Esselstyn 2003). The Church of the Nazarene was not alone in recognizing shortcomings in theological education. Noelliste (1993:5) recognizes "the growing dissatisfaction being voiced in many circles regarding much of what theological education does…[it] is being assailed for a plethora of faults: lack of purpose, the disparateness and inadequacy of its content, disconnectedness with the community of faith, insensitive policies, ineffective teaching methods, and many others. From Germany, another Evangelical educator notes similar problems (Schirrmacher 1999:4).

Systemic changes were needed in the Church of the Nazarene to prepare a greater number of pastors worldwide to staff the hundreds of new churches and to embrace diversity more equitably. Training programmes for trainers and learners needed to be developed which would extend pastoral preparation to populations

2

which had been deprived of formal education and who did not speak a major world language. Overall, pastoral training programmes needed to facilitate the spiritual formation of the ministerial candidates as well as their knowledge and know-how.

On the global level, Nazarenes voted in 1997 at the twenty-fourth General Assembly to shift the hundreds of its pastoral training programmes in the world to Outcomes Based Education. The exit outcomes of these programmes described what the ideal Nazarene pastor would *KNOW*, would *BE* and would *DO*. In order for Nazarene educators around the world to have a guide to help contextualize the programme outcomes to fit the diverse constituencies, committees created a tool called the *International Sourcebook for Ministerial Development* (Bowling 1997, Esselstyne 1999).

Nazarene educators around the world are now in the process of developing new curricula. With Nazarenes in more than 150 world areas, publishing holiness literature in 97 languages, the task of restructuring curriculum is a formidable one. There are 56 Nazarene educational institutions around the world in forty different countries in which 497,597 learners reported in 2006 (Stone 2006).

Each Nazarene "Region" ("Africa" is a Region) has a committee to assist in this development. The advisory groups established are called Course-of-Study Advisory Committees (COSACs). Identifying a process to enhance the achievement of stated outcomes was definitely a big step forward, but there is, still, a long road ahead. In Mozambique most of the members of the PAR teams and I are Nazarene educators. We sit on several committees in different parts of Mozambique and Africa in which we engage in dynamic discourse and discovery with other educators involved in this process and we seem to be wrestling with similar questions in several different places.

Since 2000, more than 300 pastors have been trained to train others to pastor in Mozambique by myself and other members of the several PAR teams I have led. These pastor trainers are called "monitors' and are currently teaching 1,272 Nazarene learners in 97 local churches which serve as educational centres of the extension system called "Nazarene Bible Institute of Lusophone Africa" (IBNAL).

Our team's normal access to the larger student population is through these monitors who speak the maternal languages of the leaders. The monitors, with whom we have established rapport through their period of training, have the linguistic and functional capabilities to extend our research deep and repeatedly into rural pockets of the country. Through these monitors, we are discovering more about how learning takes place with adults in contexts like those in rural settings in Mozambique. Other monitors and centres are located in Angola but are not part of this study.

The "classroom situations" of these Nazarene learners in Mozambique are surely some of the most unique imaginable. Although we PAR team members usually work with the monitors, we occasionally test material directly among these learners. In 2001, I field-tested a newly designed course with a group of 70 adults in southern Nampula Province. In a mud-brick little church with four holes for windows the learners sat hour after hour on straw mats on the mud-packed floor. Most of them were already serving as pastors; some of them were barefoot and all

of them seemed to be hungry − hungry to learn! They said they yearned to be pastors who are trained for what they are doing. Their physical setting left everything to be desired but their exemplary motivation to learn keeps those of us on the PAR teams "laying down track before their train" so they may arrive at their destination.

At the outset of this research, some aspects of this learner population were known, others presumed:

- The groups of learners which study together have divergent academic histories; some of them have little formal schooling, others have considerable, this diversity is likely representative of most of the learning groups.
- The majority of the learners presumably
    - have a low level of schooling,
    - are at least 15 years old with the majority being mature adult learners, older than 15,
    - are already serving as pastors.
- The aspect presumed to be common to all of the learners is their motivation to spiritual values, specifically to Christian values.

Besides informing Nazarene educators within the Nazarene educators outside of Mozambique, this PAR project also informs those within the system by enabling the facilitators and the learners to share experiences across geographic divides on the national level. The learners and trainers in the Nazarene Bible Institute of Lusophone Africa (IBNAL) are enabled by the results of this study to better understand how their own learning takes place encouraging them to exercise their service to God with greater integrity and competency to all the people of their communities and their parishes.

1.3.2 The Pragmatic Rationale

The second rationale is pragmatic − to test and refine the model of Theological Education by Extension, the "TEE Model". This informal system of training Christian leaders has had wide international application on other continents and across Africa, including in Mozambique. At an All-Africa Conference of Theological Educators in 1990, a list of weaknesses in the TEE model, compiled by Kornfield in 1976, was presented for discussion. The weaknesses included several related to the facilitators being sent out from a residence institution to outlaying extension centres. My PAR research attempts to refine the TEE model by taking into account these recognized weaknesses and modifying the flexible parts of the model to improve it. Besides the weaknesses compiled by Kornfield, another problem with TEE programmes, cited by Gatimu *et al* (1997:14), is the lack of academic recognition outside the TEE programme. This aspect is also taken into account in this study.

I acknowledge at the outset of this research a third and broader-based limitation described by Mkabela and Luthuli (1997:54): "language has played a primary role in hampering African education…this calls for a search for alternatives to improve the situation and to allow mother-tongue instruction to come to the fore". Within the model the PAR team members implement to observe holistic learning

strategies in this research, the facilitation of learning in the mother-tongues of the adult learners of my population receives deliberate and repeated attention.

1.3.3 The Scholarly Rationale

The third rationale is scholarly, seeking to contribute a different and valid perspective on *adult learning.* Brookfield , a renowned specialist in adult learning, (1995:7) suggests ten issues which need to be addressed if research on adult learning is "to have a greater influence on how the education and training of adults is conducted". My research is conducted to add knowledge to five of the areas which Brookfield identifies (1995:7-8):

- Other cultural perspectives to break the Eurocentric and North American dominance in research in adult learning;
- Solidify qualitative studies by means of survey questionnaires or experimental designs;
- Work on spiritual and significant personal learning;
- Understanding adult learning as a socially embedded and socially constructed phenomenon, and
- Attention to the interaction between emotion and cognition in adult learning.

Brookfield argues that the attempt to construct an "exclusive theory of adult learning − one that is distinguished wholly by its standing in contradiction to what we know about learning at other stages in the lifespan − is a grave error". He proposes that variables other than chronological age may be more significant in explaining how learning occurs. He cites (1995:1) "culture, ethnicity, personality and political ethos" as potential variables of significance, but there may be others.

Therefore, the enquiry constructed across the experience of this project seeks to contribute knowledge on the scholarly exploration about how adult learning takes place. If this research shows that holistic learning strategies do enhance learning, including the achievement of complex outcomes like attitudes and character traits, then the strategies which are verified as effective will be of interest to many educators, particularly of adult learners, and to other educators in the Church of the Nazarene and other similar contexts. The results of this research will also interest educational providers and trainers of adults who have minimal formal schooling, like users of the TEE model who will also be interested in the refinement of the widely-used model.

1.4   Literature Review

The development of leaders has been the subject of centuries of research, debate and modeling. The Gospel writers and the writings St. Paul are replete with educational terms like "learning", "knowing", "teaching", "thoughts", "imitation", and so on. Whole orders, movements and mission bands have been spawned to evangelize and *teach.* Several of these developed and perfected systems of learning within groups of adult learners in diverse groups and present aspects quite relevant to the context of this project: John Wesley created "societies" and "bands" within the Anglican Church which impacted all of England and generated the Methodist Church (Snyder 1980, Kivett 1995); Freire within Brazilian, then other systems of public education, set up "cultural communities" of "dialogical

education" based on the then-current model of Catholic Church "Christian Communities" (Taylor 1993); Frank Laubach in the Philippines, then throughout Asia, then Angola, "devised 'picture-word-syllable' correlations that could teach illiterate peoples to read" (Foster 1998:47); and those of the Theological Education by Extension (TEE) movement, first in Central America, then in Africa, wrote and still write programmed student texts which are the "teachers" and train trainers to be facilitators of the learning process (Winter 1969,Thorpton 1975).

Centuries of reflection on the origin, nature, control, stimulation and organization of humankind's capacity *to think* has generated whole disciplines of commentary as well as whole libraries of research and speculation. Classical thinkers renowned for their mental disciplines and capacity to inspire others in their thought systems will be considered in this study. Since 1533, the "spiritual exercises" of St. Ignatius of Loyola have been used to deepen spirituality by employing contemplation of spiritual "mysteries" using a collection of directed and repeated mental exercises. The 20th century also produced champion practitioners of mental devices which contributed to their character including the victims of undeserved solitary confinement, Richard Wurmbrant (1982) and Dietrich Bonhoeffer (1953), describe in their autobiographies the secrets to maintaining mental and spiritual well being in spite of dire circumstances. Paulo Freire's "Método" (method of using ten carefully compiled drawings to encourage analytical dialogue) guides pre-literates to speak their world as a rehearsal to literacy (Taylor 1993).

My literature review also includes forays into learning strategies which involve learning in various formats of enactment and social problem solving: scenarios, role-playing, representation, dramatic readings, mock trials, etc. Through my literature study I also discovered that learning strategies which are practiced by those involved in adult learning (Brookfield 1986, 1987, 1988, 1995, 1998, 2004, Cranton 1992, Gravett 2005), transformational learning (Payette 2002, Mezirow 1999, O'Sullivan 1999), understanding music in the brain (Jourdaine 1997, Storr 1992)balanced learning, authentic cooperative learning (Gatimu 1997, Holland 1975, Winter 1969), cogmotics (Copley 2000), whole-brain learning (Herrmann 1994, De Boer & Steyn & du Toit 2001), brain-based learning (Caine & Caine 1991, Jensen 1994, 1997, 1998, Sprenger 1999) are among those effective for the learner population of my study.

In order to better understand "thinking" in general, I studied the work of different scholars' work on multiple intelligences (Gardner 1983, 1993, 1997, 1999), (Armstrong 1987, 1993, 1994), emotional intelligence (Goleman 1996, 1998), spiritual intelligence (Zohar & Marshall 2000) and lateral thinking (De Bono 1973, 1976, 1985). Others like Herrmann (1994) and Gross (1991), as well as the brain-based learning advocates mentioned above briefly describe several models of brain functioning, but in order to understand brain functioning more fully, I read extensively from those who describe the complex modular brain theory: Harth (1982, 1993), Restrack (1979, 1988, 1994), Bergland (1985), Gardner (1987), Csikszentmihalyi (1993), Pinker (1997). For more about memory and other specific brain functioning I read Brennan (1997), Gellatly and Zarate (1999), Grandpierre (1997), Perkins (2000), Newberg, D'Aquili and Rause (2001), and finally from neuro-scientists reported by Cabeza (2002) and Cohen (2006).

However, the review of literature in books, learned journals, and the internet, did not lead me to authentic knowledge about my learners in their contexts. The adult learners of Mozambique, especially those in the remote, rural settings, have had scarce, if any, attention by researchers to their educational needs. This Participatory Action Research project sets up and assesses a holistic system of learning in which facilitators are trained and supported to use holistic learning strategies in cooperative groups within spiritual learning environments, i.e. to utilize 3-D practice for adult learning. The primary language for the field research of our PAR team is Portuguese, the official language of Mozambique. Other research may follow to conduct longitudinal studies on the holistic learning strategies which this study describes. A secondary result of my research will be more accurate demographic data on Nazarene adult learners in Mozambique.

1.5 Theoretical Framework

My research was undertaken to both fill a gap in the knowledge base, as described in the rationale, and also to test the integration of theory to practice within the defined context in Mozambique. Kember (2000:28) describes Action Research [italics mine]:

> Outcomes of systematic inquiry are made public and subjected to normal criteria for scrutiny and acceptance. Action research does, then, contribute to *both social practice and the development of theory*. Its advocates claim *that it brings theory closer to practice*.

My PAR study adheres closely to other characteristics which Kember (2000:24) identifies. First he says that Action Research is "concerned with social practice"; the social practice under scrutiny in my study is the interaction between facilitators and learners in churches acting as learning centres scattered across Mozambique. The "aim towards improvement" which is targeted in my research includes the narrowing of several gaps: theory to practice, combining right-brain and left-brain learning and cognitive and emotional learning. The project is organised into four phases, each of which is cyclic, illustrated by spirals which I deliberately use in several tables of this report in order to keep the cyclic nature of the research ever before the readers. Kember (2000:24) also says that Action Research is "pursued by systematic enquiry"; this is not just posing a simple question, but establishing a research design which reflectively and systematically questions and analyses the responses. The system of enquiry of the study in Mozambique is further detailed in the next two sections of this chapter.

Kember (2000:24) also identifies Action Research as "participative" and "determined by practitioners". The breadth of participation at all levels and throughout every phase of planning, enquiry, reflecting and analysing data of this research make it very difficult for me to write *my* research; I have led each phase and each team of the research but it is very much *our* research. I will continue to write *my* for the sake of research convention, but, because it belongs to so many other participants, I will also continue to report back to the many who participated throughout. The educators who proposed that learning we extended to the learning population of this research made the decision to do this before I moved to Mozambique. They were able to effectively share with me their vision for training facilitators to facilitate learning across a country that they knew well, and I

had to learn. In Chapter 3, I describe in more detail how these aspects of Action Research correspond to my study in Mozambique.

Epistemologically, the PAR study in Mozambique is within a critical slightly interpretive paradigm. Critical discourse is one of the major research tools used (within what I call "round table discussions" which are described later). It does not set out to test a hypothesis, but rather to seek consensus among participants with the aim of determining plausible explanations for the findings. The generalisability of the findings is "medium", i.e. broader than the sphere of the participants but not as broad as a general law or theory about learning. The subjects are investigated in their natural settings by those trained by me to do action learning and action research, so I am a participant, but my position is usually at a distance; I am not immersed in their social settings. Overall, my study seeks to understand learning not to change learning, but to facilitate it, hence, the overall epistemological position is critical with interpretive elements, and clearly not positivistic.

1.6 Research Design

As continuous assessment is normative for Action Research and also beneficial for curriculum development, Evaluation Research (Mouton 2002:158-162) provides an approximately appropriate design for this PAR study. The use of Evaluation Research for implementation or for outcome studies or for qualitative studies of empowerment seems to promise a close fit.

However, there is a framework which promises more accuracy for the focus within the human system researched, so, I am opting to create a design called "Arboric Research". This design type may be illustrated by the analogy of viewing living organisms under a microscope. When users focus the lens of a microscope on a living bacterial colony, they may intently access and observe what is going on in front of their eyes. However, while focusing they must also always keep in mind realities which lie outside the focus of the lens but which are affecting what they have in view. The variables of temperature and air critically affect the organisms that are being observed. These factors must be controlled to avoid the death of the organisms. Moisture at the proper level must be present to insure visibility and fluidity; bacteria out of the range of the lens may be affecting the sub-set being observed, i.e. the whole picture is quite different than the sum of its parts.

The framework of Arboric Research takes into account the "whole" while the "parts" are being observed and changes that are occurring in the human system in which the research is being conducted changes during the time of the research; These dynamic realities constitute the main reason to use it either by itself or as a frame for another design. Arboric Research may be chosen as the research design as described in tabular form in Appendix B using the format of Mouton (2002) and in narrative below. Arboric Research also allows other research designs, like Participatory Action Research, to function within it, using it as a flexible frame for another design.

Arboric Research aims to assess a whole human system by critical discourse about its parts, accurate description of the parts and of the inter-relationships between the parts and the whole and between the several parts. Arboric Research is guided by the over-arching theory that critical observation of the whole instead of the parts plus integrative analysis are reliable because every part impacts the

8

whole; the whole impacts the parts; the parts impact each other and isolation or dissection of the parts means alteration of the natural state at best crippling or death at worst. This meta-theory prescribes research questions which are typical:

- How do the parts impact the whole?
- How does the whole impact the parts?
- How does the germ impact the mature and vice versa?
- What are the elements of the environment and the relation of it to the whole, and the relationship of the whole to the environment?

The empirical design classification of Arboric Research is includes hybrid data, both quantitative and qualitative allowing all available data collection methods, assuming medium control. The sampling aims to extend to as much of the whole as possible with full participation encouraged, so it is highly useful to inform the specific "whole" and affirms ownership by the "whole". It recognises impossibility to reach the whole, and the subsequent sampling errors as well as participant bias. The analysis of data in Arboric Research also recognises the changing whole so includes integrative, synthetic descriptions; comparative analysis, including relational, chronological and dialogical; descriptive statistical graphics including tables and examples. More details about how my PAR research fits into the Arboric framework are described in Chapter 3.

1.7 Data Collection Plan

The terrain of this research is vast as the learners and facilitators are scattered among 81 to 112 (depending on the year) centres across the country of Mozambique in each of the ten provinces. Another six centres in Angola are part of the same system but not included in this research. The process of this **PAR** Study will be described in more detail in Chapter 3.

This **PAR** Study is being conducted in phases of collection, application, assessment and reformation, as illustrated by the spiral in Table 1.1. The members of the PAR teams vary from team to team, and I have been the facilitator and lead researcher of each of them. The team members actually participate in the planning − action − reflection cycles. The advisors do not usually meet with the team, but are abreast of happenings; they advise.

Phase Four: 01/2003 – present
- PAR 5 in repeated assessment of learning strategies and learning environments in the network via site visits, Delphi technique,
- Extensive assessment via hybrid surveys for crystallization

Phase Three: 07/2002—12/2002
- Data collection through monitor training across Mozambique
- Facilitation of holistic learning strategies throughout system by production of written materials to support monitors in their learning settings
- PAR teams 1, 2 ,3 and 4 in two action learningshops
- Multiple groups assess processes and products of action learning activities
- Formation of PAR 5

Phase Two: 1/2001 – 06/2002
- Formation of PAR 3 in Maputo for continuing data collection and assessment
- PAR 3 advisors: Grant-writing
- PAR 2 begin data collection in remote centres

Phase One: 05/2000 – 12/2000
- Formation of PAR 1; PAR 2
- Preliminary data collection and analysis
- Refinements in TEE model and Nazarene extension model
- Wide use of holistic learning strategies with PAR 2
- Holistic learning strategies to the field

Table 1.1 Phases of Data Collection and Assessment of Holistic Learning Strategies

In the column on the left in Table 1.1, besides the dates of the phases, I also identify some of the principal actions of each one. The spiral on the right represents the cyclical, non-linear nature of Participatory Action Research.

1.8   Instruments Used in Data Collection

This Action Research Project employed multiple methods of data collection from multiple levels and multiple teams of action researchers and action learners in order to crystalise the results. In pursuit of answering the major research question, "How do holistic learning strategies facilitate adult learning?", it was necessary to know if, in fact, they do, so this question, "Do holistic learning strategies facilitate adult learning?" is asked repeatedly during the first cycles of the study. If they do, then, "To what extent can holistic learning strategies advance the learning of leaders in development?" This second sub-question could only be asked in sequence after ascertaining that the holistic learning strategies, were, most

probably, facilitating adult learning. Then with more assurance, could I lead the PAR teams to probe into the major question – "How do holistic learning strategies facilitate adult learning?" The logic order of the research questions then affects the chronology. I do not mean to say that "if" was fully answered before the research proceeded to "to what extent" then on to "how". In the cyclical nature of PAR, tentative answers to each were formed as evidence was collected, so data pertinent to all three questions begins to surface early on in the data collection. The "if?, to what extent? and how?" sequence appears repeatedly in the empirical findings of Chapter 4 and the reporting of Chapter 5.

In Table 1.2 below the different research instruments used are specified.

RESEARCH QUESTIONS	Interviews: direct and via e-mail	Literature Reviews	Textual Analysis	Hybrid Surveys	Round Table Discussion	Video and still photos	Site visits	
Do holistic learning strategies facilitate adult learning?	✓	✓	✓	✓	✓	✓	✓	7
To what extent can holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers?	✓		✓	✓	✓		✓	5
If so, how do they facilitate adult learning?		✓	✓	✓	✓	✓	✓	6
	2	2	3	3	3	2	3	

Table 1.2 Relationships between the Research Questions and Methods of Data Collection in the Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach"

Interviews, literature reviews, textual analysis, hybrid surveys, round table discussions and site visits were used multiple times. Video and still photos were used less frequently. Data analysis was done by comparison between voices, textual analysis and simple descriptive analysis techniques using the software package "SPSS". In the many tables of Chapter 4, comparison of the "voices" are reported from the several different sites where "round table discussions" occurred. When the voices repeat themselves, they are identified as "recurrent themes" and the data begin to "crystalise", that is to take shape and harden as a crystal in nature actually forms. Crystalisation is one of the modes of verification. The large

hybrid survey of 2005 added quantified descriptive statistics for comparison to crystalised findings to triangulate results to improve their reliability. Reliability of the results was also enhanced by the openness of the PAR team members with participants at all levels and during all phases of the project.

The limitations of this PAR study include the limitations typical of Arboric Research mentioned above, i.e. the possibility to access only a sample of the whole population and the medium (not high) generalisability of the results. Since the participation is very broad, participant bias as a source of error may also be broad. The crystalisation and triangulation processes mentioned above are methods to diminish the effect of participant bias, but it is still present. Typing errors on data entry is also a source of error. The limitation of language was taken into consideration. Portuguese was used between the other PAR team members and me; the languages of communication between other PAR team members and the sample research were Portuguese and the maternal language of the geographical site. The reporting was done in Portuguese, translated by another PAR team member and me.

The last aspect for discussion is validity. What makes this research valid? There are several aspects of support for the validity of the research. First, the virgin context of the research; the network of facilitators gave access to areas of the world whose inhabitants have never been studied within educational parameters. Second, the rigor of the research design contributes to the validation of the process and the findings. Then, the carefully generated research findings are validated by their usefulness to the three audiences described in the rationale, i.e. other educators of the international Church of the Nazarene, other users of the TEE model and Brookfield and his followers who recommended studies in adult learning from other-than-American and European contexts, studies of personal and spiritual learning, studies which involved questionnaires and/or surveys, studies which address cognitive *and* emotional learning, and studies which contribute to the understanding of learning as a socially embedded phenomenon. The PAR study in Mozambique speaks to each of these issues specified by Brookfield and makes some contribution to each (as reported in Chapter 5).

What makes the research questions valid? The major research question, "How do holistic learning strategies facilitate adult learning?" constitutes a probe for findings which are relevant to Brookfield's recommendations about adult learning, in general, socially-embedded learning, spiritual learning and non-American/ European learning. The question also generates findings which test the TEE model, and which offer Nazarene educators another perspective (that of learning strategies in general) to consider on their trek toward qualified outcomes. The other two questions validate the major question; *do* holistic learning strategies facilitate adult learning? If so, *to what extent?*

The following chapter presents the broad theoretical framework for the consideration of the major question.

Chapter 2 Theoretical Framework

2.1 Introduction: Holism

Holism as interpreted in education and the development of personhood is the over-arching theoretical base of my research. *Whole-brain learning, holistic learning, holistic learning environments and* **holistic learning strategies** are consequently based on *holism* which refers to the *whole* or *totality* of the unit in question. Copley (2000a), Holdstock (1987) and Piet Beukes, quoted by de la Hunt (1990) refer to the contributions to holism of South African statesman Jan Christiaan Smuts. Copley (2000a: 2) even names him the "father of modern holism". Holdstock (1987:2) says, "Smuts (1926) dealt with the fundamental tendency of 'whole-making'" while Storr (1992:175) declares that "creating wholes" is the essence of human nature.

The swing of the societal pendulum towards holism as a result of the scientific revolution of the seventeenth century is explained by Zohar and Marshall (2000:26):

> [John Locke], founder of liberal democracy, used atoms as his model for individuals, the basic units of society. The social whole, he asserted, was an illusion; the rights and needs of the individual were primary. Atomism is also the cornerstone of Sigmund Freud's view of psychology and his 'theory of Object Relations'.

The recent emphasis on holism is the fruit of the protest movements against an overly technological view of the world in the 1960s, maintains Plunkett (1990:63). In consideration of the complex and broadly recognized trend toward a return to *holism*, Holdstock (1987:2), comments simply that "since the earliest times…the student as a *whole person* [emphasis mine] is what education is about. Yet, somewhere along the way we have lost sight of this reality. The student can never be divided into different bits and pieces of the curriculum".

Bruner (1986:94) dates the late 1950s as the beginning of what is called the cognitive revolution that turned scientific research toward questions of the mind which had previously been the realm of philosophers and theologians. "Psychologists…devoted themselves not to their subjects' overt, objective responses, but rather to what they *knew*, *how they acquired knowledge* and used it….this inevitably led to the question of *how knowledge was represented in the mind"*. This turning is toward a more holistic view of personhood.

The cognitive revolution has four strands according to Gardner (1987:394): first, the nature of *thinking* with "little concern with the human brain or nervous system". Then came the strand of the electro-mechanical comparison between brain function and computers. The third strand he cites is "*modal view' of cognition"* – a view in which psychological, computational, and neurological considerations are far more intricately linked and the fourth, the "*parallel distributed processing"* approach. Throughout my research, I give attention to each of these strands. The first strand extends psychology to culture; the second broadens the image of synapse to multiple impulses. The third and fourth strand are discussed later in more detail, but they describe cognitive function in terms of models which became increasingly familiar to teachers-in-training in the 1990s.

After my reading from cognitive psychologists, brain-based educators and neuroscientists, who have written over the last three decades, I suspect that a significant force toward the present holistic view of humankind springs from the arena of these professionals. They have written many books which have enjoyed popularity as they undertake to explain the intricacies of mind workings and learning. Their descriptions take into account multiple aspects of human development and identity. They make valuable contributions to our global understanding of personhood. Figure 2.1 below presents the type of organisation frequently presented by these experts. The arrow spinning off the figure below that starts at the *Intro* and moves clockwise.
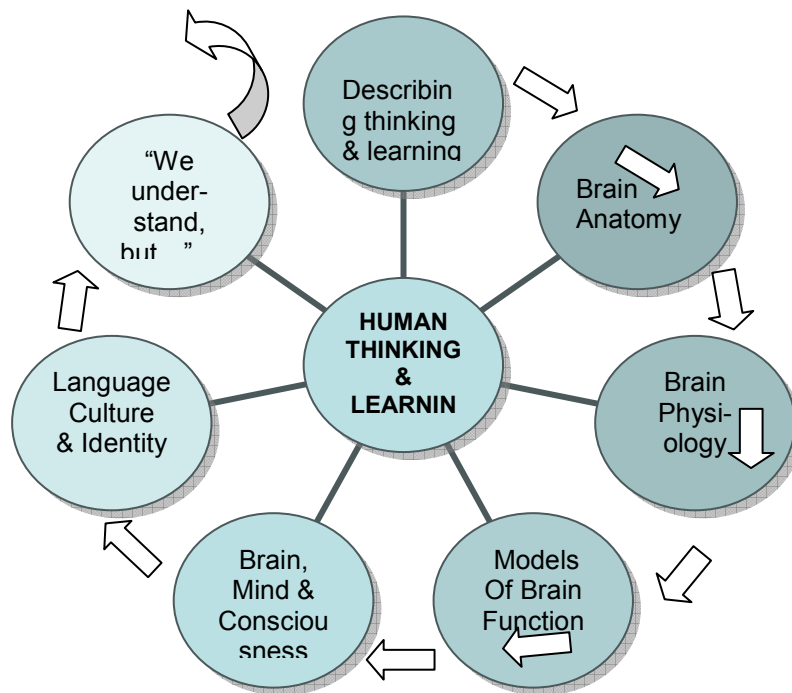
Figure 2.1 Representation of an Organised Path of Theorizing about the Mind

In Figure 2.1 The curved arrow represents the trajectory of theory and not the relationship between the subjects.

Many of these researchers and theorists seem to me to follow a similar sequence of development which I use as an introduction to the complex subject of this chapter, illustrated graphically as Figure 2.1. They tell us that it is immeasurably complex to describe "thinking" or "learning". They sketch, verbally and/or graphically, the anatomy of the brain in ways pertinent to their position and brain physiology, frequently referring to research conducted on *split brain patients* by Sperry (Gardner 1987:275, Restrak 1988, Sprenger 1999, Wegner 2002). These patients are those who have had surgically severed, for life-threatening reasons, the thick bundle of fibers, the corpus collosum, which connects the two hemispheres of the cerebral cortex. The research on these patients supports educational applications of *hemispheric asymmetry* which is the specific functioning of each the right and the left hemisphere of the cerebral cortex. Many writers make reference to the triune brain model of MacLean which appeared in 1952 which adds the importance of lower brain and limbic area functioning to the cerebral hemispheres and they may describe the metaphorical or physiological model of brain functioning which they favor. They discuss, from remarkable positions of understanding, the relationships between the brain and the mind, or the brain and consciousness generating challenging definitions and relevant issues of *language, culture and identity*. They may cite Freud, Piaget, Bruner or

Gardner for their contributions. Those who include language in their considerations will usually make reference to a contemporary of Piaget, the Russian scientist Vygotsky, who died young but whose brilliant students, including Chomsky, continued his work for several decades. They may treat "memory" at any juncture since it is actually linked to every aspect mentioned, it is discussed logically at any juncture. Before the writers close, they may make comment to the fact that they possess significant knowledge and understanding of the human mind / consciousness / thinking, yet they respectfully allude to this complexity as beyond their understanding. The effect of these statements is to posit each theory onto a trajectory towards a point somewhere beyond, a better way, a more complete model or explanation. An example of this type of "it is beyond us" statement follows from Wegner (2002:27):

> When we turn our attention to our own minds, we are faced with trying to understand an unimaginably advanced technology. We can't possibly know (let alone keep track of) the tremendous number of mechanical influences on our behavior because we inhabit an extraordinarily complicated machine.

The perception of limitation is formulated by Bergland (1985:177) as a question:

> The pattern-discerning right brain of any individual who takes the time to understand the new make-up of thought will be forced to the conclusion that the fabric of the mind is woven by some wise creator… the static form cannot produce thought; molecules come from the brain and others from the body … What force moves these molecules?

In order to clarify explanations and positions I give in this study, some superficial descriptions of brain anatomy and physiology are included in the next few sections. Detailed descriptions of such abound and are found in almost every book in my list of references which has *brain, mind, memory* or *learning* in its title.

2.2 Holistic Models of Brain Organization and Function

2.2.1 Multiple Intelligences Theory

Intelligence is classically and commonly understood as singular. The coining of the word *intelligences* in the plural was a deliberate and provocative choice by Gardner (1983) when he introduced the multiple intelligences (*MI) Theory*. His observations as a research psychologist led him to lay aside the image of the human mind as a "single, all-purpose machine that performs steadily at a certain horsepower, independent of content and context" having a single quality called *intelligence,* and "a series of relatively separate faculties" (Gardner 1999:32). He admits that he chose the plural term, at least in part, to challenge 'the widespread belief – one held by many psychologists and entrenched in many languages – that intelligence is a single faculty and that one is either 'smart' or 'stupid' (34)". He (1999:33-34) reconceptualises thinking about the activity and ability of the mind by redefining *an intelligence* as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture". In reference to the effectiveness of this plural terminology and the *MI Theory* in general, Armstrong (1994:3) comments: "Once this broader and more pragmatic perspective was taken, the concept of intelligence began to lose its mystique".

Gardner (1983) originally named seven intelligences: Linguistic Intelligence /Logical-Mathematical Intelligence / Spatial Intelligence / Bodily-Kinesthetic Intelligence / Musical Intelligence / Interpersonal Intelligence / Intrapersonal Intelligence. He named them so aptly that understanding the differences between them seems quite clear from the outset. There are those who would refer to the *Mozart Effect* (Campbell 1997) as "spatial IQ".

In later writings, Gardner himself explores the possibilities of adding three intelligences to the original seven. He considers *spiritual*, *moral, existential* and *naturalistic intelligences* and concludes that naturalistic adheres to the criteria by which the others were established so that it could be added as an eighth, and he considers a ninth possibility (1999:68):

> …one connotation of spirituality seems congruent with other intelligences: *the capacity to think about cosmic and existential issues — from our existence and role in the universe to the nature of life, death, bliss, and tragedy* [italics mine.] In most societies, organised religious, mystical, or philosophical systems deal with these issues, but people may also develop their own unique existential or spiritual frameworks. While I am not ready to proclaim a ninth intelligence, I am willing to accept the possibility that a proclivity for pondering ultimate cosmic or existential concerns constitutes a distinctive human intellectual capacity.

Any of the multiple intelligences developed singularly would be a misuse of Gardner's *MI model.* They are no more stand-alones than other facets of personhood since no one has only one intelligence. Both Gardner (1983, 1997, 1999) and Armstrong (1987, 1993, 1994) clearly and repeatedly articulate the danger of inferring this possibility.

"E*motional intelligence"* is explored by Goleman in two top-selling books (1996, 1998) but his aim is not so much to add an intelligence to the list but to encourage all to develop this capacity by learning more about how emotions affect rational functioning. Wilks describes the state of being *emotionally intelligent* in terms of reconciliation and acceptance between different sub-identities or sub-selves of an individual. Wilks (1998:45) maintains that the public front of a person, the *ego* is sometimes shocked when other *members of the inner family* misbehave. The *ego* becomes "emotionally intelligent when [it] can say to itself, these people are part of me and I am no longer ashamed of them".

An *intelligence* is not a *unit*, according to Vygotsky (1962:4):

> By *unit* we mean a product of analysis which, unlike elements, retains all the basic properties of the whole and which cannot be further divided without losing them. Not the chemical composition of water but its molecules and their behavior are the key to understanding of the properties of water.

Already in the 1960s, on what he called *an intuitive level,* Gardner (1999:32) also embraced "the view of the human brain and human mind that is now called *modularity*" which was introduced in Section 2.1 and is discussed in the next section.

2.2.2 Modular Brain Theory

While the MI Theory offers concepts that present themselves as easy to grasp, explain and utilize, the Modular Brain Theory seems to be much more technical,

anatomical, and difficult to describe. It is a theory held by holists, according to Gardner (1987:269): "The Gestalt assumption that the nervous system is organised in terms of neural fields, operating across wide regions of the cortex, struck a responsive chord with…holists".

A key factor in understanding this model of brain organization is described by Restrak (1988:22): "The organization of the neurons of the cerebrum in *vertical columns*…extends from the surface down through the six layers of cortex". Harth (1993:123) describes the organization as "thousands of sub-units or *modules*, columns of neurons that extend downward from the surface of the cortex to the top of the white matter". The vertical organization presents a different image than those of the maps of the cerebral cortex which commonly appeared in psychology textbooks several decades ago. The vast number of the neuronal cells and the specificity of the connections between the neuronal cells – greater than previously thought are significant aspects of brain modularity as well as the distribution of the modules in the brain.

Theorists give several metaphors to aid in understanding brain modularity. Restrak (1988:22) describes the modules as *subsets.* Pinker (1997:30) says mental modules are more like "road kill, sprawling messily over the bulges and crevasses of the brain….or regions that are interconnected by fibers that make the regions act as a unit". Pinker (1997:31) also favors the metaphor given by Chomsky of modules composing a '*mental organ'* which, like each other organ of the human body, is specialised to particular functions and integrated into a complex whole. In this way the mind has a heterogeneous structure of many specialized parts. Harth (1982:88) likens the modular brain model to a *hologram*:

> Every piece…says a little bit about every part of the scene, but no piece is essential….one can superimpose any number of holograms on the same piece of film, and then reproduce the images of the original scenes one by one without interference from the others.

Bergland (1985) consistently refers to the brain as a *gland* which is affected by hormones from many parts of the body and that also causes effects all over the body but is tailored to carry out a particular function. He (1985:2) says: "the notion that the brain is driven by electricity, that electricity is the stuff of thought, is accepted by most of the left brains of the world…so my left brain has a tough job if it is going to get the view that 'the brain is a gland' into your head".

Restrak (1994:67) describes how the modular brain uses different modules to access different information about the same entity.

> It's likely that knowledge within the brain is stored not as a unity (a tiger) but according to separate components or modules (the sight of the tiger, its roar, its smell, etc.). Further, some of these modular components may malfunction without affecting any of the others. Thus I may be able to respond to questions about lions based on general knowledge (Is a lion dangerous?) but not questions that would require visual knowledge (does a lion have four legs?) In short, 'lion' doesn't exist in my brain as a unity but as a multiplicity of such different knowledge categories as vision, hearing, touch and general knowledge (a lion is a member of the feline category of animals.) One area may

be gone while other areas may not be affected. Indeed, the concept 'lion' may disappear as part of the loss of every other creature in the category 'animal'.

Categorizing as a kind of pattern-making or pattern-recognizing is widely held as a descriptor for brain-functioning even though the explanations for describing how the brain detects patterns vary. Restrak (1994:70) says [*italics mine*], "one can hardly overestimate the importance of learning more about the categories and how they are organised within the brain. They form the underpinning to *our understanding of ourselves and the world around us*". Curriculum writers frequently wordsmith outcomes which reflect, in the reality of lives of the learners, their *understanding[s] of [them]selves and the world around them*. As more is learned about how the brain detects and recognizes patterns, educators should be able to set up learning situations in which their learners are enabled to better succeed in categorizing which, in turn, will help the learners better succeed in learning.

The mental task of assigning items into categories would appear to be simple, but Pinker (1997:102) illustrates that categories are not always well defined:

> In many domains people do not have all-or-none convictions about whether something is true. A thing can be a better or a worse example of a category rather than being either in or out. Take the category 'vegetable.' Most people agree that celery is a full-fledged vegetable but that garlic is only a so-so example….Conceptually speaking, we eschew [sic] the idea that something either is or is not a vegetable and say that things can be better or worse examples of a vegetable. Mechanically speaking, we no longer insist that a unit representing vegetablehood [sic] be either on or off, but allow it to have a value ranging from 0 (for a rock) through 0.1 (for ketchup) through .4 (for garlic) to 1.0 (for celery).

Gardner (1987:383) states a presentational shift from the behaviorist era, "few scientists dared to speak of schemas, images, rules, transformations, and other mental structures and operations, these representational assumptions and concepts are now taken for granted and permeate the cognitive sciences". Pinker utilizes a graphic presentation to illustrate how connectivity of modular brain functioning becomes vast. This graphic presentation Figure 2.2 continues on the next page:
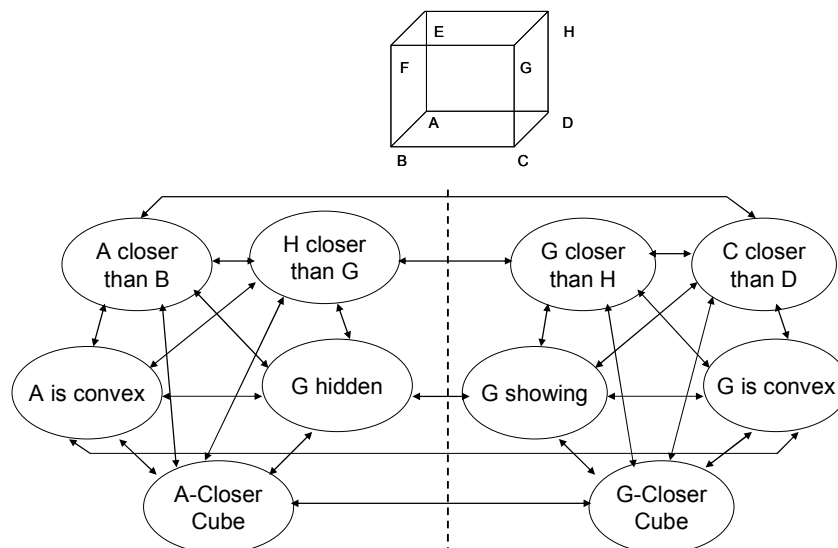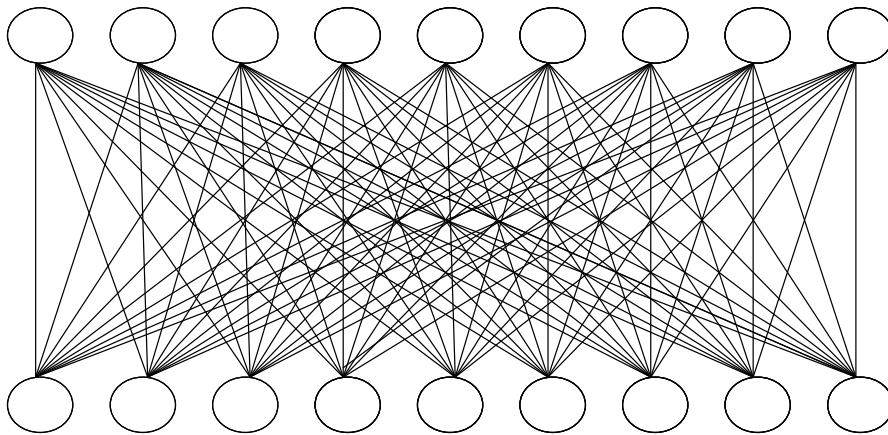
Figure 2.2 Relationships between the points of a cube (Pinker 1997:107)

The three parts of Figure 2.2 are three representations of the same item, a cube. Pinker attributes items or categories as points on a cube which have relationship or connections of differing strengths to many, many other things, such that the design of all of these connections is infinitely interrelated and intricate. Harth (1993:117) says "….the trillions of connections among neurons that define a brain are not specified in all detail by a person's inherited genes. Hence even identical twins have different neural nets, as they have different fingerprints". These could serve as a visual illustration of the verbal example of a lion cited above from Restrak. If the word *lion* is the cube, then our mental "knowledge" of *lion* is the sum of multiple perceptions and interpretations that we possess of *lion*, for example:

> Lions roar loudly and live in zoos or on African plains.
> Lions are furry animals that live in groups called "prides".
> Lions are mammals which carry their fetuses *en utero* and nurse their cubs.
> Lions can smell bad and eat yucky meat that people wouldn't want to eat.
> Lions should be cared for so they don't go extinct but I want them to be
> cared for by other people, and so on, and so on a vast number of times.

The sum of this vast number of overlapping and distinct perceptions which come from different parts or layers of my brain forms the *hologram* (Harth), or the *word* (Vygosky) *lion*. My word *lion* is different than the word *lion* in the brain of another person. My word *lion* is likely to be more similar to the word *lion* in the brain of another person from a similar cultural framework because cultural experience modifies the "weight" (Strauss & Quinn 1997:74) of certain connections (as those in Figure 2.2.) reinforcing them. That "lions should be cared for so they don't go extinct" is stated with conviction in my culture so that connection, the line between *lion* and *needs protection* is reinforced. Discordance between the *brain-conceived naming* of the concept and the *other-brain-perceived interpretation* helps to explain gaps in communication and understanding occur between participants in learning settings.

Pinker continues with the idea that "everything connects to everything" (1997:103,104):

> We can get even more adventurous, and take inspiration from the fact that with neurons, unlike silicon chips, connections are cheap. Why not connect every unit to every other unit? Such a network would embody not only the knowledge that greenness predicts vegetablehood and crunchiness predicts

vegetablehood, but that greenness predicts crunchiness, crunchiness predicts leafiness, greenness predicts lack of mobility, and so on: [103] with this move, interesting things begin to happen. The network begins to resemble human thought processes in ways that sparsely connected networks do not. For this reason psychologists and artificial intelligence researchers have been using everything-connected-to-everything networks to model many examples of simple pattern recognition.

De Bono (1976:95) describes the mind as pattern-creating by his model of the brain acting as *jelly* which

> …allows incoming information to arrange itself into patterns, in other words a self-educating system. Self-educating systems are pattern-creating and pattern-using systems. The patterns are created from the sequence of the incoming information. The first piece of information alters the state of the mind so that the second piece becomes associated with it or linked to it. In this way patterns are built up.

Restak (1994:36) calls this alteration a "modification of modular maps". Continuing to use modularity to explain the brain functioning he postulates that "our sensations, emotions, memories, and thoughts – our most personal mental activities – are the result of the parallel operation of modules throughout the brain".

In the audio domain, Storr (1992), Jourdain (1997) and Altenmuller (2004) maintain that pattern-seeking and pattern-recognition are the sources of intrinsic satisfaction produced when our ears and brain team up to interpret the patterns and categories within music. Storr (1992:176) says

> But when we first discern [in our brain] an unexpected linkage, a new pattern, it brings us intense satisfaction. The attempt to create new wholes, to discover new connections between data hitherto unrelated, is always perceived as a 'higher' mental activity, since it involves something more than an immediate, instinctive response to impinging stimuli.

Storr here refers to pattern-discernment as "higher mental activity". Bergland (1985:109) elevates the pattern-recognition capacity of the brain to the "highest form of thought" [*italics mine*]:

> Pattern recognition is the *sine qua non* of the genetic code, of the DNA/RNA interactions, which provide the blueprints for life; pattern recognition underlies all immunology – the antigen-antibody reactions that recognize and defend 'self'; pattern recognition is basic to all the hormone/hormone receptor interactions of cell regulation; and pattern recognition is the *highest form of thought*. It is the synchrony, the synergism and the spatial juxtaposition of whirling hormonal forces that give life to the human soul.

Whether the modular brain is seen as interconnected *subsets*, a specialized *organ*, a complex *gland*, *jelly forming patterns*, *thinking meat* or a haphazardly distributed *road kill*, as *pattern creating*, *pattern seeking, pattern-recognizing or pattern-discerning* – each perspective considers the brain as a whole so each of the models described is a holistic model of brain organization and function. There are other *whole-brain* models

20

− the Right brain-Left brain Model, the Triune Brain Model of MacLean model and the Four-Quadrant Model of Herrmann – which are considered in the following sections.

2.2.3 Duality of Thinking and of the Brain

The duality of the brain is a centuries-old perspective, both philosophically and medically speaking. There were plainly the two *forms of knowing* established in classical Greece, the first *revelation* or "man's endowment with an intuition of pure knowledge", the other through observation and the application of logic to what was observed". Bruner (1966:59) also refers to *art as knowing.* Reason (2003) cites Heron (1992,1996) and adds other *ways of knowing*: experiential knowing; presentational knowing; propositional knowing and practical knowing.

Instead of *kinds of knowing* or *ways of knowing*, De Bono focuses on the duality of *kinds of thinking*. He devises strategies and exercises to teach thinking. He (1973:7) delineates between vertical and lateral thinking with the qualification that "there is no antagonism between the two sorts of thinking. Both are necessary". In later writings (1985), he discusses *parallel thinking* and *six hat thinking* but at this point I limit my considerations to his concepts of only two kinds of thinking: vertical and lateral which, he contends, are mutually exclusive (1973:13): "You cannot dig a hole in a different place by digging the same hole deeper. Vertical thinking is used to dig the same hole deeper. Lateral thinking is used to dig a hole in a different place".

The duality suggested by Harth (993:89-90) relates to realms of study: "one of neurons and their interconnections, studied by physiologists, and the other of emotions, thoughts, and images that are the psychologist's domain". Gardner (1987:383) claims: "the triumph of cognitivism has been to place talk of representation on essentially equal footing with these entrenched modes of discourse – with the neuronal level, on the one hand, and with the socio-cultural level, on the other". I take this two-footed position in discussing holistic learning strategies, one that requires a level of basic understanding of both brain functioning and socio-cultural issues.

As he defends the notion of two intelligences, intellectual and emotional, Goleman generates dualities in his description of brain anatomy – limbic and neocortex, amygdala and prefrontal. In building his case for *emotional intelligence*, Goleman (1996:28) toggles between terms − *brain, mind, intelligence, reason* and *emotions* and places them in juxtaposition as parts of the whole.

Another way of considering the whole brain is to examine the functioning of the two hemispheres, right and left. Normal functionality of the two hemispheres is described in the following narrative by Restak (1988: 20):

> Because of its holistic processing, the right hemisphere is better at visual-spatial tasks, such as forming mental maps, rotating geometrical figures in one's head, or recognizing the face of a friend. But the left hemisphere comes into play when the mental map must be converted into verbal instructions – 'Take the first right turn, then make a sharp left' – or when one analyzes distinguishable aspects of a friend's face – 'Is Janet wearing a different hairstyle today?' But it is important to remember that at all times the brain functions as a whole, both hemispheres communicating with each other as well as with other parts of the brain deep below the cerebral cortex.

21

This functionality is *asymmetrical*. Cabeza (2002) in the model named HAROLD that studies have shown that such asymmetry is reduced by age. This work will be explored later in more detail. Other descriptors of right and left brain function according to several other sources are organised below in tabular form in Table 2.1:

Author and year	Left hemisphere	Right hemisphere
Restak 1994: 127	Language capacity; understands the question and replies	the intuitive apprehension of geometrical properties, copying designs, recognizing faces and reading facial expressions
Bergland 1985:1	verbal and rational;	non-verbal and intuitive;
Bergland 1985:1	thinks serially and reduces its thought to numbers, letter and words; well-taught, well-read, well-spoken;	thinks in patterns, or pictures, composed of 'whole things' and does not comprehend reductions, either numbers, letters or words
Bergland 1985:1	your *savant* brain	your *mystic* brain
Gellatly and Zarate 1999:135	various regions of the LH contribute to verbal working memory tasks	various regions of the RH are involved in spatial working memory tasks
Leonard, Ward and Schipull in Sonnier 1989:111-12	Analytical	Visual
Jourdain 1997:56-7	relations between succession of sounds	focuses on relations between simultaneous sounds
Jourdain 1997:56-7	plays a prominent role in the perception of rhythm and sequences networks of ideas into chains of words	ferrets out hierarchies of harmonic relations and adept at analyzing the highly harmonic vowel sounds of language

Table 2.1 Comparison of Characteristics of Left and Right Brain Hemispheres

Although the major anatomical features of the neo-cortex have been accurately represented since da Vinci in 1504, the radical medical treatment of the *splitting* of the brain into right and left hemispheres is more recent. The surgical procedure severs the structure which normally connects the hemispheres, the *corpus collosum.* Harth (1993:123-4) describes the *corpus collosum* as the "massive cable of some 200 million aons…that makes sure that the left brain 'knows' what the right brain is doing, and vice versa". The absence of the knowledge of what the other hemisphere is doing impacts perceptions about *integrated identity* and *personhood*. Questions surface about *true self*. There are many and divergent positions concerning *true self,* several of which are linked to brain functioning.

Careful scientific observation has taken place on patients with life-threatening conditions which necessitated the surgical process of separating the two halves of the brain, i.e. *split-brain* patients. Experiments on differences in the functioning of the two hemispheres were conducted by Roger Sperry "with his colleagues at the California Institute of Technology [who] devised methods for testing separately the two halves of the brain. These studies were also of epoch-making importance and resulted in Sperry's sharing the Nobel Prize in 1981 with Hubel and Wiesel (Gardner 1987:275)".

Recent research findings by Cabeza (2002) intepreted by Cohen (2006:85) on three groups of adults performing memory tasks suggest that "healthy brains compensate for the depredations of age by expanding their neural networks across the bilateral divide [of the corpus collosum]". Cabeza himself (2002:85) says the model, named HAROLD, is "neutral about whether the change is beneficial or detrimental for cognitive performance", but Cohen (2006:84) observes from the HAROLD model (Cabeza 2002) and his own work that "this neuronal integration makes it easier to reconcile our thoughts with our feelings" and age-related reduction of hemispheric asymmetry "contributes to keeping the elderly sharp and capable of learning".

An older view which challenged the effects of brain bi-laterality was put forth by MacKay and cited in Harth (1993:126) results in another metaphor, the "Y":

> The late English neuroscientist Donald McKay doubted that anything like a radical bisection of mind and consciousness resulted from split-brain surgery. He views the brain as representable [sic] by the letter "*Y*". The upper two branches are the two cortical hemispheres, which are, in the normal brain, connected by the corpus callosum (the broken horizontal bar in the diagram). The lower branch of the Y stands for such deeper brain structures as the limbic system, which are not affected by the operation. It is there, he believes, that a single 'self-supervisory system' is located which confers unity on the individual even with the corpus callosum severed.
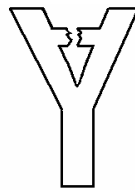
Figure 2.3 The "Y" model of the brain   (MacKay in Harth 1993:127)

The "*Y*" metaphor has three parts, two semi-joined cerebral hemispheres and the limbic brain. The next model is also triune, the model of a triune brain.

2.2.4 The Triune Brain Model of MacLean

For centuries the three anatomical parts of the brain, the neocortex, the midbrain and the brain stem, have been recognized. Twentieth-century proponents of a triune brain model, Zohar and Marshall, (1999) name three kinds of thinking that they tie to three parts of the brain and then name three kinds of thinking – Serial, Associative and Unitive – relating them to three kinds of intelligence: IQ (intelligence quotient), EQ (emotional quotient) and SQ (spiritual quotient). Zohar and Marshall, Gross (1991) and Herrmann (1994) refer to the Triune Brain Model of MacLean. He made significant discoveries about the functions of the midbrain, which he renamed limbic system or limbic brain in 1952. He attached the ideas of functioning as mammals to the limbic system and also attached the term reptilian to the functions of the brain stem, making the model easy to understand and handy for reference. The figure below is a graphic interpretation by Herrmann of the three parts.
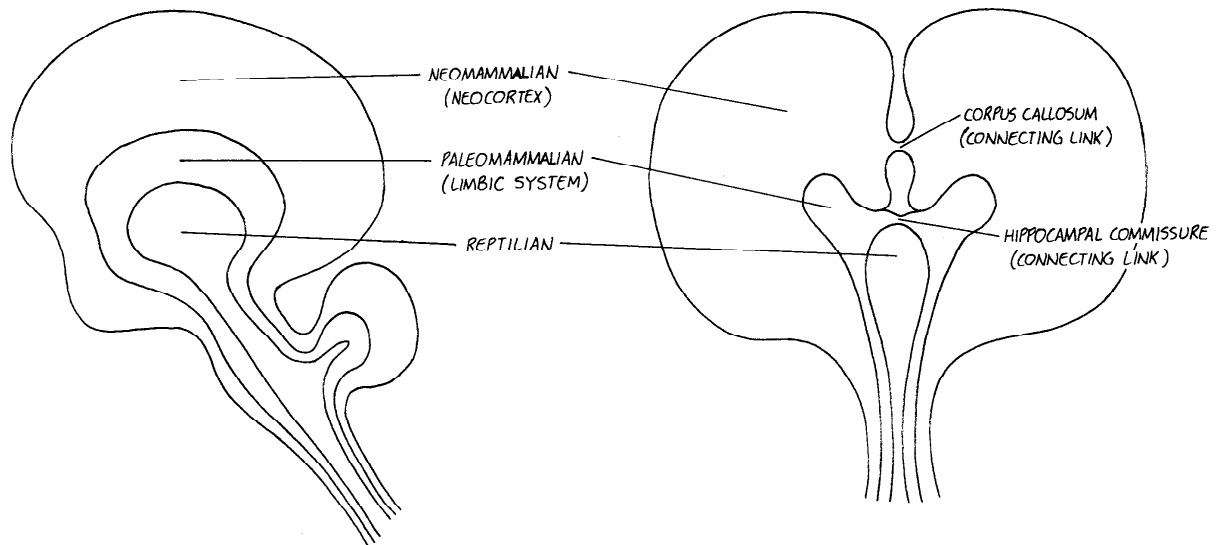
Figure 2.4 Side and frontal view of the triune brain model (Herrmann 1994:62)

The *R-Complex* (or reptilian), according to a description by Gross (1991:22) is "the brain stem, basal ganglia, reticular activating system and midbrain – in the lowest part of the brain, closest to the spinal cord. The "root brain", which MacLean calls the R-complex, deals with instinctive behavior, including self-preservation, claiming territory and status and fighting and mating".

Borrowing from MacLean, Caine and Caine (1991:67) describe *reptilian* behavior:

> the more threatened and helpless students feel, the more we would expect to see behavior that we could characterize as *reptilian.* Deeply entrenched programming relating to territory and identity become so important that group conflicts might degenerate into more primitive or aggressive behaviors.

An example of the effects on behavior that is generated from the limbic system is given by Goleman (1998:14):

> Think back to the last time you 'lost it,' blowing up at someone – your spouse or child, or perhaps the driver of another car – to a degree that later, with some reflection and hindsight, seemed uncalled for. That…was a hijacking, a neural takeover…which originates in the amygdala, a centre in the limbic brain. Not all limbic hijackings are distressing....it is at work also in moments of intense joy…

HIPPOCAMPAL COMMISSURE

FORNIX

SEPTUM

AMYGDALA
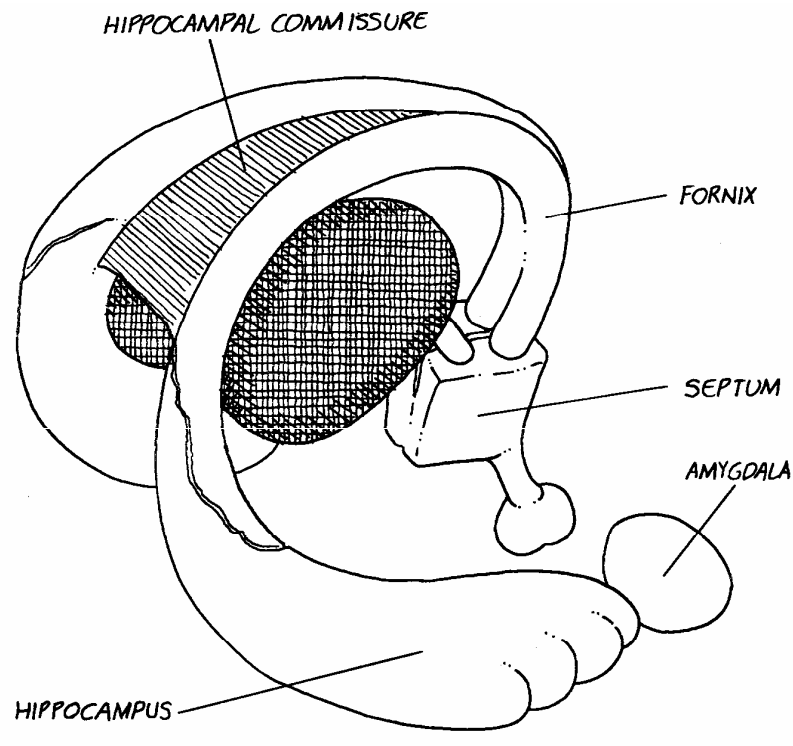
HIPPOCAMPUS

Figure 2.5 The Limbic System – Left and Right: A complex, linked set of structures (including the hippocampus, amygdala, and hypothalamus) in the forebrain thought to be responsible for the emotions (Herrmann 1994:32).

Goleman (1998:15) also specifies the function of the amygdala which "acts as a storehouse of emotional memory…life without the amygdala is a life stripped of personal meanings…all passion depends on it". Gross (1996:23) notes the great role the limbic system plays in sense perception and memory.

On a socio-cultural level, Nouwen (1977:13) qualifies emotional memories and credits to them the construction of our world view:

> Most of our human emotions are closely related to our memory. Remorse is a biting memory, guilt is an accusing memory, gratitude is a joyful memory, and all such emotions are deeply influenced by the way we have integrated past events into our way of being in the world. In fact, we perceive our world with our memories. Our memories help us to see and understand new impressions and give them a place in our richly varied life experiences.

Among the implications of the Triune Brain Model in the development of adult leaders are the behavior alterations potentially produced by emotional hijacking, variations in perception (including perceived threat not only real ones), in memory and the role of passion. Greater understanding of these implications is relevant to the learning taking place in the lives of adult learners who intend to be leaders. Predictable behavior as free as possible from emotional hijacking, i.e. an improved *emotional quotient,* is desirable in most leaders, including church leaders. Emotions are critical to learning. Armstrong (1994:83-84) challenges educators to create moments for learners to "laugh, feel angry, express strong opinions, get excited about a topic, or feel a wide range of emotions" and to model emotions in their own interaction with learners to make it safe to have feelings in the learning environment. This use of emotions as part of learning strategy is implicit in the Four Quadrant Model which follows.

2.2.5 Four Quadrant Model

The theoretical basis for the "Four-Quadrant" or the "Whole Brain" Model (Herrmann 1994) is a synthesis of MacLean's Triune Brain Model and known research on neocortex hemisphericity. Part of the popularity of the Herrmann model has to do with its clarity which enhances the ease of presentation, unlike the Modular Brain Model. The format of the book (Herrmann 1994) deliberately and alternatively stimulates first left brain then right brain, i.e. to put the whole brain to work, by alternating text and visuals images. Herrmann (1994:63) narrates how he conceived the model:

> THE QUADRANT CONCEPT. Here's how it finally came together for me. One day, while driving the 35 miles between office and home, I was thinking about how to merge the triune and the left brain/right brain theories. Both theories initially appeared in my mind's eye the way they're always illustrated: the left brain/right brain concept I 'saw' was a frontal cross section of the brain indicating two separated hemispheres. The triune brain appeared in a side view crosssection [sic] cut between the hemispheres rather than through them. Then, in my visualization, the triune brain crossection [sic] rotated through 90 degrees, so instead of looking at it from the side, I was seeing it from the back. Eureka! There, suddenly, was the connecting link I had been searching for! When viewed from this unconventional perspective, it was obvious! The limbic system was also divided into two separated halves, and also endowed with a cortex capable of thinking, and also connected by a commissure – just like the cerebral hemispheres. Instead of there being two parts of the specialized brain, there were four – the number of clusters the data had been showing!

Perkins (2000) devotes a whole book to the kind of "Eureka!" moment experienced by Herrmann, describing it as "breakthrough thinking" which can be cultivated by personal practices and in the minds of learners by practices. The experience which is describe by Herrmann below seems to link to a "Eureka! – like" experience.

As it took some time for Herrmann to *see* the brain from the back, the upper two quadrants being the cerebrum, the lower two being the limbic system, it also takes some time for readers or learners to *see* the perspective that gave rise to the model.
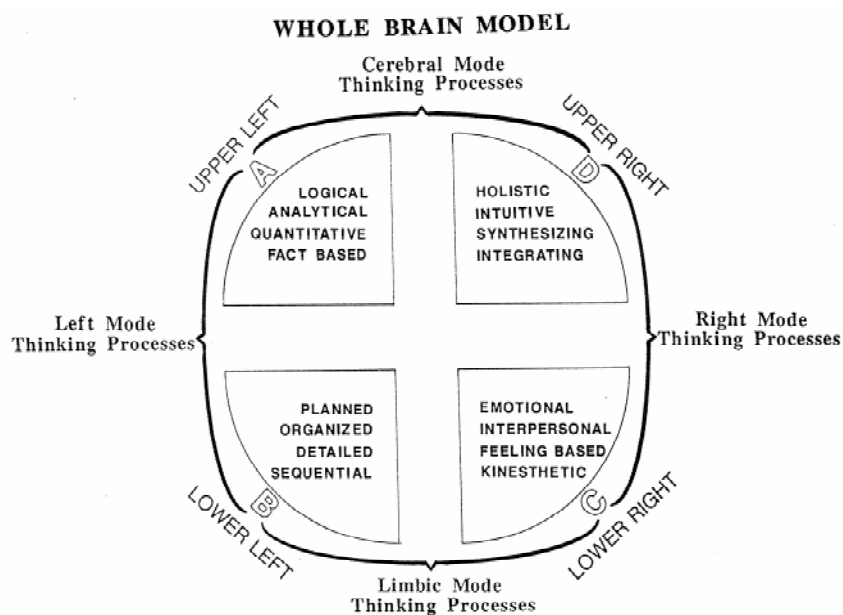
Figure 2.6 Whole Brain Model (Herrmann 1994: Appendix E)

The quadrants are not equal in size as they are pictured in Figure 2.6; the limbic halves appear to be almost equal to each other, but the limbic hemispheres are not actually equal in size to the cerebral hemispheres. The presence of emotions in the right limbic quadrant (C) is congruent with the placement of emotional memory and sensory learning in the limbic brain of the Triune Brain Model. By applying notions of the Modular Brain Theory to Figure 2.6 we might imagine a group of parallel modules organised vertically from the word *quantitative* in Quadrant A to *details* in Quadrant B, from *holistic* in Quadrant D to *interpersonal* in Quadrant C, etc. Herrmann enfolds into his "metaphorical model" the ideas of hemisphericity by applying left-brain and right-brain modes to varying domains of life: thinking, dressing, organizing, management, talking, writing, understanding, and so on. He applies the Four Quadrant Model by developing an instrument to profile the quadrant preference of the learning of an individual, which has been used empirically by De Boer, Steyn and du Toit (2001) and Hulme (1996).
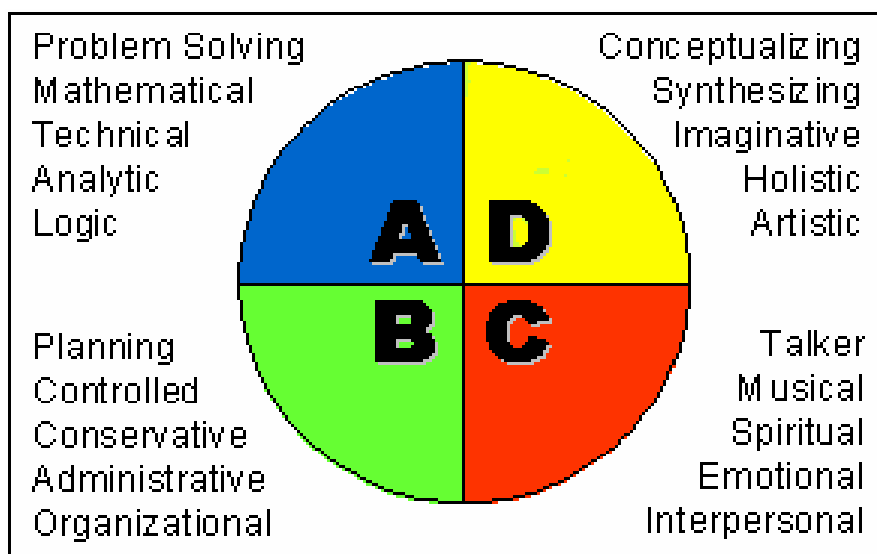
Figure 2.7 Four-Quadrant Preferences (Herrmann International 2002)

A-quadrant learners prefer lectures, measurements, analysis and numbers. B-quadrant learners like to take notes, make schedules, put things in order, etc. C-quadrant learners engage in movement, discussions, and interpersonal actions. D-quadrant learners prefer graphics, models, putting together the "big picture". Educators can think about which quadrant is being activated in the brains of their learning during particular learning events and plan learning strategies which will vary the activity of the brain quadrants so that learners of different preferences may be more inclined to enter into the learning event. These educators also vary the quadrants being stimulated so that more and more of the brain of all of the participating learners may be active in the learning event. Hulme (1996:63) uses the Four-Quadrant profiling to increase the meta-cognition of learners then form heterogeneous groups "with one group member with a primary preference in each quadrant, for discussion, case studies, or presentations". Some learning strategies are categorized by Herrmann as stimulating all four quadrants, so are whole-brain learning strategies which are of particular interest in "holistic learning strategies" which are discussed in Section 2.6.

2.2.6 Whole Brain Models and Holistic Education

Reference to *holism* is used with many other words in the field of education to convey the intent to consider the entirety of the word which follows it, hence, *holistic education*, *holistic teaching*, *holistic learning environments*, *holistic learning strategies*, *holistic methods*, and so on. Some models for holism in education which have given positive results for decades and even centuries come from those who minister (attend to needs of the people) and educate *holistically.*

Definitions of *learning* are relevant for consideration here. Heimlich and Norland (1994) use a definition from Hedges (1989): learning is being "able to do something you have never done before and to remember it so you can do it again". "*Able to do*" implies competencies or results. Heimlich and Norland continue (1994:28) by discussing intentional outcomes in adult learners:

> In addition to skills and knowledge acquisition and affective change (focused on self and on others) learners acquire the ability to purposefully shift from one paradigm to another…Learners facing a new problem realize that their old perspectives do not work any longer…they try on different perspectives and select one that seems to work better than the old perspective. Full transformation requires close association with others who share that new perspective.

Skills, *knowledge*, *ability to shift paradigms*, *try on new perspectives*; *transformation* and *close association with others who share that new perspective* are terms which are very relevant to the learning experience of the population in my research.

"Learning facilitation" says Gravett (2005:ix), "includes all the actions of the educator that have the conscious intention of and potential for assisting, helping, advancing and enabling learning". *Facilitation* has its root in the Latin *facile* which means *easy* (Borror 1960:39), so facilitation is the process or act of making something easy or easier. *Facilitation of learning*, then, refers to process of easing learning or making learning happen more easily or effectively. Adding the term *holistic* to the *facilitation of learning* means, then, the making of learning happen more easily by taking into consideration the whole personhood of the learners.

Brookfield (1986:9-11) identifies six principles of effective practice in facilitating learning in adults:

- Participation in learning is voluntary; adults engage in learning as a result of their own volition.
- Effective practice is characterized by a respect among participants for each other's self-worth.
- Facilitation is collaborative. Facilitators and learners are engaged in a cooperative enterprise.
- Praxis is at the heart of effective facilitation…all are involved in a continual process of activity, reflection upon activity, collaborative analysis of activity, new activity, further reflection and collaborative analysis, and so on.
- Facilitation aims to foster in adults a spirit of critical reflection.
- The aim of facilitation is the nurturing of self-directed, empowered adults.

The principles which Brookfield synthesizes are quite apparent in the *método* (methodology) popularized by Paulo Freire (1998:54) in Brazil in the 1970s and replanted by him and others in several other countries. In direct opposition to the *pedagogy of the oppressed,* he set up "cultural communities of 'dialogical education'" borrowing from the model of "Christian Communities" of the Catholic Church the structure of the method (Taylor 1993:74) in which students teach and learn from each other. Freire considers his students holistically as people who *know, think, talk* and *choose*, and says (Freire, 1996:24-25), "the 'formando' [the learner in formation] knows from the beginning that in the formative experience, he or she is not only to be the subject but the product…of teaching…that creates possibilities for the production or construction of knowledge".

Regarding the notion of 'humanization' Plunkett (1990:74) quotes Freire as…"the process of conscientization, or critical awareness leading to praxis, in which action and reflection are combined (Freire 1985)". The method of Freire is discussed in further detail in later sections of this chapter.

Holistic facilitation of learning is closely related to whole-brain learning and other brain-based learning theories. Facilitators of learning that use brain-based strategies know about the workings of the brain from the technologies developed and employed in the 1990s. About these discoveries, Goleman (1996: xi) wrote,

> The last decade has...seen an unparalleled burst of scientific studies of emotion. Most dramatic are the glimpses of the brain at work, made possible by innovation methods such as new brain-imaging technologies. They have made visible for the first time in human history what has always been a source of deep mystery: exactly how this intricate mass of cells operates while we think and feel, imagine and dream.

The brain cells "talk" to each other electrochemically when they receive impulses from hormonal triggers. This activity is what actually shows up on the sophisticated instruments used during experimentation. Pink volunteered to have his own brain examined technologically. He writes (2005:9-10) of the experience:

> [The] initial brain scan was like sitting for a portrait. I reclined, my brain posed, and the machine painted the picture…What results is a picture of the brain spotted with colored [sic] blotches in the regions that were active – a satellite weather map showing where the brain clouds were gathering. This technique (fMRI) is revolutionizing science and medicine, yielding a deeper understanding of a range of human experience…technicians slide me back inside the high-tech Pringles can. This time, they've set up a periscopelike contraption that allows me to see a slide screen outside the machine. In my right hand is a small clicker, its cord attached to their computers. They're about to put my brain to work.

According to these scientific observation and discoveries, some facilitators of learning set out deliberately and strategically to involve several areas of the learners' brains during learning time so that more of the brain is stimulated; hence, they are sometimes called "brain-based" facilitators. Brain-based learning holds that "the more, the better," e.g. the more of the brain involved in learning the better the learning will be". In reference to the Herrmann whole-brain quadrant model,

holistic facilitators of learning guide learners to an awareness of their learning preferences to enhance the process of their learning and to challenge learners to experiment with learning strategies outside of their own preferences.

Caine and Caine (1991:4) describe what they mean by *brain-based learning*, that it involves acknowledging the brain's rules for meaningful learning and organizing teaching with those rules in mind. Applying his understanding of brain functioning by devising a metaphorical model called *six thinking hats,* De Bono (1985) provides a means to think about thinking which he claims is simple enough for five-year olds to learn to use and effective enough for large-company CEOs to want to use. He maintains (1985:4) that using the *hat* metaphor guides people to engage in *parallel thinking*, the essence of which is that at any moment everyone is looking in the same direction – but the direction can be changed". This approach recognizes the efficiency and power of agreement in a group setting. De Bono (1976:9) furthers that "culture is concerned with establishing ideas. Education is concerned with communicating those established ideas. Both are concerned with improving ideas by bringing them up to date". Improving the way we think should, therefore, improve both culture and education.

There is a wide variety in definitions of what may be considered *holism in education*. Sonnier (1989:25) expresses what I consider to be an inadequate view: "when abundant visual stimulation is supplied simultaneously and concurrently with verbal explanation" that is *holistic teaching*. To me holistic education is more than the addition of visual stimulation. Two South African models, Curriculum 2005 and Copley's *cogmotics,* offer descriptions of holism in education which are far more comprehensive.

In the implementation of the educational reform in South Africa which included Curriculum 2005, South African Qualifications Authority (SAQA) establishes eight learning areas for learners in the country. The eight, called Life Orientation, is clearly holistic in its intent and establishes a comprehensive framework to undergird curriculum development. The rational for Life Orientation follows:

> Life orientation is fundamental in empowering learners to live meaningful lives in a society that demands rapid transformation. It is an integral part of education, training and development. It is central to the holistic unfolding of the learners, caring for their intellectual, physical, personal, social, spiritual and emotional growth, and for the way these facets work together. It locates its vision of individual growth within the quest for a free, democratic and stable society, for quality of life in the community and for a productive economy (Van der Horst & McDonald 1997:63).

Copley (2000a:1) who coined the term *cogmotics* describes it as follows:

> a holistic learning system…derived from the Latin words *cogitare* (think or know) and *motare* (move or do). Cogmotics ensures that all five major faculties (the big 5) which accord us status as human beings, namely the mental, physical, social, spiritual and emotional, are stimulated, developed and actively integrated.

Copley (2000a:3) calls attention to the *carpe diem* (seize the day) philosophy and practice of the teacher, John Keating, in the 1989 award winning film *Dead Poets*

Society. Keating's role is that of an educator who facilitated learning holistically, involving learners in the "integrative and synergistic functioning of the physical, mental, emotional, spiritual and social facilities" which Copley uses in *cogmotics.*

Jensen (1998:38) and Grandpierre (1999:107-127) speak of other physical human aspects – food, drugs, chemicals, attention cycles, fatigue – which must be included in the discussion of holism in education as they certainly affect learning. Jensen says, "All learning is mind-body". Every educator surely has had experiences with the truth of the mind-body connection. How many stimulating discussions are undermined by tea time or the lunch time bell or a wash-room break? How many learners drag sleep-eyed into the learning setting? On the other hand Armstrong (1987:74) makes note of centuries of practices which capitalize on the mind-body connection for learning

> For thousands of years, humanity passed on knowledge from one generation to another through a mixture of chanting, singing, dancing, and drama. Even with the development of written language, this unity of mind and body remained intact for hundreds of years. Dom Jean Leclercq, a Catholic scholar, suggested that monks in the Middle Ages saw reading as a physical activity…like chant and writing, requires the participation of the whole body and whole mind.

Eating can be added to the list of holistic activities that Armstrong has composed. One example is the Passover feast of the Jewish people which is composed of foods that symbolize aspects of Jewish history. As the foods are shared the stories are told to the children, year after year, to teach history.

The whole brain models are contained in physical bodies which operate physiologically and include cognitive and emotional functions. Learners are people who live in social and spiritual spheres. Holistic education promises a good fit for African learners: "The holistic frame of reference for Africans…calls for a holistic approach in education to accommodate the African perspective" (Mkabela & Luthuli 1997:39). Holistic education takes into account each of these aspects of the personhood of the learners.

2.3 Holistic Formation of Identity and Personhood

Adult learning is frequently described as "transformational" in consequence. So the title of this section "Holistic Formation of Identity and Personhood" merits comment. It might have been "Holistic **Trans**formation"; however the intent of this section is to look at the whole process of selfhood, of identity, of personhood, so I use the term "formation".

2.3.1 Identity

Selfhood or identity or personhood is the sum of what constitutes a human being. Theories and theologies abound as to what a person *is* and how he or she got to be all that he or she *is.* This section can only provide a drop of water in an ocean of literature about *identity* which floods in from psychology, neurology, philosophy, theology, sociology, medicine and even economics, starting with the brain.

Experiments conducted on split-brain patients by Gazzaniga, reported in Restak (1988) included one patient who was instructed to draw a car with his left hand and he did so, then, when asked why he did it, he could not explain why. The right side could not explain what the left side did. Restrak reports the theory of Gazzaniga on consciousness is that the brain is organised into vertical modules and that there exists one integrating module which synthesizes and gives meaning to other modules of the brain. This would correspond to what Restak (1988:23) himself calls the integrated consciousness, the true self, which makes sense out of the other modules. However, six years later he observes (1994:121):

> One part of us wants desperately to do something while another part resists with a ferocity that leaves us feeling disappointed and conflicted. At such times we wonder if more than one person occupies our bodies. Brain research on consciousness carried out over the past two decades casts important doubts on our traditional ideas about the unity and indissolubility of our mental lives.

Others make reference to aspects or parcels of self naming them *sub personalities*, *little selves* or *subselves* (Armstrong 1993:132), *the inner family – the people who live within us* (Wilks 1998:39) or *strands* (Gellatly & Zarate 1991:72): *"*Many strands go to make a sense of self. The social self is the sum of the groups to which a person belongs". Burgess (1991:58) names this plurality a "*'digest of selves'* (namely father, son, Muslim, football fan, brother, lover, colleague, friend) [which] responds to situational cues and often without conscious thought". The less identified with any single aspect of the separate self against another, say Dass and Gorman (1985:48), the freer is the person to know which…is most appropriate for a given situation. They (1985:74) also refer to *costumes* we put on "hundreds of times a day" to fit appropriate roles.

As mentioned previously, Wilks (1998:41) calls the *ego, the public front that we have constructed, our showcase* which usually speaks for others of the *inner family* which we do not "want to acknowledge, or haven't been able to accept about ourselves…almost any situation that arouses our emotions in a painful way points to an inner figure that needs our healing". Also aligning with the concept of multiple parcels of *self,* Morley (1989:318) says that our *real* identity is in our secret thought life: "Each of us leads a secret thought life, an invisible life known only to us…very different from the visible you – the you that is known by others. Yet it is the real you, the one that is known by our God".

S*elf* or *real self* may be the identity of a person within or in connection with others in his or her social context. Armstrong (1993:130) contrasts two positions held by psychologists. The first suggests that the self is "nothing more than a very complex mental map or system of schemas that allows us to organise information about the world more efficiently". The second, held by other psychologists: "a *real self* … develops out of interactions with the environment and with significant others". The second interpretation of *real* identity is interesting to compare with the expression "Umuntu ngumuntu ngabantu" interpreted as *Ubuntu* by Van der Horst and McDonald (1997:148): "a person is a person through his/her interactions with other people….Importance is placed on every person as an integral member of humanity – but equal importance on working for the common good of the group or society". O'Sullivan (1993:22-23) similarly contends: "We are persons not in

32

ourselves but in community. This deep relational quality of all of reality is referred to by indigenous peoples as 'all my relations'".

From the viewpoint as a constructivist, Bruner (1986:130) explains:

> Just as I believe that we construct or constitute the world, I believe too that Self is a construction, a result of action and symbolization… I think of Self as a text about how one is situated with respect to others and toward the world — a canonical text about powers and skills and dispositions that change as one's situation changes from young to old, from one kind of setting to another. The interpretation of this text *in situ* by an individual *is* his sense of self in that situation. It is composed of expectations, feelings of esteem and power, and so on.

So *self* may be severed by separating brain hemispheres or explained by vertical modules in the brain. S*elf* may be understood as a plural schema, the invisible, interior identity known by God or the one in community or three dimensional which is later explored in this chapter.

2.3.2 Memory

The terms *memory* and *forgetting* are so commonly tied to experiences of learning that this section might be straightforward; however, that is not the case. Instead, *memory* may be explored from perspectives that are vastly divergent in their terminology, epistemology and functionality, yet each has genuine relevance to holistic learning. Therefore, the considerations of *memory* present in this section are intertwined neurologically, practically and psychologically because separating them into categories is artificial.

A *memory* is "anything that happens and does not completely unhappen" as defined by De Bono (1973:29). "The duration of the remembrance involves changes in the nerve cells that form the memory surface. The result is some trace which is left. The trace may last for a long time or it may only last for a short time".

Several modifiers are commonly applied to *memory* − *short-term* memory, *long-term* memory, *working* memory, *poor* memory, etc. To Brennan (1997:59) "short-term memory is the place you put things you're going to need in a moment, but certainly don't want to keep permanently". To Jourdain (1997:54-5) the "auditory cortex is active during short-term memories in which aspects of auditory percepts are prolonged". Brennan (1997:60-61) says scientists who study expert translators who are able to simultaneously listen to a speech and translate it have measured their natural memory span as 10-15 seconds. Gellatly and Zarate (1999:134) describe *working* memory as, "what we currently 'have in mind" [and]… what is used to add up a bill in your head and keep track of the sub-totals, to remember where you are in a sentence or an argument or to switch back and forth between a game of chess and preparing a meal".

Byrnes (2001) informs that the concept of *working memory* has increasingly replaced the older concept of *short-term memory*. Gellatly and Zarate (1999) and Byrnes (2001) identify in neurological terms the three functional parts of working memory which briefly stores and processes information before sending it to long-term memory storage areas. These are (1) the central executive or decision

maker, and two slave systems – (2) the *visuo-spatial sketch pad* which deals with visual images and (3) the *phonological loop* which stores and rehearses speech-based information and is necessary for the acquisition of both native and second-language vocabulary.

The functioning of the two slave systems is described by Gellatly and Zarate (1999:135): " The visuo-spatial system represents limited information about spatial relationships. An audio system allows you to hold on to a limited number of words while you re-arrange them into more intelligible phrases, or work out their meaning". Apparently each of the slave systems consists of surfaces onto which awareness of past experiences and/or past patterns are brought together with new input stimuli (audio or visual), to be linked (or not) and then sent to storage areas according to other conditions present, particularly the emotional value of the set of experiences.

Caine and Caine (1991:5) describe how current, past and future connect in the brain: "Every complex event embedded information in the brain and links what is being learned to the rest of the learner's current experiences, past knowledge, and future behaviour". It is these linkages which are being forged in the two slave systems, visuo-spatial system or in the phonological loop. Restak (1988:29) says that "for experience, thoughts and behaviour to become conscious, a link must be made between mental representations of these thoughts and feelings and some mental representation of the self as experiencer".

The brain is always seeking and detecting patterns, seeking and detecting links. Brennan (1997:69) comments about the effect of emotion in this process of linking *old* experience to *new* stimuli:

> As far as we know, *all* memories are filed by association, but some memories are more strongly associated than others. What strengthens the association is emotion. If something amuses you or gives you joy or scares you witless, it will be more strongly associated with its fellow memories.

This phenomenon has obvious application in the facilitation of learning. Herrmann (1994) and Brennan (1997) maintain that we forget because we have weak accessing systems or connections. Brennan builds the argument that there are two parts to *remembering* – filing away information by transferring it from your short-term memory to your long-term memory, second, recalling the information at a later time. Brennan continues by advising that the time to make effort to *remember* is when the information is being filed away, not when you're trying to recall it. He (1997:106) says "most people don't forget – they just never take the trouble to remember". He (181) suggests deliberately tagging or labelling the thought, especially with visualization techniques, so that "when we need to pull up the thought again, we remember the visual image which is attached to the memory, and out comes the memory we wanted".

Educators can identify channels in the brain which lead learners to the memories by guiding them to make a conscious effort to remember something just learned. Jensen represents them as six *memory pathways* and Sprenger as five *memory lanes.* Whatever the nomenclature of these memory channels, knowledge about

them may be employed strategically by facilitators for their learners to be better equipped to retrieve the learning that is stored in their long-term memory.

Semantic memory Sprenger says (1999:65) "operates word by word, therefore, each learning experience should be organised to present a short chunk of information. The brain must process the information in some way after the presentation of each short chunk". Brennan (1997:101), Russell (1979:230), and Byrnes (2001:144), Jensen (1997:1998), refer to the importance of organizing information in small chunks, and then having the learner reorganise the information or reformulate the material soon after receiving it the first time. Interpreting such activity in terms of the Four Quadrant Brain Model, the reorganization or reformulation of the material is a B-Quadrant mental activity, so the educators above are guiding their learners to move the *chunk* of learning from the cerebrum to the limbic modes, from Quadrant A or D to B.

To guide learners to utilize the procedural memory lane of their brains Sprenger suggests (1999:75):

> Try anything that provides movement—for example, role-playing, debate, dance, marches, monologues, and games...these procedures not only reinforce semantic knowledge, but they also represent memories that can be stored through those **procedural memory** 'muscles". Have students stand up as you cover specific material. Ask them to walk as you review it, jump when they think they understand a particular point, and clap when they know it all.

According the four quadrant brain model, the learning strategies Sprenger suggests would encourage the pathway of impulses in the brain from analysis in quadrant A to motor movement on the other side of the brain.

What works best to store learning in memory so that it may be recalled? Brennan maintains (1997:182) "Making pictures in your mind is the most important key to a mega memory. Anything filed visually is much, much easier to remember". He suggests visualizing big, no huge, abstract things like fantastically coloured animals doing funny movements on which to hang labels of the items to be remembered. Linksman (1996) combines brain hemisphericity and learning styles to identify and describe "superlinks for learning," then advises, "The key to remembering what we learned is to store it according to our best learning link. (158)". Specifically, then, Linksman (1996:158) correlates learning styles with types of memory links:

- Visual people would *see* what they read and heard as a movie in their minds.
- Auditory people would *hear* what they read and heard as the sound track to a movie in their minds, complete with words, music, or sound effects.
- Tactile people would *experience or feel* the sensations and feelings of the movie in their minds.
- Kinesthetic people would *act out* the events of the movie in their minds.

Both Jensen (1998:60) and Sprenger (1999:64) refer to the positive connection between the number of memory channels utilized in facilitation of learning and the

degree of recall. Jensen (1998:61) says, "For maximum recall, store learning in multiple pathways AND follow up with review 10 minutes, 2 days, and 1 week later". The considerations about memory of the brain-based facilitators open windows of understanding about how knowledge constructed in learning settings other than formal classrooms may be deliberately conditioned by the learner for more effective learning. However, depending on the theory, application is modified.

Gardner (1987:395) refers to the PDP (parallel distributed processing) approach which views memory as "the set of relationships that obtain among various aspects of facts or events as they are encoded in groupings or patterns of units. What is stored are the connections and strengths among units which allow the patterns to be subsequently recreated". Thus, reinforcing existing neural connections, however they are arranged, and strengthening coded units in the facilitation of learning would become another wording for a "brain-based principle" for brain-based educators to utilise.

Remembering information is definitely a part of learning. Bloom *et al* (in Anderson & Sosniak 1994:16) comment that knowledge is

> the primary, sometimes almost the sole kind of educational objective in a curriculum. In almost every course it is an important or basic one. By knowledge, we mean that the student can give evidence that he remembers, either by recalling or by recognizing, some idea or phenomenon with which he has had experience in the educational process…a justification for the teaching of knowledge that it is quite frequently regarded as basic to all the other ends or purposes of education. Problem solving or thinking cannot be carried out in a vacuum, but must be based upon knowledge of some of the 'realities.'

Knowledge, know-how, experience, emotional and sensory memories are all constructions or productions of the learning process. We arrived on the planet with very few of them.[1] If our brain continues healthy we may continue to be changed by what we learn day after day. Restrak observes (1988:69), "Contrary to popular opinion, the older person, at least up to the mid-seventies, doesn't show much change in intellectual performance. Older people still know what they knew decades ago, and if you're willing to wait a bit, will get the information to you". Freud and Piaget were among those who "misconstrued the aging process", according to Cohen (2006:82), and that the mature mind "gets better at reconciling thoughts and feelings" (83). Gravett says simply (2005:6) that "in general…older adults need more time to learn new material". She makes reference to "new 'forms of intelligence'" which "emerge during adulthood and old age, such as wisdom, practical intelligence, and the development of expertise, and says (2005:4) "if tests used items related to deductive reasoning and long-term working memory to assess fluid intelligence, they would show an increase during adulthood instead of a decrease".

---

[1] *During the 1980s and 1990s, scientific journals around the world began publishing studies proving that music literally alters the structure of the developing brain of the fetus; that infants recognize and prefer music first heard in their mothers' wombs (Campbell 1997:3).*

"Magnified tremendously, the brain of a mentally active 50-year-old looks like a dense forest of interlocking branches, and this density reflects both deeper knowledge and better judgment," Cohen observes (2006:84). He states the obvious, that sometimes is overlooked, "older brains have learned more than young ones". Restak (1988:258) describes how the human brain practices "graceful degradation" which is the fuzzy functioning system of memory, unique, non-linear, and non-logical:

> Our brain, over our lifetime, works as a self-assembling structure whose functional capacities are distributed. That means, in practical terms, that when one part breaks down, another part can often be recruited to take its place. 'I can't remember the name of the store where I bought this coat but I can tell you exactly how to get there from here,' we may say to a friend when we can't come up with the name. 'Graceful degradation' is the intriguing term for this loss of clarity and precision. We exhibit it – or rather our brains do – but computers don't. A computer either comes up with the specific information requested or it doesn't.

Most of our individual identities are defined by *memory* as Restak (1994:76) summarizes below:

> At the most basic level, we know who we are and maintain our sense of personal identity and integration of the basis of our ability to remember our past experiences. None of us remembers everything, of course – indeed, who would want to? – but most of us remember enough from events over the years to provide ourselves with a sense of our own unity as a single, reasonable well-integrated person. Memory thus forms the underpinning for our personal sense of identity. But brain studies carried out over the past few decades cast doubt on this cheeky confidence in memory as the substrate for our own personal integration

Research suggests that at 40 years old, the best years of the brain are still ahead (Cohen 2006:82) yet, personhood

is more than the brain,
is more than the whole brain,
is more than holistic learning,
is more than memory and
is more than the sum of its parts.

The "something beyond" or "more than the sum of" is frequently referred to as *spirituality.*

2.3.3   Spirituality

Holism, by definition, treats the totality of the subject, thus, holism in personhood treats mental, social, emotional, physical, **and the part of personhood which is identified by several different names** *spiritual* and/or *cosmic* and/or *transcendental.* Spirituality has a wide variety of interpretations. Hoffman in Brown, Farr and Hoffman (1997:10) uses the term *spirituality* quite pragmatically as he applies it to situations as distant as "school principals and boards of

education in America and Britain wring their hands over a lack of 'spiritual' development (by which they often mean appropriate conduct or better English-language skills)". If definitions of *spirituality* can be so broad as to include policy implications and better language skills in school situations, then the concept certainly needs to be well examined and defined for the context of adult learners in my research.

There are several variables in these interpretations, but none is more important than the *locus of the source* of the spiritual improvement of an individual. Spirituality was once the domain of "Western monastics and Eastern mystics…to remind us of…ancient cosmologies and anthropologies" (Brown, Farr & Hoffmann 1997:9) but now it is common that those who write about the brain or the mind include arenas that used to be considered "unscientific".

As mentioned previously, Zohar and Marshall are proponents of improving the spiritual quotient of all people. They (2000:7) describe the Spiritual Quotient (SQ) as holistic and **within**: "SQ … facilitates a dialogue between reason and emotion, between mind and body. It provides a fulcrum for growth and transformation. It provides the self with an active, unifying, meaning-giving centre [sic]". They (2000:6) link the SQ to "one of the three basic neural systems in the brain", so they assert connections from holism to spirituality and also from intelligences to neural systems and tell us that our society has become *spiritually dumb* as a result of the loss of the "*human soul*…[meaning] we have lost our sense of fundamental values − those attached to the earth and its seasons" (2000:22).

Goleman (1996:xii) describes the problem of societal shifts in terms which are basically parallel to *spiritual dumbness* but he maintains focus of the havoc caused by emotional inabilities and the importance of emotional empowerment to social order and ethics. He ties complex traits, usually associated with the character, like *selfishness, violence* and *meanness of spirit* to emotional capacities. He also connects societal quality, *the goodness of our communal lives* and behaviour within society, *ethical stances in life* and names *emotional capacities* as the point within us from which these aspects *stem.* This stance qualitatively adds *emotional capacities* to the list of titles of *spirituality.* Other titles would fit into the sentence if written by other theorists. For example there is growing evidence that all these things stem from *watching violence on the screen* or from a *lack of prayer in the homes* or from *eating junk food* or from *not knowing the real true God* and so on. However open the interpretation of the source of these character and societal aspects might be, the position of Goleman regarding the importance of emotional capacities is supported by *growing evidence* as he has stated. He then describes how to develop emotional capacities in oneself. Brain-based educators in Section 2.3.2 suggest developing emotional capacities in learners by teaching to the right-brain, especially to Quadrant C. Learning strategies which contribute to the development of *emotional capacities* and *emotional empowerment* are important to my research.

Some proponents of holistic education or holistic learning like Wilson (2003), Zohar and Marshall (2000) and Miller (2003) include "spirit" as a special inner connection within the individual. Wilson (2003:2) comments:

> Deep teaching and the learning associated with it is steeped in imagination, emotions, and ideas. Minds are captivated. Ideas soar. Such learning

touches and enhances the soul of the student. The result is a level of learning that goes far beyond definitions and facts. At times, it brings about a change or *transformation within the student*.

The change comes from within; Wilson (2003:3) also calls this transformation "self-realization". The source of this spirituality and transformation is within the person.

Mouton (1993:90) also identifies transformation at the core of critical social science and uses transformational terms as relating to self-transformation and production/work:

> the aim of a critical social science is to liberate human beings from their state of alienation through the process of self-reflection…to transform or change the human condition through a critique of those alienating or repressive factors which sustain his/her alienation/self-deception/false consciousness. The core concept of the critical paradigm is therefore to be found in the idea of transformation: human beings who *transform themselves* and their environment through production/work.

The work of Freire is an example of this position. According to Taylor (1993:105) the ten drawings of commonly found life situations that Freire used in his *método* includes a drawing, number "6" entitled "Man transforms the material of nature by his work" and number "7" – "A vase, the product of man's work upon the material of nature". The drawings are the visual focal point for the social, communal dialogue carried out as

> a three-stage investigation…there is a NAMING stage where one asks the question: what is the problem, what is the question under discussion? Second, there is a REFLECTION stage: why is this the case? How do we explain this situation? Finally, there is the ACTION stage: what can be done to change this situation? What options do we have?' (Taylor 1993:73).

Dass and Gorman (1985:27) speak of the motivational impact that *self-transcendence* has on those who experience it, drawing them into further exploration of what they call *the higher Self*. The resultant opening of appetite to further experience is also referred to by Campolo, who locates the source of spirituality as God, the all-knowing, almighty God. He says (1994:144): "Those who have tasted transcendental reality can never again be convinced that this world and the society that regulates them can satisfy their needs... they know there is...something…beyond anything that the rules of the system can provide".

Still in consideration of the source or locus of spirituality, Armstrong (1993:223) holds that it may be found "outside of ourselves…in a transpersonal, religious, or celestial realm" or in the "soul of the earth" or "in ourselves – but in our hearts rather than our minds". Continuing, he describes this *supraordinate intelligence* in terms of the MI Theory, contending that it "may be important, even essential for the survival of the planet, that…somehow guides the other seven, making sure that their use is directed toward the common good of humankind".

Spirituality, as described by O'Sullivan (1999:259-260), "refers to the deeper resources of the human spirit and involves the non-physical, immaterial dimensions of our being; the energies, essences and part of us that existed before and will exist after the disintegration of the body". He is one of many who separate spirituality from institutional religions and points out that the result of such identification has been that contemporary education suffers. In attempts to put back what was left out, private sectarian and non-sectarian institutions are logical results of public institutions divorcing spirituality from education.

There are proponents of modern holism like Plunkett (1990), Campolo (1994) and Copley (2000a) who consistently refer to a point outside of self, to a "transcendence" or a "transcendent one" or "God". Plunkett (1990:82) says: "We may know more than we can express. Spiritual intuitions are formless, though they may still refer to a reality with features much sharper than the ones known through reason or the senses".

Plunkett (1990:84) clarifies further:

> The spiritual represents a mode of access to a realm of being which is *outside time and space* [italics mine] but is not subjective. The spiritual reality is transcendental, and gives humanity a personal link to god [sic], that is to the Absolute in goodness and truth, so that there is no conceivable human aspiration that can take us any further.

Although Bruner frequently speaks of our creating our own *worlds* by our words and by our perceptions of ourselves, he locates transcendence beyond ourselves and ties transcendence to meaning and to creative arts (1986:153):

> The transcendent is an unshakable, axiomatic acceptance of 'meaningfulness,' like Descartes' axiom that God will not falsify our perceptions of the world or Einstein's that He will not play dice with us. It is incarnate, a real presence − as truly sacramental as the faith, say, of a Rashi or a Nicholas of Lyra that the word of god could always and inevitably be found in the literal text of Scripture once it were properly explicated philologically, historically, and with a view to its function as theology. It is faith in meaning incarnate in the work of art, meaning that captures the 'immensity of the commonplace,' that changes our very construction of reality: 'poplars are on fire after Van Gogh.' So Matisse could proclaim after completing the murals in Venice, 'I am God,' or Picasso speaks of 'God, the other craftsman'.

Gardner also emphasizes the importance of expressions of human creativity by saying that (1987:391-92) the goal of cognitive science should be to figure out how humankind how creates wonderful products of the mind (*italics mine)*:

> The ultimate goal of cognitive science should be – precisely – *to provide a cogent scientific account of how human beings achieve their most remarkable symbolic products*: how we come to compose symphonies, write poems, invent machines (including computers), or construct theories (including cognitive-scientific ones).

This research project resonates with this position as it seeks to *provide a cogent scientific account* of how one set of human beings, those who live scattered across Mozambique, come to achieve, against many odds, a relatively *remarkable symbolic product* – the construction, in community, of knowledge quite pertinent to their lives. If empires in the age of Alexander, the Great, or Ancient Rome or Bill Gates are remarkable social inventions or achievements, then communities of real learning should also count. This knowledge is not concrete, and it may not be recorded in writing by the communities, but it may be passed on to others who listen to and interact with them by their verbal expressions recorded in this project.

Csikszentmihalyi (1993:239) gives six distinct values for what he calls *spiritual activity*:

> 1) harmony among conflicting desires,
> 2) meaning among the chance events of life,
> 3) reconciliation between human goals with the natural forces that impinge on them from the environment
> 4) an increase in complexity by clarifying the components of individual experience such as good and bad, love and hate, pleasure and pain
> 5) expression of these processes in memes that are accessible to all
> 6) integration of these processes then with one another, and with the external world.

It might be inaccurate to label Bruner, Gardner and Csikszentmihalyi as "theologians" (although at least one distinguished educator holds that everyone is a "theologian" because everyone has a knowledge of God[2]) but the thinking demonstrated in each of the quotations above resonates with major tenants of incarnational theology. Foster (1998:272) holds that all people are called to the living out of such theology which he calls "*sacramental living*, a life that makes present and visible the realm of the invisible spirit". Foster further maintains that through sacramental living people "experience God as truly manifest and notoriously active in daily life…everywhere we go is 'holy ground'".

Therefore, even though most all who identify themselves within *holism* will refer to the spiritual aspect of the learner, there are at least three very different loci of this spirituality – within the self, outside of the self in some indefinite cosmic sense or in God with a capital *G,* the Supreme Being.

Csikszentmihalyi (1993:242) discusses the contemplation of God:

> These days the quest for truth may not lead one to a contemplation of God, as it did Aquinas, but rather to the comprehension of the underlying causes of reality, of the organic relationship between the various forces and processes in the universe, including the minds of men and women. Some may still prefer to give the mysterious power that binds all these processes into a fabric of incredible complexity the name God

Csikszentmihalyi, like Gardner, uses phrases very relevant to this PAR study. He opens the possibility that the quest for truth may lead *one to contemplate God*, as

---

[2] Dr Jerry Lambert frequently makes such a claim in addressing Nazarene educators so he distinguishes between "theologians," who everyone is, and "academic theologians".

41

did the Catholic Father, Aquinas, in order to better *comprehend the underlying causes of reality*. He says such quest *may not lead* one but does not exclude the possibility that, in fact, it *may lead* one to a contemplation of God. Though this stance may be an unpopular one, this is the one I take. The teachings from other Catholic thinkers like St. Ignatius de Loyola as well as other Christian and non-Christian thinkers come to bear on my research. That the *contemplation of God* will also lead to *better understanding* about the *relationships* that Csikszentmihalyi named and also better understanding about *the minds of men and women* is central to my research as it seeks to understand if and how learning takes place in the minds of men and women in Mozambique and it asks if there is improvement in relationships in the lives of the learners because of the holistic learning strategies employed.

Csikszentmihalyi admits that contemplation of God may help to comprehend the causes of the organic relationship between the various forces and processes in the universe *including [the forces and processes of] the minds of men and women.* I borrow this perspective; I believe that contemplating God, including Him in the study by various means, may help to understand the causes of the organic relationship between Him and the minds of men and women and the forces and processes therein [their minds]. And among those who still prefer to acknowledge God as the mysterious power binding all the processes into an incredibly complex fabric, I stand.

My study does not set out to give evidence of God or to argue the validity of such stance or to proselytize for others to join me. With scientific rigor in this study, I use the term *God* to refer to the relationship of inclusion the learners take to the Supreme Locus of Spirituality outside of themselves. So I name *God* as the locus of spirituality that I repeatedly use in this study. I choose to employ the term *tri-dimensional* coining the term in an attempt to eliminate ambiguity as to the source of spirituality in the life of the learners. By definition the three dimensions of *tri-dimensional* are, therefore, the following:

> 1st: the person
> 2nd: other subjects and objects
> 3rd: God

In like manner *tri-dimensional practice* or *3-D practice* assumes that the third dimension, which is *spiritual learning environment* puts God into the setting; *spiritual environment* is not spiritual in humanistic or secular senses. *Spiritual learning environments* include God.

2.3.4 Tri-dimensionality

Models and concepts of *self* from varying psychologists have been introduced. The term *self* tends to attend to the personal interpretation of each individual of her or his identity. To speak of *self* in relation to others the term *social self* is usually used. *Personhood* also refers to *self* but connotes a less inward-turned perspective of the individual so each term provides fitting terminology for the current discussion. In the figure below both terms occur. The inner *selves,* particularly as related to the mind or thinking, are frequently interpreted as *triune* and have other names in diagrams of other writers. Johnston (1996:21) refers to Piaget 1952, Jung 1923, Plato cited by Keefe 1992, Snow and Jackson 1992 and

Keefe and Languis 1983. In holistic or whole-brain manner, Johnston makes a diagram of the triune components of the mind, naming three types of learning which she discusses as *cognition, conation and affectation.* This diagram follows as Figure 2.8.
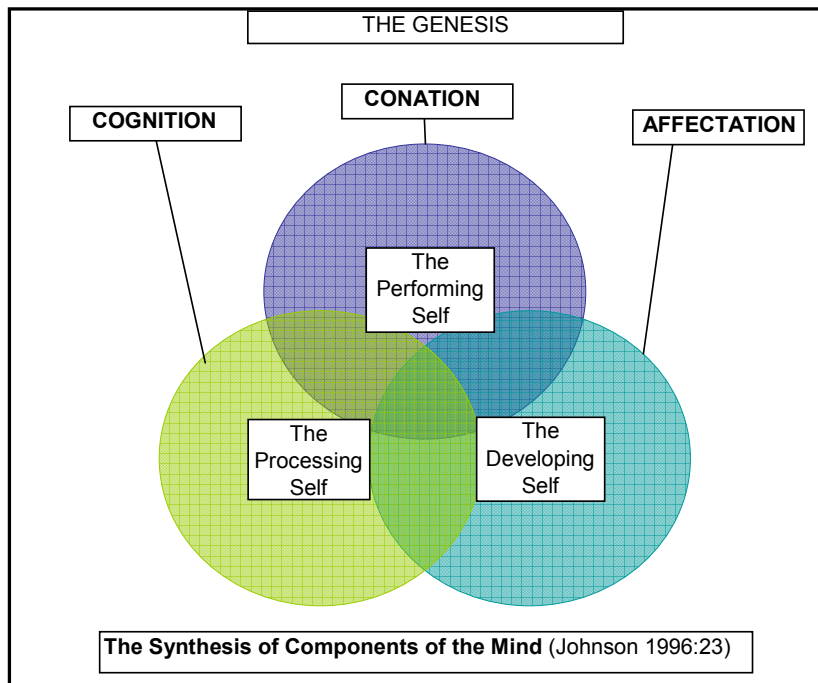
Figure 2.8 The Synthesis of Components of the Mind (Johnston 1996)

Cognition is a commonly used term which refers to mental activity in the domain of facts and knowledge. Johnston (1996:22) explains that the less frequently used term *Conation* has been given "a variety of names including 'purposeful striving,' 'persistence,' and 'the behavioural action'". Those working in brain-based learning trace conation to the earliest development of the human brain. *Affectation* implies emotions, affective learning, emotional memory, probably includes *emotional capacities* as supported by Goleman.

Her major thesis deals with the *will to learn*. She explains (1996:27):

> Modern day psychologists refer to *will* as the drive to act that is uniquely our own. *Will* is that force that is derived from our sense of deep meaning – our sense of purpose – our drive to have meaning. Meaning arouses our energy. The energy of meaning is our passion. The energy to act on what is meaningful forms the very heart of our will,

Johnston uses strong terms – *force, sense of deep meaning, sense of purpose, drive, energy, passion, heart*. The terms themselves denote important human issues of great importance which, quite logically, are of importance in this research project. Each of the three selves apparently work on both sides of the brain so are whole-brain selves even though one quadrant or another may be the dominant thinking mode of the self.

Another trilogy tangential to this discussion is the citing of three kinds of exit level outcomes from South African curricula may seem to be a disconnected subject[3], but the way Killen describes the competencies targeted for the lives of South African learners resonates with the goal of Johnston to motivate learners *persistently* – for the long run. *Persistence* is part of Conation. *Persistence* is necessary to exit an educational programme in South Africa. Hence, the point of contact of the two subjects and inclusion here of the three kinds of exit level outcomes (Killen 2000:iv):

- **Practical competence** is the demonstrated ability, in an authentic context, to consider a range of possibilities for action, to make considered decisions about which possibility to follow, and to perform the chosen action
- **Foundational competence** is the demonstration of an understanding of the knowledge and thinking that underpin the actions taken
- **Reflexive competence** is the demonstrated ability to connect performances and decision making with understanding and with an ability to adapt to change and unforeseen circumstances and to explain the reasons behind these adaptations

"Foundational competence" clearly relates to "Cognition" of Figure 2.8 and "Practical competence" to "Conation". Less obviously, "Reflexive competence" may relate to "Affection".

Another diagram which presents a learner holistically is presented as Figure 2.9. In it the *selves* are named the *Social Self*, the *Whole-Brain Self* and the *Spiritual Self* for convenience in this study. The *Social Self* has several roles as the image and behaviour of *self* is modified by the presence or expectations of other people and of objects as discussed in Section 2.3.1. The *Whole-Brain self* includes affective, behavioural and cognitive, all aspects of any of the Whole Brain models discussed above, but particularly that of Herrmann (1994). The Spiritual Self, like the other two selves, undergoes process and development, is not static so is also subject to learning. Each parcel of self of the whole self is enhanced by God, as the external source of spirituality, hence, the word *God* within the diagram of the whole person. Memory is also present because, as discussed in Section 2.3.2, memory is an integral aspect of personhood. The three dimensions of personhood are the holistic self relating to others, to self and to God, hence the term *tri-dimensional* personhood. The diagram in Figure 2.9 synthesizes most of the discussion to this point in the chapter. Because it pulls together many points which have been discussed textually, and is also graphic, it clearly appeals to the D-quadrant in the minds of the viewers. Some will be pleased to see it because they are visual learners, others with left-brain preferences may not appreciate it. The oval representation of the whole self contains three figures which represent, as labelled, the *social self* surrounded by several points of social contact, the *real* or *spiritual self* in the centre, and the *whole-brain* self as the model for the *mental* self of *tri-dimensional personhood*. All three selves have varying facets and all are affected by the presence of God, and are interpreted through functional memory.

---

[3] Perhaps this is an example of *lateral thinking* (de Bono) which is non-linear and has holes or jumps that get filled in subsequently.
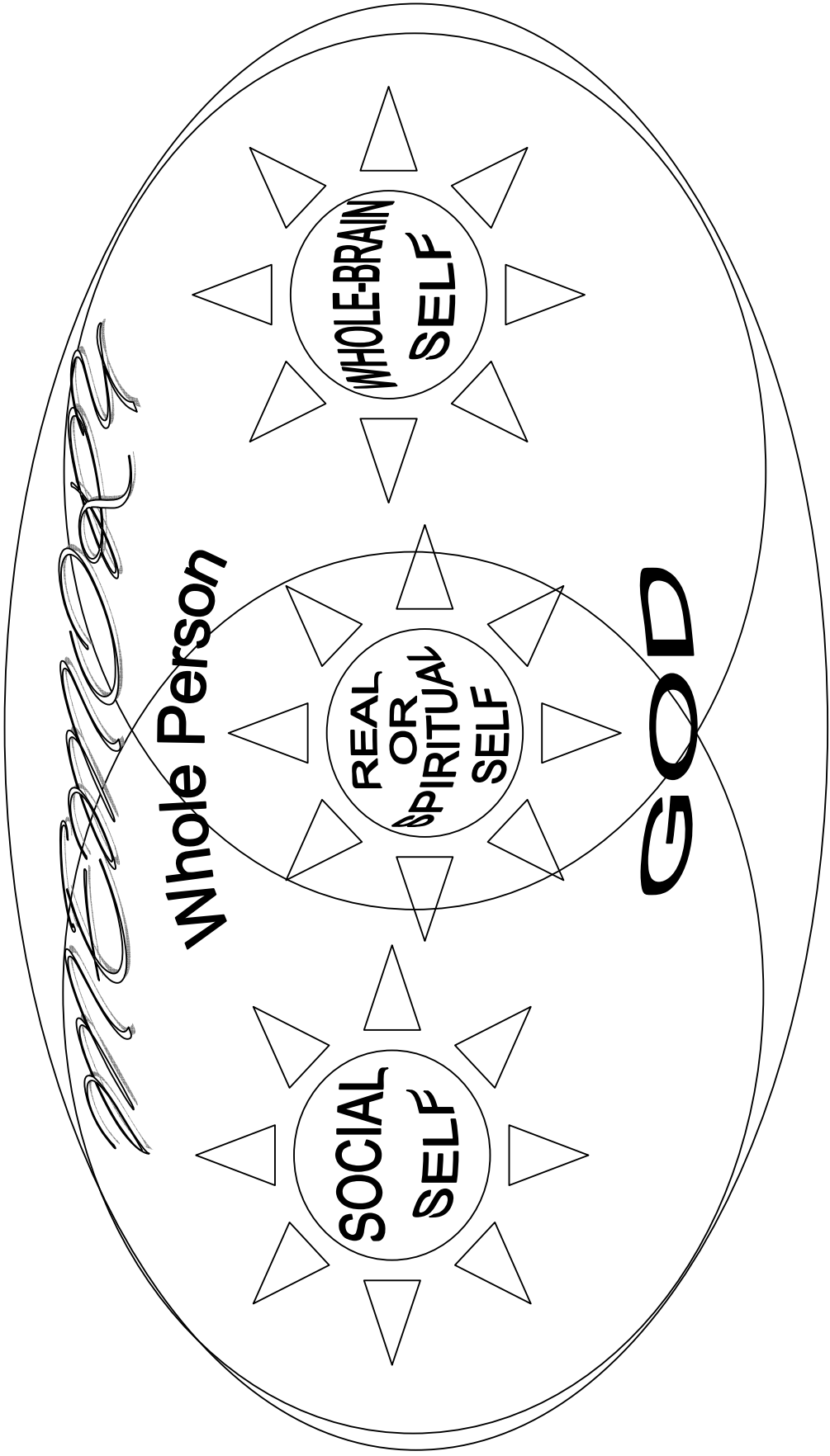
Figure 2.9 Theoriogram on Tri-Dimensional Personhood

45

## 2.4	Spiritual Learning Environments

### 2.4.1	What are aspects of learning environments in general and spiritual learning environments for adults in particular?

Although the phrase *learning environment* almost automatically brings to mind several physical considerations of the physical settings where teaching/learning encounters take place, *learning environments* include other aspects besides the physical setting. These are the learners themselves, the facilitators of learning and the relationships between all of them as participants within the physical setting. These aspects are named separately but, in reality, each impacts the other, and it is artificial to consider them independently. Yet this is the nature of reflection on the parts of a whole, the whole being defined here as *learning environment.*

Physical aspects of the *setting* include the lighting, temperature, acoustics, seating, ventilation, instructional equipment, wall space, room size, shape, colour, flooring, windows, etc. These aspects do influence learning. Educators like Cranston (1992:130) encourage the creation of an environment which "provides for [both] the comfort of the participants and also makes clear the role of the educator". She implies that the comfort of the participants has both physical and emotional considerations. In this study the physical aspects of learning environments are called *settings*. Because of financial and geographical restraints currently implicit in the context of our PAR project, there is very, very little potential to improve the physical setting of any of the learners. *Comfort* is a term rarely used in the whole of the Mozambican context; *wellness* is the usual question in Mozambique, so, while I ascribe to the usual importance of physical aspects of the learning setting as they are named here, I proceed to aspects of the learning environment which are clearly more within the control of the research. The emotional aspects of learning environments are included in what some call *climate* which is conditioned by many decisions regarding the learning activities as well as the emotional baggage from past learning experiences which the adult carries into the learning setting which colours the new learning experience, especially at the outset.

Broadly experienced adult educator, Laubach, says (1960:39) "sixty percent of the success in teaching adults lies in the manner of the teacher". The terminology used by Laubach dates his comment; a current rephrasing of his intent might read, "sixty percent of the success in *learning* among adults lies in the manner or skill of the *facilitator".* Brookfield (1987:71) speaks of the importance of facilitators modelling openness and critical analysis. Skillful facilitators of learning manage aspects of power, gender, age, and other diversities within the environment to condition it for conduciveness to all of the learners present in the environment.

Frank Laubach developed a literacy movement formally known as "each one teach one" for "the silent billion" because of their lack of voice in affairs of their societies and the world (Foster 1998:47). He started in the Philippines to teach Maranao adults to read, then to teach adults in…Singapore, Ceylon, India, Egypt, Palestine, Syria, Turkey, Afghanistan, Nepal, Dutch New Guinea leading to the founding of the world literacy committee which would reach an estimated sixty million people (Foster

1998:47) in 100 countries of the world (Laubach, Kirk & Laubach 1991:195). Laubach and his colleagues repeatedly taught people to teach others. Laubach, and colleagues Kirk and Laubach, formulated principles for the facilitation of learning within these populations which focus on characteristics of the adult learners themselves, based on their extensive experience. An abbreviated version of their ten *Principles of Teaching an Adult* (Laubach *et al* 1991:43) follows:

1. An illiterate adult should be treated like any other adult.
2. An adult knows the meaning of many spoken words.
3. An adult likes to read about things which relate to his experience or which will give him new experience.
4. An adult likes to teach himself as much as possible.
5. The teacher must be careful to maintain the self-respect of the student.
6. An adult's time is valuable. Every minute of the lesson should count.
7. An adult should see the relation of what he is learning to the problems he faces every day.
8. The size of the type in the first lesson should be large enough to prevent eye strain. The teacher should speak distinctly and loud enough to be heard without shouting. The chair and desk should be large enough for an adult.
9. An adult should have the feeling of success from the first lesson.
10. The adult should have an opportunity to read something besides his textbook.

Imel (1995) labels such a learning environment as Laubach recommends as *inclusive*. Two suggestions that she makes about the creation of such an environment among adults are for facilitators to

- Acknowledge that all individuals bring multiple perspectives to any learning situation as a result of their gender, ethnicity, class, age, sexuality, and/or physical abilities and to

- Recognize that since identification with social groups is multiple and complex, [a learner's] claimed identity will be in response to many contextual factors that position the individual politically (Imel 1995:3).

The first series of learner aspects cited above are basically those present at birth: *gender, ethnicity, class, age, sexuality,* and *physical abilities.* Then Imel alludes to social groups to which the learner may belong by birth but mostly by choice. Together the aspects result in numerous factors which constitute the context of learners.

As to be expected, there are many similarities between the characteristics of adults identified by Imel and those by Laubach. Freire (1994:107) gives important place to religiosity and to partying (*festas)* in articulating his description of the *progressive educator.* According, therefore, to Freire, the list of recommended skills of facilitators includes the abilities to *read the world of the learner* with its religiosity and celebrations (*festas)* and *perceive the indispensability of their tomorrows.*

Facilitators of adult learners take into account that adults are already *formed* as they enter the learning environment. This is not a static *formed.* If it were then entering the

learning environment would be in vain. The frequently-cited position by Cranston (1992:145) says "one of the primary differences between education for adults and education for children is that children are 'forming' and adults are 'transforming'" acknowledges the experiences, mindset, value system and basic worldview which adults already possess, which may be *transformed*. This potential of transformation is a given in every environment where learning will take place; it is a belief that facilitators and learners hold in common.

From "a *mountain of information about the way the brain develops in adulthood* from in-depth interviews with the 'excellent elders' nominated by journalists, lawyers and counsellors in their thirties and forties" Donovan and Wonder (1994:38-40) affirm (1994:38-40) that they identify "what it takes to be happy, sharp, secure and admired in old age...their stories show that you are never too old to change, to learn, to grow; and, that, in fact, changing and learning are the keys to an exciting, fulfilling life".

The adult years are called the time to "master the art of self-renewal" according to a book title by Hudson (1991). Taylor (in Marienau, Taylor & Fiddler 2000:12) phrase adult learning as reframing *life themes* which "interpret and bring order to the myriad of perceptions, thoughts, actions and feelings that constitute an individual's interactions with her environment". Such reframing results in "a more complex, self-construction, and the possibility to be some other way" (Taylor in Marieau *et al* 2000:12)". Phrases like these – "adults being *transformed"*, "adults *never too old to change"*, "adults *learning to think critically" and "adults reframing life themes towards the possibility of being some other way"* – all point optimistically toward potential change in the learners of the population of this PAR study*.

The *learning environment* of my study in Mozambique includes more than the *learners* themselves; it includes more than the *learners in their multi-faceted personhood and their multiple contexts.* A critical aspect in my study are the "monitors" who are graduates of the Nazarene Bible School in Maputo trained to be facilitators of learning in the system using holistic learning strategies to facilitating learning. My research question regarding the extent that learning is facilitated by holistic learning strategies is conditioned by the fact that the learning to be analysed in the whole research proposal is the learning facilitated by these monitors. Such a situation does not preclude the potential of learning as per Brookfield (1986:149) who comments that

> [Because of many research studies on self-directed learning in the decade of the 1970s] there is now much less likelihood that educators will presume that valid and valuable adult learning can occur only in the presence of an accredited and professionally certified teacher. Knowles, Tough, and others have helped to dispel the false dichotomy whereby institutionally arranged learning is seen as rational, purposeful, and effective and self-directed learning in informal settings is viewed as serendipitous, ineffective, and of a lower order.

For the particular population of learners of my study, access to "accredited and professionally certified teachers", as named by Brookfield above, to facilitate their

learning is only rarely possible. Many schools across the country were devastated or destroyed during the years of civil war and reconstruction and re-equipping the educational force has been slow. The access to the learners is through these minimally-trained monitors who meet with them periodically.

The relationships between the varied objects and subjects which compose *learning environments* are interpreted by attitudes. What are the attitudes of one learner to another and of the facilitator to the individual learners? What are the attitudes of the facilitator and of the learners toward the setting? Some learning settings are, in normal terms, very uncomfortable and unlikely to facilitate learning, but they become environments where learning takes place because of the attitude of the learners and facilitators toward them.

The subject of attitudes appeared several times in a personal interview I conducted about learning to survive difficult situations with a man who conducted training for survival to US Armed Forces for 20 years. Floeter (2004) says that the most effective training is "experiential, built on a broad yet thick foundation of knowledge, lots of kinds of it, then skills to be a good survivor". He refers a point of time in which people make a decision to either involve themselves in surviving or view it passively as spectators and says surviving is 10% knowledge, 10% skills and 80% attitudes.

An example of a survivor is Wurmbrand (1982:12,14) who describes his experience in a very unique learning environment:

> I lived many years in an isolated subterranean prison cell, in timelessness, something akin to the weightlessness experienced by astronauts. Just as they know no difference between heavy and light, I knew no distinction between past, present and future. For years we were individually isolated in solitary cells, where we heard nothing, not even a whisper. We had no books or writing materials, much less a Bible. We never saw a child, and seldom a woman. We saw no colours: our world was gray. The walls were gray, our uniforms were gray, even our faces were an ashen gray. We soon forgot that blue, green, red, violet exist.

And then Wurmbrand describes his learning experience (1982:9):

> The outward circumstances, the complete silence, the situation of not being distracted by either sight or sound – all were highly favourable to deep thought…I think much in images, not in propositions. With me in my cell were the Bible characters of old, as well as the saints of all ages – that 'cloud of witnesses' mentioned by Paul, I also saw, as in a theatre, Shakespeare's characters…I did not waste time, between beatings and tortures, thinking about how badly I had been beaten or fearing that I would be beaten again. Instead, I recited verses of Scripture, Shakespeare, and other poetry. I even composed poetry….I thought about God and the Bible, about its words, its letters, even the blank spaces between the letters.…. I believe God sent me there, to allow me to delve more deeply into the truths concealed within His words

Similarly, from a prison cell in Germany in 1943, Bonhoeffer (1953:36) writes, "[For] those who hold fast to values of which no man can deprive them…there is nothing peculiarly difficult about Christmas in a prison cell". The attitudes of Wurmbrand and Bonhoeffer are not the only aspect at work in their extremely bleak learning environments in which deep learning is facilitated. Motivation, human relationships, prior knowledge and faith are also parcels of their experiences. Knowing about extreme cases like these may give hope to others in less dire situations. Others can aspire to transcend circumstances; they can acknowledge a truth which leads to the question which will be explored in Section 2.4.2.

2.4.2   How do spiritual learning environments differ from general learning environments?

In the brief discussion above of *learning environments* in general, aspects of the *settings*, the *learners*, the *facilitators,* and *the attitudes between the other three* were introduced. What, then, makes a learning environment *spiritual?* A *learning environment is spiritual* when transcendent realities and dynamics are acknowledged, encouraged and included in the learning event by means of activities like prayer, and spiritual development of the learners is intended as well as their mental, social, emotional and physical development. As previously defined, the locus of spirituality for making the environment *spiritual* in the context of this research is God.

There are centuries of models from which to choose of spiritual learning environments which are considered successful because of the change in the learners who participated in them. The models chosen which are briefly described below are of those of 1) Moses, 2) the synagogue system, 3) Jesus Christ, 4) the Apostles, 5) St. Augustine, 6) Martin Luther and St. Ignatius of Loyola, 8) John Wesley, and 9) the designers of Theological Education by Extension (TEE). Attention is given to the aspects of the learning environments which make them specifically *spiritual*.

2.4.2.1 Moses

Moses began teaching leaders in the post-Egyptian era according to the instructions ascribed to Jethro who was both his father-in-law and "the priest of Midian" (Exodus 3:1). According to the account given in Exodus 18, Jethro goes to meet Moses in the desert after the ten plagues of Egypt and Moses led the Israelites out of Egypt. Soon after the miraculous crossing of the Red Sea, comes to meet Moses; he watches Moses listen to person after person, and judge, by himself, their civil and religious disputes. Jethro critically assesses the methods that Moses uses to judge the nation and suggests a five-point modification which would still get the task of settling disputes accomplished but much more efficiently, allowing Moses to judge only the most difficult cases allowing him more time to be the spiritual leader, the representative of the people to God (chapter 18, verse 19). Jethro suggests that Moses: a) instruct in the Law, b) show them how to live and how to perform the duties expected of them, c) select leaders which have certain characteristics, d) appoint the leaders over groups of different sizes and e) share the responsibilities of guiding the people of God to know the will of God (verses 20-22). Exodus 18:23 says that Moses did everything that Jethro suggested.

Several aspects of this model predispose the environment to be *spiritual*. First is the quality of the instructor, Moses, who is to be "the representative of God" (18:19). Second are the criteria of selection of the learners (18:21); they are to "be trustworthy" and "hate dishonest gain" which both are related to social behaviour but they also are to "fear God," a spiritual quality. The content base for the learning is to be the "Law of the Lord". And finally there is the inclusion of God in the learning system in several ways – all the people coming to Moses, Moses himself and the learners he teaches are *seeking the will of God,* Jethro also conditions his suggestions with the phrase (verse 23) "if you do this and God commands*".*

Grayzel (1968:21) comments that Moses was "centuries ahead of his times…[so] only the great men among the Hebrews, the prophets, truly understood Moses' teachings". Grayzel (1968:45) calls Ezra "the Restorer of the Torah, second in importance to the Jews only to Moses". The public reading of portions of the Torah and the Prophets was an occasional feature of Jewish public life would lead to the Synagogue schools. Several public readings of the Law are recorded in the Old Testament, but, in the time of Nehemiah and Ezra the readings were institutionalized – the reading of the Torah every Sabbath, Monday and Thursday. Around these readings, which were, of course, public gatherings other structures grew – services and synagogues?

2.4.2.2 The Synagogues

Besides the institutionalization of the public reading of the Torah during the time of Ezra, the professional of *scribe* was also instituted during his time. Because of the work of the scribes, more scrolls of the Law came into existence which made possible reading in groups other than those in Jerusalem. The knowledge that the scribes acquired of the Torah and prophetic literature made them natural teachers as well as readers on the days of assembly which happened on special occasions. The scribes were not priests so could not perform sacrifices but they could read the passages of Scripture which accompanied the sacrifices and then describe, in a teaching mode, the activities that the priests were conducting in the Temple. Therefore, the public readings on Saturdays, Mondays and Thursdays became services. Grayzel (1968:49) further describes the impact of the scribes: "The scribes…strengthened personal character; they created literature; they formulated laws. They derived from the sacred books those ideas which were to guide their own people, and in time, inspire others".

The formalization of Synagogue Schools came with the passage of *The School Law* in 76 BCE when the Pharisees came into power. Grayzel (1968:89) speaks of the context:

> The Scribes had always insisted that every Jew must be acquainted with the sacred books. Ever since Ezra, scribes, like Joshua ben Sirach, had conducted schools where any man could go or send his children. These, however, had been schools of the upper grade; we should call them colleges. Elementary instruction was given at home by the father, upon whom the Bible imposed this as a duty, or by a teacher engaged for the purpose by those who

could afford it. This limited the educational opportunities, since few fathers are good pedagogues, even if their knowledge suffices, and fewer still can afford the luxury of a private teacher. Gradually, to be sure, lower schools, too, had begun to come into existence. The Pharisees, however, were not satisfied with this haphazard educational system. Now that they had a chance to legislate, they, under the presidency of Simon ben Shetah, decreed that every young man be in duty bound to seek an education. Of course, farmers still did not have the opportunity to do so, and eventually come to be looked down upon by the rest of the population. But at least from the larger villages, towns and cities a literate, informed Jewish people could be expected to come.

A major motivation for attendance at the Synagogue services, three times a week, and at the Synagogue schools was a theological stance. The Pharisees believed and taught that "holiness could be approached, if not achieved, by a human being if he regulated his every action in accordance with biblical commands as interpreted by the scribes…" (Grayzel 1968:123). If holiness was going to be approached, then, the individuals had to know the biblical commands so study of the sacred scrolls was of extreme importance. Such importance led to the founding of more and more community houses which subsequently came to be known by the Greek word *synagogue.*

The reading of the Holy Book in the synagogue became more and more popular because of what Grayzel (1968:120-21) calls the "two fundamental principles":

> 1) each man must come in close and direct touch with God, and 2) knowledge is the road to piety…a constant reading of the sacred books would encourage good actions and good thoughts. Such thoughts and actions constantly repeated would become habits; and good habits result in good character.

The aspects of learning environment of this model which are *spiritual* include, the use of the Holy Book as the base for content, as in the Moses model, and the spiritual motivation that both the learners and the scribes possess to know more Bible in order to be more holy. The environment also included remembering events of God's kindnesses, reciting and singing Scripture passages. Private praying in public meetings became part of this model.

The careful attention of Mary and Joseph to Jewish traditions such as the presentation of the baby Jesus to the Temple at eight days (Luke 2:21-38), and the yearly journey to the Temple, – "Every year his parents went to Jerusalem for the Feast of the Passover" (Luke 41:42) – implies that they followed the cultural/religious norms. These norms would have included the regular participation of Jesus in synagogue services, and, probably, synagogue school since they lived in the village of Nazareth, not out in the rural parts of Israel, and he knew how to read. Grayzel (1968:131) imagines that, as Jesus got older, "he learned his father's trade, but he never abandoned his studies, and continued to fill his mind with the words of the ancient prophets as well as of the apocalyptic writings". The learning environment which was established by Jesus Christ is the next model to be considered.

2.4.2.2 Jesus Christ

From the years of synagogue schooling, readers, other than the scribes, could read from the scrolls in the synagogue system. In St. Luke 4:15 says that Jesus "taught in the synagogues, and everyone praised him". Continuing, St. Luke describes a session of teaching that Jesus conducts in the synagogue of Nazareth, town in which he was raised. He reads from the Prophet Isaiah (St. Luke 4:18-19), rolls up the scroll (v. 20), makes claim to his being the fulfilment of the prophetic passage (v. 21), then, in response to the amazement of those congregated, he quotes from the Old Testament books of Proverbs, I Kings and 2 Kings (vs. 23-27). By that time the people "were furious (v. 28)" with him and tried to expel him from town. In the next scene recorded (St. Luke 4:31-32), he teaches again, in another town, not Nazareth, the people "were amazed at his teaching, because his message had authority" (St. Luke 4:32). Neethling, Stander and Rutherford (2000:106) say that it is "risky to challenge the existing order…for the opposition is usually fierce". They (2000:107) point out that new paradigms generate emotions and behaviour like "hate, anger, disappointment, disapproval and opposition" and that Jesus was such a powerful example of "an 'out of the box' thinker [that] he shocked the people of His time".

Several allusions to the authority of the teaching and words of Jesus appear in the New Testament, and many times it precipitates responses like Neethling *et al* describe above, i.e. hate, anger, disappointment, etc. The physical settings vary greatly for the teaching/learning encounters of Jesus with his followers, but whether in the synagogues, or in the fields, on fishing boats, at the table or any of the many other settings, the authority of his words is consistent. He describes this authority to his disciples, and one of them records his words (Matthew 28:18): "all authority in heaven and on earth has been given to me". The teaching that the disciples should continue is based on this authority; his disciples should "make disciples of all nations, baptizing them…and teaching them to obey everything I have commanded you".

So the words of Jesus, recorded by Matthew, describe an aspect of the learning environment which was not identified in the models from the Old Testament, specifically, the spiritual presence of God in the process of learning his teachings. Another disciple, John, captures another description Jesus gives of the spiritual presence of God promised for the processes of learning (John 14:25-26): "All this I have spoken while still with you [disciples]. But the Counsellor, the Holy Spirit whom the Father will send in my name, will teach you all things and will remind you of everything I have said to you". Jesus here speaks also of the role of the Holy Spirit in assisting with remembering previously learned "things". Since memory resides in the brain, as discussed in Section 2.3.2 of this chapter, the logical implication is that the Spirit of God works in the brain. Recently scientists have made inquiries into the relationship between God and the brain and initiated a science called "neurotheology" (Newberg, D'Aquili & Rause 2001).

The primary spiritual aspect of this model environment is the presence of God in the facilitator, Jesus. But this spiritual presence and operation within is also promised to the learners, who, after Jesus become teacher/facilitators for other learners in other generations. The Holy Spirit does not just visit when the learning of the words of

Jesus is taking place. According to Jesus in John 14:23 and 14:26, He takes up residence in the life of those who love and obey Him. Jesus uses all the Old Testament, plus his own authoritative words, as spiritual bases for the learning environment. Discussion follows of the learning environments established by the disciples of Jesus who came to be called the *Apostles*.

2.4.2.4 The Apostles

The Bible records the names of twelve male disciples in Matthew 10:2-4, three women – Mary Magdalene, Joanna, wife of Cusa, and Susana (Luke 8:1-3) – and many other disciples remain largely unnamed. On one occasion Jesus sends out "seventy-two others" two by two, and one-hundred twenty are gathered together waiting in Jerusalem, according to Acts 1:15. The term *Apostles* is applied to the eleven male disciples, excluding Judas Iscariot, and to Paul of Tarsus who does not meet Jesus physically but meets him spiritually in a dramatic encounter which Paul describes in the New Testament[4].

Coleman (1973) reviews the socio-political background of these men seeking commonalities which would qualify their selection by Jesus as his followers. Coleman (1993:28-29) identifies no socio-political factors common to all of those of the group but cites four characteristics aspects of their attitudes: they were 1) open to learn, 2) possessed a sincere yearning to know and be moulded by God, 3) disillusioned with superficial religion, and 4) seekers of a Saviour. These aspects surface in the writings of the four Apostles whose writings are New Testament canon: Matthew, John, Peter and Paul and contribute to the transformations in their lives which they cite.

Matthew, the scoundrel who cheated people out of their money as he levied taxes becomes a follower with such careful attention that he records the Gospel of Matthew as a faithful journalist. Matthew tucks a clear statement an important moment of personal faith into his account of Jesus and Peter walking on the water. When the two climb into the boat where Matthew is sitting and the wind dies down, Matthew says" "Then those who were in the boat worshiped him, saying, 'Truly you are the Son of God.'" Coleman says the men were "seekers of a Saviour". Perhaps this is the moment when Matthew found his. Matthew shows his readers ten ways or methods that the disciples used to learn from Jesus which are presented in a later section but he also carefully records, as an eye-witness, the Sermon on the Mount which Webber (1986:116) identifies as the root of his spirituality, the completion of the Old Testament in the new teachings of Christ:

> It calls, as did the OT law, for poverty of spirit, for mercy, for a desire for justice that practices the holiness of God. It is this spirit, this action, this approach to life that will issue forth in the knowledge of God and peace. This active aspect of spirituality is clearly indicated in the sermon…The three essential practices of Jewish piety – almsgiving, prayer, and fasting – are urged on the believer. They are to be acts that come from the heart.

---

[4] *Paul writes accounts of his conversion occur in Ephesians 3:8-20, Philippians 3:3-14 and 2 Corinthians 11:21b-12:5 (Scott 2002a:44).*

John, the young fisherman, who arrived before Peter in their run to see the tomb of Jesus but waited for Peter to go in first, becomes John, the Ancient, the Beloved, the venerated Elder, (Scott, Scott, Chambo, Mirashi & Mahalambe 2003:12). He says he was in the empty tomb when he "saw and believed (St. John 20:8)", and he writes five books of the New Testament as a faithful witness to what he saw (Revelation 1:2) and experienced (I John 1:2) and heard (I John 1:5). The writings of John appear to focus on love and relationships, including the relationships between the persons of the Trinity, but he also uses forms of *to know* and *to understand* with frequency; they are used sixteen times in the five short chapters of his first letter (Scott 2002a:35-37). To John *knowing* in general and *knowing God* specifically are the bases for love and for relationship. He says, for example (*italics mine)*, "Everyone who *loves* has been born of God and *knows* God. Whoever does not *love* does not *know* God, because God is love" (I John 4:7-8). John ties knowledge to relationship.

From the beginning of his career, Peter seems promising as a leader but, during the three years of discipleship, he makes blunders and real failures. Three encounters in Peter's life seem to result in the transformation of his life (Scott 2002a:24): "1) his profound repentance after denying Jesus Christ; 2) the profound forgiveness by the loving, risen Jesus on the beach after the resurrection, 3) the baptism of the Holy Spirit on the day of Pentecost". When Peter preaches on the day of Pentecost, as recorded in Acts 2, he was able to synthesize the teachings which he has read and heard. The teachings from the synagogue and from Jesus, his own life experiences of failure, repentance and forgiveness come together.[5] Peter, the fisherman turned preacher, says (Acts 2:14), "let me explain this to you…" He then articulates deep understanding of the Old Testament prediction from the prophet Joel of the out-pouring of the Holy Spirit, the wisdom and truth of Davidic poetry, the culmination of Scripture in the life of Jesus and the role of personal repentance as he had experienced. The authority of his words is great as evidenced by 3,000 people (Acts 2:41) "accepted his message".

The formation, transformation and preparation of the Apostle Paul are vastly different from the experiences of the other Apostles. He defends his apostleship several times in several sermons which are recorded in Acts,[6] and in each of the thirteen epistles which contain his "signature".[7] In his letter to the Galatians (1:11-12) he relates the contrast between his current way of life with his life before he "received the gospel by revelation from Jesus Christ". He describes his pre-conversion intent to "persecute the church of God…to destroy it" and says he was "extremely zealous for the traditions of my fathers" which were Pharisees. He continues his personal account of preparing for Apostleship; right after conversion he went "immediately into Arabia", then to Damascus and waited three years before he went to Jerusalem "to get acquainted with Peter and stayed with him fifteen days. I saw none of the other

---

[5] *This seems to be a "eureka-type" moment like Herrmann (describes when he "sees" the four-quadrant brain model, pulling together learning from different parts of his learning and experience.*
[6] *The sermons of Paul are found in Acts 9:3-19, Acts 22:1-21 and Acts 26:9-23 (Scott 2002:44).*
[7] *These are Romans, I Corinthians, II Corinthians, Galatians, Ephesians, Colossians, Philippians, I Thessalonians, II Thessalonians, I Timothy, II Timothy, Titus and Philemon. The fourteenth epistle -- that to the Hebrews -- is sometimes attributed to Paul. There are various bases, both external and internal, for disputing him as author, including the lack of "signature", i.e. the author does not identify himself as Paul does when he writes the other letters.*

apostles – only James, the Lord's brother (Galatians 1:18-19). Pauline writings clearly describe how he taught, where he taught, who he taught as well as what he taught. So the letters of Paul not only consist of theological constructs which underpin great works of Christian theology but they also are woven together from the thorough knowledge of Scripture which he possessed before conversion, his emotional zeal first for Jewish tradition then for the edification of the Christian church, his years away from the other Apostles, which included time alone with God in the Arabian desert, and, of course, his own "disorienting dilemma" which was the dramatic conversion experience itself.

Paul serves as an example in many of the roles of which he writes, but he does not write directly about the years he spent in the desert. However, he was the first of many, says Grave (1916), in the role of the *recluse* and the *monk*. The model of St. Augustine is discussed in the next section. Graves (1916: 6-7) writes of both Paul and Augustine:

> The first recluse was Paul, who was followed by Anthony and hosts of others. Before long, however, these monks began to live together, and the first monastery was founded by Pachomius about the middle of the fourth century…This form of monasticism was extended into Europe by Basil, Athanasius and Jerome, and there, under Augustine, Cassian, and Benedict, it turned toward more active pursuits. The codes of Pachomius and Basil were replaced by those of St. Augustine and of Cassian in the fifth century and of Benedict in the sixth.

When the Apostles become the teacher/facilitators of the learning process of their followers, they bring the experience of their own transformed lives as the spiritual ambient of these learning environments. Evidence is found in the Scriptures to document the changes in the lives of Matthew, John, Peter and Paul. They seem to be examples of successful adult learners. In current terms of adult learning the men might be characterized by different terms like Payette (2002:5) borrows from Mezirow:

> Perspective transformation is said to be triggered when an adult experiences a significant personal event, a personal crisis, an internal search for meaning, labelled by Mezirow as a *disorienting dilemma.* This triggering event may be a swift experience one encounters or a singular significant occurrence over a long period of time.

The *disillusionment with superficial religion* which the Apostles found commonly when they came into contact with certain religious leaders may have been the *significant occurrence over a long period of time* which made them *open* to other *frames of reference*, which consist of "*habits of mind wh*ere broad generalized, taken for granted beliefs and assumptions exist and…*point of view,* where feelings, attitudes, beliefs, judgments, and criteria for evaluating create clusters of *meaning schemes* (Payette 2002:5)". If new experience, information and / or impressions pass through our *frame of reference*, with its two parts, and the new input has more meaning or makes more sense then we are willing to modify, change or even substitute our

frame of reference. A schematic representation of the process here describes follows as Figure 2.10:
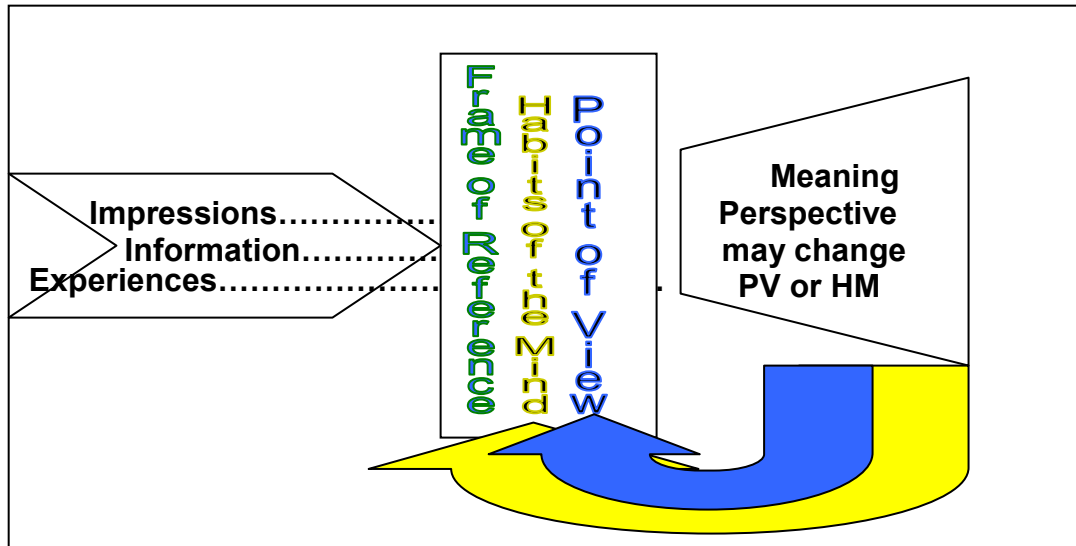
Figure 2.10 Diagram of Theory of Mezirow (based on Payette 2002)

Figure 2.10 displays "impressions, information and experiences" entering the life of the learner, and these pass through the filter of interpretation that is already constructed and present in the life, made up of "frame of reference" made up of "habits of the mind" and "point of view". According to the impact or value of the filtered input, the "meaning perspective" may change the individual, as in the case of the Apostles, and alter the "PV" (point of view) or "HM" (habits of the mind).

The twelve Apostles were willing to leave their occupations and follow Jesus. Many times in the Gospels there are incidents which cause some followers to turn away from Jesus because of his teachings. Payette (2002:8) explains, "Teachers attempting to reveal unbiblical assumptions and values can create an emotional experience that becomes threatening to adult learners. Asking learners to take action on reflective Spirit led insights can be a threat to psychological security that transformational learning imposes".

Matthew, John, Peter and Paul seem to respond with positive changes in their *frames of reference* to various *disorienting dilemmas* that are presented to them in their experiences with Jesus and his teachings. They each also seem to have what Palmer (2000:6, 19, 2001:1) calls "breakthrough thinking" at points in their lives when many things come together. Palmer also speaks of the "Eureka effect" of discovery or creativity. In the lives of these Apostles, the discovery is the answer to the long-sought solution to their lives. They found it! They write about finding it – for Matthew it was in the boat after Peter walks on the water, for John it was in the empty tomb, for Peter on the day of Pentecost, for Paul when he is blinded on the road to Damascus. In terms of the four-quadrant model, the *eureka effect* may be explained as the instant at the end of a mental volley between the left-brain and right-brain: first left-brain (A-quadrant) information and analysis, then right-brain (D-quadrant) synthesis, more left-brain (A-quadrant) measuring, then some right brain (D-quadrant) "what-if-

ing" and imagining, left-brain (B-quadrant) reorganizing, right-brain (C-quadrant) reflecting, discussing, A to D, C to B, back and forth, back and forth until – aha! The brain makes sense of the patterns and goes limbic! an emotional lightning bolt to both right and left limbic hemispheres, to the amygdala itself. An emotionally engraved life event takes place in the whole brain which converts the frames of reference with its accompanying beliefs, values, attitudes and behaviours of the individual and it is exciting. "Any breakthrough worth its salt is worth an exclamation Most of us would probably say "Aha!" but we might say "Eureka!" (Palmer 2000:6).

The Apostles also bring the spiritual content of the Old Testament, the words of Jesus, and the words of the other Apostles as already having Scriptural value. Webber 1986:189) says:

> The [Christian] church existed for decades before the NT documents were written and for several centuries before the NT was organised into the present canon of Scripture…the earliest authorities in the church were the apostles. Christians gathered around their teachings (Acts 2:42) and treated their interpretations of the tradition as authoritative (2 Thessalonians 2:15)…initially apostolic teaching was handed down in the oral traditions of preaching and worship. The book of Acts, for example, contains several sermons of the apostles, such as Peter's sermon at Pentecost (Acts 2). The Epistles contain early Christian hymns (Philippians 2:5-11), catechetical material (Galatians 5:16-26), creeds (Romans 10:9), doxologies (Romans 11:36), and benedictions (1 Corinthians16:23). All these materials were in existence in oral traditions and possibly the written traditions that predate the NT writings.

The writings of the Apostles Matthew, John, Peter and Paul comprise much of the New Testament. Beside that the principle personalities of the book of Acts are Peter and Paul and, the Gospels of Mark and Luke are, according to tradition, based on accounts by the Apostles. Throughout the writings, the Apostles repeatedly underscore the spiritual quality of the written word: Peter in I Peter 1:23: "You have been born again...through the living and enduring word of God" and 1:25: "the word of the Lord stands forever… this is the word that was preached to you". Peter in II Peter 1:20 also describes the production of Scripture: "no prophecy of Scripture came about by the prophet's own interpretation…but men spoke from God as they were carried along by the Holy Spirit". John says (I John 1:3-4) "we proclaim to you what we have seen and heard, so that you also may have fellowship with us. And our fellowship is with the Father and with his Son…[so] we write this". Paul also declares "The word is near you; it is in your mouth and in your heart…the word of faith we are proclaiming (Romans 9:28)", and so they write repeatedly. The Jewish position of knowing Scripture as tantamount to "being holy" is personalized by the resident presence of the Spirit of God in the life of the believer. Paul calls this a "mystery" three times: Romans 16:25, Colossians 1:26 and I Timothy 3:16. Therefore, integral to the model of the Apostles is 1) the experience of spiritual transformation resulting in the habitation of the Spirit in the life of the teacher/facilitator and the learners, 2) the same Spirit who works harmony between them and works in their brains to teach and to bring the word to remembrance, and 3) the eternal, spiritual, authoritative "God-breathed" (2 Timothy 3:16) quality of the written word. It is no wonder that

Christians became commonly known as "the people of *the book".* That book (the Bible) and the indwelling habitation and operation of the Holy Spirit are the spiritual ideals which became increasingly obscured during the next centuries, resulting in several solutions from the lives of some who kept seeking that ideal, including each of the next models. Graves (1916:4-5) describes the period between the Apostles and Augustine:

> By the third century Roman society had become most corrupt...Christianity was no longer confined to small extra-social groups meeting secretly, but was represented in all walls of society and mingled with the world. It had become thoroughly secularized, and even the clergy had in many instances yielded to the prevailing worldliness and vice. Under these circumstances there were Christians who felt that the only hope for salvation rested in fleeing from the world and its temptations and taking refuge in an isolated life of holy devotion…Hence there grew up within Christianity that form of solitary living known as monasticism, with its 'asceticism' or discipline of the body in the interest of the highest spiritual life.

Gatimu *et al* (1997:3) point out that, "Theological education is one of the major functions of the [Christian] Church. It is for the preparation of the whole people of God, some for the special ministry of the Word and Sacrament, and others for the general priesthood of all believers". Each of the subsequent models are variations of this task – to prepare all the people of God, especially, but not exclusively, the leaders whether they are called "monks" or "priests" or "lay preachers" or "pastors". The Church in Africa is no exception. The next three models start in monasticism: St. Augustine comes from the monastic model and stays within it; Luther comes from monasticism and then takes theological education to the general public as well as to pastors of the Protestant Church who, contrary to those in monasticism, marry and live in the general public. Loyola comes from monasticism and takes theological education to priests, to other monks and to youth. His disciples extend the system to other continents. Wesley comes from life in the general public and educates in the public sphere all who would hear, as well as preparing and discipling hundreds of pastors across England. The TEE model is a creation which responds to the needs of the Church in places where access to options of formal education are very limited.

2.4.2.5 St. Augustine

The life and work of St. Augustine form the last and most distinguished chapter in the tale of outstanding contribution of Roman North Africa to Latin thought and letters. His full name is Aurelius Augustine, and he was born in A.D. 354 on the Ides of November in the small town of Tagaste in the Roman Province of Numidia Proconsularis (Howie 1969:1). Walker (1959:160) states that "in Augustine the ancient church reached its highest religious attainment since apostolic times. He was referred to as the father of medieval Roman Catholicism…His theology, though buttressed by the Scriptures, philosophy, and ecclesiastical tradition was largely rooted in his own experience".

Augustine was a teacher by profession. The reputation he acquired as a teacher of rhetoric speedily led to his appointment as a public orator and a teacher of rhetoric at Milan (Howie 1969:140). Upon his conversion to Christianity he laid down his secular teaching duties, but did not abandon the vocation of teaching (O'Mearg 1965:105). He clearly states in the *confessions* that he was merely putting aside the work of formal instruction in the techniques of oratory in favour of a more challenging and significant task (Howie 1969:140). In the months immediately following his conversion, this task was begun, near Milan, where Augustine spent some months discussing with a group of his friends and young pupils in the implications of Christian involvement. On his return to North Africa and his native Tagaste, Augustine realized the need for the spread of education among Christians, both priests and laymen. Thus at Tagaste and later at Hippo he established communities, whose purpose was the preparation of well educated Christian teachers for the North African Church (Howie 1969:140).

Following his consecration when he was preoccupied with the need to produce better educated leaders and teachers for the African church, he wrote *Christian Education* and *The Instruction of the Uninstructed*. These writings of Augustine are the rich sources of practical advice on teaching methodologies (Walker 1908:299). All the recommendations he makes in these works derive from the commandment which he sees as the basis for all personal relationships: "You shall love the Lord your God and your neighbour as yourself". The personal relationship with God enables people to advance in understanding, and so live the good life, must be reflected in the association of teacher and learner, since this association is designed to affect exactly the same purpose. Thus, according to Augustine, in the instruction of his pupils the teacher must co-operate with the purposes and methods of God; his teaching must be founded on a personal relationship rendered productive by love.

Webber (1986:193) holds that those who place Augustine as a metaphysical theologian are not reading from him or "Justin Martyr, Irenaeus, Tertullian, Clement, Origen, Athanasius, Basil, or Jerome" because it soon becomes apparent that these fathers are "steeped in the Scriptures". Polman (1961:40-41) states that Augustine, together with the entire church of his day, was firmly convince that the Bible was divinely inspired. He simply took it for granted. He adds, "To him the Holy Scriptures were the work of God's fingers, because they have been completed by the operation of the Holy Ghost who worketh [sic] in the holy authors" (Polman 1961:42). The aspired relationship of love between learners and teacher contributes richly to the spirituality of the learning environment in the Augustine model. Four centuries after the Apostles, the centrality and primacy of Scripture in method, content and relationship is intact, all of which enhance the spirituality of the learning environment.

2.4.2.6 Martin Luther and St. Ignatius of Loyola

Contemporaries, Martin Luther, 1483 –1546, and Ignatius Loyola, 1491– 1556, both sought the purity of the Church, dedicated their lives to the knowledge and teaching of the Scriptures and were forthright leaders who fathered, respectively, the German Reformation, and the Jesuits, integral to the Catholic Counter-Reformation.

Martin Luther, an Augustinian monk, brought about the German reformation, a protest against the Roman Catholic Church system. "He is responsible for the fact that a purified Christianity; a Christianity of the reformation, was able to establish itself on equal terms with the Roman tradition" (Tillich 1968:227). He protested against the Roman practices such as the selling of indulgencies, the issue of purgatory, the celibacy of the priests and nuns. "Many Christians realized that the Church was simply not serving the spiritual needs of the time. It had become corrupt, and abuses were widespread. At the same time Christians were becoming more literate and articulate, so they expected more of the Church (Spickard 1994:171)". The reformation was a complex, multi-faceted response to the political, economic, academic, social, and ecclesiastical atmosphere of the fifteenth and sixteenth centuries. This exploration in this study of the model of Martin Luther focuses on the spiritual learning environment he fostered so is limited to Luther himself and the aspects of spirituality of his model and does not extend to the reformation.

Martin Luther was the first child of the seven children. His parents were devout. They taught their child (Martin) to pray and nourished him on legends of the saints and the superstitions of the German peasants as an informal method of teaching theology, Bible and "things of God" (Gifford 1946:340). They also taught their children "things of God" through music or hymns.

Luther took his Bachelor's degree in 1502 at Erfurt, Germany's greatest university, and three years later his Master's degree (Walker 1959:303). In the monasteries and convents, both formal and informal methods of teaching were employed in teaching those young men and women for ministry. In pre-reformation Germany, there was a very large number of monks and nuns who peopled the innumerable monasteries and convents. The number of churches was enormous in Germany for the population. Almost every tiny village had its chapel, and every town of any size had several churches (Lindsay 1941:45).

Luther was the first to make full use of the value of printing as a medium for propaganda and to write with the printed page in mind (Gonzalez 1985:15). The invention of the movable type printing press gave his writings a widespread audience that they otherwise would not have had. He translated the entire Bible from Latin to the German language and printed it so that everyone could have access to the Word of God and read it on his or her own contrary to the Roman Catholic Church position that only members of the clergy could possess the Bible. Luther treated the entire Bible as the inspired Word of God (Tillich 1968:244). The spiritual quality of the learning environment which Luther created was enhanced by his participatory strategies – translating Scripture to the vernacular so the people could read it directly, putting theology into hymns which were printed and distributed to the populace. These strategies are based on a theological position of participation, *the priesthood of all believers*, which became basic to Protestantism.

His contemporary, Ignatius of Loyola, also was deeply devoted to the teaching of Scriptures but also to the Roman Pontiff such that he founded the Society of Jesus, the Jesuits, which resulted in an international system of Christian education, an important aspect of the Counter-Reformation.

The members of the Loyola family were always loyal servants of the crown of Castile and were very important in Guipozocoa as they were distinguished from others by the service that they offered to the kings of Castile. They were also a religious people. "Religious matters played an important role in the family life of the lords of Loyola, above all because their condition as patrons of the church gave them the right and the obligation of intervening in the church affairs of Azpeitia" (de Dalmases 1985:3). The religious life of the family was closely related with that of the parish however this did not succeed in shaping Ignatius. He was a man given to the vanities of the world. He tried an apprenticeship, then military service. In the siege of Pampelona by the French army he was badly injured on both legs. While in bed still recuperating from the injury, he read a book by Ludolf entitled *Life of Christ* which inspired him in such a way that he made a choice to commit himself to the service of God. He said, "Sanctity and chivalry are both types of perfection, and both are to be reached only through sacrifice and training and both present challenges" (Foss 1969:68). Sanctity was the sensible and practical ideal which challenged him supremely and led him to conclude: "A man can have no foundation other than Jesus Christ…Therefore, whoever wishes to escape the damnation due his sins and to be corrected in spirit, must not forsake that foundation" (Foss 1969:68-69).

Then beginning his spiritual education, he set out to Manresa and stayed in Barcelona for a year. "In those days God was treating him like a boy in school, teaching him, and that was because of his rudeness and gross mind" (Foss 1969:73). He spent several hours of the night in prayer, and disciplined his body, eating no meat and drinking no wine. During the day he tramped the street for alms and listened to his inner voice. His devotion moved more and more to helping others which was a giant step towards the foundation of the Society of Jesus. After this experience with God, he went on a pilgrimage to Jerusalem, but was not successful as he realized that little could be achieved without education (Graves 1910:209).

In 1524, he started on his formal education journey in a grammar school, at the age of thirty-two[8]. Later he undertook a university education at Alcala and Salamanca and managed to have a group of people live around him (Foss 1969:79). While studying at Paris University, he managed to convince and convict six fellow students to join hands with him in devoting themselves to missionary work and to maintaining the papal authority (Graves 1910:209). Later that year August 15, 1534, the group took their vows. In 1540, after considerable opposition, Pope Paul III approved the *Society of Jesus* as the monastic order of the Jesuits. This order went on a campaign of converting the heathen and combating Protestantism. The subsequent founding of schools, teaching and lecturing publicly were ways of supporting this order and strengthening the papacy. The schools of the education system consisted of lower colleges, upper colleges, religious education and university. The Jesuit training took from twenty-one to twenty-three years, including the years of novitiate and teaching (Graves 1910:212).

---

[8] *The fact that Loyola, who would subsequently build up an international system of education of great importance, went to grammar school when he was already thirty-two (or thirty-three from other sources) years old should make him a meaningful example to adult populations like mine, who return to schooling or start schooling when they are already mature adults.*

The Jesuits adopted the three vows of poverty, chastity, and obedience, and a fourth special vow placing them at the service of the pope. This community was founded principally for the advancement of the soul in the Christian life and doctrine, and for the propagation of the faith by the ministry of the word, by the spiritual exercises, by works of charity, and expressly by instruction in Christianity of children and the uneducated (Olin 1990:83). In the practics, daily office was to be said individually rather than in choir, as was with the practice of other orders. The order did not sing in mass, but every Jesuit exercised himself faithfully in practices deemed to be necessary and useful for growing in faith. This left the members free to perform whatever task they were called upon to do.

Pilgrimage was one of their most important practices. Life was viewed as journey fraught with obstacles and difficulties through this world. By pilgrimage they meant a search, essentially an interior journey, toward some goal or ideal, which would affect inward growth or change or transformation towards spiritualisation. It involved a pursuit of meaning or mission for one's life (Olin 1990:83). So they committed themselves to reading spiritual writings, the manual of Benedictine monks, studied scripture deeply and worshiped God through service to others. How much this resonates with practices from adult learning today: *critical reflection, critical thinking, applied learning, establishing meaning perspectives,* etc.

In addition to the spiritual environment for learning that was carefully created by Loyola by means of the varying aspects already mentioned, he also devised *spiritual exercises,* series of devotional meditations and activities, which he taught and used extensively from the time he was at university and throughout the Jesuit educational system. In preparing learners or colleagues for the spiritual exercises, he expounded on the articles of faith, the mortal sins, the five senses, the three faculties of the soul and other good things concerning the service of God to come out with the spiritual exercises which are considered in a later section on holistic learning strategies.

2.4.2.7 John Wesley

Although John Wesley may not be as well-known as those involved in the other models which have been discussed so far *Christianity Today* places the conversion experiences of John Wesley and Charles, his brother, on the list of the twenty-five most important events in the history of the Christian Church (Miller 1990:4). Other superlatives are also attributed to them. Kimbrough (2002:11) sites their volume *Hymns on the Lord's Supper* (1745) as "without question one of the most significant collections of Eucharistic hymns ever published in the English language". Charles wrote "approximately eight thousand hymns" (Foster 1998:374). "[John] Wesley's efforts – travelling over a quarter-million miles to preach over forty-two thousand sermons, publishing over two hundred books, pioneering or participating in most of the social causes of the day – helped save England from the chaos of a revolution like the one that devastated France" (Foster 1998:374). "Some eighty denominations worldwide regard [John] Wesley as ecclesiastical ancestor" (Tracy & Ingersol 1998:28). He was short and "never weighed over 135 pounds, but the 'little giant' led England in a revival of religion that has been called the Methodist Revolution" (Tracy & Ingersol 1998:31).

The Wesley brothers, John (1703-91) and Charles (1707-1788), were two of the nineteen children of an Anglican preacher. Their mother, Suzanna, is frequently cited as having significant influence on their spiritual formation as she met with each child for one hour a week. Kivett (1995:2) speaks of the impact of this meeting: "These were not cold and formal times, but rather warm and intimate. John's turn came on Thursdays and he looked forward to it with positive feelings. He was able to remember these intimate times of conversation with his mother years later while a student at Oxford". Both John and Charles studied at Oxford University. They sought personal piety with fervour. One means they employed within a small group which met four times a week to study and read from Scripture. Wesley himself from his Works VIII:348 in Hulley (1987:8) says the readings were chiefly from the Greek New Testament. Kivett (1995:3) says that when John took over the leadership of the small group, he realized the need for there to be accountability within the members of the group for them to be able to reach their spiritual goals. Kivett (1995:3) continues: "berated by other students who called them 'Methodists' or 'the Holy Club' [they] gave themselves to periods of prayer, fasting, discussion, communion, and opportunities of practical ways to help the sick, elderly, imprisoned, and poor. With 'the Holy Club', Wesley incorporated expectation of behavioural change through the group process".

John is considered to be the founding father of the Methodist movement. The volume of readings and writings which John produced is remarkable: Outler (1975:6-7) in Hulley (1987:53) says John "recorded most of his reading after 1725…which runs to more than fourteen hundred different authors, with nearly three thousand separate items from them (ranging from pamphlets to twelve volume sets – including many huge leather bound folios". Foster (1998:174) reports that he published over two hundred books and preached over forty-two thousand sermons. Baker reports (in Hulley1987:48) that "in the nine years from 1782 to 1791 Wesley wrote between five and six and a half thousand letters. In his old age his letters tended to be shorter". All of this is beyond the hymns that they composed which "related the central teachings of the Christian message to his own experience [of spiritual conversion], and therefore to the living experience of those who sang the hymns" (Hulley 1987:35).

Yet, none of this activity is considered to be the most outstanding legacy of the ministry of John Wesley. Freeborn *et al* say (1994:146): "Many believe the class meeting was Wesley's greatest contribution to Christianity…among them D. L. Moody and Henry Ward Beecher". While *militaristic* is the term sometimes applied to describe the style of Loyola in establishing the system of Jesuit schools, *methodist* is the term applied to the style of John Wesley. The network of societies, classes and bands across England which Wesley established, including the training to his leaders, became a formidable system of informal education. McKenna describes (1999:21) how class meetings were populated, the network of which became the educational system of Wesley:

> After nonbelievers were convinced by Wesley's preaching, they were invited to a class meeting where they could learn more about the gospel and also see if Methodists practiced the faith and love they professed. Once converted, then, even the poorest were expected to give a penny a week to those who were poorer still. As these new believers grew in grace, social holiness had two

dimensions; increasing spiritual accountability to the Body of Christ and great social responsibility for the needs of the poor. Maturing members of the methodist class meeting were expected to reach out in ministries to prisoners, widows, the aged, the sick, the hungry and especially to oppressed children.

John established several kinds of small groups which Kivett (1995:4) summarizes:

	Size	Open/ Closed?	Fre- quency	Objective
The Society	50 or more	Open group	Weekly/ Sun. pm	For instruction and evangelism
The Class	12	Open group	Weekly	For personal accountability, self-examination & evangelism
The Band	5-8	Closed invited/ screened/ accepted Peers of same sex, marital status, and age or maturity	Weekly	For confession of temptations, mutual love and encouragement
Select Band	Small	Invitation only For leaders	Weekly	For stimulation to inward and outward holiness, and training in leadership
Penitent Band	Small		Weekly	For counselling, exhortation and restoration to full fellowship and service following backsliding

Table 2.2 Types and Characteristics of Wesley Bands (Kivett 1995)

The aim of the small groups was "to conserve the converts, to reform society and to renew the church" (Kivett 1995:4) and "to help people in the pursuit of Christian perfection" (Tracy and Ingersol (1998:28). The leaders of the class meetings became the "preachers" or "assistants" of the Wesley model. Lawson says (1963:106) there were "intricate rules for their candidature, laid down in the 1747 Minutes", that they were to be "extraordinary messengers to provoke the others to jealousy". They were to consider themselves "learners rather than teachers", "for whom therefore a method of study is expedient in the highest degree. Learners they were! Five hours of study per day was prescribed for them".

The consequent social reform which took place in the nation was not because of the structures themselves but because of the spirituality carried through the structures in the transformed lives of the leaders and members. Kivett (1995:1) describes the process:

> While he did not mount a formal crusade against the institutions of oppression in English society, the reformation of that society occurred just the same – from the inside out, from the bottom upward, one by one, group by group. The spiritually awakened were organised into small groups whose primary goal was to develop the behaviors and virtues of a Christian lifestyle. As the leaders of these groups taught sobriety, industry, cleanliness, and Godliness,

the lower class became the middle class. Society was transformed, and the small group lay at the centre of the transformation society.

As John Wesley preached to public citizens in open air and taught his parishioners in churches and in societies, he urged them to *holiness,* a term which authors of other models also use. In a letter to his father, cited by Baker (1980:399) in Hulley (1987:18) Wesley explains:

> By holiness I mean, not fasting, or bodily austerity, or any other external means of improvement, but that inward temper to which all these are subservient, a renewal of the soul in the image of God...a complex habit of lowliness, meekness, purity, faith, hope, and love of God and man.

This essentially is the bottom line of the Wesley model: an *inward temper* which governs, *a complex habit* composed of godly attitudes and spiritual attributes.

"John Wesley was convinced that holiness is discovered in the practice of our faith in the practical and everyday routines of life" (Job 1997:9). Because of this burning conviction, "He fashioned for himself a way of living that included time for reading and reflecting upon scripture and other spiritual works and methods for putting into practice what he believed and what he heard God calling him to do".

2.4.2.9 Theological Education by Extension (TEE)

Theological Education by Extension or TEE is a model of adult learning which started in Guatemala and rapidly was adopted by many churches in many countries of the world. Ferris (1990:13) says

> The faculty of the Presbyterian Seminary in Guatemala did not set out to develop an alternative model of theological education. In 1962 …they were faced with a desperate situation in their church and in their seminary…the pattern for training which came to be known as TEE evolved through a series of *ad hoc* experiments aimed at improving the effectiveness of the Seminary.

One of the faculty members, Winter (1969:83) states that the programme they launched was based on two assumptions: "that you can find leadership gifts in the specific subcultures of a church…and that you can train them where they are. Such a programme treats the subcultures seriously, yet is unified in a single institution".

The "desperate situation" the Presbyterians faced in Guatemala in 1962 presents several similarities to the conditions of the Church of Nazarene in Mozambique at the outset of this research in 2000. One similarity was the quantitative factor, i.e. that the rapid growth of the church had over-extended the capacity of the existing, residential educational system to provide an adequate number of trained ministers for the number of churches which had sprung up. Mozambique was not the only candidate setting for use of the TEE model. Ferris (1990:15) estimates that by the date of his

---

[13] *I have chaired Africa Region COSAC since its formation in 2002.*

writing in 1990 "thousands — perhaps hundreds of thousands — of Christians in the 'Third World' [sic] have received ministry training [through TEE] which otherwise would have been inaccessible to them".

Many African countries utilize the TEE model. "According to the TEE database maintained at the Christian Learning Material Centre, there are at the present approximately 341 TEE programmes in Sub-Saharan Africa" (Gatimu *et al* 1997:3). It was first introduced in Africa in 1970 (Ferris 1990:14). Holland was involved in bringing the model to Africa. As he and his wife were experiencing in their church in Zambia faster membership growth than leadership training, and they read about what happened in Latin America, they believed that it "would open new possibilities for training more men for the ministry in Africa".

The Committee to Assist Missionary Education Overseas (CAMEO) of the World Council of Churches collaborated with the Association of Evangelical Bible Institutes and Colleges of Africa and Madagascar (AEBICAM)…to produce TEE texts from 1970 onwards (Gatimu *et al* 1997:12). Holland and Holland headed up development of the lesson materials called the TEXT Project of the Theological commission of the A.E.A.M. The books of this *Text-Africa Project* are published by Evangel Publishing House in Nairobi, Kenya, facilitating the spread of TEE in Anglophone Africa, and to a limited degree, Francophone Africa (Gatimu *et al* 1997:12). The books have been written by interdenominational teams of writers, used in sixty-two countries in Africa and have been translated into over one-hundred twenty African languages (Thornton 1990:92). In Mozambique, where Portuguese is the official language the Sociedade Internacional de Missões (S.I.M. Mission) purchased the right to translate the books into Portuguese in 1997 (Interview Hanna 2000). In 2000, the groups in Mozambique using the Text Africa books included S.I.M., the African Evangelical Fellowship, Swedish Alliance, the Baptist Union, the Southern Baptists and other smaller groups (Hanna 2000).

According to Winter (1996:429-431), one of the initiators of the programme in Guatemala, features of the TEE model are 1) the daily study of each learner with a carefully written text book, 2) weekly face-to-face contact session [with a facilitator] and 3) spiritual and intellectual fellowship with a small group of students.

These facets are well-known among those who have used TEE (Smith & Thornton, Holland & Holland, Gatimu *et al*). Each of them will be considered in more detail other sections of this research report. Ferris (1990:14) observes that "after 1973, TEE shifted its attention and support to experiments in dialogical learning, modelled on Paulo Freire's programme for literacy and "conscientization" in Brazil". The juncture of these two models is not surprising due to the congruence of their intended learning outcomes and circumstances of their populations of learners.
Thornton (1990:13) describes the weekly learning session as "a time for increasing understanding, explaining, asking questions seeing how the lessons relate to life". Gatimu *et al* (1997:7) comment that educators appreciate the importance of face-to-face contact between the learners and the tutors". Bruner and Brookfield are two esteemed educators who speak of this importance. Reiterating Bruner (1986:127) that "most learning in most setting is a communal activity, a sharing of the culture",

the weekly learning session of the TEE format brings adult learners to a "table" of free interchange of perspectives based on common texts, as they experience similar challenges and hopes in the daily lives. Brookfield (1995:8) says "Learning is a collective process involving the cultural formation and reproduction of symbols and meaning perspectives".

2.4.3 Summary of Spiritual Learning Environments

In the models of spiritual learning environments considered above, those who established them evidence the capacity to think critically. Whether this was a natural ability or culturally honed competency or a skill developed in practice or intentionally developed by learning experiences of their choice, they possessed the capacity to critically reflect. In each model much time is spent reflecting on Scripture and applying the Word of God to the dilemmas the learners faced and realities in which they lived. Some, from the time of Moses, were judges; in other instances they were educators. They reflected on the cases of others to encourage alignment with the Word of God. They reflected on their own lives as they considered themselves on the road to biblically-based *sanctity* or *personal piety* or *moral wholeness* or *holiness* – whatever they called it. In their reflections on the example of Christ they found perfection and congruency and so they constructed the concepts of "Christ-likeness", "Christ-centeredness", and "the mind of Christ". These reflections are also explainable in psychological terms as Kelsey (1984:41) formulates:

> The psyche is brought to an entirely new level of reality. Far from entering the void of nirvana or losing itself by seeking to be transcended, the ego is transformed. It is made a harmonious part of a total human psyche, which now has a new center and focus. The old center and the new remain in relation, a new relationship of wholeness.

The spiritual self, as the central self and eternal self, worships and emulates God as the ultimate Hero, submits to Him, freeing the tri-dimensional self, to be a joy-filled, peace-full person, free from conflicts, to the measure that their words, thoughts, attitudes and relationships match the Word of God. ***Being*** is the result of finding personal relationship with God. The place given to the Bible in each of these models is not to be under appreciated. The Bible is replete with explanations, observations and instructions about the formation of selfhood. In his letter to the Philippians, Apostle Paul states what he was, what he once thought, what he once perceived as significant, he now considers as "dog dung" compared with *knowing Christ…firsthand* All that he *was* he lets go of to *know, experience and be* and also to go with Christ to death.

> "Philippians 3: **I was**…an Israelite from the elite tribe of Benjamin; a strict and devout adherent to God's law; a fiery defender of the purity of my religion, even to the point of persecuting Christians as a meticulous observer of everything set down in God's law Book… all the ***things I once thought*** were so important are gone from my life. Compared to the high privilege of ***knowing*** Christ Jesus as my Master, firsthand, ***everything I once thought*** I had going for me is insignificant – dog dung… I gave up all that inferior stuff so I could

know Christ personally, *experience* his resurrection power, *be* a partner in his suffering, and *go all the way* with him to death itself" (Pederson 1993:416).

Paul experienced transformation. He faced death frequently. An eminent American gerontologist, Cohen, recently reports (2006:84) his research findings on what he calls the "myth of mid-life crisis" saying: "What sparks this series of changes? Why, after finding our places in the world, do so many of us spend our 40s and 50s re-evaluating our lives? The impulse stems partly from a growing awareness of our own mortality….we gain new perspective on who we are and what we really care about". Paul seems to have a full-blown awareness of his mortality and he is ready for it; he is ready for knowing, for being and for dying.

From the model of Moses through each other model considered, in the lives of the learners and the creators of the educational models, life goals surface which have commonality but are expressed in different terms. Besides the clearly articulated wording in each model, a global indication is given by the popularity for six centuries of *The Imitation of Christ* by Tomas á Kempis (1418)*.* Christians come from different perspectives and positions but they aim at the same goal, they are deeply interested in imitating Christ, emulating Christ*.*
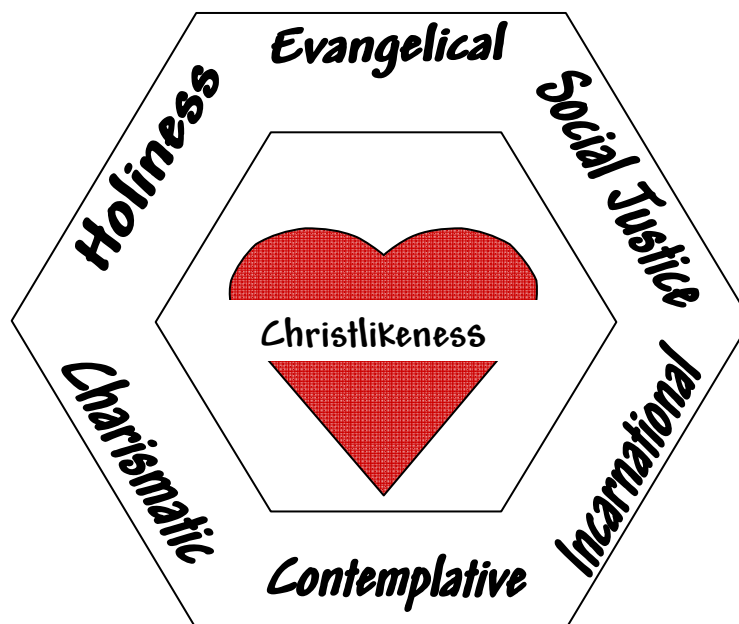
Figure 2.11 Diagram of the Six Great Traditions of the Christian Faith

The six great traditions of the Christian faith, as named by Foster (1998), are incarnational, contemplative, evangelical, holiness, charismatic and social justice. The goal of each tradition is the same – *Christlikeness*, *becoming like Christ,* the *image of God* – which occupies the centre of the illustration in Figure 2.11. Each tradition encourages spirituality in different ways; each tradition has multiple examples of ways to make learning environments spiritual.

The nine models which are briefly described in this section serve as rich resource for understanding some of the aspects and dynamics of learning environments which are *spiritual*. Later sections of this chapter refer back to these models in respect to aspects they display of cooperative learning and holistic learning strategies which are the subjects of the next two sections 2.5 and 2.6.

2.5 Cooperative Learning Groups among Adults

By the working definitions of this research project, holistic identity or personhood is *tri-dimensional* composed of the whole-brain self, the spiritual self and the social self, all influenced by God and all perceived or interpreted by the health of the memory. In cooperative learning groups each individual has this tri-dimensional identity of a whole person. The community itself of the learners is another "whole" which is explored in this section entitled, "Cooperative Learning Groups among Adults. These considerations include contextual perspectives of the population of learners in this study, pragmatic considerations, especially as related to some of the models in the previous section on spiritual learning environments, and scholarly observation about learning in community. Implicit in these considerations is also the presence of God in the workings of the learning community. Community can be viewed through many lenses.

2.5.1 Scholarly and Pragmatic Issues of Cooperative Learning Groups

From the perspective of adult learning, Brookfield (1987:215) puts social learning at the top of adult learning: "Forming and living within relationships are, arguably, the most important of all our adult learning efforts, and the ones to which we ascribe perhaps the greatest significance". He invites argument to this stance, but, for now, I want to agree with it, and proceed to his next point: "Assisting people to be able to think critically within these relationships must be one of the most important functions helping professionals and educators can perform". He identifies *critical thinking within relationships* as a most important help that facilitators can bring about in the lives of their learners.

Another renowned adult educator, Mezirow (1998:72) in Mezirow (1999) describes how ideal communities function according to the theory of transformational education by citing five characteristics of an ideal learning community which are 1) "cemented by pathic solidarity", 2) "committed to participatory democracy – social and political", 3) "informed through critical reflection", 4) "acting collectively in reflective action", and 5) "responsive to human need". Adding to these five the descriptors specified above by Brookfield, "capable of critical thinking within relationships", results in six characteristics of an ideal community of learning. Cooperative learning groups among adults functioning optimally exhibit these characteristics of ideal communities.

Yet, there is a factor of culture which greatly impacts each learner in each cooperative learning group; that factor is the basic societal organization of the society in which the learner was born: "Is her or his society *individualist* or *collectivist?"* Hofstede (1997:50-51) defines the two terms with clarity:

> *Individualism* pertains to *societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism* as its opposite pertains to *societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty.*

This "basic societal organization" influences every aspect of the society so it influences every individual who is born into the society and every community within the society, including the communities of learning. Different levels of *individualism* and *collectivism* exist, have been measured and are published because the affect they have on behaviours of individuals and groups has impact on all cross-cultural interests: business dealings, marketing, counselling, education and so on. In Table 2.3 Hofstede presents key differences between the *basic societal organisation:*

Collectivist	*Individualist*	
People are born into extended families or other in-groups which continue to protect them in exchange for loyalty	Everyone grows up to look after him/herself and his/her immediate (nuclear) family only	1
Identity is based in the social network in which one belongs	Identity is based in the individual	2
Children learn to think in terms of 'we'	Children learn to think in terms of 'I'	3
Harmony should always be maintained and direct confrontations avoided	Speaking one's mind is a characteristic of an honest person	4
High-context communication	Low-context communication	5
Trespassing leads to shame and loss of face for self and group	Trespassing leads to guilt and loss of self-respect	6
Purpose of education is learning how to do	Purpose of education is learning how to learn	7
Diplomas provide entry to higher status groups	Diplomas increase economic worth and/or self-respect	8
Relationship employer-employee is perceived in moral terms, like a family link	Relationship employer-employee is a contract supposed to be based on mutual advantage	9
Hiring and promotion decisions take employees' in-group into account	Hiring and promotion decisions are supposed to be based on skills and rules only	10
Management is management of groups	Management is management of individuals	11
Relationship prevails over task	Task prevails over relationship	12

Table 2.3 Collectivist / Individualist Adapted from Hofstede (1997:67)

It seems probable that half of these differences, the ones which I numbered 2, 4, 5, 7, 8 and 12, are likely to affect considerably the dynamics of what happens in cooperative learning groups. A colleague of mine, another American, facilitator of learning communities in Africa, Reed (2003:4) makes note of collectivism: "In Africa, we say, 'I am because we are". This community-based philosophy of life we must apply to our educational endeavours and shun the individualistic 'private property' model that we have seen develop in America". Reed and I hear Letseka say (2000:181) "The importance of communality to traditional African life cannot be

overemphasized. This is because community and belonging to a community of people constitute the very fabric of traditional African life". My study must take into account the basic societal organizational factor of *individualism* vs. *collectivism*.

Copley (2000c) defines community as, "group of 3 or more people who, regardless of the diversity…have been able to accept and transcend their differences, enabling them to communicate authentically and effectively and to work together towards common goals". The "community" which Copley describes is not a community in the deep, societal sense of Hofstede, such that the rules or norms for community function should not be expected to apply. Groups can "communicate authentically and effectively" and "work together towards common goals". The use of the term "team" seems to promise more accuracy.

The establishment of "personal, Christian community in the midst of a hostile environment" is identified by Easum (1993:45) as "the primary task of the first-century Christians". He says the biblical term for this personal community was *oikos* which translates in English to "household". In the face of political/social/spiritual hostility like Christians experienced in the first century and others experience in subsequent centuries due to prevailing ideologies of their native culture, "Christian community" probably has all twelve characteristics that Hofstede defines for a collectivistic society. Outside of such contexts there is more freedom of choice so the Christian community may be collectivistic or individualistic with all the levels in between the extremes.

Regarding the establishment of communities of learning, Gravett (2005:23) speaks of the two important functions of "negotiation" first "to establish norms of interaction that may govern how members of the group relate to one another" and "to help learners, by means of reasoning together, to move towards the view of reality shared by those who are viewed as experts...making 'private' learning 'public'". Negotiations in the establishment of a new community of learning, especially one in which there is cultural diversity, might include aspects of collectivistic and individualistic societies so that the ground rules for the group may be the first construction of the group itself.

In relation to several models of adult learners which have been introduced in this study, the nature of the groups which come together for the purposes of learning vary from individual group to individual group. In the Freirean model, which Emge (1988) and Taylor (1993) say that was on the base-level ecclesial communities or "CEBs" of the Brazilian Catholic Church, the educator presents to the learning group one of a number of specifically chosen audio-visual pieces, then the educator…

> asks a series of open-ended questions about these [audio-visual] materials that encourage students to elaborate upon what they see in them. Ultimately, this questioning process leads the students to define the real-life problem being represented, discuss its causes, and propose actions that can be taken to solve it (Freire 1970, 1973; Wallerstein, 1983). Ideally, the solutions evolving from the group's discussion will entail actions in which reading and

writing skills are required, thus giving learners a concrete purpose for the literacy they are developing (Spener 1990:2).

The model stimulates motives for learning, motives which are deeply embedded in the reality, including the esteemed values, of the learners, which are reinforced by the group discussion which seems to act as a "vote of approval" or a taking of "group consensus". The group discussion effectively approves (or disapproves) and authorizes (or not) the action of each learner learning to read and write since such action benefits the common cause. It is easy to see how this fits into a collectivistic notion of identity as "based on the social network in which one belongs" and also the notion of "in-groups" (Hofstede 1997:67) to which being loyal results in continued protection to the individual, and which have a defined hierarchy which play a role "in regulating the behaviours of its members in order to maintain harmony, which may include subordinating personal goals to achieve group goals" (Burgess 2002:33). If the learner is supported by the community to learn it is because the learning behoves the community to which he or she belongs.

Power distance is another sociological term which comes to bear on group dynamics so is pertinent to considerations of cooperative learning groups; it is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede 1997:262). The factor of *power distance* involved in the group discussions in the Freirean model is discussed by Freire in his book of instructions, so to speak, for facilitators who use his methodology. He comments (Freire 1994:118):

> The dialogue between the teacher and the students does not make them equals, but defines a democratic positioning between them. Teachers are not like the students for *n* number of reasons among which because of the difference between them makes them what are they are. If they were equal, one would become the other. Dialogue has meaning precisely because the subjects in dialogue maintain their own identity, but defend it and, in this way, each grows with the other…Dialogue…does not *level*, does not reduce to the other…nor does it favor one over the other…but implies a fundamental respect of the subjects involved, that authoritarianism shatters or does not allow to be built.

Mezirow (1995:54) in Gravett (2005:30) characterizes the ideal situation for dialogue, in which the participants have "all the necessary information at their disposal to enable informed participation" and "equal opportunity to participate, including the change to challenge, question, refute and reflect, and to hear others do the same". Furthermore the participants are:

- free from coercion and distorting self-deception,
- able to weigh evidence and assess arguments objectively,
- open to alternative points of view and to care about the way others think and feel,
- able to reflect critically on assumptions and their consequences,

- willing to accept an informed, objective and rational consensus as a legitimate test of validity until new perspectives, evidence or arguments are encountered and are subsequently established through discourse as yielding better judgments.

Several aspects cited by Mezirow are definitely within the control of the facilitator of the group learner, even in Mozambique. Most dialogue is not ideal as most environments are less-than-ideal, but facilitators who know the characteristics of such an ideal certainly enhance the probability of success of the learning experience. Freire (1996) has other advice to facilitators which is pertinent to the creation of an environment conducive to learning [The translation is mine; digits between parentheses, like (24-25) indicate page numbers]:

> There are some indispensable truths for teachers...one being that you become convinced, definitively, that teaching is not the transfer of knowledge but is creating of the possibility for its production or its construction (24-25).

> To teach requires...methodical rigor (28), research (32), respect for the knowledge of the learners (33), criticality (34), aesthetics and ethics (36), the embodiment of words by example (38), risk, acceptance of the new and rejection of any form of discrimination (39), critical reflection on practice (42), recognition and assumption of cultural identity (46), consciousness of incompleteness (52), good sense (67), humility, tolerance and fighting for the rights of the educators (74), job and hope (80), conviction that change is possible (85), curiosity (94), trust, professional competence and generosity (102), commitment (108), understanding that education is a form of intervention into the world (110), liberty and authority (117), conscious decision making (122), knowing how to listen (127), recognition that education is ideological (141), availability for dialogue (152) and good intent toward learners (159).

I include this advice by Freire because it reflects the breadth and specificity of the attitudes and beliefs which he considers essential for facilitators to have in order for knowledge to be constructed in the cooperative learning groups. It is not just the coming together in a cultural circle, showing drawings and asking carefully chosen questions which make learning happen. Knowledge construction is dependent on the formation of the facilitator.

The impetus for the creation of CEBs according to Emge (1988:33) was "a shortage of Brazilian clergy and calls from the Vatican for greater spiritual development among the people led to the development of prayer and education groups led by laypersons". This same combination of factors, i.e. the shortage of clergy and desire for greater spiritual development of the laity, was also impetus for many of the other models cited of biblical education, those of Moses, Jesus, Apostles, Luther, Loyola, Wesley and TEE. Freire adapts the CEBs to the ends of literacy and calls the groups "cultural circles".

Sitting in a circle has come to be orthodox practice of adult learning settings, hence strategic for cooperative learning group. Indeed, the circle facilitates communication, in general, is a non-verbal statement of democratic equality of all in the circle, and signals that group dynamics like openness and honestly are expected in the setting. Brookfield (1998) critically evaluates the practices of sitting in a circle as well as the practice of using discussion. He does not recommend abandonment of the practices, but he points out that regarding as "best" the discussions in which the facilitators rarely speak may allow "the reinforcement of differences; of status existing in the wider society (1998:290)" because learners who are members of minority groups, or who are introverts, or those who need more time to reflect before speaking may not speak if the facilitator does not intervene skillfully to "create a structured opportunity for all group members to say something".

In the experience of TEE trainers (Thornton 1990:27) group members over a period of time will take roles within the group. Thornton names twelve predictable roles like the "initiator", "information seeker", "classifier", gatekeeper", "elaborator", "consensus tester", and, of course, "chairman". By knowing this normal phenomenon, facilitators can give the group more effective leadership. Dass and Gorman (1985) would discourage role-assumption or role-maintenance since it can interfere with the openness of the group to meet simply as people. This seems to agree with the critical position of Brookfield cited above.

In relation to sitting in a circle, Brookfield recognizes that "no practice is more beloved of adult educators…it is a thoroughly moral seating arrangement" (1998:290). However, he explores the existence of "a much more troubling and ambivalent reality"… that the circle can be a "painful and humiliating experience" for students "who are shy, aware of their different skin colour, physical appearance or form of dress, unused to intellectual discourse, intimidated by disciplinary jargon and the culture of academe, or conscious of their lack of education". With this reality exposed, he now explains to students that he is aware of the fact that sitting in a circle is "sometimes experienced as an oppressive mandating of participation". He tells students that they can choose, without consequence of being considered uninterested or hostile, the right not to speak. This poses a counterstance to, as Copley (2000c) calls it, the circle as an "ancient form of gathering in which people connect, communicate, celebrate, hold council and create community".

Hasbrook (2002:1) speaks the concept of "praxis" in reference to the Freirean approach:

> Students and teachers critically think about the conditions of their realities, for the purpose of constructing and attempting solutions, referred to as "action" by Freire. Reflection-action is possible through collaboration, or dialogue-interdependent and concurrent processes to enact praxis. The key in praxis is the ongoing partnership between action, reflection, and dialogue.

Certainly in the Nazarene educational context "students and teachers" are endeavouring to "critically think about the conditions of [our] realities" and such thinking is "for the purpose of constructing and attempting solutions". According to

these specifications Nazarenes around the globe are engaged in "praxis", and will continue to be until the educational systems better fit the multiple realities. "Praxis" is also used with frequency in relation to teaching Bible and/or theology. It is not always used to mean "the partnership of action-reflection-dialogue" in this full sense. Sometimes it seems to be used to mean "theory-into-practice", which does not specify discussion, particularly culturally relevant discussion or reflection as part of the process. Lai (1995:1) has a definition for "praxis cycle" in which he says, "teachers/facilitators use dialogue required to help students/disciples develop the competencies required to become biblically literate, critically conscious, and actively involved Christian citizens". Praxis, in the fuller sense, and/or praxis cycle is seen in several of the models discussed.

Regarding Jesus with his disciples, Maxwell (2001:87) comments, "Jesus' greatest miracle….was the result of countless hours of training and modelling for his twelve disciples…he got those relative failures to replicate his miraculous ministry in such a way that they reached all of Asia within two years". The disciples were successful in praxis. Praxis is also seen in the model of Paul with his disciples, Augustine with his norm of using "Socratic questioning", Wesleyan classes and bands, and the TEE model with the 3-question cycles of "face-to-face sessions" which are discussed below in more detail.

The dynamics of meetings of Wesley "classes" and "bands" also merit attention. The weekly meetings of the bands were characterized by "a high degree of frankness about oneself and the other members of the band...before anyone questioned another, they had to speak of themselves" (Hulley 1987:23). The subject matter of what they were to speak was prescribed by five questions which each participant of the small group (5-8 people) answered, questions which probed their integrity, morality and spiritual condition (Freeborn *et al* 1994). Wesley *classes* were slightly larger than *bands*. Classes had 12-15 people and the format was more instructive and inspirational than confessional. Members of classes carried cards and were expected to participate weekly in the class, which encouraged responsibility. Classes disciplined members according to rules of societies which were published by Wesley.

Another kind of group which Wesley established was his meetings with the class leaders. Accountability for the spiritual state of the members was ever encouraged:

> Whenever Wesley arrived in a town where there was an established society he would summon the leaders to enquire from them about the spiritual state of the class members. The Leader's Meeting therefore became the institution which enabled Wesley to keep his finger on the pulse of the work in every Society in the Methodist connexion [sic]. As such the meeting fulfilled a vital function in the growth of the Methodist movement…The class system also provided the first level of pastoral care for Methodists, seeing to their immediate needs and monitoring their spiritual growth (Hulley 1987:25).

The TEE model has not been static during the thirty years since its inception. Besides the ten weaknesses cited by Kornfield and referred to in the rationale of this thesis,

the model has been contextualized and improved. Features which have persisted are cited by Snook (1992:34) and include:

> the periodic discussion class, students purchase their own textbooks, modification in the styles of independent study materials, different academic levels studying together, block scheduling of seminars, flexible time periods for the completion of studies, and yearly convocations.

Winter (1969:428), one of the founders of the programme in Guatemala, calls these constants, "The Four Foci of Action", i.e. daily study, weekly centre meeting, monthly seminar, and annual graduation programme. The TEE model is generally considered to be a positive solution to much of the negative criticism of contemporary "theological education" in general, which is usually aimed at institutional training in Bible schools and seminaries. Schirrmacher (1999:4), in an annual meeting of German missiologists, says:

> One characteristic emphasized in the Bible, the ability to teach, includes both knowledge and the ability to share it. Theological education tends to disregard other qualities (self control, maturity through testing, exemplary family life), for seminaries fail to provide either counselling or cooperative practical training by instructors in everyday church life.

Noeliste (1993), Schirrmacher (1999) and Pluddemann (2004) seem to concur that biblical leadership qualities are exemplified by the model provided by "Jesus and Paul", which also serves as the base for the TEE model. In the TEE model the learners do not leave their ministry contexts, so have the possibility of the *praxis cycle* ever available. They continue to live in their home contexts, a fact which provides potential for more continual assessment of their maturity, family life and example as their lives are open to their parishioners, peers and moderators. Gatimu *et al* (1997:18) considers the choices which are inherent in the model, i.e. choice of place and time of study, choice of subjects, part of an authentic "democratisation of learning opportunities"…as opposed to "the restrictions of a normal classroom and timetable that is associated with conventional learning".

The written materials of the TEE model are discussed further in the next section but it is pertinent to note that the discussions which take place on a regular, usually weekly, basis in the centre meetings are guided by the facilitators on the content of Bible-based programmed learning books which are "designed precisely for this kind of study," according to Winter (1969:430). Such practice follows the guidelines for excellent discussion, i.e. that each participant have all the necessary information at their disposal to enable informed participation (Mezirow 1995:54 in Gravett 2005:30). One of the text writers explains (Holland 1992:23): "It became clear that practical questions and assignments should be written into the lessons so that students could think about them before the sessions and then enlarge on the applications as they discussed issues together".

The regular meeting in the church or home or under the tree chosen to be the "TEE centre" of a group of learners is a time of cooperative learning which is described by

writers very familiar with the dynamic: Snook (1992:53) says "The weekly discussion seminars buzz with practical contextualizing which comes right out of the experience of the student…The mortar of contextualization is the discussion group; the pestle is the Word of God". Gatimu *et al* (1997:18) claim that in these discussions learners are able to "discuss the challenges of Christian life and relate these to biblical truth and Christian conviction….[and] share experiences they have gone through and how these experiences could be used to strengthen the church both spiritually and numerically". These descriptions give evidence a deliberate platform for the critical reflection and critical thinking that is taking place in these sessions.

Change and/or learning are always volitional. Learners will to change. Gatimu *et al* (199:26) reflect the clearly collectivistic stance in relation to the learning which may or may not take place in a TEE session:

> [The adult learner] may refuse to change his attitudes and behaviour if such a change is not accepted by his peers and cultures. Adult learners are very sensitive to ridicule, and scorn from his peers. He would not accept changes that may make him to be isolated by their peer groups or local community. This is more true [sic] in Africa where we find that every individual is part and parcel of the whole community and his decisions are influenced by community norms and values.

Frequently cited causes for breakdown of TEE programmes in Africa are the following "lack of church acceptance and approval" (Snook 1992:53-57). This problem has the potential of casting the deciding ballot in collectivistic settings. Other shortcoming cited, "lack of finances, lack of programme structure, lack of trained leaders, preconceived ideas about TEE [as an inferior form of Bible education]" are failures related to external, administrative features of the programme, not related to the internal workings nor the spiritual worth of it. They are weaknesses which can be addressed in refining the TEE models.

2.5.2   Cooperative Learning Groups in Mozambique: Contextual Issues

2.5.2.1 Multiple Contexts of Nazarene Adult Learners in Mozambique

I refer earlier to many expressions which relate to the multiplicity of *identity* as *self* or *selves.* Accordingly, in this section, I explore the several subsets of identity to which the learners in my research belong. These include *African*, *Mozambican,* and also member of a particular tribe. Each of these subsets is conditioned by the birthplace of the learner. Then by choice the learners also belong to the subsets *Christian* and *Nazarene*. The learners also belong to subsets of different types of learners including *bilingual* or *multi-lingual* will be discussed in this one. The reason that these particular learners constitute the population being studied is because of the ready access to them I have by virtue of my position as trainer of their trainers as Field Education Coordinator of the Church of the Nazarene in Lusophone Africa and because both professionally and personally, I have vested interest in their learning. Learning strategies which may or may not be effective with them are the variables of the

research project itself. Their contextual identities are some of the invariables in my study.

As adult learners come into learning environments they bring with them their "world" of experience. This "world" is a composite of the varying contexts to which they belong. In this chapter, I examine the subsets named in Figure 4.1 as some of the varying contexts of the learners in my study. Burgess (2002:7) comments that "basing one's understanding of others on their social identity…assumes that people have many different identities, which are activated by situational cues".
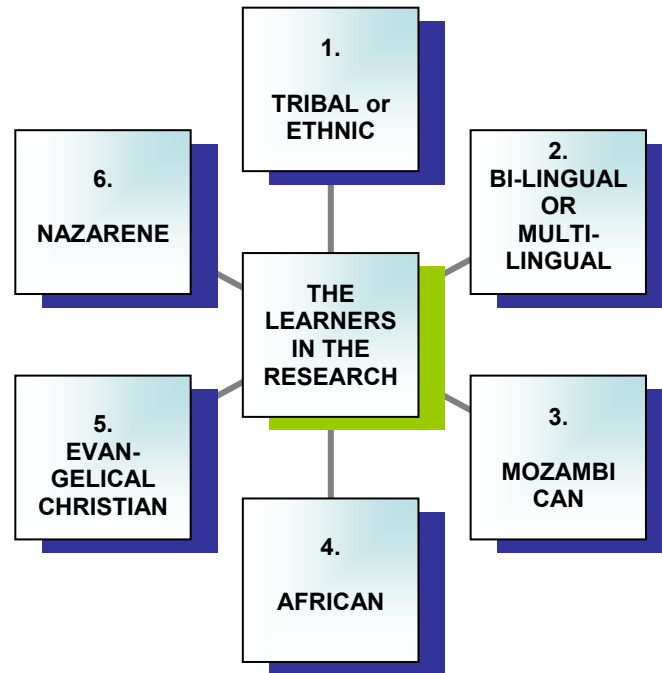
Fig. 2.12 Contextual Subsets of Identity of the Learners in this Research

The contextual subsets of the learners in this research project have connections with the framework of Arboric Research described in Chapter 3. The soil in which the research takes place is composed of the subsets determined by birth, i.e. Tribal/Ethnic, Linguistic, Mozambican and African. *Evangelical Christian* and *Nazarene,* subsets of choice rather than birth, are also structures which have formed in the same soils in which the learners were born. The formation of an Evangelical Christian in Mozambique is different than the formation of an Evangelical Christian in Namibia, Togo or France because the *soil* of the cultures in which the Evangelical Christian grows modifies the worldview, the expressions of faith and the philosophy of education, resulting in differences which learners bring into their learning environments. Nazarenes around the world have in common many values, structures, and even cultures; however, Nazarenes in Mozambique are linked together by a commonality of experience proceeding from their shared contexts that is a yet stronger link than the one between the Nazarenes in Mozambique and those in Swaziland.

Each of these subsets are like root structures of a tree that grow, bend and have form. Roots facilitate the flow of the experiences in learning examined in the lives of the population of study. Learning is the movement, the change occurring within the roots.

2.5.2.2 The Cultural Contexts of Nazarene Adult Learners in Mozambique

The *cultural context* of learners takes into account the ethno-historical, tribal, linguistic, cultural aspects of their settings, which are conditioned by the geographic background of the particular group of learners and also overlap with each other. Mozambique has ten provinces. The provinces of Maputo, Gaza and Inhambane are considered the "South". Sofala, Manica and Tete are "Central". The "North" may mean all four provinces above the Zambezi River but sometimes the province of Zambezia, just north of the river which is crossed by barge, is considered "Central" leaving the "North" to include Nampula, Niassa and Cabo Delgado (Restrick 2000, Fillmore 2000, Walker 2000, A. Banda 2000, Questa 2000, and Perkins 2000).

Relating to the learners in my study, those who were born in Central Mozambique, as a group or ethnos, clearly have different historical, political, tribal, linguistic and cultural aspects of their context than those of Southern Mozambique or Northern Mozambique, etc. Carefully comparing the maps numbered as Figures 2.13 and 2.14 the tribal variances within the province of Tete (northwestern Mozambique), for example, are easily identifiable. These regional variations within each of the ten provinces Mozambique can be identified by cross-map comparison and shows diversity within each province.

Each tribe which settled Mozambique spoke a different language so the list of names of the tribes and the languages is long. Early on in my research I was *very* fortunate to interview a missionary from SIL who gave me hard copies of the most recent linguistic maps of Mozambique and told me that in 1999, SIL International identified thirty-nine languages in Mozambique (W. Gardner personal communication, May 15, 2000). According to SIL (2004) all of the languages are considered "living languages" and are categorized as "narrow Bantu". Electronic copy of one of the maps Gardner which he had helped to compile and he gave me in 2000 is found below as Figure 2.15 in which the distribution of thirty-six languages is represented in an "ethnologue".

Figure 2.14 Provincial Map of Mozambique (Worldmap.org 2004)

Figure 2.13 Ethnic Map of Mozambique (Perry-Castañeda Library Map Collection 2004)

81
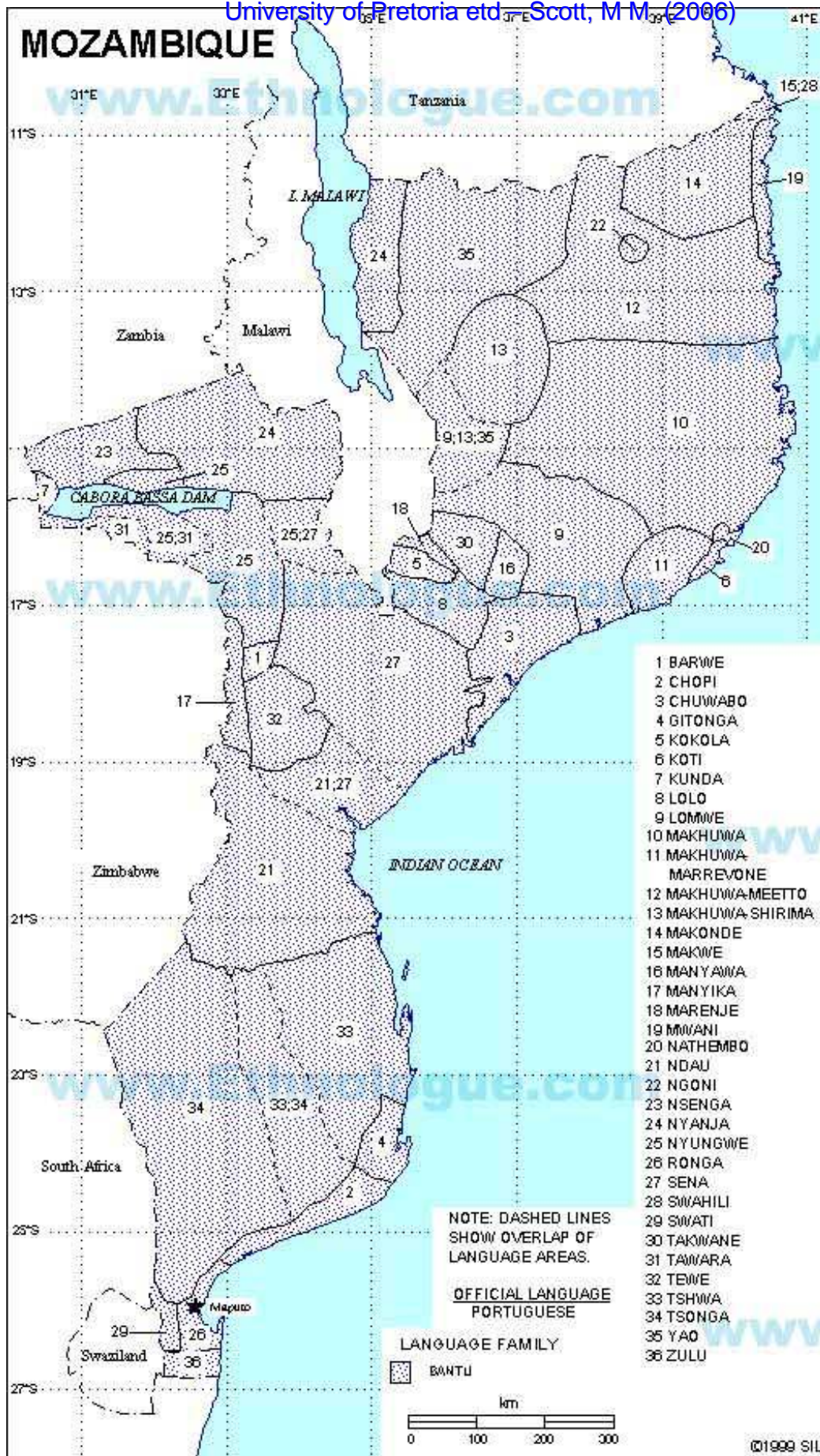
Figure 2.15 Ethno-linguistic map of Mozambique (Gardner 2000, SIL 2004)

82

Adding to the difficulty of learning about the languages spoken by Nazarene adults in Mozambique is the fact that they all have dialects (SIL 2004). Continuing to use the Tete Province as an example, *Nyanja* is one of the major languages of Tete. Information given about *Nyanja* that SIL (2004) publishes includes many details about it. The dialects of Nyanja include: "Chewa, (Cewa, Chichewa, Cicewa), Ngoni (Cingoni), Nsenga (Cinsenga), Nyanja (Cinyanja)" (SIL 2004).This knowledge helps those of us in the South to understand why learners from Tete will give several answers to the question, "What language do you speak?" They answer with the name of their dialect.

The maps show that the eastern part of Tete shares ethnic and language groups with Malawi, specifically Nyungwe and Chewa, and shares none with the southern Mozambican province of Inhambane (see figure 4.2). In missiological terms the people who share ethnicity and language are called "people groups" (Sterns & Sterns 1991:40) which frequently spill across political boundaries like those between Tete and Malawi. Hiebert (1976:417) borrows Boas' term "cultural area" defining this as a group of tribes within a single geographic area that share a great many culture traits…in contrast to other such groups nearby". Hiebert continues by saying that those who speak dialects of a language "have more in common linguistically…than they have with others who may be nearer to them in space but speak a different language". Mkabela and Luthuli (1997:56) describe language as "a major carrier of culture".

The groups in which the Nazarene adults are learning are organised primarily by space because they must walk to their centres (geography) not by culture, however, aspects of space and culture overlap. Therefore, the learners within a group share many significant identity aspects with others in the group. This contributes to a sense of belonging and enhances the collegiality and trust level of the groups. Connections between language, identity and learning are foundational for everyone.

The learners in my study do not need to know or discuss the influence of their culture on their identity for the influence to exist. From research conducted in South Africa on what is named "new cultures", Burgess (2002:31) says: "People are often very unaware of the influence of culture. This is because it is effortlessly internalised from birth". Hall (1962:viii) links "internalized culture" with "what is thought of as mind*"* and further connects it with "the organization of 'information' as it is channelled (and altered by the senses) to the brain". Acculturation is holistic learning. Vygotsky (1962:39) says the "basic characteristic of words… [is] a generalized reflection of reality". As each [person] gathers perceptions of reality, that is as he or she responds to the world surrounding him or her, as impressions in the brain are being imprinted then reinforced, linguistic expressions are then formulated. With this concept Vygotsky ties words to reality; words as products of the reality perceived, i.e. within culture.

Restak (1988:221-222) quotes Dr. William S.Y. Wang:

> Language is the best window through which we view mental life. But it's probably even more than that. I think how we relate to others, how we see things, how we represent reality within ourselves, to ourselves, are all very

critically influenced by the choices that our language makes available to us. 'Another language, another soul,' as language teachers sometimes like to repeat…

Restrak (1988) goes on to give an insightful example of the interplay between culture and language:

> Interviewing native Hopi speakers in the American southwest, Dr. Ekkehart Malotki explained the idea that the reason the Hopis have no perception of time is because they have no vocabulary for it. When one Hopi said that they 'went to pray to the sun with cornmeal,' for instance, Malotki caught a particular phrase and asked, 'Does this mean the time when you do this?' 'Yes,' was the answer. 'Barely sunrise.' As Malotki points out, 'They are living with time in every point of their lives. But not necessarily in the way we perceive time today (222) Malotki…people are not different because of their language; they are different because of their experience in this world and whatever becomes important to them (224).

Of course, *different* must not be construed in any way as *inferior* or *deficient*. Armstrong (1994:160) reminds us that intelligences are multiple, and learners from every culture have and use "all…intelligences….and that educators would be making a great mistake it they began to refer to specific racial or ethnic groups only in terms of one intelligence".

The constructs of Armstrong, Restrak, Wang, Vygotsky, Hall, and Burgess introduced in the last few paragraphs interweave *culture*, *language*, *identity* and *learning* as threads of the same tapestry or fibers of the same root system. However, the object which is in formation is not a tapestry or a root; it is a person, a dynamic selfhood, the self or multiple selves-under-construction, a tri-dimensional learner. What is the impact then of learning in a second or third language? The perception of and expression of reality is altered, so is the reality itself altered? Is one social self the one that speaks the maternal tongue and another social self the one that speaks the colonial tongue? Can those two selves meld? What melds them? My study will not answer these questions, but I have just raised them.

There are political and economic variances within every ethnic group or tribe. Each Nazarene adult learner has been nurtured in a context with all of these aspects as influences on his or her learning. An educator who lived in both the South and the North comments: "The Chewas [in Tete] were a different tribe with customs and language unlike what we had in the south among our Shangaan people [with whom] we had worked…for almost 20 years (Stockwell 1992:44)".

Evidently there was not as much tribal diversity in the sixteenth century in the area which would come to be known as Mozambique in subsequent years to the present. Newitt (1995:32) comments:

> When the Portuguese first described east central Africa, they clearly distinguished three African peoples. North of the Zambesi [sic] were the Makua [sic] while to the south there were Karanga and Tonga. The great

Dominican ethnographer, João dos Santos, made it clear that the classification was essentially linguistic.

Portuguese is the official language and the language of instruction. Portuguese is the first language of only 30,000 of 18,880,000 (1.6% of the population) while 27% speak it as second language according to the 1980 census (SIL 2004). This implies that most instruction in Mozambique requires the learners to be bi-lingual at least and that learning take place in a far-from-desirable second or third language. As designated in Chapter 3, the basic language of my research is Portuguese so its use continues to be a limiting factor of the research.

However, both Portuguese and the maternal languages are used in the centres where learning is facilitated in this study. Discussion in the maternal languages takes place freely. In their learning centres, the adults of my study are thus free to interact in the cultural context of their hearts, an extremely significant aspect since the formational programme targets outcomes of moral integrity and characteristics of identity. If Mkabela and Luthuli are right when they say "emphasis on an African language will create a consistent African value system (1997:56)", the use of the maternal languages in the learning centres of our educational system should enhance the construction of the value system of the groups of learners. They may access Biblical passages in Portuguese or their mother tongues, and then discuss the application of the passages to their daily lives in their mother tongues.

2.5.2.3 The Societal Context of Education in Mozambique: History, Politics and Economics

The word "societal" is used in this section to describe the intertwined aspects of the history, politics and economics which come to bear on adult Nazarene learners in Mozambique as other significant elements in the context in which they live and learn.

When the Portuguese captured the Moroccan port of Ceuta in 1415, the country started explorations intending to find a route to the gold which they had found in Ceuta and to establish a spice route to India. They underestimated the size of the continent, but in 1498, Vasco da Gama stopped at Mozambique Island, off the coast of present day Nacala, on his way to India. In 1505, the Portuguese decided to occupy the East African coast. The first permanent Portuguese settlement was on Mozambique Island which became the centre of Portuguese operations (Briggs 1997:8). The Mozambique created in 1891 was not a piece of random map-drawing but an attempt to make sense of the history of the region, grouping within the borders of a single colonial state the major ports between Cabo Delgado and Delagoa Bay…attempting to summarise five hundred years of the experience of the societies that existed within the area".

During the subsequent colonial period, 1891-1975, Briggs (1997:14) notes that only four of the present ten provinces of Mozambique were administered by "direct rule" of the colonial authorities. These were three found in the area south of the Save River – Maputo, Inhambane and Gaza – and the area around Mozambique Island which was called Nampula. The rest of the country fell under "indirect rule" (Briggs 1997:15) since the control was in the hands of *prazeros*, foreign

companies developing trade. So, except for the area near Mozambique Island, Mozambique above the Save River was less influenced by the Portuguese and more by Britain and the Yao from Tanzania.

Whether *Portuguese-colonial* or only *colonial* in Mozambique, this period reaches deep into the 20th century. In 1960 in South Africa "180 black Africans were injured and 69 killed during demonstrations in an incident which became known as the *Sharpeville massacre* (Boddy-Evans 2004). Also in 1960, in Mozambique the "Massacre of Mueda" took place. First says (1983:xxii) "villagers asking for better working conditions are gunned down by Portuguese troops in the northern province of Cabo Delgado". Mueda, in Cabo Delgado, the northernmost province, was one of the areas which had been under the "indirect rule" described above.

In subsequent years, wars took place in Mozambique. The first war is called the "Colonial War" or "War of Liberation" depending on who is writing about it. A Nazarene missionary (Stockwell 1992:46) says,"In the early 1960s a communist party had been formed…with headquarters in Dar es Salaam in Tanzania. FRELIMO (Front for the Liberation of Mozambique). In 1964 the first shots were fired in Mozambique". Ten year passed. On April 25, 1974, a military coup in Portugal overturned the Caetano/Salizar regime. Within two months of the *coup d'tat* the new government in Portugal entered into negotiations with Frelimo. On September 25, 1974 the two sides signed the Lusaka Accord; "Mozambique would be granted independence after a mere nine months of interim government, and power would transfer to Frelimo without even the pretence of a referendum or election" (Briggs 1997:17).

The second period of violent strife is not commonly identified in writing as *civil war*; however, it is frequently called civil war in conversation with Mozambicans. This strife took place between Renamo and Frelimo, political factions which today have become the major parties to provide candidates for election. Briggs (1997:19) says "From 1987 onwards, Renamo warbands roamed through the Mozambican countryside, supporting themselves with random raids on rural villages in what an official of the US State Department described as 'one of the most brutal holocausts against ordinary human beings since World War II". Despite the enmity between the two parties during the war years, the two parties still co-exist in the country. Adherents of both parties are members of the Church of the Nazarene and among the learners in my research population.

A Mozambican friend says that before the war the people lived in family units that were scattered, not in villages as today (Mahalambe 2002). The "villagisation" referred to by Roape (internet comment, para 2) is this societal grouping of extended family units in villages which was encouraged for protection. "Mozambique has been at peace since 1992…[and] Renamo's relative success in the election [to parliamentary seats] came as a surprise to many, considering its history" (Briggs 1997:20). This may be an indication of the determination or even the tradition of the Mozambican people in general to forgive and forget.
All of the learners in our educational system were affected directly or indirectly by these wars. Some were soldiers or refugees or party members or prisoners. All are the worse for the destruction which occurred during those years which resulted in tremendous devastation of infrastructures – human, natural, social,

technological and commercial throughout the country. One case in point is the lack of roads; the only road in the country which connects north to south is a narrow two-lane highway, asphalted now between Pemba, the northernmost provincial capital, and Maputo, the southernmost, except for two sections, a 40-mile stretch still dirt or mud (depending on the season) and the above-Pemba road which leads to the frontier with Tanzania. The mighty Zambezi River bisects the county; the only way to cross the Zambezi on the north-south highway is by barge; a bridge is under construction. Presently the only two-lane bridge across the Zambezi is in the town of Tete, 800 miles from the north-south highway. A one-lane railroad bridge allows cars to cross to the north every 30 minutes, then to the south in the next 30-minute period. Trains do not circulate because the tracks were blown up during the wars and are still not repaired. The lack of infrastructure for transportation has obvious negative impact on the distribution of goods, on communication and on many aspects of development, including tourism.

In post-colonial education in Mozambique under Frelimo Mrs. Samora (Graça) Machel was appointed Education Minister in the new government and "worked tirelessly for 10 years to resuscitate an education system that had never been great, and had ground to a halt during the war years" (Maytham 2002:12). Maythan reports that she brought "the illiteracy rate down from 93% to 72% and taking school enrolment from 400,000 to 1.5 million". In this period, "primary school attendance doubled and enrolment at secondary schools increased sevenfold and [Frelimo]…sought to undermine the problem [sic] of ethnicity by spreading the use of Portuguese as a common language" (Briggs 1997:18).

More recent observations about public education in Mozambique are not as positive. From a recent study, conducted by Mario, Fry, Levey, and Chilundo (2003:17):

> All forms of education are a scarce resource in Mozambique, with a drastic funnelling at each successive higher stage in the educational system. The 1998 United Nations Development Programme (UNDP) Human Development Report estimated the adult literacy rate in Mozambique at 40.1 per cent, with the rate among females (23.3 per cent) less than half the male rate of 57.7 per cent. According to the 1997 census the overall gross enrolment rate [which] was 66.8 per cent in primary education, falls to 0.3 per cent in higher education, with the female rates being considerable lower than male rates.

	Total	Men	Women
Primary education	66.8	75.7	57.7
Secondary education	6.9	8.2	5.6
Technical education	0.8	1.1	0.5
Higher education	0.3	0.5	0.2

Table 2.4 Gross Enrolment Rates in Mozambique, 1997 (%) Mario, Fry, Levey, and Chilundo (2003:17)

UNESCO Institute for Statistics reports a slightly higher percentage of literacy in 2002 63.3% literacy among males and 31.4% literacy among females with an

average across the whole sampling of 46.5% literate. In respect to sexuality, Briggs says that Frelimo emphasized sexual equality and says "that 28% of the people elected to popular assemblies in 1977 were women – a higher figure than almost anywhere else in the world". However, in 2003 Graça Machel is quoted to say that "One of the biggest barriers African women face is the lack of educational opportunities. Education is key to being able to make choices about what one wants to do in life. I don't believe we can get equality without making sure that every woman can get an education" Maytham (2002:12).

The Mozambique government seems to be persistent in looking out for females. In several public documents (Republic of Mozambique 1998, 2000, 2001a and 2001b) goals set for learners consistently reflect higher goals for females in order to balance the still current reality of fewer females than males in all levels of schooling. The 2001b (10) document says "the participation of women and girls is very important for the development of this country…it will be necessary to identify models and methodologies of literacy and post-literacy courses of short duration, principally at the community level and attractive to women and girls".

Of course equal opportunity for women to be learners in the Nazarene centres is also an issue to continually encourage. Within the materials developed during our research persistent inclusion of both genders is deliberately used in references to the Portuguese terms for learners and pastors, the references are made to *alunos* (males) and *alunas* (females)*, pastores* (males) and *pastoras* (female pastors) (Scott 2002a, Scott 2002b, Scott 2004a) and a few of the most active trainers in the country are women (Scott 2004b). The pastor of the largest Church of the Nazarene in Africa is a woman, Rev. Bessie Tsambe, as is the pastor of flourishing Maputo City church, so female role models are present as pastors and educators.

Returning to the incidents of the late 1890's to early 1900's and to the area of Mozambique below the River Save, i.e. the *South*, a growing commercial relationship between southern Mozambique and the mines of South Africa, particularly Witwatersrand, significantly influenced the nation. This relationship was a key to the founding of the Church of the Nazarene in Mozambique and still affects the Church of the Nazarene today. This will be described in further detail, but in her book, which First (1983:1) tellingly entitled *Black Gold, The Mozambican Miner, Proletarian and Peasant,* she describes the importance of the connection between the mines and Mozambique:

> There was a time, during their critical formative years, when the Witwatersrand mines could not have been worked without Mozambican miners. Immediately before the Boer War, 60 per cent of black miners came from Mozambique. In 1906 the proportion had risen to 65.4 per cent. After Union in 1920, when the SA state was perfecting its coercive machinery for labour supply from within South Africa's internal labour reserves, the total of Mozambican Workers dropped, but they regularly made up more than a quarter of the total number of workers in the goldmines and collieries affiliated to the chamber of Mines.

The importance of the Mozambicans to the mines as well as the converse significance of the mines to the Mozambicans and to Mozambique itself is underscored by First (1983:2):

> There is no family in the southern part of Mozambique — which was the principal recruiting zone — that has not sent a father and most likely a son to the mines...Although mine labour recruitment was limited by law to the three southern provinces of Maputo, Gaza and Inhambane, the effects of the export of labour have affected the political, financial and economic relations of the whole country.

The entry of Protestant missions into southern Mozambique was "one of the by-produces of mine labour" (Newitt 1995:36). Churches active in the mining areas often had contact with Mozambican migrants and became interested in establishing stations in the home regions of their converts. DeLong and Taylor state (1955:204) "A conservative estimate places the average number of men living in mining compounds hundreds of miles from home at one hundred thousand….When these Christians returned to their homes in Portuguese East Africa, they had a consuming desire to share their spiritual discovery with their own people". These historical statements are apt entrance to the ecclesiastical history of the next section of study.

2.5.2.4 Nazarene Historical Context of Nazarene Adult Learners in Mozambique

The Church of the Nazarene is an international Christian denomination which was founded by the fusion of several groups from different parts of the United States each bringing with it functioning educational institutions and missionaries establishing national churches in several parts of the world. To this union, the founding groups brought with them work already being done in several global contexts including Africa which was entered previous to this 1908 date of Stateside union. A Cape Verdian, João Diaz, was already establishing the Church of the Nazarene in his native arquipelago, the Cape Verde Islands (Scott 2001a:5) from 1904 onward, hence, the Nazarene work in Africa is over 100 years old.

In Southern Africa, the church started in Swaziland through the work of a couple named Schmelzenbach. The first mission station was named "Peniel" at Endingeni.

From Peniel Mission Station, the Church of the Nazarene in Swaziland proceeded to establish health posts, schools, Raleigh Fitkin Memorial Hospital in Manzini, a nurses' training school, a teachers' training school, and a Bible school. The Bible School was started at Endingeni "about 1921, through the special endeavours of Miss Eva Rixse and Miss Ora Lovelace….outgrew its quarters and in 1933 was transferred to Stegi [sic]. Here the school proper was named the Swaziland Bible School" (DeLong & Taylor 1955:216). In 2006 the school is still located in Siteki and is seeking university status as Nazarene College of Theology (Scott 2004).

Previous allusion was made to the fact that the first Nazarene work among the Shangaan-speaking people of southern Mozambique started in South Africa in

mines on the Witwatersrand in 1922. Rev. and Mrs. I. O. Lehman were independent missionaries doing evangelism in Witwatersrand in the Transvaal and in Portuguese East Africa at Manjacaze. They decided that a denomination would be able to stabilize and continue the work so they put both missionaries under the jurisdiction of the Church of the Nazarene (DeLong & Taylor 1955:203).

Similarly to Nazarene work in other places of the world, in both starting points of Mozambique, Gaza and Tete, missionaries started medical ministry, schools *and* pastoral training programmes. "In 1928, Miss Rixse went to open the Nazarene Bible School in Gazaland (Tavane Station) (DeLong & Taylor 1955:188) which describes the inception of the Bible School in the South. The woman subsequently in charge of developing the Bible School, Schultz (1982:32) affirms that Miss Rixse was in charge of the "Gaza Bible School" in which "twelve young men were enrolled," but Stockwell (Restrick 2004) says that previous to 1954, the "Bible School" was more "one-on-one tutelage than a proper school".

In 1952 the International Holiness Mission in Great Britain joined the Church of the Nazarene, and with the amalgamation came about 30 of their missionaries and mission stations, including one station in Tete, Mozambique. For administrative and ministry purposes, Nazarenes in Mozambique were divided in two districts in southern Mozambique, and the joining of the IHM necessitated the forming of a third district. About a thousand miles to the northwest of Maputo, the Tete District was formed (DeLong & Taylor 1955:210-13).

In March, 1954 the leadership of the Bible training programme led by Miss Rixse in Tavane passed to Miss Lorraine Schultz (Schultz 1982, 1997, Restrick 2001). Schultz (1982:5) says the school was "reopened on a full-time basis". From her autobiography, Schultz (1997:49, 50) gives an inside picture of how Tavane Bible School functioned in 1954:

> Recommended by pastors and church boards, 21 students came from churches throughout the three Gaza districts. Some were new converts. But if we were to have workers for tomorrow, it would be necessary for us to train them all. Along with a language barrier that proved horrendous, there were extreme differences in levels of education. While a fourth grade education was considered good then, only a few could understand Portuguese. Some had learned to read and write – barely – in night school near the gold mines. The rest fell somewhere in between.

> Textbooks were unavailable. We had only the Bible, two small booklets in the Shangaan language, and a few mimeographed notes with which to teach. Since I spoke only a little Shangaan at that time, how we got through that first year remains a mystery. For sure, during those first months the teacher learned more than her pupils!

> We added a third-year course in 1956 and a fourth year for theology students in 1957.

Schultz (1997:50-51) comments on the purposes of the training: "As we trained workers, we did our best to equip them with a sound knowledge of Scripture and

help them find spiritual depth in their individual lives". From interviews with Stockwell, a colleague of Schultz in Tavane, Restrick (2001:114) notes that in 1954, "construction commenced on the first official Bible school building. Instruction was given in Portuguese with a large portion of instructional materials being supplied by Nazarenes in the Cape Verde Islands".

Besides cooperation with Nazarenes in Cape Verde, there was also educational and personnel interchange between the two Nazarene Bible training schools in Mozambique, i.e. in Tavane and in Tete. Selected students and a few teachers travelled the 1,000-mile distance that separated the two ecclesiastic districts (Stockwell 1992:55). Because these Tete pastors came to Gaza needed to learn the Southern language, Shangaan, to study in Gaza, many of the established leaders in the church today were trained in Tavane and speak Shangaan, even if their mother tongue is Chewa. The facilities of both Tavane, Manjacaze and Furancungo, Tete were occupied by soldiers during war years. .

An idea began to form in the mind of some of the Nazarene leaders. Schultz dates this idea to 1973. The following lengthy quote from her (1982:96-97), as well as the quote she embeds from Frank Howie, is extremely significant in terms of the TEE model already discussed as well as the system of education by extension functioning in Mozambique today:

> A new book had come into my hands entitled: *Theological Education by Extension (TEE),* by Ralph D. Winter [1969.] It told of the programme of TEE being launched on many mission fields. I was impressed. It would not substitute for the existing Bible Training School at Tavane, but it would reach out to many who could further theological training in their own area. Rev. Frank Howie…felt the burden. Here is a part of his report to the Annual Moçambique Council in 1974:
>
>> *It was July, 1973….we were called upon to give substance to the dream. It was one thing to talk about an Extension Bible School, to get excited about a new form of theological training; but would it work here in Mozambique?...A network of local study centres, staffed by travelling tutors. A Bible school that takes the training to the student. That trains him where he is. An Extension Bible School…That was the dream. We need not have worried. God had already done most of the groundwork. About six weeks after coming to Maputo, we started our first classes with two part-time African teachers and about 70 students in the city, as well as almost 30 students in the Limpopo area….and now…a total of 106 students registered for this first full year of extension studies. We operated six study centres.*
>
> That report was a thrill. The TEE programme had been launched with great success, and graduates from the Bible Training School at Tavane, where I had laboured for 22 years, were part-time instructors for this new programme.

Soon after this successful report was given by Howie, the independence of Mozambique and the nationalization of church properties closed the door on the Bible School in Tavane as well as this fledgling programme of pastoral training by extension in Maputo. This action was conferred by announcement on July 25, 1975 made by President Samora Machel. Along with all other schools, dispensaries, doctors, lawyers, funeral directors and transpiration, the Bible School was nationalized and confiscated by government officials (Restrick 2001:188, Howie 1993:63, Mandlate 2005). The office and book deposit in Tavane was granaded and stocks of materials were destroyed (Machava 2004). Facilities at both Tavane and Furanguno were badly damaged but are still standing today.

During the years when foreign missionaries could not visit Mozambique, Howie worked with Mozambicans in the mines of RSA. By 1981, natural disasters opened the door of Mozambique to visitors so Howie drove into Maputo to meet with church leaders (Mandlate 2005). The residential Bible school was closed so they worked on the idea of "a Bible school without buildings of its own, a school without walls" (Howie 1993:72). He reports (1993:74) that "the new…programme opened on February 2, 1982, S Mandlate as director, V Mbanze as a full-time teacher, and four part-time teachers. There were over 100 students enrolled". Mandlate (2005) relates that the system of six teachers working at six different local churches worked for a few years but by 1986 it behoved both students and teachers to concentrate their resources at the church that he (Mandlate) was pastoring, Maputo Central Church of the Nazarene. This Bible school without walls was functioning now in one centre.

In 1988 the World Mission Division [of the Church of the Nazarene] approved the establishment of a residential campus for the Bible College in Maputo but did not have funding in hand for the development of the institution (Howie 1993:58.) The city donated land, and the cornerstone on the property was laid in 1991 (Mandlate 2005). In a book called *The Mozambique Story,* Howie (1993:86) closes with a challenging statement: "The college is the key to the future of the Church of the Nazarene in Mozambique". Moved by the truth of this statement in during his first visit to Mozambique, a Nazarene pastor from Kirkland, Washington, undertook the challenge to find donors and volunteer workmen to build the first 10 buildings on the Maputo campus. Eight years and 22 volunteer teams later, the American pastor, Rev. Randall Craker (Craker 2000) officially ended the campaign called with the inauguration of the tenth building. The Bible School functioning in Maputo today is housed in these buildings with a capacity for 170 residential students is called "Seminário Nazareno em Moçambique".

After the 1986 consolidation of the six centres into one centre in Maputo Central, there were several attempts to get another network of extension centres started in Mozambique (Mandlate 2005, Restrick 2005); the need to extend pastoral training to residents other than those in Maputo was very real. In May of 2000, the Church of the Nazarene transferred educationists, Margaret and Jon Scott, from Romania to Mozambique to work alongside the Mozambican leadership to develop an extension system that would work. This PAR project is conducted through the years of the development of the projected system.

2.5.2.5 The Global Educational Context of Nazarene Adult Learners in Mozambique

The Church of the Nazarene is an international evangelical denomination which values education. The modifier "evangelical" highlights the intention to proclaim the *evangel,* i.e. the gospel or good news. There are Nazarenes in over 150 world areas, publishing holiness literature in 97 languages update: (Stone 2006). From its inception, the Church has promoted holy living, Christian-mission-to-the-lost and education-for-all. When four holiness groups came together in 1908 to found the Church of the Nazarene, each of them already had an established publishing house, missionaries in several countries and an educational institution. These groups were uniting for purposes of living and teaching scriptural holiness. Ingersol (1998:1) reiterates the importance of two populations of learners from the outset: "any generalizations about the purpose of early Nazarene colleges must be broad enough to take into account different intentions − training *Christian workers* and educating a *Christian laity*".

Nazarenes established liberal arts colleges in Kenya and Korea and graduate seminaries in England, Philippines, Costa Rica, Equator as well as the United States (Lambert, Truesdale & Vail 2000:3). By February, 2006, in the fifty-seven Nazarene educational institutions around the world in forty different countries, 49,597 learners were reported (Stone 2006).

The 1980s were the years for Nazarenes to listen and then take action on ministerial education. Like other communities of faith which have been explored in this chapter, the numerical growth across the world, especially in more remote and less developed regions of the globe such as Mozambique (Walker 2000, RIIE 2000) meant that there were not enough pastors and other leaders trained to lead the new Christians. The other problems was qualitative in regarding the way that ministerial training was taking place, especially in the United States. Although holy living was always the goal of the preparation, many moral failures were taking place. Gaps existed between head knowledge and ministerial skills (Vail 2000, Esselstyn 2003). The problems pointed to the need for systemic change. Esselstyn (2003) relates that the leaders of the denomination paid attention to these voices, and in 1985 the General Assembly appointed an "Education Commission" to study the situation of Ministerial Preparation and to make recommendations to the General Assembly of 1989.

When the General Assembly of the Church of the Nazarene met in 1989, the Education Commission (Wetmore 1989) made several recommendations which resulted in the **creation of the International Board of Education** with a careful description of the purposes and responsibilities of the board and its officer who would be called the "Commissioner of Education", and i**ncreased access within Nazarene membership to education of both ministerial and lay leadership**. "No nationality, ethnic minority, nor social class should be excluded or given unfair advantage" (1989:17-18). The 150-page document also states that

> Nazarenes may expect their educational institutions….to be 'holy fellowships' of learners and teachers, administrators, and staff persons. The entire educational enterprise would express and develop the reality of

the presence of the Kingdom of God, especially as it relates to loving God and neighbor with all of the mind in community….and to be engaged, above all, in the formation of Christian character in every member of the learning community.

Also in 1989, the first Nazarene Commissioner of Education was elected and the Office of the [Nazarene] Ministry in a joint effort with Church Growth and approved by the Board of General Superintendents, sponsored the first in a series of very significant meetings called the *Consultation on Ministerial Preparation*. These consultations were held yearly until 1997 in Breckenridge, Colorado, and are frequently referred to as the *Breckenridge Meetings* (Vail 2001). Esselstyn (2003) observes, "It became evident that the impact of the consultations was going to be worldwide so the Office of the Ministry called on World Mission to select representation to join in the discussions, so missionaries, professors, pastors and laymen began to attend from other world areas".

Besides the 1985-89 Education Commission, those involved in the consultations at Breckenridge, and on-going action of the Commissioner of Education and International Board of Education, other action was taken by the Association of Nazarene Sociologists and Researchers (ANSR). According to Crow (1991) in the spring of 1991, the ANSR conducted a formal survey of 600 people − 57% pastors and 42% lay members − to identify the qualities and abilities which are considered "essential" to the Nazarene minister. Among the group surveyed of 600 Nazarenes there was one quality chosen to be the most important by both the group of pastors and the group of lay members. Crow (1991) reports that "'Loyalty to Christ' was perceived by both laity and clergy as the most essential element for Nazarene pastors".

In 1995, fifteen educators from Nazarene institutions of higher learning in several parts of the world formulated and published a position paper to articulate the Nazarene stand in the concerns which were under discussion in broader forum at the *Consultation on Institutional Development for Theological Education in the Two Thirds World* which they were all attending. Among the statements of this declaration are the following: (Lambert 1995):

> All educational entities must be committed to equipping all the people of God for ministry to the whole Church in its mission to the world.

> The institutions of the International Board of Education will be more effective as they are integrated more fully into a global network of inter-related institutions with the goal of moving beyond network to an integrated system of education.

> Our mission requires multi-level education, from certificate to doctoral programmes delivered in multiple settings and delivery systems including various forms of distance education along with campus-based programmes.

At least in part, the assumption of this position by top Nazarene educationalists makes it possible for populations of learners like those in Mozambique to

(certificate-level) to prepare for professional ministry and be granted credentials for ministry from the international level of their church when they complete their preparation.

Across the globe, Nazarenes continued to hammer out guidelines and statute changes which would formulate positive systemic response to the deficiencies which were being identified. Then in the international assembly in 1997, the Church of the Nazarene voted to substitute the section of the international Manual of the Church of the Nazarene which deals with "Education for Ministers". A cursory comparison of this section in the 1993 *Manual* to the same section in the 1997 version of the *Manual* shows the magnitude of this change which permits and encourages curricular contextualization within stated guidelines.

> Cultural differences and a variety of resources will require differing details in curriculum structures, however, all programmes for providing educational foundations for the ordained ministry that seek approval by Pastoral Ministries should give careful attention to content, competency, character, and context. All courses involve all four elements in varying degrees (Bowling 1997:180).

Consequent to these changes, hundreds of Nazarene educational providers in the world are redesigning the curricula of their pastoral training programmes to align with the generalized learning outcomes prescribed in the 1997 Manual (Bowling 1997:180-181, ARCOSAC 2003:32-33):

> **1. CONTENT –** Knowledge of the content of the Old and New Testaments, the theology of the Christian faith, and the history and mission of the Church is essential for ministry. Knowledge of how to interpret Scripture, the doctrine of holiness and our Wesleyan distinctives, and the history and polity of the Church of the Nazarene must be included in these courses.

> **2. COMPETENCY –** Skills in oral and written communication; management and leadership; finance; and analytical thinking are also essential for ministry. In addition to general education in these areas, courses providing skills in preaching, pastoral care and counselling, worship, effective evangelism, Christian education and Church administration must be included. Graduation from the course of study requires the partnering of the educational provider and a local church to direct learners in ministerial practices and competency development.

> **3. CHARACTER –** Personal growth in character, ethics, spirituality, and personal and family relationship is vital for the ministry. Courses addressing the areas of Christian ethics, spiritual formation, human development, the person of the minister, and marriage and family dynamics must be included.

> **4. CONTEXT –** The minister must understand both the historical and contemporary context and interpret the worldview and social environment of the culture where the Church witnesses. Courses that address the concerns of anthropology and sociology, cross-cultural communication, missions and social studies must be included.

The four paragraphs constitute an institutionalized move to improve the breadth of ministerial training programmes by deliberate addition of three kinds of outcomes which are other-than-content, i.e. capacity, character and context. They are organised by four broad areas which begin with the letter "C" so they are commonly called the "4 C's" by Nazarene educators. Esselstyn (2003) comments: "Obviously the naming of the four categories could have been done in words other than those beginning with a C but some Nazarenes do like alliteration and thought that that would make it easier for all to remember".

The wording of the paragraphs provides guidelines towards re-writing curricula as balanced experiences in the formation of diverse populations of learners. The wording does not demonstrate grammatical consistency or precise educational terminology. The intent of the writing committee was to formulate very broad strokes for each world area to specify. The spirit of the holistic reform is furthered by the explanatory paragraph from the *International Sourcebook for Ministerial Development* and the *Africa Region Sourcebook for Ministerial Development* (ARCOSAC 2003:27)*:*

> The concept of curriculum goes beyond what is thought of as an academic programme or course content. The character of the instructor, the relationship of the students and instructor, the environment, and students' past experiences join with the course content to create a full curriculum. Nevertheless, a curriculum for ministerial preparation will include a minimal set of courses that provide educational foundations for the ministry.

The *4 Cs*, thus, become one of the invariables of my research; in terms of Arboric research they are some of the roots already formed which have an outer, already partially hardened exterior through which the learning experiences of my population of learners may flow freely.

Other roots like this in the Nazarene system are called the *Know-Be-Do*'s. Vail illustrates the "BE, KNOW, DO'S" with the following diagram:
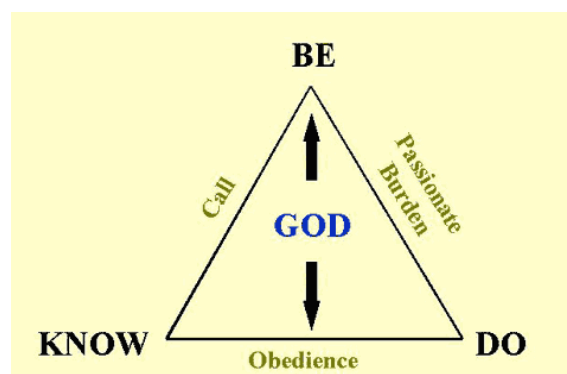
Figure 2.16 The Know-Be-Do Triangle (Vail 2001)

Vail (2001) explains further:

> While the triangle is shown as an equilateral triangle, growth of the minister may result in different sides growing at different rates or one characteristic

being emphasized at different points in the minister's career. God is the focus of the minister's life and He directs growth that occurs over the minister's lifetime of service.

Vail is saying that that, during the years of a minister's life, the aspects of *knowing, being and doing,* as well as those of *call, burden and obedience* do not develop at equal rates. When *obedience* out-develops *call and burden,* the resultant graphic would be Figure 2.17a. When *call* leads in development, then Figure 2.17b illustrates the life. When *passionate burden* out distances the other aspects, then Figure 2.17c would illustrate.
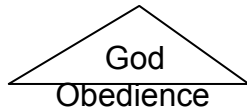
Figure 2.17a	Figure 2.17b	Figure 2.17c
God / Obedience	Call / God	Burden / God
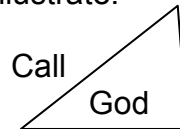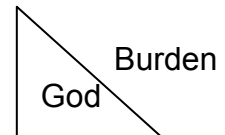
The International Church of the Nazarene further describes the ideal Nazarene pastor by identifying what he/she would K*NOW*, would B*E* and would D*O*. The following two paragraphs became part of the *International* S*ourcebook for Ministerial Development* and the *Africa Region Sourcebook for Ministerial Development* (ARCOSAC 2003:34-36)*:*

> The goal which we are pursuing for the development of the candidate into a minister of the gospel of Jesus Christ is never fully reached. It is a goal toward which we grow. Continuing education does help us make progress, but the most vital aspect lies in the growth and development of our continuing fellowship with the Lord. The 'goal can be expressed in what we expect a minister to **be**, to **know** and to **do**.

In group settings in which this subject is introduced, everyone present has ideas about what an "ideal" church leader is like, so asking them to answer questions like the following and writing them for all to see, shows that expectations for a minister are generally quite high:

- What does an ideal church leader know?
- What does an ideal church leader know how to do?
- What are some of the character traits of an ideal church leader, i.e. what is he or she like?

Figure 2.18 Composite of the "Ideal" Church Leader

The official answers of the Church of the Nazarene to these questions contribute to the statements which describe the outcomes for programmes of study which prepare ministers for service in the denomination. The official list, published in the *Manual of the Church of the Nazarene* follows:

- **BEING**

A loving servant: Humble. Vulnerable. Expressing love for God (piety) by prayerfulness, availability to the Holy Spirit, being called, being obedient, experiencing the church's confirmation of the call. Expressing love for people through compassion and sensitivity.

Transformed by the power of Christ administered by the Holy Spirit into a person fully given to God.

Honourable: A person of integrity, morally unimpaired, trustworthy, honest, genuine, transparent, loyal, reliable and non-manipulative.

Wise: Expressed through ability to discern the will of God, common sense and objectivity.

Self disciplined: Expressed in maturity, self awareness, self control, a sense of the appropriate, perseverance, patience, courage, boldness, being a self starter, rightly ordering priorities, commitment, and passion for the truth.

KNOWING

The Truth: As expressed in scripture, life and the church.

Liberal Arts: As expressed in human behaviour, sociology, psychology, anthropology, communication and persuasion.

History and Tradition: Contextualization, awareness of the contemporary world, aware of diversity of peoples and societies.

Methods of Research: Exegesis of congregations and communities.

Classic Theological Disciplines: Spirituality, theology, ecclesiology, worship, music, Bible, gospel, ethics, church history, mission, Christian education.

Relational Disciplines: Leadership, management, authority, power, conflict management, knowledge of human brokenness.

DOING

Personal skills: Critical thinking, ministerial thinking, modelling servanthood, love,   reconciliation, faithful behaviour, ability to change, grow and adapt, risk taking.

Pastoral care: Develop solid personal relationships, counsel, guide, heal.

Teaching: Mentoring, directing and imagining a better future, interpreting faith.

Evangelizing: Discipling, nurturing.

Preaching: Exegetically, narrative style, Biblically.

Communicate: Interpersonal communications, public and private communication, listening actively, vision casting.

Leadership: Ability to administrate and handle polity, provide vision, articulate goals, lead worship, assess, plan, evaluate, facilitate organizational development, lead in team building, lead in educational ministry, promote mission, do mission.

Again, the wording of the *Know-Be-Do* paragraphs may be imprecise as educational terminology but they are invariable features of the system in which the learners of my research population have freedom to learn.

In 2001, the twenty-fifth General Assembly of the Church of the Nazarene added the mechanism for contextualization to take place by requiring that all programmes of study which intend to prepare Nazarene ministers to qualify for international recognition (ordination) be validated by "Regional Course of Study Advisory Committees" (Fairbanks 2001:182). The addition of this structure effectively decentralized the locus of assessment of relevancy of the programmes, moving it much closer to the context of each population of learners.

The Church of the Nazarene further empowered educators around the world to return these concerns to the level of the local church where the concerns had first surfaced in order to contextualize the programme outcomes to fit the diverse constituencies of the learner across the international denomination (Esselstyne 1999, Walker 2000). This is accomplished by instituting curricular review committees and writing manuals, called *Sourcebooks on Development Standards for Ordination,* to guide educational providers in the re-writing of their courses of study (ARCOSAC 2003:5). The curricular specifics of the ministerial training programmes are formulated by committees of educators and church leaders, all of whom are stakeholders and partners in the educational endeavours. These programmes are then thoroughly reviewed by the Africa-wide Nazarene curriculum committee (ARCOSAC).[13] ARCOSAC works with the national curriculum committees recommending adjustments until the programme can be verified as aligning with the values and directives set forth by the International Course of Study Advisory Committee (ICOSAC).

What cannot be captured in paragraphs, figures or statistics is the importance of *inclusion* in pastoral training which has been extended to thousands of learners around the globe who are now being equipped for Christian ministry. Among those learners included are almost all of those who are learners in the population of my study in Mozambique.

2.5.2.6 Learners as Developing Leaders in Their Current Contexts

The curricular plan for the ministerial course of study in Mozambique which was formulated and tested by the first PAR team in the year 2000 was approved by ICOSAC in February, 2001, is both historic and extremely pertinent to the population of Nazarene adult learners of this study. The curricular plan was the first programme of study in the Nazarene world which projected the preparation of ministers with such a low entry-level, or perceived-to-be low entry-level, of academic standing; it became historic when the international committee approved it unanimously (Woodruff 2001). This approval was distinct evidence that the global Church of the Nazarene intends to act on its intentions to empower at various levels. It is extremely pertinent to my population because they are direct beneficiaries of the paradigm shift and the curricular reform. Before the changes were instituted by changing of the International Manual of the Church of the Nazarene in 1997 and 2001, these learners could not qualify for ordination. Now their programme of study is approved at the highest levels of their church.

The challenge of identifying literature to implement the approved curriculum requires an understanding of the dearth of books in general, evangelical in particular. Choices of Christian literature in Mozambique are **excruciatingly few**. At the outset of this PAR research in the city of Maputo, with a population of approximately 3,000,000, there was one well-stocked Catholic bookstore carrying titles from Brazil, Portugal and some from an emerging Mozambican Catholic perspective and a tiny evangelical bookshop (Methodist) in which buyers may choose from **seven to ten titles!** (Scott 2001b:9) In 2003, an evangelical mission opened another tiny bookshop which imports books from Brazil, offering about 2,000 titles (Bila 2005).

Nazarene Publications in Kansas City, Cape Verde and Brazil have long produced Nazarene classics in tiny numbers for secondary-level and degree-level ministerial preparation. The pastoral training institutions in Maputo and Cape Verde use these titles in coursework and have them in their libraries (Scott 2001b:9).

Although "having a Bible" would appear to be as easy as dropping by a local bookstore to pick one up, or asking for one from the para-church support groups like Gideons, in all the countries of Portuguese Africa, it is not this simple. While Portuguese is the language which unites the country, it is the second, third or fourth language of the majority of the population. S.I.L. Bible translators report that the whole Bible only exists in 5 of the 39 languages of Mozambique, the New Testament in 10 of them (Scott 2001b:10)

The fast growth of the denomination since the end of the war years (Scott 2001a:6) is the principle reason for being of the population of Nazarene adult learners in Mozambique. In 1989 the Church of the Nazarene had approximately 12,000 members. In 2000, it had about 56,000! The goal for 2010 is to have 1,200 new churches (Walker 2000). Hundreds of men and women are serving churches as pastors with little or no pastoral training because the development of educational structures has not yet caught up with the rapid and extensive expansion of the church since national peace was assured in 1992.

Walker (K. Walker, personal communication October 20, 2000) relates that a key to the recent expansion of the church was the deployment of a Mozambican pastor, Rev. Jonas Mulate, from the South to the Northeast. In 1989 the largest ethnic group in Africa still without a viable Christian church, i.e. "unreached" in missiological terms, was the "Makhua" who live in the Northeast. According to S.I.L. (2004), Makhua is the maternal language spoken by the greatest number of Mozambicans. In only four years, from 1989 to 1993, Rev. Mulate established Nazarene churches throughout these Makhua-speaking Northern provinces through effective evangelistic preaching, then followed preaching by the selection and appointment of lay pastors to lead preaching points. He networked his travel along the family lines of the converts. Gifted as a church-planter not as an educator, he sent a few leaders South to study theology, but most of his church leaders stayed in place as lay pastors and now constitute part of the population of learners involved in this study (Scott 2001a:4-5). Rev. Mulate was transferred to Central Mozambique. Implementing the same techniques of church planting that he used in the North, Rev. Mulate continued to plant the Church of the Nazarene, this time in the provinces of Sofala and Manica, then Inhambane. He, as well as

the church planters (who are also lay pastors) who followed his model, certainly account for a large part of the explosive growth of the church in Mozambique (Scott 2001a:6).

So, who are the developing leaders who are adult learners in Mozambique? Accurate demographics of the population is a tangential result of this study but the careful study of their contexts provide several descriptors. They are men and women who grew up in towns and villages stressed by and sometimes damaged or devastated by civil strife and political instability. Their geographical surroundings include speakers of some of the other 39 languages from other Mozambican tribes with consequent cross-cultural challenges. The learning environment was probably voiced in their second or third language. Although their secular communities encourage adults and women to study, their access to schools was and still is limited by the existence of few schools. The population is probably mostly made up of "adults" according to Brookfield (2004:1) who defines "adult" according to their experience, not their age: "a straight-to-Ph.D.-candidate wouldn't be an adult student by this definition, but a 16 year-old high school dropout who comes back at age 21 or 22 would be an adult student".

Few and *scarce* and *too little* are words which express more common realities in their experience than *much, abundance and plenty.* Their tribal societies are generally collectivistic but their cohorts may be shifting toward individualistic. Their communities of faith highly esteem trained leadership, encourage integrity between word and deed, and affirm reading, education and on-the-job training. Their Nazarene communities are associated with and influenced by their connections to other Christian and Nazarene communities which espouse like values, accessibility and outcomes in their programmes of learning.

Figure 2.19   The Social Contexts of the Nazarene Adult Learner in Mozambique

The "social self" is one of the three sub-selves of tri-dimensional personhood. Yet the "social self" interacts in several groups to which the person belongs. The sub-groups to which the learner in the research context in Mozambique belong are

indicated in Figure 2.19 on the points of the "sun". The learners are bi-lingual or multi-lingual, belonging to ethnic tribes in the country of Mozambique which is still affected by wars and lacks of several kinds. Most of them are members of the Church of the Nazarenes which puts them within the bigger sub-culture of Christians, particularly evangelicals. They are learners who are already church leaders or are becoming church leaders.

2.5.3 Research Aim to Test and Refine TEE Model

As previously mentioned, the TEE model has had success in many countries in Africa and is used by several groups in Mozambique. The swiftness of its adoption across the world as well as the fact that it functions to equip and train those in the practice of ministry meets a wide-spread pressing need, especially in developing countries. The strengths of TEE abound in publications but critical assessments of its weaknesses are few. The list of TEE weaknesses by Kornfield, part of an unpublished typescript in 1976 is one of the only listings.[14] It follows below:

1. The failure of students to complete assignments because of involvement in more pressing matters.
2. Lack of identification of the educator with his students. Because of the brevity of the time spent in each extension centre a growing personal relationship is difficult to establish.
3. Lack of time for the educator to be with his family since he is constantly travelling from centre to centre.
4. Lack of being able to graduate in a relatively short period of time since to cover the same number of courses as a residential seminary would require between two and three times as many years.
5. Too much hinges on one individual teacher and there is lack of exposure to many teachers with varying fields, abilities and vision.
6. It is too easy to quit since there is little initial sacrifice involved in becoming part of the programme.
7. The travelling itinerary could be quite expensive.
8. It would be difficult to be involved in evaluation of nonwritten assignments and of practical applications of the learner's studies.
9. The role of the educator, even more than in the residential setting, perhaps, would be that of providing cognitive input in a limited amount of time, so that affective and behavioural changes would have to occur at the students' initiative. Everyone disagreed with this point by Kornfield. They felt that since the teaching material had presented the cognitive input, then the TEE teacher, even more than the residential teacher, has time to discuss application and behavioural changes. Gaddis of TEE in Zimbabwe added that they also have prepared teacher's guides which suggest many affective type activities to promote change in the student,
10. The lack of resources in many cases, both written and human, to turn to for help during the interim period between the extension educator's visits.

This study aims to take these observed weaknesses into account as well as two others – the lack of academic recognition of TEE, cited by (Gatimu *et al* 1997:14)

---

[14] No other reference has appeared in hours of searching on databases.

and the lack of mother tongue instruction, cited by Mkabela and Luthuli (1997:54) – and to attempt to make systemic improvements in the model as possible.

2.6 Holistic Learning Strategies

2.6.1 What are learning strategies in general? What do they aim for? What are *holistic* learning strategies?

In relation to *Tri-Dimensional Personhood*, this section continues to discuss the *Whole-Brain Self*, specifically as this self is developed by holistic learning strategies which impact the whole brain. **Learning strategies are deliberately chosen activities to engage a particular population of learners to facilitate learning toward intended learning outcomes.** The deliberate choice of the activities relates to their fit in relation to the time, the learners, the other strategies being used in the teaching/learning encounter. The facilitators assess appropriateness of strategies during the encounters. *Learning strategies* as a term is chosen for this research from among several possibilities including *brain-based learning, learning styles, teaching strategies*, *instructional events* and *teaching methods*. I discuss the rationale for choosing the term *holistic learning strategies*.

Teaching methods is a long-used, familiar term among educators which unambiguously refers to modes chosen by instructors to conduct their instruction. The problem with this term for use in this research is the emphasis on the *teaching* so it tends to connote a teacher-centred activity which is a different philosophical stance than my research takes. Teacher-centeredness not learner-focus is also a potential inference in the use of the terms *teaching strategies* and *instructional events* so neither of those terms is chosen.

L*earning styles* are the modes of learning preferred by individual learners. It is an explicitly learner-focused term, and a savvy facilitator will take into account in her instructional planning the varied *learning styles* of her learners. *Learning styles* are preferences which can be explored and developed but are not directly prescribed by the facilitator while *learning strategies* are planned by the facilitator. Posner and Rudnitsky (2001:156) say that "teachers ought to think about not only what they will assign and present but the qualities of….thought or engagement that they are seeking to engender…and the [thinking] operations used". This is the basis of choice used by brain-based facilitators.

Brain-based learning is nearly identical with *holistic learning* so either the term *brain-based learning strategies* or *whole-brain learning strategies* could have been chosen. I chose *holistic learning strategies* for two reasons. First, *whole* is clearly broader and more inclusive than *brain* and I do not want to give the impression of considering only the brains of the learners in the choice of strategies. Secondly, because my interpretation of *brain-based learning or whole-brain learning* is slightly different from interpretations of those who frequently use these terms (Herrmann, Jensen, Sprenger, Caine & Caine).

Why use the term *strategies* instead of *methods?* Military operations are well-known to be *strategic or tactical* in relation to the *mission*. *Strategic* operations are those involved with global plans in steps to accomplish a large mission or

objective. Tactical operations undertake all the logistical and technical assistance needed to carry out the mission. Similarly *learning strategies* are activities in which the learners are engaged which result in certain outcomes. In order to facilitate critical thinking in adult learners, Brookfield (1987:72-85) the following strategies: *affirm*…self-worth, *listen* attentively, *show* support…for efforts, *reflect and mirror*…ideas and actions, *motivate*, regularly *evaluate* progress, *help*…create networks, *be…*, *make* people *aware* of how they learn, …*model.* These are strategies for educators to adopt in order to foster critical thinking. Attempting to imagine such suggestions appearing on a listing of *teaching methods* illustrates the kind of fundamental differences which exist between methodologies and strategies.

In relation to strategies which target the development of attitudes, then holistic implies attention to the completeness or thoroughness of change that is desired. The formation of attitudes is complex and the measurement of attitude change must be inferential and indirect (Henerson, Morris & Fitz-Gibbon 1987:13) so strategies must take into account manifestations or consistencies over time.

Posner and Rudnitsky (2001:159) say, "In teaching cognitions, the principal instructional consideration is providing for elaboration". In order for *cognitions* or *understanding* to result from the teaching-learning encounters, planning must include that the learners elaborate something, a book report, a project, a creation of their own, which is called an *elaboration.* The use of elaborations

> requires that students have multiple and diverse opportunities for engaging new content…[they] must integrate new knowledge with existing knowledge. To accomplish this, students must think about and think with the new material in a variety of ways. Listening, notetaking [sic], explaining, analyzing, discussing, developing, critiquing, inventing, experimenting, comparing, arguing, defending, and justifying are a few of the kinds of engagement that lead to elaboration (Posner & Rudnitsky 2001:159).

An *elaboration* as described by Posner and Rudnitsky is a whole-brain learning strategy that sounds quite similar to the *expressions of human creativity* cited by Bruner (1986:153) and the *symbolic products* referred to by Gardner (1987:391-392), not in relation to extraordinary expressions or products, but in relation to the process of creation of any such thing.

	Quadrant A	Quadrant B	Quadrant C	Quadrant D
The kinds of thinking used in the *elaborations* of Posner & Rudnitsky, assigned to the brain quadrant stimulated	Listening, Analyzing,	Developing, Comparing	Explaining, Critiquing, Defending, Justifying	Inventing, Experimenting
	Remembering, integrating with past knowledge			

Table 2.4 Kinds of Thinking Used in Elaborations of Posner and Rudnitsky (2001)

Certainly many of the verbs used by Posner and Rudnitsky as necessary in an *elaboration* are integrating new knowledge with existing knowledge, involved in

group discussions – listening, explaining, analyzing, developing, critiquing, inventing, experimenting, comparing, arguing, defending and justifying may be assigned to the four quadrants of the whole- brain model which indicates the extent to which an *elaboration* stimulates each of the four quadrants, i.e. the "whole brain", hence the justification for considering it "whole-brain". Considering that group discussion also may be described by the verbs employed above for an *elaboration,* group discussion may be considered to be a *verbal elaboration,* and it may also be considered a whole-brain learning strategy since it requires brain activity in all four quadrant. Some of the participants in group discussion may be spectators and not actively engage in the mental activities which are described; for these learners, the strategy is less active because less of the brain is engaged.

A = listening
analyzing
critiquing

D = inventing
experimenting

B = note-taking
arguing

C = explaining
defending
justifying
comparing
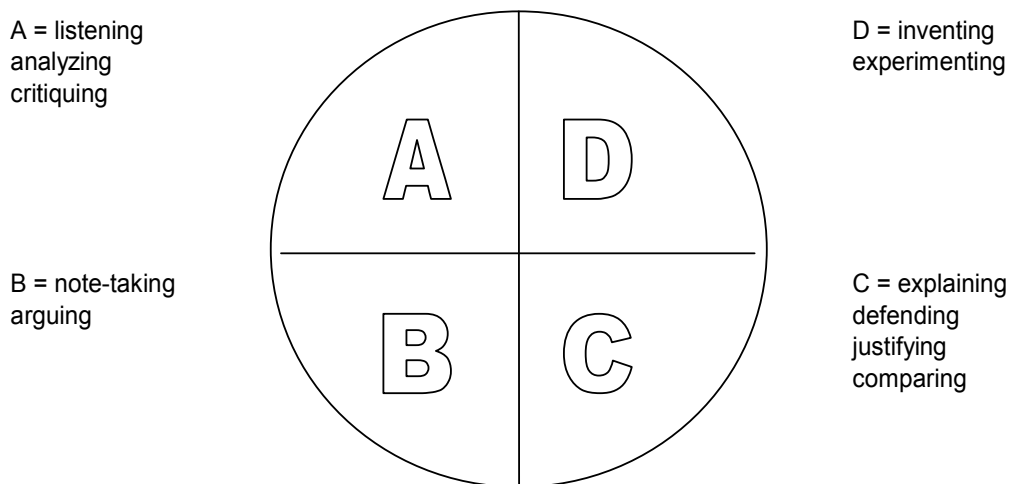
Kinds of Thinking Assigned to 4 Brain Quadrants

Figure 2.20   Synthesis of Components of the Mind (Adaptation Johnston 1996:23)

Figure 2.20 above assigns the verbs identified in *elaborations* to graphic positions on the stylized version of the four-quadrant model. The Four-Quadrant model of the brain is metaphoric (Herrmann 1995:63); the quadrants represent the four quadrants of the brain but is not a physiological map.

Whole-brain learning strategies are activities which target the engagement of each of the four quadrants of the brains of the learners. Holistic learning strategies aim for outcomes in each of the domains of holistic personhood, i.e. growth and development in the cognitive, social, spiritual selves of the individual. As previously mentioned "facilitators…model openness and critical analysis" Brookfield (1987:71) in any group in which critical thinking is being developed. Brookfield further states that "two central activities would be…identifying and challenging assumptions, and exploring alternative ways of thinking and acting". One way to explore alternative ways of thinking is to deliberately vary the side of the brain or the quadrant of the brain which is being used as implied by Hulme (1996) and De Boer, Steyn and du Toit (2001) who encourage facilitators to design teaching activities to move back and forth dynamically in the delivery of each key learning point to distribute learning to all four quadrants of the whole brain model.

After the metaphoric four-quadrant model was first designed, and after much profiling of learners to identify their learning preferences, Herrmann expanded and applied the model. In the figure below, Herrmann details the kinds of mental activity which are typical of each quadrant.

WHOLE BRAIN LEARNING		AND DESIGN CONSIDERATIONS	
A – UPPER LEFT		**D – UPPER RIGHT**	
LEARNS BY:	**LEARNERS RESPOND TO:**	**LEARNS BY:**	**LEARNERS RESPOND TO:**
ACQUIRING & QUANTIFYING	FORMALIZED LECTURE	TAKING INITIATIVE EXPLORING HIDDEN	SPONTANEITY
FACTS APPLYING	DATA BASED CONTENT	POSSIBILITIES	FREE FLOW
ANALYSIS & LOGIC	**FINANCIAL/TECHNICAL CASE DISCUSSIONS**	RELYING ON INTUITION	EXPERIENTIAL OPPORTUNITIES
THINKING THROUGH IDEAS	TEXT BOOKS & BIBLIOGRAPHIES	SELF DISCOVERY	PLAYFULNESS
BUILDING CASES FORMING THEORIES	PROGRAMME LEARNING BEHAVIOR MODIFICATION	CONSTRUCTING CONCEPTS SYTHESIZING CONTENT	**FUTURE ORIENTED-CASE DISCUSSIONS**
			VISUAL DISPLAYS INDIVIDUALITY AESTHETICS BEING INVOLVED
B – LOWER LEFT		**C – LOWER RIGHT**	
LEARNS BY:	**LEARNERS RESPOND TO:**	**LEARNS BY:**	**LEARNERS RESPOND TO:**
ORGANIZING & STRUCTURING CONTENT	THOROUGH PLANNING	LISTENING AND SHARING IDEAS INTEGRATING	EXPERIENTIAL OPPORTUNITIES
SEQUENCING CONTENT	SEQUENTIAL ORDER	EXPERIENCES WITH SELF	SENSORY MOVEMENT
EVALUATING & TESTING THEORIES	**ORGANIZATIONAL & ADMIN CASE DISCUSSIONS**	MOVING & FEELING	MUSIC
ACQUIRING SKILLS THROUGH PRACTICE IMPLEMENTING	TEXT BOOKS	HARMONIZING W/ THE CONTENT	**PEOPLE ORIENTED CASE DISCUSSIONS**
COURSE CONTENT	BEHAVIOR MODIFICATION PROGRAMME LEARNING STRUCTURE LECTURES	EMOTIONAL INVOLVEMENT	GROUP INTERACTION

Table 2.5 Whole Brain Learning and Design Considerations (Herrmann 1995:419)

It is pertinent to notice that "discussions" are placed into each quadrant, but the nature of the discussion is particularized: financial-technical cases in Quadrant A,

future oriented ones in Quadrant D, and so on. This diagram is used as a basis to categorize learning strategies which are researched in the PAR project.

❶ Studying the meaning of the words, phrases and passages that Jesus used
❷ Paying attention to the teacher
❸   Responding to questions and discussing the answers.
❹ Knowing the words of Jesus
❺ Putting the teachings of Jesus into practice
❻ Obeying the instructions of Jesus
❼ Training in groups
❽   Having eyes and ears open like a child's
❾ Coming to Jesus with concerns
❿ Having the habit of singing together

Table 2.6 Ten Methods of Learning According to St. Matthew (Scott 2002a:17)

The model of the Apostles, previously considered, also offers insight into whole-brain learning strategies. Matthew specifically takes note in his gospel account of the ways that he was learning from Jesus as the master teacher of the disciples. The list of the "Ten Methods of Learning According to St. Matthew" (Scott 2002a:17) shows that the apostles engaged in connecting new knowledge with previous knowledge by "studying the meaning of words, phrases and passages" that Jesus used from the educational system of their context, the synagogue teachings from the Old Testament (Quadrant C, harmonizing with the content). They also listened carefully to the teaching (lectures, i.e. Quadrants A and B) and put the teachings into practice and obeyed instructions that he gave them (whole-brain A, B, C and D). Responding to questions and discussing the answers, they had group discussions which fall into several quadrants but since Peter spoke a lot and Matthew is never quoted to have said anything, different portions of Peter's brain were used than Matthew's. "Having eyes and ears open like a child's" refers to an attitude of openness to learn and make mistakes, to explore and discover (Quadrants A and B). Matthew says that they "came to Jesus with concerns" which translates to prayer (Quadrant C with others). Of the apostles only Matthew refers to the "habit" of singing together (Quadrant C).

Holistic facilitation of learning is conceived in the mind of the facilitator and born in the teaching/learning episode. Killen speaks of *good teaching practice* when he says "teachers… must be able to design effective learning experiences, they must be able to reflect on what they do and they must be able to change their practices according to what they learn from their experiences. (Killen 2000:vi). *Holistic learning strategies,* therefore, are choices made by facilitators previous to and *during* learning episodes:

- choices regarding their stance (attitudes, actions and interactions) in relation to their learners,
- choices among the multitude of learning activities, assignments, modalities, methods,
- choices related to issues of time and space which influence the learning episode,
- choices which respond dynamically to the set of learners and
- choices which facilitate learning strategically toward intended outcomes.

In order for the monitors who facilitate learning in the environments of the learners of my research to be able to design effective learning experiences, as Killen cites above, deliberate consideration must be given to the several choices designated above in relation to the facilitators of learning in the context of my research. These monitors meet voluntarily with their learners under very adverse conditions; their training is minimal, and they have many other obligations in their churches, families and communities. They deserve as much assistance as possible in order to equip them to make these choices so that they do not get bogged down and quit their task. Because of these real restraints, much of the training done with the monitors is role-playing of the situations in which they will be the facilitators. In the role-playing, the attitudes, actions and interactions which encourage learners are rehearsed over several weeks of simulated class settings.

The choices the monitors have related to learning activities, assignments, modalities and methods have been limited in number so that they can practice a few with more excellence. Choices relating to time and space are left up to each cooperative learning group. The exit outcomes are those prescribed by the global Nazarene system. Therefore, all five realms of choice listed above are pertinent and accounted for in this research. The holistic learning strategies which are the focal point of the research are the learning activities and modalities which are chosen from the multitude of others because of the ability of monitors to be successful in their supervised experiences of using them. These holistic learning strategies are discussed in the next section. In selecting holistic learning strategies which are within the experience and expertise of the Mozambican monitors to utilize, attention is given to the quadrant to which each strategy belongs so that the set of strategies which is used by them stimulates the whole brain of the learners in my population, i.e. is holistic.

2.6.2   Exploring Learning Strategies Using Four Quadrant Model

Given the multitude of choices of holistic learning strategies as discussed in the previous section and the academic limitations and minimal training which the facilitators have, which holistic learning strategies are within the command of the monitors in Mozambique? The answer is given as a listing, then is compared to the diagram of Herrmann which is Table 2.5 in the previous section, then the strategies are briefly detailed theoretically and pragmatically.

The learning strategies which are used with the learners of the research population include the following:

1. actively and independently assessing Bible content
2. hearing the Bible and text material read and explained
3. memorizing Bible content
4. reading the programmed Text Africa books
5. regular group discussions based on main ideas (informational)
6. taking of written exams
7. answering in writing all of the questions of the Text Africa books
8. attending class at least 67% of the time
9. discussions based on reasoning questions
10. inviting God to intervene (prayer)

11. encouraging and helping colleagues
12. including peer tutoring in second-chance occasions
13. reflection using several applications
14. regular singing of songs
15. choral reciting of truths
16. working on projects together to buy books
17. discussions based on application questions
18. icon or visual clue interpretation
19. key words as tags, labels
20. pictures, maps, graphs
21. discussions based on key words
22. identifying heroes
23. appropriately applying Bible content to life scenarios
24. **rehearsing integrity: hero modelling / role-modelling /**
25. **role-taking/ self-sacrifice**
26. **team work: team building work projects**
27. **pair or trio groupings /peer tutoring**
28. **classical spiritual disciplines**
29. **singing for learning**
30. **cooperative learning groups**
31. **praxis**

The last strategies of the list above are highlighted for their holistic impact on the brain Having thirty-one different learning strategies as their set of experiential knowledge from which to choose gives monitors freedom within structure to facilitate learning with confidence within the structure. The nature of the learning which takes place in the four quadrants is based on the brain research presented in an earlier section. The model is descriptive so enables brain-based educators to plan learning events with balance to the different areas of the brain. In this way, the learners are more at ease with the activities which suit their preferences and more challenged with activities which are outside of their preferences. The whole brain may be stimulated.

Key mental activity	Quadrant A = Decoding	Quadrant B = Ordering	Quadrant C = Reflecting	Quadrant D = Synthesizing	Quadrant A
Other mental activities of the quadrant	Coding Reading Listening Analyzing Measuring	Reorganizing Planning Scheduling Tactical	Moving Music Making concrete Socializing	Playing with Visualizing "Gestalting" Exploring	
Activating between 2-4 quadrants	**Praxis**	**Spiritual Disciplines**	**Teamwork**	**Singing for Learning**	

Table 2.7 Mental Activities per Whole Brain Quadrant

In Table 2.7 activities normally associated with each quadrant are specified and four activities, decoding, ordering, reflecting and synthesizing, are highlighted which are key brain activities of the quadrant. Four strategies are particularly holistic in their potential: praxis, spiritual disciplines, team projects and critical singing. Similar to *elaborations*, each of these four has potential to utilize two to four quadrants of the brain during their use.

Following along this line of categorizing learning strategies according to the whole brain model as set forth in Tables 2.5 and 2.7, twenty-five strategies would be distributed to the four quadrants of the whole brain model as follows:

A = Decoding	D = Synthesizing
actively and independently assessing Bible content	icon or visual clue interpretation
hearing the Bible and text material read and explained by monitors and colleagues	key words as tags, labels
memorizing Bible content	pictures, maps and graphs
reading the programmed Text Africa books	identifying heroes – in Bible passages and in text narrations
regular group discussions based on main ideas (informational)	discussions based on Key words
	appropriately applying Bible content to life scenarios
B = Organizing	**C = Reflecting**
taking of written exams	Inviting God to intervene (prayer)
answering questions in writing in the Text Africa books	encouraging and helping colleagues including peer tutoring
attending class at least 67% of the time	reflection in several applications
answering all of the questions in the Text Africa books	regular singing of songs
discussions based on reasoning questions	choral reciting of truths
	discussions based on application questions

Table 2.8 Strategies for Facilitating Learning in Each of the Four Brain Quadrants

The above categorization separates *discussions* into each of the four quadrants based on the nature of their content or the known dynamics of the discussion. Table 2.8 does not list *praxis* and *cooperative learning groups* which have already been discussed. And it also excludes four other strategies which certainly affect the learner in many ways, i.e. holistically so none of them can be placed in any one quadrant. These four are each "telescoping learning strategies", one within another with ever broader scope: 1) "singing for learning", 2) the classical Christian spiritual disciplines, other than "simple prayer" (explained later), 3) teamwork which includes working together for everyone to pass on pass-fail requirements, team building work projects, pair or trio groupings for studying out of classes, and 4) rehearsing integrity, a very central or core activity which includes hero modelling / role-modelling / role-taking and self-sacrifice. All of the strategies are discussed in more detail in the following paragraphs, particularly the four just mentioned.

2.6.2 1 Rehearsing Integrity: hero-modelling / role-modelling / role-taking / self-sacrifice

The *identification of heroes* as a learning strategy is a cerebral function. *Hero modelling* starts with *hero identification* but requires the participation of the whole brain. Heroes are people, real or mythical, who we admire. We basically agree with and are amazed by what they say and do and with the attitudes and values they display. We are attracted to their lives. In whole-brain terms, the lives of heroes present patterns which resonate with the patterns of our wiring. We are moved (affectively) to make the patterns of our lives ever more congruent with the patterns of their lives.

Colson (1990:114) says that "respect for heroes and the authority structures they represent is on the rise in America", and the reason for this, he continues, is that "we need legitimate goals and aspirations beyond self. These can be provided by role models, the heroes who inspire the rest of us and goad us on". The reason that John Wesley became a "paragon of Christian social action, engaging in prison reform, slave emancipation, etc"., according to Kinlaw (1998:101) is that these activities "were a normal consequence of Wesley's message…of entering into the Christ-life". Wesley desired to enter into the life of Christ.

For many centuries Biblical and Christian heroes have been identified and their lives are studied textually to discover everything possible about them. The importance of "imitating Christ" in several models of spiritual environments was discussed in a previous section. Besides the book *Imitation of Christ* by Thomas á Kempis, Jesus as the ultimate model of everything – thinking, actioning, living, relating, teaching, feeling, synthesizing, fulfilling and so on – prompts writers to produce book after book towards the goal of becoming like this hero. Kingsolver (1998:13) says that having "the mind of which was in Christ Jesus…internal guidance system" will equip and enable "to walk like Jesus walks – to pursue the goals he pursues, with the attitudes and passions that Christ himself has". Neethling, Stander and Rutherford (2000:15-16) say that "probing the thinking of Jesus in order to learn how to think like him will better enable us to behave like him". Note the goal again, the desired outcome, is to be like the hero, in this case Jesus.

As previously mentioned, the learners in this research already occupy positions of leadership which makes them "role models" for others in their communities. So besides emulating their Hero, they are, by virtue of position, models visible in their communities, candidates for imitation by those they are leading. As they attend classes regularly, study and lead they are already "role-taking" the roles of "learner", "leader," and, in a humble sense, the role of "hero" for those who are watching their lives.

A kind of "hero" is the "moral exemplars" which have been studied in recent years and have caught the attention of many including Gardner (1997) and Brookfield (1998). It is interesting to note the attitudes of selflessness and perseverance as well as their gestalt perspective view of life as commented by Gardner (1997:132):

They believed passionately in what they were doing and had no doubts that they were pursuing the proper course of action. They were overwhelmingly positive in attitude, believing that setbacks were only temporary or part of a larger plan. Their beliefs were often founded on a religious basis. Perhaps surprisingly, they did not regard what they were doing as anything special – they assumed, we might say naively, that anyone else in their position would behave with equal nobility. Their scores on standard tests of moral reasoning did not stand out – the capacity to behave in a caring way seems quite different than the capacity to reason acutely about moral dilemmas.

The best explanation for the "selfless behaviors and attitudes" of the moral exemplars, according to Gardner (1997:132) is that [italics mine] "over time, these individuals *established habits* that led them to [behaviours considered 'moral']…".[15] Practicing or rehearsing behaviours is the acting out "of appropriate and effective ways to handle real-life situations…differs from other forms of role playing…by focusing on behavior change as an end in itself, not as a technique for identifying or working through presumed conflicts" (Master & Burish 1987:99).

Self-sacrifice (and its sister trait, self-denial) rarely falls on the lists of "learning strategies", however, it is explicitly described as a means of learning throughout the New Testament[16], and by most of the mystics like de Caussade (1751): "if all knew that saintliness consists of all the suffering which their state provides each moment; that it is not any exceptional state that leads to the sublime heights of perfection.. how happy they would be!" It is implicit in education which takes place in monastic settings, in the lives of contemporary moral exemplars studied by Gardner, and in the learning environments of this research study. It cannot be ignored because self-sacrifice is continually present in the lives of the monitors and in the learners who finish courses. Brookfield (1998:301) recognizes the lack of critical reflection in these moral exemplars: "They are acting out of a sense of moral certainty in a way which is experienced as highly pleasurable, rather than self-sacrificial. These moral convictions are not reached after an extended period of soul-searching or careful analysis".

Gardner postulates (1997:132) that:

> the 'moral exemplar' is most singular in the extent to which he sacrifices his personal goals for those of his family, the broader community, or even world society. Knowledge of self or other, interests in a domain of knowledge or skill, are harnessed to a broader concern: the improvement of life conditions for those other than oneself.

Moral exemplars are "most singular" in the *extent* to which they sacrifice for others. I would observe that sacrifices – of personal goals for the sake of others – even large sacrifices are normal sacrifices in the lives of many spiritual people,

---

[15] *To the extent that [extraordinary individuals] inspired others to undertake comparable good works, these individuals earn the descriptor spiritual (Gardner 1997:132).*

[16] *For example, Paul says in 2 Cor. 4:2 in a contemporary version of the Bible (Pederson 1993:373): Since God has so generously let us in on what he is doing, we're not about to throw up our hands and walk off the job just because we run into occasional hard times.*

and pertinent habits for the learners in my study. However, I prefer to note, as meat for learning contexts, the importance of "harnessing"…"knowledge of self or other"… "to a broader concern". This harnessing or connecting can be highlighted in learning settings. Why know self? To better serve those near you. Why know others? To better serve them. Why know anything, from any domain? To improve life for others. These answers are valued as "correct" in the communities of learning of my study because, as Kinlaw (1998:101) comments, "The essence of Christian living is making oneself a servant as Christ is a servant". This essence is sung in beloved hymns: "I will serve You (God) because I love You. You have given life to me," and so on. The words to another are "Make me a servant, humble and meek", and there are many, many others. Missionary David Livingstone (in Olasky 2005:36), having walked hundreds of miles in crossing the continent of Africa chronicles frequent illness and many snake encounters yet writes, "Can that be called sacrifice that which is simply paid back as a small part of a great debt owing to our God which we can never repay?"

2.6.2.2 Team Work: team working projects / pair or trio groupings for studying outside of class / peer tutoring / pass-fail requirements

There are several rings to this telescoped strategy. It deserves a name that is easier to handle. Calling it "teamwork" emphasizes that, as a team of any sport, its members have a common goal, it will require several skills, communication, distribution of task, strategy setting, and working together to reach that goal.

There are standardized features of the IBNAL curriculum which are deliberately built-in to facilitate complex learning like attitudes and character traits over the period of time that the learners are involved in the programme of study. These features make a structural framework for "team work" which connect and overlap the other learning strategies of this "telescope", i.e. *team working projects, pair or trio groupings*, *peer tutoring / solutions to pass-fail requirement*. These curricular features are specified in writing, first as commitments on the part of each student in a pre-study covenant, then as course requirements for each of the forty-two courses of the programme. In order to become a student in the IBNAL programme, the person signs a statement that he/she will (Scott 2001a:3):

- *do homework to the best of their ability;*
- *arrive as close as possible to the beginning time of the weekly class, with their Bible, textbook (with questions answered) and ready to enter into discussions;*
- *respect the monitor and classmates in their contributions in class;*
- *pay the fees and cost of the book.*

We encourage all those interested in studying to do so. For those who have less than 3rd grade instruction, another set of procedures is also required. These students must

- *find a person who will help them everyday by reading the 5 lessons per week and will write in the answers to their questions;*
- *memorize the key verse each week;*
- *begin to study with someone to improve their reading ability.*

A student who fails in this code of conduct will not be allowed to enrol in classes the following term.

In order to pass any course of the forty-two courses, the student must complete all of the course requirements. The requirements are the following (Scott 2001a:5):

At the close of each 'regular' course of the IBNM [later changed to IBNAL], one TEE unit, Theological Education by Extension, will be attributed to all those who have

- *attended 8 of 11 weeks of classes [or 67%] in which they participated in a constructive way in the discussions;*
- *completd 90% [changed to 100% in 2002] of the questions in the textbook, that is the great majority of the questions in each lesson;*
- *achieved at least 50% on the final test (which may be administered orally) which will include*
- *memorized Scripture passages*
- *made payment of their student book and fees.*

Failure to complete any one of the requirements means the student does not get credit for the course. Monitors are trained to give learners a "2nd chance" to complete any of the requirements which are not completed at the time that colleagues complete them. Monitors are encouraged to invent ways (strategies) that, by working together to help the weaker members of the cohort during this grace period, all of the learners can pass the course.

So in order for all of the learners to pass the course, the monitor has several options. When one learner fails because of getting less than 50% on the exam, an academically strong colleague may tutor him or her for a second setting of the exam. The exam may be given orally instead of written. When someone fails because of less than 67% attendance, the monitor may give the learner responsibilities that would count as class times, responsibilities which contribute to the well-being of the *cohort* (the group studying together). Since paying for the textbooks is required but may be extremely difficult for the whole cohort, they also work together as a team to raise money for everyone's books. Mindell (1995:194) describes such activity saying, "Teamwork involves spontaneous, organic consensus that sees everyone's view as part of the community". Mindell says that the building of consensus which he defines as "that special, temporary group condition in which people move unanimously together in a particular direction". By consensus, and as a team, the cohort may plant a peanut garden to raise funds for the books or make baskets and market them jointly. The system of IBNAL for the African context promises a good fit according to Mkabela and Luthuli (1997:8):

African learners should be given much more opportunity to work together in the classroom and on projects outside school. Grading of learners should be based on the ability to work together and facilitate the potential of others….most African people were required to adjust to the solitary nature of Western education, people used to the Western system can be expected to adjust to the co-operative system. Ideally, both systems need to be explored and, if possible, be made mutually inclusive

This social commitment to each other has spiritual dimensions, according to Plunkett (1990:82), "as does every step in life…The sense in which we belong to each other both transcends the rational order, and demands of us a constant spiritual opening to others". Teamwork is only one aspect in development with these complex strategies; responsibility, integrity and selflessness are also facilitated by these strategies. Colson (1990:147) posits that it is the duty of the Church "to call men and women to identify right and wrong and to accept responsibility for their behaviour". So the activities and attitudes prescribed in the covenant and in the course requirements which include respect for others in the cohort ideally work together to produce consensus, teamwork and other actions which demonstrate genuine caring.

2.6.2.3 Classical Spiritual Disciplines

Classical spiritual disciplines is a large set of telescoped or intertwined strategies which are centuries-old means to "know God" or "practice godliness / holiness" or construct "spiritual knowledge". The classical spiritual disciplines include confession, meditation, reflection, spiritual reading, contemplative prayer, silence, solitude, and fasting. They are the subject of volumes of literature like the famous *The Practice of the Presence of God* by Bro. Lawrence and *The Sacrament of the Present Moment* by Jean-Pierre de Caussade, of art forms like iconography and worshipful dance, of retreat centres, seminaries and monastic orders, of the film "The Passion of the Christ", produced by Mel Gibson, and of the "spiritual exercises" of Loyola. The learners in this research study practice classical spiritual disciplines – to a limited extent in the formal learning settings, but more regularly, usually daily, on an individual basis, so they are learning strategies which facilitate learning in the lives of this population of learners. The whole brain of the learners is affected by these disciplines.

Descriptive comments follow about some of the most commonly practiced disciplines, but the way they intertwine makes the consideration of one alone quite artificial. In order to practice genuine confession, other disciplines like meditation, silence, spiritual reading and/or silence precede the act of confessing – to God or to a person. Solitude assists one to meditate and reflect. Contemplative prayer may be accompanied by fasting. Spiritual reading includes meditation and reflection, and so on.

Confession, combined with repentance, is the practice of admitting to God personal responsibility for actions, attitudes, thoughts which are known by the repentant one to be against his or her conscience. Such admission, when coupled with a belief in forgiveness, purges from the weightiness of guilt. Without confession "we push the awareness of what we have done into our subconscious…what has been repressed still generates sadness. It dampens our spirits. We feel depressed...because of these repressed memories of sin" (Campolo 1994:116). Confession relieves the internal and personal weight of "falling short" of the best.

The practice of "blessed subtractions", as Freeborn *et al* (1994) call it, refers to the disciplines that subtract things from life for a period of time. The normal things are not wrong but the discipline subtracts one or more of them in order to focus more

intensely on "knowing God". Solitude and isolation subtract people, silence subtracts noise and communication, fasting subtracts food, chastity subtracts sexual activity, poverty subtracts financial means and so on.

St. Anthony spent twenty years in isolation. "When he left it he took his solitude with him and shared it with all who came to him. Those who saw him described him as balanced, gentle, and caring" (Nouwen 1981:32). "A good dose of solitude", contends Foster (1998:52-3), "is necessary for our [spiritual] growth even though we want to affirm the importance of the Christian community". Yet, it is not the solitude itself which produces godliness. "Walking with Christ" in the solitude (Laubach 1954:136) is the source of peace and blessing because, explains St. Augustine, speaking to God, "thou hast made us for thyself, and our souls are restless until they find their rest in thee". Frankl (in Campolo 1994:215) observes that in the Nazi concentration camp, survival was dependent upon "the ability to imagine a future… that would express the joys of Shalom...the peace and joy of God...who could see beyond the present".

"Silence is a gift of hidden wonders", says Civen (1984:74) poetically, and continues by pointing out that by the power of silence "we hear the Song of Songs; at its core we find God. Silence is not less than sound, but more. Silence is the sound of All-in Unity. God is found in the waiting silence of the seeking heart". Kreeft (1990:203) maintains that without silence, we cannot be good, "for without silence we cannot grow deep roots, and without deep roots we cannot develop character, and without character we cannot be good". The quiet mind finds resources which are otherwise hidden. "As we learn to listen with a quiet mind, there is so much we hear. Inside ourselves we can begin to hear that 'still small voice within,' as the Quakers call it, the voice of our intuitive heart which has so long been drowned out by the noisy thinking mind" (Dass & Gorman 1985:111).

Foster (1998) suggests fasting from food is only one of the options, that fasting from the media, from the telephone, from the dictates of our consumer culture, from achievement addiction are other subtractions from which we may better "know God". "Blessed subtractions" (Freeborn et al 1994) are disciplines which deliberately reduce mental and spiritual clutter in order to focus on self-with-God. In this way repentance and confession would also be "blessed subtractions".

Other spiritual disciplines involve focusing in spite of other things around or focusing enhanced by aids. Meditation, reflection and contemplation focus on God in spite of surroundings as Wurmbrand and Bonhoeffer were able to do in solitary confinement in Romania and Germany, respectively, and as seekers may do in community retreat settings. Meditation/reflection and/or contemplation may use an object like the written Word of God, a written prayer, a rosary, a piece of sacred art, worshipful music, bread and wine, to focus, not on the object itself, but on God through the object with the goal of "touching God".

Through the centuries there have been great masters of contemplative prayer who "devoted all, or nearly all, of their waking hours to prayer…they prayed and worked simultaneously. They prayed while they read, while they walked, while they listened to music, while they were writing, while they were working with their hands" (Laubach 1954:95-96). The intent of their lives was to put into practice the

Bible verse "prayer without ceasing". Laubach himself tried to do this. He comments, "When one first tries to form this new habit, his mind resists and runs off on a tangent. This stage of mind wandering must be endured by all who would learn this discipline. It is true of every new good habit that one seeks to form. We must pass through a period of failure" (Laubach 1954:96).

The result of the practice of spiritual discipline may be a creative flow from which a work of some kind is inspired and produced. The result should be peace and harmony with self, others and God. Brother Lawrence, one of the great masters of contemplative prayer exhorts, "Let us often remember…that our sole occupation in life is to please God. What meaning can anything else have?"

Reflection must be practiced outside of environments which are formally assigned to learning and include the "learning of God" in reflection in whatever setting this may take place. Ultimately the learning setting is within, the whole brain selves of learners. Classical spiritual disciplines affect the whole brain.

2.6.2.4 Singing for Learning

"Singing for learning" is not simple singing of any song. It is the singing of songs which have specific words that express ideas and/or concepts of the I.L.O.s (intended learning outcomes) and/or major points of content. The specific words codify meaning in such ways that Quadrant A analyzes and deconstructs it. The words express known ideas or constructs in new ways which Quadrant B reorganises. The melody pleases and plays in Quadrant D and moves the emotions of Quadrant C. Hence, singing for learning is whole brain and powerful to the individual. In the collective realm music is also powerful for the simultaneous effect it has on the group. Storr (1992:89) describes this:

> Music brings about similar physical responses in different people at the same time. This is why it is able to draw groups together and create a sense of unity...Music has the effect of intensifying or underlining the emotion which a particular event calls forth, by simultaneous coordinating the emotions of a group of people.

Martin Luther and then Charles Wesley utilized the power of music to speak to and teach the people. "A Mighty Fortress" became the anthem of the German Reformation, sung by people in churches all over the country. The words reflect the context: the architecture of Germany, the political and ecclesiastical struggles of the times, and the theological war between God and the "ancient foe" (Satan). The words of the first two stanzas are written below on the left in poetic, archaic English. I have written a non-rhyming, line-by-line interpretation on the right:

A mighty fortress is our God,	Our God is like a castle,
a bulwark never failing;	a support which never fails;
our helper he amid the flood	God helps when many ills descend
of mortal ills prevailing.	On mortals [men]
For still our ancient foe	The enemy, Satan,
doth seek to work us woe;	is still out to make problems;
his craft and power are great,	he has great skill and power
and armed with cruel hate,	and hate is his weapon,

on earth is not his equal.	No one on earth is so great.
Did we in our own strength confide,	If we trusted in our own strength
our striving would be losing,	our efforts would not win,
were not the right man on our side,	if the right man [Jesus] were not
the man of God's own choosing.	Siding with us, the choice of God.
Dost ask who that may be?	Do you ask who he is?
Christ Jesus, it is he;	Christ Jesus is the one.
Lord Sabbaoth, his name,	Holy Lord, his name,
from age to age the same,	the same in every age,
and he must win the battle.	Jesus will win the battle.

The melody had already proven to be singable and pleasing because Luther borrowed a popular tune. Luther and Wesley "met the needs of the culture of their day by taking the tunes out of bars, putting words to them, and using the songs in worship…They did not conform the message, just the package" (Easum 1993:86).

John Wesley had rules for singing which indicate how important the words and the manner of singing were to him:

- Learn these tunes before you learn any others; afterwards learn as many as you please.
- Sing them exactly as they are printed here.
- Sing all.
- Sing lustily and with a good courage. Beware of singing as if you were half dead, or half asleep.
- Sing modestly.
- Sing in time.
- Above all sing spiritually. Have an eye to God in every word you sing. Aim at pleasing Him more than yourself, or any other creature

(Bible1982:i)

As noted previously, Wesley hymns combine doctrine and experience; for example, *A Charge to Keep* speaks about the responsibility (charge) of glorifying God, fitting the soul for heaven, serving contemporaries, and fulfilling a call to serve. The second stanza speaks of personal accountability to do God's will, to be careful to live in God's sight so that the servant of God will be prepared to give a "strict account" to God of his or her life:

A charge to keep I have, a God to glorify;
A never dying soul to save and fit it for the sky.
To serve the present age. My calling to fulfill;

O may it all my pow'rs engage to do my Masters' will!
Arm me with jealous care, as in thy sight to live;
And o thy servant, Lord, prepare a strict account to give!

(Bible 1982:75)

Many hymns of the Wesley brothers are still sung in Western cultures. This fact attests to their enduring power and value. However, the music of Luther and the Wesleys does not necessarily move the hearts of people from other cultures.

Easum (1993:86) emphasizes the importance of "culturally relevant music". This relevance is also a factor in "singing for learning" as a holistic learning strategy. "There is ample evidence to show that myths, folk tales, proverbs, songs and drums have always played an important educational role in traditional African life," observes Letseka (2000:189). The monitors are encouraged to pick one song for each face-to-face session that connects to one of the main ideas of the week, and to explain the connection before singing the song. In the written guides that monitors can use, several of these possibilities are suggested to them, for them to choose from so that the use of songs in "singing for learning" is encouraged and facilitated. There are two Wesley songs in the collections from which the monitors train.
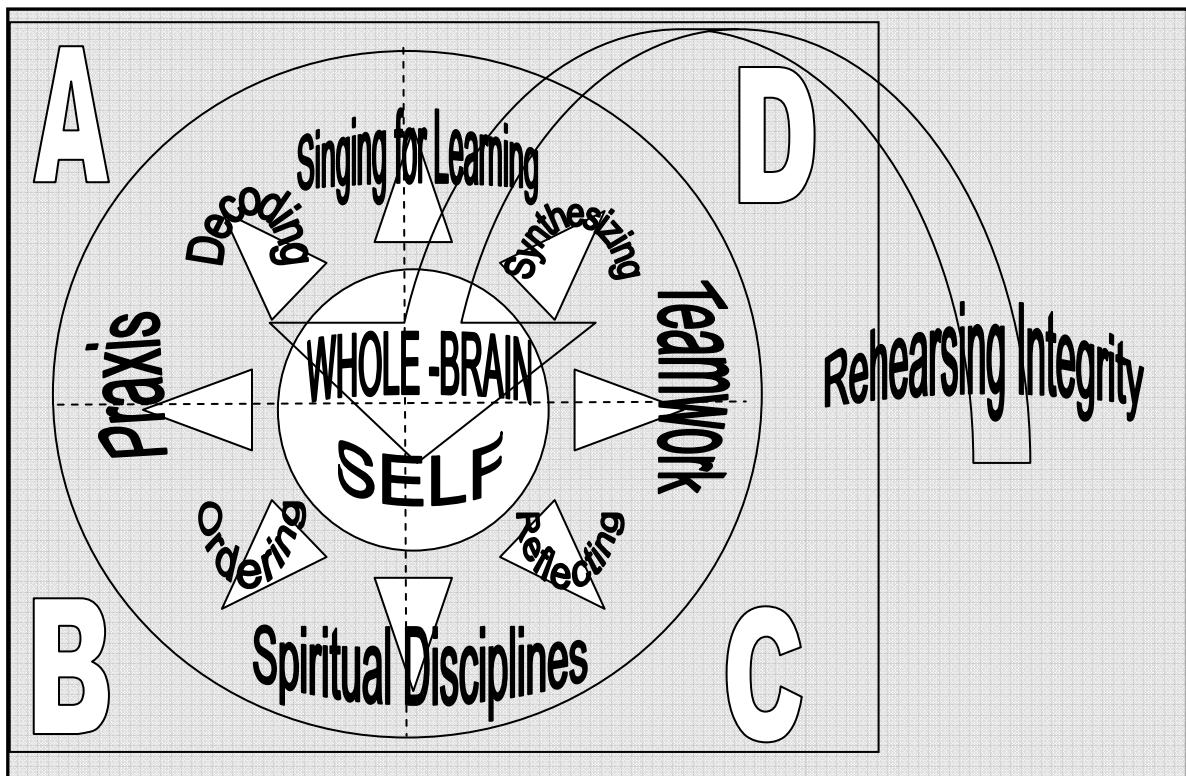
Figure 2.21 Holistic Learning Strategies Positioned on Four Quadrant Model

In the diagram in Figure 2.21 a circle quartered by dotted lines representing the four quadrants lays over the diagram of the whole-brain self in which a key thinking modality is specified in each quadrant – decoding, ordering, reflecting and synthesizing. The four complex strategies – praxis, spiritual disciplines, teamwork and singing for learning are placed deliberately at the junction of quadrants which they potentially unite. As discussed in the previous paragraphs, the potential of these, as well as some other strategies, is to affect all four quadrants depending on other variables. As also mentioned previously, the telescoped strategy – rehearsing Integrity: hero-modelling / role-modelling / role-taking / self-sacrifice – would fit at the centre of the whole-brain self diagram. Now I present a brief look at other learning strategies, organised by quadrants.

QUADRANT A = Decoding

2.6.2.5 Actively and Independently Accessing Bible Content

In homework assignments in order to answer questions in the textbooks, the learners get Biblical answers by opening their own Bibles, finding the correct reference and reading the references to answer the questions. Boff (2000:86) .the [Holy] Spirit never allows Jesus' words to remain dead; whenever they are reread, they gain new meaning and produce new practices". Bediako (1995:62) holds:

> The single most important element for building such an indigenous Christian tradition is therefore the Scriptures in the vernacular language of a people. It is to the undying credit of the modern missionary enterprise from the West, and to the lasting benefit of the newer church which have resulted, that the value of the vernacular Bible for converts was generally recognised, quite early. There is probably no more important single explanation for the massive presence of Christianity on the African continent that the availability of the Scriptures in many African languages.

The student books of the Text Africa series refer the learner to the Bible repeatedly such that the learner gets used to opening the Bible, seeking the particular passage and reading it silently.

2.6.2.6 Hearing the Bible and Text Material Read and Explained by the Monitor and Classmates

The face-to-face sessions are normally opened by the monitor with a brief devotional based on the Bible verses that are being mastered during that particular course. These 5-10 minutes of open Bible, being explained by the monitor, provide occasion for a spiritual boost to the learners, many of whom are already pastors leading churches and not able to hear others preach.

Decoded words captured by hearing them enter the brain differently than decoded words captured by reading them silently. Hearing and reading at the same time enters differently yet. During the two hours of each face-to-face session, this strategy is used commonly. Sometimes the readings are done in chorus which magnifies the sound, multiplying the audio effect. Bartle (2001:86) emphasizes the importance of scriptural readings within each learning community:

> When people from thousands of different cultures read the Scriptures, the parts that are very significant to one group of people are often not so important to those who come from another cultural background. They search the Scriptures through the spectacles of their worldview. As Christians around the world share with each other their grasp of Scripture and their understanding of God we all gain in the process.

The cooperative learning groups which are opening the Bible to read to one another are not "Christians [from] around the world" but they are Christians sharing their understanding and interpretation as each interacts with Scripture.

2.6.2.7 Memorizing Bible Content

One of the requirements to pass each course is to memorize four or five Bible verses which are carefully selected to reinforce the main ideas of the lesson content. If learners do not have the verses perfectly memorized the first time they take the exam, they can keep on trying to write or say the verses until they master them. The learners fill their spare minutes reciting their verses for one another, in the large groups or in pairs or trios. The Bible itself gives motivation for the learners to accomplish these memorizations since their goal is personal piety: "I have stored up your word in my heart, that I might not sin against you (Psalms 119:11)".

Memorization as a learning style currently carries some stigma of being "too rote" in nature. However, I personally must acknowledge that some things thoroughly memorized have usefulness for a long time. I can still recite some learning that I committed to memory forty-five years ago, and I visit those memorized pieces from time to time when they are useful to me. My point is that memorization is not a major tool in the learning toolbox, but it still has a place there.

2.6.2.8 Reading the Student Textbooks

Because of its honoured place in learning for centuries "reading" as a learning strategy needs no explanation. As Bloom *et al* (in Anderson & Sosniak 1994:16) say "the teaching of knowledge is…basic to all the other ends or purposes of education". Memorisation and reading are codified inputs of knowledge. In face-to-face sessions, information contained in text books is the basis for the discussions.

The "programmed Text Africa books" do need comment because they are unique student text, designed very explicitly for learners like those of my research population. All of the Text Africa books have the same format of divisions – ten units of five lessons, The units are the basis of study for one week; each divided into five lessons which are intended to be read and studied daily by each learner, and the unit content, already known to each learner, is the basis for the weekly session of the learning group. Besides format consistency, there are other characteristics of the texts which are intentional in every book. Text-writers comment: "The way to maintain a conversation style of writing is to adopt a friendly tone of writing, informal and colloquial…you need to develop a mental imagination that you are talking with an individual learner and it is only then our writing will be 'readable' and your learner will 'hear'" (Gatimu *et al* 1997:73).

The standard format encourages daily work. One of the founders of TEE, Winter, strongly extols the worth of this practice. He says (1969:430):

> …if properly handled, these daily studies can involve not only the mastery of required course content, but a great deal of creative thinking and writing and even the development of independent research skills. These men [sic] are not just passing courses. They are developing a discipline that can continue to operate far beyond the limits of the usual three-year theological cram course. The extension programme affects the student in his daily life through books and new study habits

The development of a daily discipline of studying books at home surely is a worthwhile by-product of the special and deliberate design. Beside the standardized organization of the books, and the conversational style, there are two other aspects worthy of mention. The illustrations given and the situations posed are all African. And the formatting on each page is different. The pages are not full of text; each page is broken into frames which cycle sequences of learning activities, stimulating different parts of the brain. Each frame is composed of Information, Response and Confirmation. Holland (1975:17) reproduces a page from *New Testament Survey, Part One* to illustrate the page format which is copied below:

Take your Bible now. Open it at the front. Find the page where all the books of the Bible are written. Find the names of the New Testament books.
    Count the number of books in the New Testament.

2. How many books are in the New Testament? _____
===
    There are 27 books in the New Testament. These books are not all the same. They are very different.
    Do you have some cattle? Think of a herd of cattle. To some people, all the cattle look the same. But if you know the cattle they look very different from one another. Some are heavy. Some are light. Some have many colours. Some are on colour. Some have straight horns. Some have horns which are bent.
    In the same way, there are different kinds of books in the New Testament. There are four kinds:
        (1) Gospels
        (2) History
        (3) Letters
        (4) Prophecy

3. Gospels are one kind of book. In which Testament are they? _____
===
    The first kind of book in the New Testament is the Gospels. These books tell the good news about how Jesus came. They tell about his work to save us.

4. The book of Luke tells the good news of Jesus. What kind of book is it? _____
===
    Luke is one of the Gospels. The Gospels come first in the New Testament. They are like the cow that leads the herd. They lead us into the New Testament.

Figure 2.22 Example of a Page of Text Africa Material (Holland 1975)

The wording is intentionally simple and straightforward so that the learners are able to easily grasp the basic content. This is how the Text Africa books are written.

The other student text materials which have been developed for the learner population during this research have incorporated several aspects of the Text Africa books into the writing style, i.e. conversational Portuguese, organization of main ideas in each learning unit intended for one week of homework, frequent questions within the text, African examples, etc.

2.6.2.9 Regular Group Discussions Based on Main Ideas of the Week

During their training, the monitors role-play discussions with three kinds of questions for their use in conducting the face-to-face class sessions in which the already-studied lessons are discussed. The kinds of questions are 1) informational, 2) reasoning questions, and 3) application. The main ideas of each lesson are stated as daily assignment titles, and then are presented in more detail through biblical texts and questions written into the books. The discussions based on the main ideas are, therefore, data-collection or informational in nature, clearly within the domain of Quadrant A. Aspects of the mental processing which precedes speech or writing are described by Vygotsky (1962:144), "Planning has an important part in written speech, even when we do not actually write out a draft. Usually we say to ourselves what we are going to write; this is also a draft, though in thought only". So, before a participant writes answers or speaks in a discussion, mental planning or drafting has taken place. Killen exhorts another type of planning, too. Based on his understanding that the fact that learners are participating in a discussion does not automatically mean that they are learning anything, Killen says (2000:42) "You have to help learners to think about the ideas being raised in the discussion and to use these to construct a deeper understanding…Prepare the discussion plan: questioning, timing, keeping a discussion moving and on the right track" (Killen 2000:52-53). This is what monitors do in supervised practice facilitation of discussion groups and the ideal that they would keep on practicing when not being supervised.

QUANDRANT B = Organizing

2.6.2.10 Taking Written Exams and Answering Questions in Writing in Student Books

These two learning strategies, commonly used in educational settings, are considered together because the difference between them is the length of time past before recalling the answers. The Text Africa books reinforce by having learners write several different times the same answer to the same question. Such repetition may be overkill for some, but it is effective in brain-based learning because the learners are re-writing the correct answer. That is the "programmed" aspect of the textbooks. Doing the lessons this way is motivational in that the learners are enabled to master the informational lesson material, and respond to this material, from memory, on written exams. Laubach *et al* (1991 91:187) corroborate the effectiveness of these written learning strategies used with adults with minimal formal schooling. When the learners do the homework as prescribed, on a daily basis, then their performance on the written (or oral) exam is enhanced by the practice writing of the correct answers.

Doing the homework of answering the questions in the student books is promised by the learner when he or she signs the covenant. From his framework of "emotional intelligence," Goleman (1996:285) says the bedrock of character is self-discipline…and "a related keystone of character is being able to motivate and guide oneself, whether in doing homework, finishing a job, or getting up in the morning". The Nazarene curricular reform requires attention given to the development of *character*. Answering the questions page by page, week after week, pours the informational content through the fingers of their writing hand. Then, having the answers in writing when the learners come to the face-to-face session provides equality in the preparation for discussions which take place in the session. Self-discipline belongs to Quadrant B, according to Herrmann (1995:425), and self-discipline is what it takes to get the home-work completed.

2.6.2.12 Attending Class at least 67% of the Time

This behavioural pattern of attending class most of the time implies traits like responsibility (to the cooperative group and to the learner's own goals), honesty (the learners signed a covenant that commits their attendance), as well as their skill in time management which is important for leadership. In relation to assessing attitudes, Henerson *et al* (1987:13) comment:

> Behaviors, beliefs, and feelings will not always match, even when we correctly assume that they reflect a single attitude; so to focus on only one manifestation of an attitude may tend to distort our picture of the situation and mislead us. We have no guarantee that the attitude we want to assess will 'stand still' long enough for a one-time measurement to be reliable. A volatile or fluctuating attitude cannot be revealed by information gathered on one occasion.

Excellent attendance at face-to-face sessions is not the only behaviour quantified and recorded over time. The next learning strategy is also quantifiable. Over the course of 42 different classes which the learner attends to qualify for ordination, a pattern of attendance emerges which infers measurement of attitudes like those mentioned above.

2.6.2.12 Discussions Based on Reasoning Questions

The second kind of question that monitors practice using in their training are "reasoning questions". While informational questions usually have only one correct answer because they are identifying factual data, "reasoning questions" have more than one answer; therefore they are the basis for healthy interchanges of ideas and positions in group discussion. Informational questions use journalistic words like *what, when, who, where, how many* and *how much* (Thornton 1990:50)*.* Reasoning questions probe the meaning and significance of information, so frequently are used right after an informational answer is given. For example, "What was special about the birth of Jesus?" Answer: He was born of a virgin (informational). "If Jesus was born of a virgin, what is the significance of his birth?" Answer: there are many answers because it was a reasoning question. Discussion ensues. The mental activities are reorganizing past knowledge in new

frames which belongs to Quadrant B and synthesis, which would be Quadrant D thinking.

St. Augustine is famous for using "Socratic questioning" which Armstrong (1994:70) describes

> In Socratic questioning, the teacher serves as a questioner of students' points of view. The Greek sage Socrates is the model for this type of instruction. Instead of talking *at* students, the teacher participates in dialogues *with* them, aiming to uncover the rightness or wrongness of their beliefs. Students share their hypotheses about how the world works, and the teacher guides the 'testing' of these hypotheses for clarity, precision, accuracy, logical coherence, or relevance through artful questioning.

Reasoning questions are a type of "Socratic questioning". The aim is not for the teacher/facilitator to uncover "the rightness or wrongness of …beliefs" but more that the learners discover this within themselves. Ideally the "testing of hypotheses about how the world works" takes place in discussions on reasoning questions.

QUADRANT C = Reflecting

2.6.2.13 Inviting God to Intervene (Prayer)

Contemplative prayer is described above as one of the classical spiritual disciplines. The prayer of this learning strategy is not the same thing as contemplative praying. This prayer is recognition of God in the learning environment. At the beginning of the face-to-face session, one of the learners in the group is asked to lead the group in spontaneous, non-formal thanksgiving for His presence and His blessings. The opening and closing of the class session in prayer is an affirmation of faith in the promise of God to be "with us". Indeed, as Laubach (1954:97) puts it:

> Learning to live with God is the highest of all habits...It may take longer to form than any other habit, but after a while experience will show that it grows easier. After months and years of practicing the presence of God, one feels that God is closer…At last, God gets so close that one stops thinking of God as outside himself, and begins to think of Christ inside in one's own though and breast. He sees God's thoughts flow into his mind. Sometimes one feels that they are coming in from above but more often one feels that these thoughts are welling up from the unconscious, as from a hidden fountain.

Prayer at the outset of the time spent together in the learning setting also gives the opportunity for learners to "bear each others burdens (Galatians 6:2) by praying for each other.

2.6.2.14 Encouraging and Helping Classmates

Mutual encouragement and the desire to help each other are hoped expressions of the trust and loyalty that learners in a cooperative learning group experience.

As the learners discuss important issues week after week and apply them to their individual situations, they "hear" each other. Dass and Gorman (1985:113) note, "In most helping situations…'I hear you' reflects a much deeper message: 'I understand. I'm with you.' The reassurance does not come from the words themselves, of course, but from what the words represent. It comes if the person indeed *feels* heard".

2.6.2.15 Peer Tutoring in Second-Chance Occasions

If learners in my research population do not accomplish all five criteria to pass a course when the other learners in their cohort pass, then a "second-chance" can be invented for them. In such inventions, the cooperative learning group may assign a peer to tutor the weaker one. This is an academic extension of the previous learning strategy "encouraging and helping colleagues". Gatimu *et al* (1997:27) surely pinpoint one of the activities of peer tutoring, "Dialogue is… found when students study in groups. In these groups they discuss the issues raised in the study material". Peer tutoring is a dialogic review of learning already in process. The readiness and willingness of a colleague to take time to help a peer in this way also is a display of traits like "kindness", "unselfishness", "loyalty" and "self-discipline". Henerson *et al* (1987:13) say that attitudes have "many *manifestations* – productivity, attention, interaction with others, verbal responses". They also say that attempts to measure an attitude such as racial prejudice may be "blurred by peer group pressures, the desire to please, ambivalence, inconsistency, lack of self-awareness". Applying this to peer tutoring, those who volunteer to help others may have some other personal agendas for doing so. However, the learning strategy has validity for certain cases; it is a useful solution for benefiting the weaker learner and for giving all the learners experience in group problem-solving, contributing to creativity and resourcefulness.

2.6.2.16 Reflection in Several Applications

Reflection a mental activity is discussed previously in several ways – as "critical reflection" in adult learning theories, as one of the partners of "praxis", as a component of Participatory Action Research and the Freirean approach, as parcel in "discussions" of all kinds, and in each of the "classical spiritual disciplines". Reflection, however, is not a "given" in all learning contexts. Not everyone is reflective by natural disposition or temperament; not all learners have experience in environments where reflection is encouraged. So, reflection may need to be practiced in the safe learning environment for it to become an acceptable practice. Sonnier (1962:54-55) suggests that a non-threatening beginning might be the simple question, "Did you enjoy learning this lesson?" Other simple questions may be more natural for the reflection of other learning populations. Some educators use quiet moments as time at the end of a learning session to deliberately reflect on what has happened during the learning session, time before closing, time before moving on to another activity. Reflection may have to be introduced in small, deliberate ways in order to be widely practiced.

2.6.2.17 Regular Singing of Songs

Singing is already a frequent activity among the population of learners in my research, so it is a normal part of their group settings. "Singing for learning" has been explained above, but the "regular singing of songs" is another learning strategy. It is the use of songs to create appropriate ambient in both spatial and temporal senses, not the whole-brain learning experience that "singing for learning" has the potential to be. Music unites, as previously cited in Storr (1992); so singing is a force to draw the group together, to unite the hearts and minds of the members. Singing usually is pleasant so it conditions the audio environment with harmony. Singing evokes emotion and rhythmic movement, so it stirs the learners. Singing is poetry put to melody, so it enhances memory. A children's song I learned long years ago says:

> Sing it! You'll never forget it!
> If you've something to remember, put it in a melody.
> Sing it! You'll never forget it, if you sing it!

To say that "you'll *never* forget" is an overstatement, excused by poetic license, but the repeating sound waves of song do make pleasant patterns over which memories seem to travel well. Brain-based educators like Jensen and Sprenger use music deliberately as a memory lane.

Among the learners of my population, singing in their maternal languages is very much preferred over singing in Portuguese, so singing in these first languages is continually encouraged. "Western Christianity...is very cognitive and analytical [A-quadrant]…in order for theology to be contextualized the truths of the gospel must be expressed through song, ritual, ceremony, and symbols [C and D quadrants] that are meaningful to the people" (Bartle 2001:91). For purposes of unifying groups of learners from different parts of the country, learning to sing songs in Portuguese also has some value, so the Student Guide of IBNAL (Scott 2001a) has a number of hymns and choruses which they also learn, which the monitors learn during their training.

2.6.2.18 Choral Reciting of Truths or Chants

The inclusion of "choral reciting of truths" as a learning strategy has four sources of inspiration: Jewish practice, Eastern Orthodox practice, the movie "28 Days", the personal memory of practices in youth organizations. The "shema" in Deuteronomy 6:4 is the heart of Jewish Law; they repeat it often, and can recite it in chorus. Most Christians know how to recite in chorus the truths of the Lord's Prayer, a few of the Christian creeds and John 3:16. Eastern Orthodox priests lead their flock to choral recitation of many truths. In the movie "28 Days" the main character, an alcoholic in a rehabilitation centre, refuses to recite truths that others are repeating when she first gets to the centre; but the chants are truth, and when she stops denying the truth of them, she joins in the recitation. Then, in life after the centre, the chanted truths appear in her thinking and help her through tougher times. The "motto", "pledge" and "promise" of each youth organization I was a member of (Girl Scout, 4-H, Job's Daughters) are still in my memory, and they still

inspire me. They are well-articulated, poetic expressions of noble behaviour. An example is the Girl Scout promise: "On my honour, I will try to do my duty to God and my country, to help other people at all times, and to obey the Girl Scout laws".

In terms of whole brain learning, the "choral reciting of truths" magnifies the audio effect of oral work; it is more than hearing a truth from just one voice so reinforces the impact. The poetic or mantra-like effect of repeating phrases several times in the identical way echoes or ripples in the brain. If neuronal impulses are like indentations in the "gelatine" of the brain, then repeated identical phrases may deepen the indentations, strengthening connections to other neuronal pathways.

Gravett says it very succinctly (2005:34):

> Neurons that are repeatedly used grow stronger synapses and more effective neuron neuronal networks. And the more they fire, the more they send out new branches looking for more and newer useful connections. The frequency with rich the synaptic pathway is used determines whether it will stabilise or not. Neuronal circuits that are used become stable or 'hard wired', while those that do not get used gradually 'dissolve". Thus, repetition is needed for strengthening synapses. The notion of frequent repetition or rehearsal must be considered in conjunction with the fact that it is the *learner's* neuronal networks that need strengthening. Consequently, educators need to shift the performing and rehearsal as much as possible to the learners. This once again highlights the importance of learning actively engaging and working with the learning content.

2.6.2.19 Discussions Based on Application Questions

The third kind of question which monitors in training learn to use is "application questions". These have personal pronouns in them and can have as many answers are there are learners in the group because the application is personal in terms of "I", "me", "my", "mine" or the collectives "we", "us", and "our". If such and such (Jesus rose from the dead) is true, how does this affect the way *we* act (conduct funerals)? Or, "How does this affect *our* attitudes toward dying?", etc.

Caine and Caine (1991:7) remind us that "people can and need to grasp the larger patterns. The part is always embedded in a whole; the fact is always embedded in multiple contexts". The knowledge collaboratively constructed in cooperative learning groups has both individual contexts and collective contexts for application, hence multiple right answers. Brookfield (1998:286) states that "A respectful stance towards the adultness of learners means that we acknowledge that their experiences in the world outside affects substantially what happens inside the adult classroom". Application questions have the potential to guide learners to apply this respectful stance to the inverse direction, taking the learning from their "learning setting" to "affect substantially what happens" in their living setting, i.e. their "world outside".

Brookfield also (1998:287) cites several studies (Mines & Kitchener, 1986; Rybash *et al*., 1986; Sinnott & Cavanaugh, 1991; Sinnott, 1994; and Kitchener & King, 1994) which "show that the capacity to make an informed critique of one's

experience is context and person-specific". This seems to mean that no one is really able to evaluate the experience of another. This respects the opportunity of the individual to apply learning to his or her unique experience. Yet…adults do seek consensus, that their choice of application is somehow appropriate and probably effective. Perhaps this seeking of consensus is more so in collectivistic societies than individualistic societies. In summary, then, discussions based on application as a learning strategy seems to be the planning phase of *praxis*.

QUADRANT D = Synthesizing

The deliberate inclusion of learning strategies from this quadrant is influenced by the position of Kreeft (1990:131): "I suspect that if Jesus were teaching today he would produce great movies and TV shows". Kreeft continues to describe the parables of Jesus as "really little mental movies. They were not only pictures, but moving pictures. He knew how much the mind is moved by moving pictures". The intended use of the D-quadrant strategies is to excite the minds of the learners to visual creations that are somehow more dynamic than what is on paper before them. The challenge is for them to "see" more than the eyes envision in order making a "more lasting dent" in their brain wiring. Others encourage this active envisioning: Bruner and Nouwen (1977:66) write about the visual power in stories in which we can "walk around, find our own place…encounter, dialogue and share". This makes every Bible story a new "world" (Bruner) or "land" (Nouwen) for learners to enter in the imaginations of Quadrant D. In visualization or in other D-quadrant fabrications concepts, ideas, principles, values, inspirations, etc. are synthesized, put together in a holistic construction which makes sense, has meaning, and ties together different parts and perspectives. So each of the five strategies listed here is connected to the others by these mental dynamics.

2.6.2.20 Icon or Visual Clue Interpretation

Icons are visual clues or graphic symbols for constructs of realities which may take many words to unpack. For example, depending on the meaning culturally attached to it, a triangle,　　　　　as an icon, may mean to the person who sees it – a company for internet and other electronic communication (AOL), the sphinx of Egypt, or the triune God. Obviously, the meaning of the icon must be articulated.

Nazarenes and other Christian groups in Melanesia teach Bible and train others to teach the Bible by using stick figures. These essentially function as icons or visual cues. Bartle (1998:1) describes how this visual learning strategy is used in connection with praxis and cooperative learning groups:

> A village church with walls of woven bamboo, a cement floor and a roof of corrugated iron situated in the highlands of Papua New Guinea. Thirty women are seated on narrow wooden benches gazing intently at a large sheet of paper at the front of the church. The sheet is divided into nine squares and in each square are a series of stick figure pictures. The teacher holds an open Bible in one hand and a pointer in the other and step by step works her way through the lesson pointing to the various pictures as she teaches. From time to time she will ask one of the women to read the Bible verse that corresponds to the reference on the chart. Concluding her lesson she goes back and revises it and asks for any questions. After replying to any questions the class breaks into groups of two or three.

2.6.2.21 Key Words as Tags or Labels (or Suitcases to Pack Into)

With the definition referenced previously that Bruner gives of a word the basic unit of communication into which much meaning can be packed, single words can be used deliberately as "suitcases" into which many ideas and concepts may be stuffed. Functionally, key words can be used as icons; they do not have to be "read", they just have to be recognized as memory triggers. In the same way that the meaning of an icon must be articulated, words used as keys, tags or labels to subjects of larger significance, must also be articulated and/or textually explained in order to unify and particularize meaning within a cooperative learning group or other collegial setting. Besides exploration of the significance behind the key word, graphically distinguishing the letters, also is recommended in this strategy in order to cue the one seeing the word that the word is not used for its normal codifying function, but means something specifically. The use of the "word art" function on word processors works well for such presentations.

For example, ADAM as a key word becomes more than just a name. According to the meanings which I would attach to the graphic in the minds of learners, the key word tag has within it the story of creation and the first covenant of God with humans, the eternal purposes of God for all of creation, including humankind as steward of all creation, etc.

2.6.2.22 Photos, Pictures, Maps and Graphs

A picture is a tiny slice of reality so is more easily interpreted than maps and graphs which are symbolic or iconic; the latter represent reality, and these representations have to be explained. A picture (usually) makes sense without prior learning or verbal explanation. Maps and graphs do not. The "Bible in pictures" is the presentation of Biblical narrations in the form of sequential drawings which are like comic book strips. Unlike the stick figures mentioned previously, the drawings are life-like presentations which act like "pictures" in the presentation.

2.6.2.23 Discussions Based on Key Words

Vygotsky (1962:5) says that the unit of verbal thought is "found in the internal aspect of the word, in *word meaning*….it is in word meaning that thought and speech unite into verbal thought". Discussions based on words which are key to understanding the lessons in the textbooks are ways to identify and explore the basic units within the main ideas. Mental activity includes synthesis. Discussion about *key words* is continued in their use as visual symbols in the D-quadrant.

2.6.2.24 Identifying Heroes

Although other learning strategies like reading, listening to stories about, comparing one life to another, i.e. valuing the worth of the potential heroes, the mental vote-of-ascent that this person is "*my hero*" is a right-brain function. It is usually accompanied by emotion, like loyalty and aspiration to "be like" the hero. The D-quadrant mental activities are the holistic, constructivistic knowing of the

hero, a kind of thorough identification with the person that involves synthesis and imagination. Nouwen says (1977:65) we "call to mind men and women in whom the great vision becomes visible, people with whom we can identify, yet people who have broken out of the constraints of their time and place and moved into unknown fields with great courage and confidence," and he gives as example those described in the book of Hebrews, chapter eleven, which is the "hall of fame" of biblical heroes of faith.

2.6.2.25 Appropriately Applying Bible Content to Life Scenarios

The ability to appropriately apply Bible content to life scenarios resides at the heart of praxis. It presumes understanding of the Bible content so discussions concerning the meaning and potential applications precede the actual application to life situations. Bloom *et al* (in Anderson & Sosniak 1994:16-17) add that "when the student encounters a problem or situation, he will select an appropriate technique for attacking it and will bring to bear the necessary information, both facts and principles". This is a kind of synthetic, integrative thinking to action.

2.6.2.26 Praxis

As previously discussed for the term *praxis* the definition of Hasbrook (2002:1) is "the partnership of action-reflection-dialogue". This IS the intended strategy for the TEE model in which dialogue is based on the textual material in the textbooks and in the Bible and continues through reflection and action, reflection accompanies textual study, prayer, discussions and action, and action is carried out responsibly, reflectively and responsively in family, church and community as application of learning or response to reflection and dialogue.

2.6.2.27 Cooperative Groups

The use of cooperative learning groups is discussed at length in the previous section but it also is listed here since it is a holistic learning strategy. Cooperative groups contribute to the mutual moral, cultural and spiritual accountability of the learners in the groups, as those in the Wesley classes, and also as those in the first-century Church: "Out of…worship grew a fellowship of love and caring that was the most remarkable feature of the early church....nothing attracted and converted pagans more often than the love and caring that they saw among pagans" (Kelsey1984:41).

The validity of learning in groups vs. learning alone is captured in a testimonial by Williams (1987:42) of a sixty-year-old man who describes how such a study group with two-way participation has opened a new dimension in his life: "I've always loved to study. Since college days that has most often always meant reading by myself, usually in bed at night after the house got quiet....Something's been happening… that's opened up a whole new world for me. I'm becoming a part of a learning community again".

This case serves as an example of what Cohen is turning up in his study of over 3,000 older adults. He (2006:84) says "only 10 percent of the people I've studied describe the midlife transition as a crisis. Far more say they're filled with a new

sense of quest and personal discovery". For those of my learning population who are "older adults" in the cooperative learning groups, this news is encouraging.

2.6.2.28 Summary of Holistic Learning Strategies

The four-quadrant brain metaphoric model is useful for the consideration of learning strategies as it assists in assessing how strategies are more likely to vary in their effect on the brain. With the intention for learning to take place in more effective ways in the lives of the learners, then strategies which are probably more effective are better to choose. Among the thirty-one learning strategies explored and assigned to the brain quadrants which they probably stimulate, several surface as the most likely to facilitate learning holistically, so that these constitute the set of learning strategies which are the focus of my research: discussions of several types, praxis, singing for learning, classical spiritual disciplines, teamwork including team building work projects/ studying together / peer tutoring / pass-fail requirements, rehearsing integrity including hero-modelling / role-modelling / role-taking / self-sacrifice and cooperative learning groups.

2.7 Summary and Synthesis of Theoretical Framework

2.7.1 Summary of the Literature Review

The over-arching theoretical framework of this Participatory Action Research project is "holism". Within holism I review several concepts and models including whole-brain models of brain organization and function and holistic identity, memory and spirituality. Within holism, I also explore the construct of "tri-dimensionality" with the intent to posit my research within this tri-dimensional model of self, the tri-dimensional person the "social self", the "spiritual self" and the "whole-brain self". Within tri-dimensionality three specific constructs of learning are explored – spiritual learning environments, cooperative learning groups and holistic learning strategies – all of which facilitate the learning and development of the learner as a whole person.

The graphic model in Figure 2.9 illustrates the three dimensions of personhood in which the "social self" is surrounded by the different groups to which they belong, allowing the interpretation that a different sub-self relates to each group. Figure 2.9 also identifies the "spiritual self" as the "real self" in the centre of the person. The graphic model specifies the "mental self" as, particularly "whole-brain". "Memory" and "God" are written into the model of tri-dimensional personhood since all parts of human experience, social, spiritual and mental are tied together by memory and are influenced by the presence of God. While "remembering and understanding" are commonly linked as parts of learning, the other truth is that remembering and understanding of self are both parts of identity.

Cogmotics, as described by Copley (2000a, 2000b and 2000c) appeared to be similar to, perhaps even the same as *tri-dimensional learning* but after a more critical comparative analysis, it became clear that the aims are parallel, the theories and practices overlap but overall they are not the same. Table 2.9 which qualifies the comparison follows:

---

[18] *The repetition of "three" in several aspects of this research is circumstantial and neither deliberate nor important.*

Copley			Tri-dimensional
Teaching	**Facilitating**	**Animating**	**Forming**
Information	Knowledge	Wisdom	Knowledge & Wisdom
Conditioning	Learning	Growing	Transforming
Passive	Participative	Experiential	Volitional
Monologue	Discussion	Dialogue	Utilize all 3 oral modes
Impersonal	Personal	Transpersonal	Relational
Serious	Light hearted	Whole hearted	Inspired
Authority	Advisor	Catalyst	Facilitator
Defined	Explored	Evolved	Organic
Disempowering	Enlightening	Empowering	Equipping
Cognitive	Cognitive/social	Cognitive/social/physical Emotional/spiritual	Cognitive/social/physical Emotional/spiritual
Partistic	Halfistic	Holistic	Transcendental
Fight	Fumble	Flow	Blossom

Traditional Teaching	**Cogmotic Animation**	**Tri-dimensional Facilitation**
Emphasize separateness	Emphasize wholeness	Emphasize oneness
Confuse uniformity with unity	Welcome diversity	Diversity and unity
Trivialise the individual	Exalt the individual	Exalt God
Dull the creative spirit	Nurture & celebrate creativity	Liberate & affirm creative spirit
Be competitive	Be collaborative	Be connected
Restrict	Liberate	Liberate
Block human energy	Release human energy	Focus human energy
Be static and rigid	Be dynamic and flexible	Be responsive and deliberate
One best way	Many different ways	Diverse excellence
Linear and hierarchical	Omni-directional and mutual	3-dimensional and participatory
Feel unnatural	Feel natural and free	Free, secure
Audio/visual	Multi-perceptual	Transcendent
Hard work	Joyful participation	Authentic significance
Outcome orientated	Process orientated	Process toward outcome

Table 2.9 Comparison between Cogmotics (Copley 2000a) and Tri-dimensional Learning

The characteristics of Tri-dimensional Facilitation of Learning which are found in the shaded areas of the above table become increasingly significant as the focus of my research narrows to facilitating learning through holistic learning strategies. The organization and function of the brain, as a whole, and its multiple processes of thinking are described in literature and explored in field research in many ways. I organise the considerations of this literature into five categories based on their perspectives of the brain. The literature has frequent references, too many to begin to cite, for the Multiple Intelligence Theory (Gardner 1983, 1987, 1999, Armstrong 1987, 1998, 1994), the Modular Brain Theory (Restrak 1979, 1988, 1994, Harth 1982, Bergland 1985, Pinker 1997, and also Gardner 1987, duality models including hemisphericity, vertical and lateral thinking (De Bono 1973,

1976, 1982, 1985), and the Triune Brain Model (MacLean 1952). There is less frequent reference to the Four Quadrant Model (Herrmann 1994) but I agree with Hulme (1996) that its metaphoric and non-technical presentation makes it user-friendly so I choose it for framing much of my research. Another reason to choose the Four Quadrant Model is inclusiveness; Herrmann folds into it understanding from other models and theories.

Several physiological aspects of brain function are basic understanding to the workings of the brain which underpin brain-based facilitation of learning: the networking of dendrites and creation and maintenance of synapses at the ends of neurons (brain cells), the vastness of the number of neurons, the physical division of the brain into left and right hemispheres connected by the *corpus collosum* which can be surgically severed but can also be bridged by dendrites collecting across the divide (Cohen 2006) and the long-known tri-partic structure (neo-cortex, mid-brain and brain stem). Recent attention given to the limbic brain, especially in relation to emotions, emotional memories, emotional intelligence (Goleman 1996, 1998) and spiritual intelligence (Zohar & Marshal 2000) as well as functional alterations that are triggered by changes in hormones that bath the brain cells are also pertinent to considerations of "memory" and, ultimately "selfhood".

Memory is organised in one part of the brain for ordinary input, and in another part for emotionally-charged input. The concept of memory being a recalling of knowledge or experience that is filed in a bush called "neuron network *x*" is probably less congruent with known brain functioning than the idea of memory a hurried searching "all over the brain," impulses scurrying along gelatinous impressions previously formed by neuronal connections, comparing pattern after pattern, getting to something that it is "like" (Gravett 2005:35) before it gets to the previous impression of what the knowledge or experience was – all in a matter of seconds (or a few more seconds if the learner is older.) As such, the memory is never quite the same as the first impression, because, of course, the brain is different the second time it constructs the knowledge or experience. As such, the memory of one individual differs from the memory of the same knowledge or experience of another individual.

Spirituality has many nuances of meaning but also several loci of source. Spirituality refers to the meta-physical aspects of personhood; these may be result of the connections of the individual 1) with a cosmic, something or someone at a point outside of self, 2) with a superior self deep within the individual or 3) with God outside of self and transforming self by personal encounter. The third position, which finds tenuous inference in Bruner, Gardner and Csikszentmihalyi and specific reference in Plunkett, Campolo and Copley, is selected as the position of this study.

Tri-dimensionality applies to the process of learning as each of three sub-selves – social, spiritual and whole-brain – responds, grows and develops through learning experiences. Within tri-dimensional learning the triune model of Johnston (1996) identifies the "processing self", the "performing self" and the "developing self" each as components of the mind. In the curricular reform of the global Church of the

Nazarene, the target outcomes are organised into four domains – the 4 Cs – content, competency, character and context.

Learning environments include the many physical aspects of settings in which teaching/learning encounters take place which may or may not be under the control of the facilitator. The attitudes of learners and facilitators and the relationships between each of them are the most important elements of a learning environment as inferred by Laubach (1960), Laubach *et al* (1991) Imel (1995), Freire (1970, 1994, 1996) and others. In most of the models cited of spiritual learning environments, *critical reflection* as the "spiritual activity" of applying Scripture to life as divinely intended is like the *critical reflection* as seen in adult learning literature which is labelled as a "cognitive activity". Out of hundreds of "spiritual learning environments" which exist or have existed, nine were chosen for brief presentation because of closeness of fit they offer in relation to the values and goals of the population of learners in my research: Moses, the synagogue, Jesus Christ, the Apostles, Augustine, Martin Luther, Ignatius of Loyola, John Wesley, and TEE. They are qualified as "spiritual" because of the deliberate inclusion of God in the learning environment, the inclusion of spiritual learning goals, and the spiritual quality of the learning materials, particularly the Scriptures.

I explore "cooperative learning groups" as a learning strategy for adults like those in existing models – the cultural circles of Freire, the classes, bands and leaders meetings of Wesley, the face-to-face sessions of TEE. Fundamentals of cooperative learning groups include discussions of several types and the abilities of facilitators in conducting them, reflecting, again, the importance of the facilitators in learning settings. Several African educators -- Letseka (2000), Goduka (2000), Mkabela and Luthuli (1997), Gatimu, Gachegoh, Oyiengo, Kithome, Suwa (1997) – see cooperative learning groups and holistic education as very good and necessary for African learners.

I identify at least some of the multiple groups to which the learners of this PAR research belong – Africans, Christians, Nazarenes, Tribal, Bi- or Multi-Lingual, Mozambican. In-group biases, which popularly might be called "group loyalty," can pull the learners first toward one group then another, especially in collectivistic societies. Besides these groups, they are also seen as "learners" and "leaders-in-development", and the fact that they also belong to these groups conditions the expectations of members of the groups to which they belong. Group consensus as a process of approving change is significant not only to the social sub-selves of a person, but also relating to the spiritual self. Some African educators (Gatimu *et al* 1997:26) hold that adult learners are so influenced by community norms and values that they do not accept changes that would isolate from peer groups or local community.

Learning strategies are deliberately chosen activities to facilitate learning in a particular population of learners toward identified and intended outcomes. *Holistic learning strategies* stimulate whole brain learning i.e. learning taking place in both hemispheres, i.e. in all four quadrants. In explaining and defining thirty-one different learning strategies, I use the metaphoric four-quadrant brain model of Herrmann, enhanced by the knowledge from other whole-brain theorists and neuro-scientists, to make informed guesses as to the kind of mental activities

involved in each learning strategy in order to assign each one to one quadrant or more than one. The learning strategies which are like rings of a telescope, one within another, are those most likely to be fully whole-brain, i.e. potentially stimulating to all four quadrants of the brain. These learning strategies are the "holistic learning strategies" and the focus of the research: group discussions, praxis, rehearsing integrity, classical spiritual disciplines, singing for learning, cooperative learning groups and teamwork.

2.7.2 Preliminary Findings: Application of Literature to Research Questions

My research hopes to speak relevantly by attempting to provide theoretical and empirical evidence toward answers to two preliminary and one major research question for three[18] specific audiences – Nazarene educators; all those interested in Theological Education by Extension; and Brookfield and other adult learning theorists. The answers at this point, based on the literature review, are partial – to be moved towards completion by means of the results from the use of other research instruments in the research design which follows in Chapter 3.

The first research question is, "*Do* holistic learning strategies actually facilitate adult learning?" Strategies used in many models of adult learning give considerable evidence from practice that, even though they were not called "holistic learning strategies", strategies which conform to my research definition of "holistic learning strategies" have been used with success for many centuries. **Discussions** of several types, which operate using democratic norms of mutual respect and equality, utilize critical reflection, reasoning, life application, articulation of position, and listening to position of others on the same truths, are widely used in adult learning today and were utilized in the models of Freire, Wesley bands, and Jesus with the Apostles which are known as successful in teaching adults. These same models also utilized other activities, directionally and deliberately: **cooperative learning groups, praxis**, **teamwork**, and **rehearsing integrity***: hero-modelling / role-modelling / role-taking / self-sacrifice. Martin Luther and John and Charles Wesley did not call their hymn-singing "**singing for learning**" but they carefully put doctrine into easy and pleasing melodies which affected their learners holistically. The activities of solitude, silence, fasting, contemplative prayer, meditation, reflection, spiritual reading, church going and others considered **classical spiritual disciplines** were not only "life-styles" or "vows" of religious groups, but they also match the definition of "holistic learning strategies". Other learning modes are embedded in them, like "rehearsing integrity", "self-sacrifice", "hero-modelling", and "role-modelling".

The second research question is "**To what extent** do holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers? The question is conditioned by the fact that the strategies are not being employed by highly skilled professions but by trainers whose level of formal schooling is "minimal" or even "low" by Western standards. Theoretically, according to Brookfield (1986:149) the fact of their schooling does not preclude the advancement of *bona fida* learning. According to linguistic and cultural theories of learning, the fact that the trainers are from the same ethnic group as their learners should benefit learning conditions. I hypothesize that the trainers who belong to very similar groups as the learners are able to very fully "speak

their language," not only in linguistic terms, but terms of application to current situations, in-group pressures and biases, contextualization of Scripture, and future implications. These trainers who are "their own" should not, therefore, limit the extent to which learning is advanced.

Since there was no base-line assessment on the population of learners, the *extent* to which learning is advanced is not quantifiable by comparing a beginning numerical measurement with another measurement taken later. Therefore, *extent* must be interpreted inferentially from words like "poorly" and "greatly". This subjective quantification is targeted in the empirical research. So "to what extent" is not answered in this theoretical portion, but is part of the field research.

The third and principal research question is "***How*** do holistic learning strategies facilitate learning?" I postulate that the words used to describe how the brain functions also apply to holistic learning strategies to help describe how they function to facilitate learning. Among the key words to consider are two sets of words:
- patterning, categorizing and congruent [19]
- relating, connecting and integral.

I propose that holistic learning strategies facilitate adult learning by assisting the learner to make the sub-selves of his or her personhood "congruent" and "integral". The basic brain operations to produce congruency and integrity are patterning, categorizing, relating and connecting.

The brain is always *relating* new impulse to previous impulse, new knowledge to previous knowledge, new images to previous images, comparing the relation of one to another. Synapses are formed to continually connect one dendrite to other dendrites; a greatly magnified healthy adult brain "looks like a dense forest of interlocking branches" (Cohen), everything connected to everything (Restack) like the points of a cube (Pinker). In a parallel way, holistic learning strategies also relate and connect different kinds of experiences which are stimulating the brain, relating new to previous, like to like, unlike to unlike, connecting every experience to every other experience. The result of greater relatedness and connectedness in the brain includes "greater reconciliation between thoughts and feelings" (Cohen 2006); "Making sense out of anything depends upon relating one thing with another, upon discovering or imposing order" (Storr 1992). I want to call this result "greater integrity". In the learning strategy "rehearsing integrity" learners relate intention to action, they connect intention to action, and they reconcile intention with action, producing in them a thorough personal integrity, from the brain level to inter-personal relations, to spiritual relations. In "singing for learning" learners connect the coded meanings of the words to concepts and ideals; they relate the words to rhythm and tone; they activate right and left hemispheres, upper and lower quadrants, establishing dendrite networks, synaptic linkages; they are moved; music produces intrinsic satisfaction (Storr 1992). Brookfield (1995) calls for more attention to the interaction between emotion and cognition, a call for more interaction between cerebral and limbic brains, left and right hemispheres.

---

[19] *In geometry angles may be equal and congruent to other angles; if triangles are congruent then the lines and the angles which compose them are equal and congruent. When laid over one another, the shapes match each other.*

The brain is also always pattern-seeking, pattern-making, and pattern-identifying. Matching and categorizing are kinds of patterning. Even though our empirical understanding of how categories are organised in the brain is still lacking, we do understand "categorizing" on a macro level as sorting according to type. Learning strategies are experienced at inter-personal and intra-personal levels but the assignments to the four brain quadrants are based on typical activities at the level of the brain. I am trying to postulate parallelism between what we carry out at what I am calling "macro levels" (levels which are observable to the naked eye) and what the brain carries out at "micro levels" (levels which require brain-imagery machinery to observe)" positioning myself within the "cognitive revolution".

Hence, I return to the concept of personhood becoming "congruent" as the result of holistic learning strategies. Caine and Caine (1994:144) refer to "doubleplanedness" that is a kind of "congruence". In congruent (tri-dimensional) personhood, the selves "match" each other, are "congruent" to each other, there is fit between the social selves, between the social self and the spiritual self and the whole-brain self. There is peace because their centres and patterns overlap without edges causing friction. These selves categorise using the same criteria, and these categorisations are patterns repeated, practiced, rehearsed, known and known again within holistic learning strategies. The person is also "integral" which has to do with pureness of essence; a baby boy is 100% human, integrally human, even though he cannot walk or talk (yet). Relating and connecting results in fullness, lack of deficiency, no holes, completeness, fulfilment, i.e. integrity, a person, fully connected, is in touch with the selves of his or her personhood and God; inter-personal relationships are in tact; life is consistent, a well integrated whole. Holistic learning strategies assist learners to "make themselves whole".

This explanation reminds me of readings I did five years ago and actually surprises me; after these years of wide reviews of literature reading, researching and analysis, I did not expect to find myself aligned with statements I quoted at the outset of my literature review: "Smuts (1926) dealt with the fundamental tendency of 'whole-making'" while Storr (1992:175) declares that "creating wholes" is the "essence of human nature". However, all of the other literature I reviewed puts me on pathways which meander back to this position – whole-making.

In theory, then, holistic learning strategies facilitate adult learning by moving adults toward congruency and integrity in their lives. These strategies used within cooperative learning groups magnify the effect of strategies by multiplying the voices, increasing the weight of approval, and providing a safe, public, mini-society in which individuals can rehearse competencies of all types. When the learning environment is also spiritual, the effect is to magnify yet more greatly the effect of strategies by adding the weight of God's presence and His approval, and providing a theo-centric presence to relate to all of the sub-selves. Theoretically, then, the holistic learning strategies of successful models of adult learning as described in the literature give evidence that these strategies **do** facilitate adult learning. The empirical research will either corroborate or negate this evidence found in literature.

Theoretically, the use of holistic learning strategies by minimally prepared trainers should not affect the extent to which they (holistic learning strategies) advance the

learning of leaders in development. The empirical studies, therefore, not the literature review, are the source of data for answering the second research question: "To what extent can holistic learning strategies advance the learning of leaders in development when used by minimally prepared trainers?"

From divergent disciplines, the literature converges on a plausible explanation for **how** holistic learning strategies facilitate adult learning. They facilitate learning by operating within the learner in ways that are parallel to the internal workings of the brain, that is by categorizing and by other forms of patterning which move the person toward greater congruence between the sub-selves of his or her personhood and by relating and connecting to produce a more integral self. This explanation effectively reduces the importance of "adult", towards supporting Brookfield's proposition that other variables other than the "adultness" of learners are of importance. In this explanation, the significant issues are more the health of the brain and its development, especially in terms of its connectedness, rather than the age of the learner. Continued physical, mental and social activity and "eating right" are good for the maintenance of brain activity (Donavon and Wonder 1994), (Restrak 1994), (Gardner 1997), (Ivan-Smith 2002), (Cabeza 2002) and (Cohen 2006).

In empirical research, statements from participants which indicate greater internal harmony, understanding, maturity, more behavioural connectedness will substantiate the theoretical evidence for this explanation. Quantitative data regarding the value of studying is also pertinent to this question of "how?".

In addition to seeking out more complete answers to the three research questions, there are a few other secondary intentions of this research: 1) to describe the research population accurately, 2) to refine and test the TEE model, 3) to observe how *collectivism* may factor into the learning experience of my population, 4) to respect the plea in the literature to move as close as possible to instruction in the mother tongues, and 5) to provide a public (written) platform for the many voices of learners and educators who participate with me in this Action Research. I have spent most of the last five years listening to them and reading their reflections and opinions. They have valuable contributions to make that many others, too, will want to hear.

Chapter 3: The Research Framework and Methodology: Participatory Action Research (PAR)
Framed as Arboric Research

3.1 Introduction

This research qualifies as Action Research (AR) in general and specifically as Participatory Action Research (PAR) Research. Action research has been around for fifty-plus years. Noffke (2002:14) refers to a "host of predecessors…which help us understand the diversity of meanings the term has acquired". Beyond diverse meanings of the terms Kemmis (1993:1) goes on to say that there are a variety of traditions [italics mine] of educational action research" and refers to waves of AR, including the ones in the 50s then the 70s which, he calls "de-natured", i.e. cautious in political stance, focusing on the methodological rather than the emancipatory aspects of the research. There is, then, wide difference in the effective aims of action research; the question in this regard is: "Who will be affected by the action and the research?"

Action research in education is, in the least, *good reflective educative practice* and that practice has been personally required of me for the thirty-five years that I have lived and taught in divergent contexts among diverse populations of the world. I resonate with Reason (2003:1) who says:

> Action research is an attitude toward enquiry, not just a methodology ….I do not separate my scientific enquiry from my life. For me it is really a quest for life, to understand life and to create what I call living knowledge – knowledge which is valid for the people with whom I work and for myself.

Zuber-Skerritt and Kalliath (2003) organize seven commonly shared values and principles of a culture of action learning and action research (ALAR) by using the acronym ACTIONS:

- *A* *dvancement of knowledge and learning*
- *C* *ollaboration*
- *T* *rust, truth and honesty*
- *I* *magination and a vision for excellence*
- *O* *penness*
- *N* *on-positivist assumptions and beliefs*
- *S* *uccess: Shared success*

Each aspect cited in the acronym characterizes my research as follows. My research contributes to the ***Advancement of knowledge and learning*** by scientifically describing a population about which little scientific research has been undertaken – adult learners in Mozambique – and by applying the findings to scholarly dialogue as described in Section 1.3.3 The Scholarly Rationale. The research questions the efficacy of the learning strategies used in the learning of these adults and attempts to refine by trial and retrial the model of Theological Education by Extension.

In relation to **Trust, truth and honesty** which make possible real **Collaboration**, these values should pre-exist, at least to a certain extent, within the community network of the Church of the Nazarene of which the researchers, learners and leaders are all a part since the church fosters these values. However, fostering values and putting them into practice *within* the several levels and *between* the several levels of the participants are not automatic so the PAR teams intentionally facilitate the deepening of trust, truth and honesty within the learning system. Rothwell (1999:20) maintains, "While the team facilitator helps the group to function cohesively, it is ultimately the responsibility of each team member to work toward that end…[of] improved morale and work satisfaction".

Kember (2000:27-28) reasons that a result of **Openness** is that the public scrutiny of the observation and evaluation cycles of action research bring theory and practice to closer accountability:

> The action research cycle incorporates systematic observation and evaluation. Outcomes of systematic enquiry are made public and subjected to normal criteria for scrutiny and acceptance. Action research does, then, contribute to both social practice and the development of theory. Its advocates claim that it brings theory closer to practice.

As discussed in the Contextual Rationale, Section 1.3.1, the Church of the Nazarene on a global level opened itself purposefully to narrow the gap between theory and practice in the Nazarene ministry. As the research in Mozambique is made public inside and outside the learning context, the process, the implemented products, and ultimately, the performance in ministry of the learners is continually assessed by a large and multi-layered audience. Verification by a multiple-level and multiple-voice consensus between the participants in a cyclical pattern as well as plausible explanations based on my interpretation of literature reviews attests to the "openness" of the research process.

Reason (2003) corroborates this procedure saying:

> Guidelines for action research suggest as a first principle that the authors explicitly address the qualities they believe relevant to their work and the choices they have made in their work, and also the authors explicitly connect their own judgments to discussions in current literature.

Already in the writings of Chapters 1 and 2 I have tried to consistently demonstrate involvement and connection to the current literature. In this regard, Action Research manifests a style of reporting as well as collecting data.

The next quality of Action Research is **Imagination and a vision for excellence.** Actually a lot of imagination was required to even begin research in Mozambique because there is very little experience in a research mode within the Church of the Nazarene in general and in Mozambique in particular. Imagining that holistic learning strategies could be implemented in remote centres of the country is not commonly envisioned. Yet it was the vision existent in the mind of educators who could see it well enough to describe it to me, and then project the image for others to see, too. Other participants who begin to see the vision in their own

imaginations willingly and sacrificially involve themselves to build it. The motivation for excellence has kept all the PAR team members and me at the task of taking the research to a stage of excellent public reporting.

Action research is characterized by ***Non-positivist assumptions and beliefs***. Positivist research, according to Kember (2000:10), 1) is scientific and employs experimental survey to verify or generate causal explanations and/or universal laws, 2) tests hypotheses and seeks generalisability through random sampling, 3) positions researcher as a neutral observer, 4) manipulates variables in experiment or holds them statistically constant.

In relation to these four positivist characteristics, the surveys conducted in my research generate descriptive and inferential data which add to understanding and plausible explanations, not causal explanations or universal laws. The testing of the model of Theological Education by Extension is for refinement not hypothesis testing. I am participant in the research process. The variables are dynamic variables of human social systems so none of these four characteristic describe my research. This shows that all of the qualities within the acronym of Zuber-Skerritt and Kalliath aptly describe my research.

In Chapter 1, I made reference to seven characteristics of Action Research worded by Kember (2000) which are included in Table 1.1. I mentioned that six of the seven are parcel of my research. Each of the characteristics is used below to introduce the further description of my project as Action Research (AR) in the seven following sub-sections.

3.1.1 Action Research as Social Practice

The social practice of concern in my project is multi-faceted because it is that of a whole learning system called IBNAL, so the social practice concerns the adult learner in his or her multiple contexts of life both in and out of the congregation which he or she leads; the social practice of the trainers of the learners (the monitors) towards the learners, towards the researchers and towards their administrators; and the social practice of the educator-PAR team members between themselves, in their interface with the trainers and administrators, and their less frequent social interface with the learners. The round table discussions which are such an integral practice of this research project facilitate the improvement of dialogue between the several contexts. The philosophy of my AR project agrees with Noffke (2002:21), i.e. that the role of AR is social transformation – in concerted efforts towards systemic change. I enjoy the spirit of Diez in Borda (1998:20): "Action Research is now a way of practicing Social Sciences by transforming the world with all those who wish to build their own history". My project predicts that the adult learners in the education system of the Church of the Nazarene in Mozambique are among those who wish "to build their own history" and, consequently, transform their world.

3.1.2 Action Research as Targeting Improvement

There is a broad spectrum of possibilities in identifying or defining the target for the types of *improvement* which might be gained by Action Research. According to action research projects described by McNiff, Lomax and Whitehead (1996) the

improvement might be the personal and/or professional development of teachers. Hollinswork and Sockett (1994:262) suggest that teacher research could go as far as to lead to educational reform by

- reducing the gap between research and practice;
- demonstrating the problematic nature of 'outsider' knowledge in directing teachers' work;
- emancipating educators from the positivist 'domination of thought' through their own understandings and actions;
- establishing the centrality of teacher-selves in research, challenging the privileged view of traditional research's 'objectivity,' and, therefore, hierarchies of knowledge; and
- showing how teacher researchers come to trust their own abilities to construct knowledge, to become meaning makers, and to improve their practices.

Undertaking AR *solely* for personal and/or professional development has the danger, pointed out by Noffke (2002:20), of providing "an avenue for the 'social engineering' of particular attitudes and dispositions among teachers to the exclusion of others, primarily the focus on technical questions of 'delivery' to the exclusion of questions of curriculum and social justice".

At the other end of the spectrum of action research are those like Freire (1970), Borda (1998), and Kemmis (1993:3) who aim: "to make strong and explicit connections between action research and social movement….calling it emancipatory or critical action research [which] sees the connection between social research and social life as intrinsic to research". Kemmis continues to describe these kinds of action research as being "relentless" in their attempts to improvement of conditions and to create "a form of collaborative learning by doing".

The spectrum within that which is called Action Research is broad – from improvement of practice within a narrow, even personal scope to transformation of a whole system. Personally, then I find that neither one nor the other end of the spectrum fits: if I undertake to only improve the capacities of the trainers in my system or the metacognitive sensibilities of all of us in the system, then I run the risk of engineering gains pertinent to a narrow learning context while inhibiting aspects of curricular import and the improvement of social justice which may have greater or at least broader significance. To posit my research in terms of Kemmis' *critical* or *emancipatory action research* would also not be an accurate fit even though in the pursuance of facilitating learning to all there exists within my teams a rather relentless "trying to understand and improve the way things are in relation to how they could be better and at creating a form of collaborative learning by doing". The overall intention of my research is more directed at the learner-participants than at "the system".

Gumbo (2003:3) says "PAR [participatory action research] is essentially about 'full' rather than 'pseudo' or partial participation; it is an empowering participation". In these senses, it is quite accurate to call my research *Participatory Action Research* (PAR) to clarify the distance it has from in-class practice and to

accentuate the participation which ascribes to be *full*. Within outcomes embraced by PAR is also the potential improvement described by Reason (2003:6) "the formation of communicative space…[this] may well be that the most important thing we can try to do in certain situations is to open, develop, maintain, encourage new and better forms of communication and dialogue".

My project does intend to create communicative space for wide participation. It also intends to improve the learning environment and the facilitation of the learning within that environment and to empower those within the social/educational system. Action research typically targets change of those in the project without targeting change of the system, Therefore, my research qualifies on several points to be accurately called "Participatory Action Research".

3.1.3 Action Research as Cyclical Process

While there are varying spheres of application and the intended outcomes within the practice of action research, the cycles of action and reflection are always part of the description. Kember (2000:25) explains that improvement is gained in the cyclical process "each incorporating lessons from previous cycles". Reason (2003:12) identifies the purpose of these cycles "to check our claims against what actually happens, to ask questions such as, 'Does it work?', 'Do we have evidence to support our claims?'". McLean (1995:66) points out another aspect of these cycles: "when one cycle of action research is completed, another begins, so it does not have a specific beginning and a specific end…….new research questions are considered as old ones are resolved". The reference to overlap and unintended outcomes of action research may refer to the dynamic nature of the process. Ziegler (2002:4) enthusiastically uses and teaches action research yet she warns that it is "unpredictable and untidy". McNiff, Lomax and Whitehead (1996:51) also speak of the "overlap, retracing steps, reviewing, redirection and refocusing…anything but sequential" in the action research process and emphasize the need for the researcher to be "very methodical and on task".

The cyclical nature certainly counters the linear nature of positivistic research. However, just because it is not tidy or linear does not mean that action research is not valid, effective or reliable. The quality of action research is measured by standards which are discussed at the end of this chapter.

3.1.4 Action Research as Systematic Enquiry

Enquiry (UK) or *inquiry (USA)*, depending on geographic context, both indicate the action that questions, examines and probes, seeking truth and accuracy. The motivation for the enquiry is not specified. The quality of the enquiry *is* specified; the enquiry is *systematic*, i.e. it is planned, purposed, and deliberate.

Besides *enquiry and systematic* Kember (2000:148) are *pursued*; pursuit is the continuing, on-going and deliberate movement of the whole process. McLean (1995:ix) phrase this pursuit as "a long-term commitment to action research…we begin using the process, [we] stop searching for 'the' answer and begin examining our current and future practices in a systematic way".

There are four loops in the spiralling figure below which represents my PAR project. Each loop includes planning – action – reflection – cycles of research by the various PAR teams in Mozambique. Figure 3.1 below illustrates this.

In my research the spiral is upward bound, holistic learning strategies functioning within a holistic educational system focused ever "upward" on improving learning by means of strategies that are ever more appropriate and relevant to the learners in a holistic system that is ever more coherent and consistent at all levels. The spiral in Figure 3.1 indicates the intent for my PAR project to be pursued over time.

Figure 3.1   Cycles of Research of The Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach

The systematic enquiry took the form of literature reviews, e-mailed and face-to-face Interviews, critical discourse (which I have identified as round table discussions and which implies critical listening), textual analysis, hybrid surveys, video and still photos, and site visits. The plan for carrying out this Participatory Action Research (PAR) was phased in relation to collection, application, assessment and reformation, as illustrated also by the spiral in Figure 3.1. The personnel of the PAR teams varied from team to team, and I led each of them:

Phase One A: 05/2000 – 8/2000 (Key Activity – Reflective Planning)
- Formation of PAR 1
- Preliminary data collection and analysis
- Refinements in TEE model and Nazarene extension model

Phase One B: 9/2000 – 12/2000 (Key Activity – Reflective Learning)
- Formation of PAR 2 as first learners
- Using all holistic learning strategies with PAR 2
- Deployment of PAR 2 to the field
- Re-assessment by PAR 1
- Taking holistic learning strategies to the field
- Taking monitor training to the field, to XaiXai

Phase Two: 1/2001 – 05/2001 (Key Activity – Reflective Writing)
- Formation of PAR 3 in Maputo for continuing data collection and assessment
- PAR 3 advisors: grant-writing
- PAR 2 begin data collection in remote centres

Phase Three A: 5/2001 – 06/2002 (Key Activity – Responsive Praxis)
- Data collection through monitor training across Mozambique
- Facilitation of holistic learning strategies throughout system by production of written materials to support monitors in their learning settings

Phase Three B: 07/2002—12/2002 (Key Activity – Reflective Listening)
- PAR teams 1, 2, 3 and 4 in two action learningshops
- Multiple groups assess processes and products of action learning activities
- Formation of PAR 5

Phase Four: 01/2003 – Present (Reflective & Responsive Empowerment)
- PAR 5 in repeated assessment of learning strategies and learning environments in the network via site visits, Delphi technique,
- Extensive assessment via hybrid surveys for crystallization of findings

PAR TEAM 1: 5/2000 – 12/2000 – Margaret Scott, research coordinator
Ken Walker, Paulo Sueia, Simeão Mandlate

Advisors: Jon Scott, Filimão Chambo,

PAR TEAM 2: 9/2000 - 5/2001 – M Scott, research coordinator

12 Selected Mozambican diploma-level graduates, Albino Banda, Glória Macie, Alberto Caetano, Orlando Jofesse, David Paiva, José Vitorino, Questa Zeca, Catarina Tovele, Rute Matombe, Laura Neves

Advisors: J Scott, K Walker, P Sueia, S Mandlate

PAR TEAM 3: 01/2001 – 5/2001 – M Scott, research coordinator
Volunteer Mozambican diploma-level graduates

Advisors: K Walker, P Sueia, Eugénio Duarte, J Scott

PAR TEAM 4: 6/2001 – 12/2002 – M Scott, research coordinator
F Chambo, Bonifácio Mirashi, and First 7 Lead Facilitators: A Banda, G Macie, Elaine Perkins, Phil Troutman, Manuel Vale Afonso, João Manonga, L Mahalambe, Jr., J Scott

Advisors: K Walker, P Sueia, Dave Restrick

PAR TEAM 5: 12/2002 – 12/2005 – M Scott, research coordinator
F Chambo, J Scott and Lead Facilitators: A Banda, G Macie, M Afonso, J Manonga, J Langa, Enoque Sombreiro, L Mahalambe, Jr.

Advisors: K Walker, B Mirashi, P Sueia, D Restrick

In consideration of the question of qualitative vs. quantitative research techniques, action research may use either or both. Vulliamy (in Vulliamy, Lewin & Stephens 1990:17) observes:

Qualitative research techniques are especially suited to the early stages of the implementation of an innovation, whilst more quantitative measures of

outcomes may be required to assess the impact of an innovation, once it has been effectively implemented.

My research was carried out over several years of repeating cycles in the midst of the implementation of more than one innovation. From the outset the plan was to utilize mixed methods. Qualitative research tools were used during the first phases. In the last phase a hybrid survey which would yield qualitative description results as well as some quantitative data to provide a more rigorous base of empirical data for the final analyses.

3.1.5 Action Research as a Reflective Process

Knowing how to be reflective is not an automatic skill for educators, but it can be learned. McLean (1995:3) points out that in action research we evaluate "the consequences of educational decisions and adjust practice to maximize effectiveness". But, practioners who facilitate learning reflect on many aspects other than educational decisions. Jensen (1998:86) advises practioners on how to link action research to brain-compatible learning in learning environment by reflecting on questions like the following:

- Are your teaching approaches flexible, individualized based on multiple learning styles, novel, and interesting?
- Do you ask students to work in teams?
- Are your assignments fun, realistic, complex and rich?
- Do you ensure that students receive lots of feedback on a daily basis?"

On-line comment (http://www.scu.edu.au/schools/gcm/ar/arp/aandr.html) about the rigor that comes from critical reflection through repeating cycles of reflection in action research says [italics mine]: "critical reflection in each cycle provides many chances to correct errors…where the critical reflection is characterized by a *vigorous search for disconfirming evidence*". Reflection during and after data collection of content (or discourse or observations) includes deliberate focus on content and context via actions like McMorland (2003) identifies in an acronym which reads REFLECT:

Remember,
Enquire,
Feel,
Listen,
Engage,
Capture,
Trust and Translate into action

There is a time in the research process when *hard* or *rigorous* rightly describes. These actions cited above in the acrostic by McMorland may appear to be *soft* by comparison, however, action research, particularly *participatory* action research, is embedded in a multi-levelled social context. Encouraging participants all the

levels to remain open with me and other PAR team members in the reflective process, requires a relationship in which trusting engagement may take place such that *soft* is probably the necessary perception to encourage their active and open participation.

Critical analysis may be carried out by individuals in the research process. Then *vigorous search for disconfirming evidence* is at the heart of the activity. Starting from the eight verbs in the McMorland acronym, I assign to each one corollary data analysis techniques (Smit 2004) which I incorporate into the data analysis of my PAR project in Mozambique.

Remember: applying memory while always seeking to identify similarities and differences while executing textual analysis of notes, memos, transcripts, and visual analysis of photos and videos

Enquire: critical discourse with participants at all levels; constant comparisons to identify patterns, major themes and to ensure open relationships

Feel: continuous reflection on impressions and relationships over time

Listen: attention and annotation on pace, stresses, volume, non-verbal clues as well as content analysis; what do the stories really mean?

Engage: critical analysis: Who talks? Who doesn't? Why and why not? What is the non-verbal statement involved in the answers to these questions? Who is being allowed to be a participant? Give "voice" and direct access to all via response cards which is called "Delphi technique".

Capture: analyze essence of unplanned data from informal personal encounters and on-the-spot data capture, hand counting, spontaneous feedback from group discourse, etc.

Trust: analyze progression in openness / closedness; identify breakdowns and consider solutions for next phase.

Translate into action: measure which participants carry through on actions promised, including reports.

These eight headings introduce many details about the *actions* which are embedded in the process of enquiry and analysis towards answering the research questions. A part of the rigor is resultant of the consistency of such reflective practices. Engaging, capturing, listening in an ambient of trust where feelings are permitted to be expressed, repeating these practices again and again first in one setting of the learning system, then another, until, like a crystal in formation, layer after layer, the findings begin to harden; the findings "crystalise".

3.1.6 Action Research as Participative

As Kember states, action research may be participative in general, however, there is definitely variance from project to project in the degree of participation or the breadth of participation. In contrast to positivistic research, AR is open and non-exclusive as the researcher shares the process with others. In relation to teachers enquiries as researchers they invite other practioners to comment as *critical friends* on the problems or solutions; that is not what I am doing. In reference to action research which adds *participatory* to its title, Gumbo (2003:9) says, "PAR is also not a selfish exercise to let only the professional researcher learn from the research, or largely other researchers….It is rather a co-learning exercise in which the participants, the practitioners also gain and learn from the research". All of these statements relate to the *openness* found in the acronym of Zuber-Skerrit and Kalliath cited previously. Openness includes transparency in process, exposure of problems and failures and revelation of successes.

Diez in Borda (1998:20) identifies uncommon results of this participation in action research by using uncommon terms – a *bond of knowledge*, a *meeting-point*, a *guarantee* and a *talisman*:

> Action Research is also here as a bond of knowledge between people born on opposite shores, a meeting-point for us to work together, a guarantee of civic participation, a talisman against the curse of indifference and indolence.

Maybe because of my years of working alongside different groups of people born on the opposite shore from me, I identify with and buy into the rhetoric Diez uses here. I can "see" this happening in Mozambique: I want my PAR project to result in a *bond of knowledge*, a *meeting-point*, a *guarantee* and a *talisman.*

The level of participation in *participatory* action research espouses to be, in some way, *greater,* than "just action research" hence the addition of the qualifier. The phraseology "shared success" (Zuber-Skerritt & Kalliath 2003) leads right back to this participation and also leads to some ethical questions which are discussed below in Section 3.2.

3.1.7 Action Research as Determined by Practitioners

In relation to Holistic Learning Strategies among Nazarene Adults in Mozambique, those in the first PAR team are all educators, trainers of pastors, i.e. "practitioners" within a specific category. The vision for the large project was born and structured in the minds of some of them, then shared and described it until others, including me, caught the vision, along with their enthusiasm, and their belief that it could be accomplished, as long as it was built together. The other stakeholders of the research include church administrators, church members and the learners themselves who are not practioners. In this aspect, my research was determined by some of the practioners, but not all of the practioners of the system. Some do not *own* it as framers but all involved can own it as a result of their input and can authentically own the results.

3.2 Practical and Ethical Considerations

Several limitations and ethical questions are inherent in Participatory Action Research and are not posed in the list of seven aspects from Kember discussed above but they are discussed in this section. Other practical and ethical considerations are particular to this, my PAR project.

3.2.1 Language

Language is a consideration in this project. The languages used in my research are English and Portuguese for the literature reviews and for my interface with the high- and intermediate-level practioners. Other languages are used in the local learning centres for interface between trainers-of-trainers and trainers and between trainers and adult learners.

Stephens asks himself two questions (1990:81): "How *biased* would be those asked by me to reflect upon their experiences? Would my sole use of English 'skew' the picture – that is present only the views of elite extroverts?" (What would be the difference between "elite extroverts" and "elite introverts"?) I must continually ask myself the first question, and critically access the data from this perspective in order to answer the question. Then I must ask "Will my use of Portuguese 'skew' the picture – that is present only the views of elite extroverts?" to which I may answer, the participants do not present views *only* to questions that I ask; they also present views to compatriots who live with them. This does not prevent "skew" but acknowledges that the participatory design aims to empower the voice of those infrequently heard.

3.2.2 Other Considerations

Stephens in Vulliamy, Lewin and Stephens (1990:79) points to a bias which must also be acknowledged from the outset of my research, namely the role of the expatriate in research in Africa:

> It would be a mistake, I believe, to think that it is only the expatriate who is the outsider in the research process. Or that he or she is necessarily at a disadvantage…it is probably true to say that, whereas any qualitative research involving interviews, participant observation and other forms of intervention in the daily lives of the community (whether one is a member of it or not) raises problems of an ethical nature, there are specific problems faced by individual researchers coming from one very different community to research another.

Whether bias is introduced by the fact that I am an expatriate or that others of my PAR team members are also "outsiders" to some of the participants, such bias does need to be recognized as a limitation of my research.

Noffke (2002:20) frames other ethical questions in terms of knowledge production as an outcome of AR:

- In whose interests is knowledge produced?
- Who "owns" and benefits from knowledge?
- To what extent can we begin to talk about collectivities instead of assuming proprietary notions of knowledge production?

I am challenged by these questions and want to answer them fairly since wide participation is the fibre of the project, wide inclusion should extend to ownership of the benefits from the knowledge production, starting off with a translation of it back into Portuguese so that they can read the collective results.

Reason (2003:17) says:

> Sometimes in action research what is most important is how we can help articulate voices that have been silenced. How do we draw people together in conversation when they were not before? How can we create space for people to articulate their world in the face of power structures which silence them?

I cannot change the fact that I am an expatriate doing research in Africa but I can draw participants together in conversation when they were not before. I can listen carefully to the voices which have been silenced in the past and report them accurately toward authentic articulation. I can actually empower them to participate, repeatedly, cyclically. I can include the view of many participants to publications which they can read. And, from a position of privilege, I can keep opening platforms for their continued expression within the system. With them I can build an inclusive learning system linking them to educational opportunities, therefore, give them benefit from the knowledge produced.

3.3 Arboric Research Framework

3.3.1 Introduction.

The PAR project in Mozambique is taking place within a human systems context which is, therefore dynamic. In seeking to identify the proper research design for the project, I considered framing it as *ethnographic research;* however, the study is not conducted in precisely the natural setting of the participants. The setting is close to their natural living settings and in education centres which are located in and affected by their local communities but it is not very *natural* for many of these learners to be in the role of learners again, and the PAR team members, for the most part, were not embedded in the wide context of the learning centres which constitute the sites of the use of holistic learning strategies. I considered *evaluation research* but the curriculum was not yet fully implemented so the field was not yet ready for evaluation; it would have been very difficult if not impossible to construct base lines for evaluation.

One of the realities of my research context is its fluidity. Middlewood, Coleman and Lumby (1999:19) compare the fluidity of research in a human system to a *snapshot:*

Attempting to assess the impact of research, a pragmatic differentiation can be made of how far conceptual thinking was influenced in the individual researcher and in others, and how far practice changed, but the perspective is a *snapshot* at one point in time which assesses impact so far, and which is consequently partial and imperfect….

The analogy of a *snapshot* certainly has applicability to research on human systems; perhaps one *frame* of a film or movie would be a more complete analogy which would accommodate the dynamic nature of the subject. This fluidity is inherent in the cyclical, repetitive nature of PAR. A film or movie is an encapturation of reality with accompanying sight, sound and movement, but the film itself is flat, celluloid, unchanging, and non-living. My research is not flat but multi-dimensional, not celluloid but organic, ever-changing towards a vision and is definitely living research. Therefore, I am opting to frame a design called "Arboric Research" because it promises accuracy for the focus on the learning taking place within the ever-changing structures of the human system of my study.

Arboric Research takes its name from and may be illustrated analogously and graphically by certain living organisms, particularly trees and grapevines. Both of these plants illustrate the dynamic nature of research on human systems but do so within the formation of a living structure which also captures the non-linearity that is also inherent in research human systems. Human systems over time bifurcate, branch out and need pruning in order not over-extend the life capacity of the system. Research on human systems can appear "messy" or "untidy" because of this tendency to bifurcate. In representing this aspect grapevines would have the advantage over trees since grapevines grow those twisty little spirals and their branches intertwine with each other which might better suit Participatory Action Research. But a careful look at the bushy, overlapping branches of several sizes of a mature tree for the "researcher" who is sitting in the "v" of the first bifurcation also sees non-linearity and certain untidiness in the growth pattern, so I chose a tree for illustration.

We may appreciate any individual part of a tree (or grapevine), i.e. the leaves, the shade or the fruit. However, while focusing on one part, we must also always keep in mind realities which do not lie within the momentary focus of the one part of the plant but which are affecting the part under observation. No part of the tree would be healthy if the roots were not actively taking in moisture and the internal systems were not all functioning to get nutrients and water to all parts. The variables of temperature and air critically affect the health of the part being studied. These factors must be controlled to avoid the death of the plant. Moisture at the proper level must be present to insure on-going life; hence, the whole picture is quite different than any one or even the sum of its parts.

Similar in effect, Kemmis (1993:4) comments about the relationships between the "micro" and the "macro" in social and educational life:

> If the 'macro' is conceptualized as a different order from the micro – as unanalyzable [sic] in the same terms – then it will be impossible adequately to conceptualize the relations between local and global change, between

research for the improvement of local practice and research for the development of universalizing theory.

The summary of Arboric Research in general as it might be applied to any human system was presented in Chapter 1. In Table 3.1 below, the rows with characteristics of Arboric Research are split apart in order to write interpretive comments fitting my particular research project into the dynamic, organic, living framework of the human system which is the educational system of the Church of the Nazarene in Mozambique. The Participatory Action Research is framed by the Arboric Research design.

ARBORIC RESEARCH DESIGN FOR
"A STUDY IN HOLISTIC LEARNING STRATEGIES FOR DEVELOPING LEADERS IN THE CHURCH OF THE NAZARENE IN MOZAMBIQUE

Design classification	*Empirical*	*Hybrid data*
	Quantitative & Qualitative	*Medium control*

This study called "A Study in Holistic Learning Strategies for Developing Leaders in the Church of the Nazarene in Mozambique" is empirical, both quantitative and qualitative, uses hybrid data and medium control.

Key research questions	*How do the parts impact the whole?*
	How does the whole impact the parts?
	How does the germ impact the mature and vice versa?
	What are the elements the environment and the relation of it to the whole and the whole to it?

The "whole" of my study is the Nazarene system of education in Mozambique which has two main branches: the residential Bible School where the trainers (monitors) are trained and the extension education network called "Instituto Biblico Nazareno na Africa Lusófono" (IBNAL).

The "parts" of my study are the people, the leaders and learners and the PAR team members, including me, all within the Nazarene system of education in Mozambique.

The "germ" of my study is the holistic learning occurring in the minds of the learners.

The "elements of the environment" are the varying contexts in which the leaders and learners of the Nazarene system of education in Mozambique live, work, minister and learn, not the least being the Church of the Nazarene.

More specialized design types	*Research questions represent varying domains of functionality such as "the four C's" of the learning domain: Content, Capacity, Character and Context.*

The domains of functionality represented in the research questions are:

- *"Do* holistic learning strategies facilitate learning?" The domain of functionality of this question is individual, within the brain of each one.

- *"To what extent* do holistic learning strategies facilitate learning? The domain of functionality of this question is individual and social in that some limitations to the "extent" are within the individual other limitations originate in the social contexts in which the individual is embedded.

- *"in the hands of minimally trained monitors"* The domain is academic or educational.

- *"How* do holistic learning strategies facilitate learning*?* The domain is scientific, belonging to shared, public scholarship.

Typical applications	*Multi-level assessment over time, in situ, of the satisfaction of the partners in the system community with the empowerment and functionality of the system which is described by community members; assessment of process management is pertinent.*

This research study utilizes both applications given above.

Meta-theory	*Critical observation of the whole instead of the parts plus integrative analysis are reliable because*
	A. every part impacts the whole;
	B. the whole impacts the parts;
	C. parts impact each other;
	D. isolation or dissection of the parts means
	    a. alteration of the natural state at best
	    b. crippling or death at worst.

This research study ascribes to this meta-theory.

Conceptualization / mode of reasoning	*What are the parts of a system which contribute to authentic functioning? Are there any blockages? Analogous to any complex plant or animal, the living, dynamic whole consists of the following:* *A. cycle of life; life from life; "chicken or egg?" –either may be chosen to begin dialogic observation* *B. fertilization; union, genetic coding;* *C. embryonic life: vulnerable, potential, immature in function and structure, different from its adult form;* *D. growth: dimensions;* *E. development: diversification of structure and achievement of function of all parts;* *F. renewal or rigidity-to-death*

In Chapter 5, this mode of questioning and reasoning is reported in detail.

Selection of cases / sampling	*Sampling intends to be extensive to all levels and to many parts of the whole; full participation encouraged.*

The selection of cases with each of the research tools utilized was open to every part of the system and each response was voluntary by self-selected participants.

Mode of observation/ sources of data	*All available data collection methods, including structured and semi-structured methods.*

This research project utilized several data collection methods: round table discussions, face-to-face and e-mailed interviews, textual analysis, literature reviews, site inspections, hybrid surveys, and photographic and video data capture.

Analysis	*Integrative, synthetic descriptions; comparative analysis, including relational, chronological and dialogical; descriptive statistical graphics including tables and examples.*

The analysis tools described above are the tools utilized in this PAR study.

Strengths	*High usefulness to the specific "whole" and all of its parts; affirmation of value, ownership and empowerment of the parts.*

The knowledge jointly produced has already given evidence to its usefulness to the whole Nazarene educational system in Mozambique and in other countries, and empowerment of the parts became evident in the role-taking of many learners as leaders in Phase Four of the project.

Limitations	*Possibility to access only approximate real "whole"; medium generalisability.*

I acknowledge these limitations.

Main sources of error	*Participant bias; sampling errors; selectivity effects.*

I acknowledge these main sources of error.

Table 3.1. Arboric Research Framework for A Study in Holistic Learning Strategies for Developing Leaders in the Church of the Nazarene in Mozambique [1]

There are four phases to my PAR project. Illustrated by the growth and maturation of a tree, the four phases correspond to the following images in Figure 3:2.

---

[1] *The format and section headings of this table are based on examples given in* Mouton (2002:147).

**ARBORIC RESEARCH FRAMEWORK OF
PARTICIPATORY ACTION RESEARCH PROJECT:
Holistic Learning Strategies for
Developing Nazarene Leaders in Mozambique**
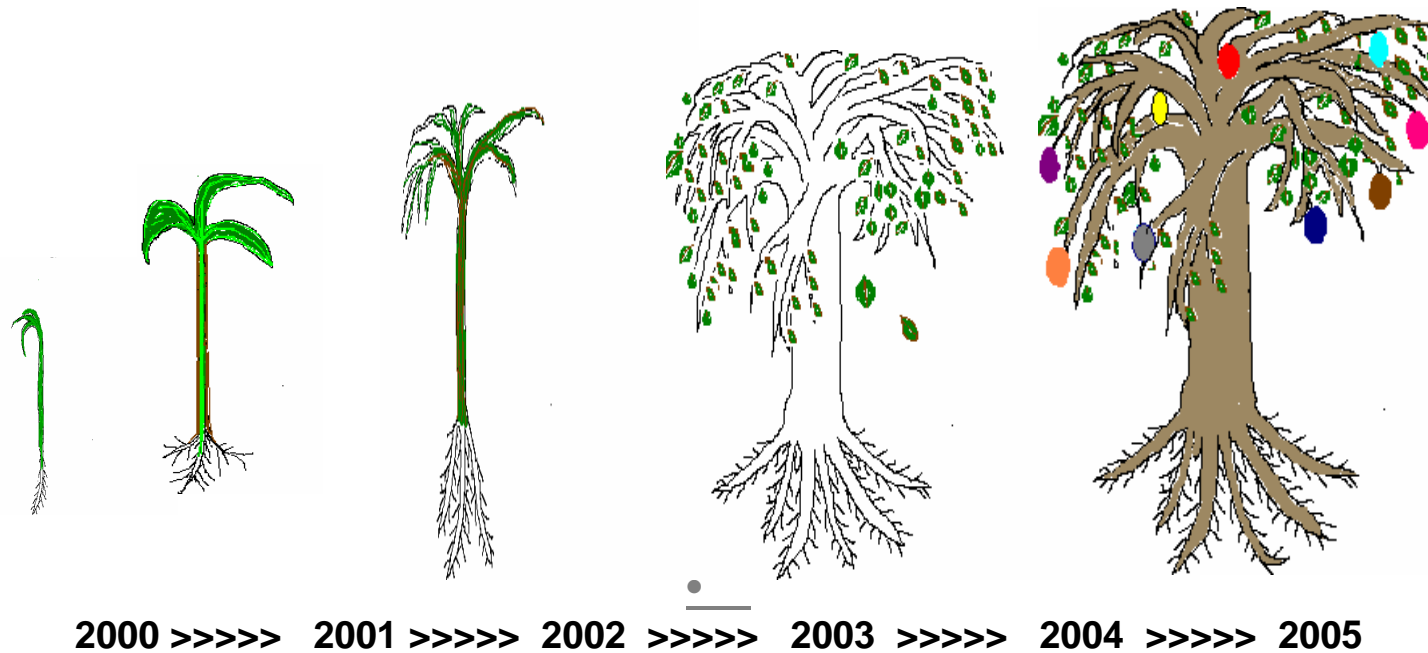
2000 >>>>>   2001 >>>>> 2002 >>>>> 2003 >>>>> 2004 >>>>> 2005

Figure 3.2 Trees in Development as Illustration of Arboric Research

Figure 3.2 shows trees of varying sizes and in varying stages of development. The learner population of this PAR study grew in size, especially during the period 2000-2001. Human systems also evolve and develop as trees do. Examining holistic learning strategies in 2000 and 2001 was limited by several factors – the small size of the population, the superficial understanding of holistic learning strategies on the part of PAR team members, the lack of infrastructure to do research systematically and the short experience of anyone in the system with the use of holistic learning strategies. The "tree" gained in maturity; by 2003, IBNAL, had gained potential to be recognized for what it was and still is, a holistic learning system in which pastors are trained to facilitate learning via holistic learning strategies.

Correlating Kemmis' terms to my PAR research within an arboric frame, I observe brain activity or learning in each individual as the "micro unit" and the holistic learning system (IBNAL) as the "macro unit", and the researchers consistently engage in critical and participatory discourse throughout. I think Kemmis might find resonance in Mozambique.

3.3.2   Application of the Framework to the Research in Mozambique

The "Soil and Roots" provide an analogy that is easy to follow: learners are found in a specific context from which they continue to draw, receiving nutrients and shape. The learners in this research have several different contexts discussed in Section 2.5.2. Each context is important, feeds the learners in different ways and influences their learning and the achievement of the various project outcomes, i.e. efficacy of learning strategies, and authentic voice and empowerment.

The "Stem and Leaves" form the conduit system of plants. They include infrastructures which are already solid and others still developing in which more movement takes place than in those already solid. Likewise, the infrastructures within human systems also vary in development, solidness, rigidity and "movement". The areas of human systems in which movement can take place are those in which there is enough pliability or softness to permit change.

The stem of a tree starts out pliable and soft, vulnerable to injury and infestation, then the outside of the stem hardens as the protective outer layer of the bark covers over the living inner structures where growth and development keep on taking place as long as the tree lives. Likewise, in the holistic learning environment of the adult learners in Mozambique, there are structures which are fixed. In Section 2.5.2 I identified the aspects of the context of the learners (and of the other participants) which are more rigid than the areas in which growth and development take place. I believe that most human systems are like that, that there are structures which harden but there are tender areas where growth and development may be encouraged to take place.

The leaves are part of the conduit system. In a tree they are the structures which absorb needed nutrients from the outside and also give off products. Likewise, the participants in this PAR research are open to the outside and take and give.

The "Sap" of any plant is the fluid essence that penetrates and gives growth; this is the three-dimensional learning which actually is taking place in the lives of the

learners. Holistic learning within holism was explored in Chapter 2 as the theoretical framework of the research. Three-dimensional learning is a specific kind of holistic learning that the project undertakes to facilitate through the use of holistic learning strategies which are relevant and pertinent to the whole population of learners. The essence of the findings on learning is reported in Chapter 5.

"**Cell-to-cell Processes"**, in any plant, including trees, constitute the life of the organism. As soon as there is no transfer, there is no life. In deciduous trees, leaves die and fall when a layer in the leaf stem cuts off transfer to the leaves. Similarly, the multi-directional interactivity between participants in the PAR project is the life of the research project: learners, facilitators and action researchers. The empirical study itself, which closely observes the interactivity between the "cells", i.e. the participants, is explored in Chapter 4.

"**Flowers and Fruit"** are the products of life processes of plants. Flowers develop into fruits. Results are the products of the life processes of a human structure. They are "evidences" of the processes which may be seen and described. The project results constitute Chapter 5. The **"Seed"** is the potential for the next generation. In the seed is all the life potential for furtherance. At the end of Chapter 5 recommendations for further study are described.

3.4 Summary of Research Instruments and the Plan

Participatory Action Research is the over-arching research design. The involvement of many other participants throughout the four phases of the research has been consistent. This type of research influences the style of reporting the data collected as well as the cyclical, reflective, dialogic aspects of the process itself of data collection and analysis which is conducted between the participants. It can appear untidy, especially to a non-participant, because of its fluid, spiral and non-linear qualities. The differences between PAR and positivistic types of research have similarity to *lateral thinking* verses *vertical thinking* (De Bono 1973), the latter which is linear, proceeding toward a quantifiable objective, known from the outset, the former which proceeds non-linearly, the pathway has jumps and gaps, toward a qualifiable objective, recognized by the individual(s) when it is encountered.

The tools of data collection and analysis of my Participatory Action Research were diverse and are reported in detail in Chapter 4; they included critical discourse with comparative analysis ever in search of patterns and repetitions which crystalise findings and *disconforming evidence* which precipitates reflection into plausible explanations. As introduced in Table 1.4, the data collection tools and analysis generate findings relative to the research questions. Table 3.2 below organises the same information, i.e. tools and research questions, on axes opposite those in Table 1.4 in order to show the status of the research reporting at the end of Chapter 3.

RESEARCH QUESTIONS:	1. Do holistic learning strategies facilitate adult learning?	2. To what extent can holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers?	3. If so, how do holistic learning strategies facilitate adult learning?	
Literature Reviews	✓		✓	2
Round Table Discussions	✓	✓	✓	3
Interviews: Direct and Via e-mail	✓	✓		2
Textual Analysis	✓	✓	✓	3
Hybrid Surveys	✓	✓	✓	3
Video and Still Photos	✓	✓	✓	3
Site visits	✓	✓	✓	3
	7	6	6	

Table 3.2 Relationships between the Tools of Data Collection and the Research Questions of A Study in Holistic Learning Strategies for Developing Leaders in the Church of the Nazarene in Mozambique

Discussion: At the end of the Literature Review reported in Chapter 2, theoretical answers to Questions numbered 1) and 3) in Table 3.2 are reported. Findings from six other tools, those utilized in the empirical study, would contribute to answering the second question, i.e., "**to what extent**". The answer to the first question, "***Do*** holistic learning strategies facilitate adult learning?" is reported at the end of Chapter 4 in the findings from six tools utilized in the empirical study. These same six tools of the empirical study might contribute to answering the second question at the end of Chapter 4, and five of the research tools in the empirical study might contribute to answering "**How** do holistic learning strategies facilitate adult learning?"

The ethical implications of Participatory Action Research condition the future of the knowledge produced, that it also be jointly accessible and beneficial, i.e. continue to be owned by the many participants. The quality standards of the research are upheld by the multiple layers of accountability which result from the openness inherent in the participatory process, by the conformity of the researchers to the parameters of the research type, Participatory Action Research, by verification through the use of several research instruments, by rigor in the use of multiple tools of analysis, by thorough, accurate and integrative reporting, and by responsiveness to the suggestions and orientations of my supervisor and the faculty support including the Dean of the Faculty of Education at the University of Pretoria.

Page 139: [1] Formatted	Unknown	05/05/2006 15:41:00
English (South Africa)		

Page 139: [1] Formatted	Unknown	05/05/2006 15:41:00
Font: (Default) Arial, 14 pt, Bold		

Page 139: [2] Formatted	Unknown	05/05/2006 15:41:00
English (South Africa)		

Page 139: [2] Formatted	Unknown	05/05/2006 15:41:00
English (South Africa)		

Page 139: [2] Formatted	Unknown	05/05/2006 15:41:00
Font: (Default) Arial, 14 pt, Bold		

Page 139: [3] Deleted	JON PAUL SCOTT	04/05/2006 19:26:00

The fundamental difference between
action research informed by a technical interest and
action research informed by a practical one
is that the former is concerned primarily with answering the questions:
What must I do to get the best results and how do I do it?
The latter also asks,
What must I do in order to understand what is happening in this social context?
(Savahl 1993:46).

Page 139: [4] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, Bold, English (South Africa)		

Page 139: [5] Formatted	Unknown	25/04/2006 06:35:00
Indent: Left: 0 pt, Hanging: 27 pt, Outline numbered + Level: 2 + Numbering Style: 1, 2, 3, … + Start at: 1 + Alignment: Left + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: Not at 36 pt + 78 pt		

Page 139: [6] Deleted	Unknown	

This research qualifies as Action Research (AR) in general and specifically as Participatory Action Research (PAR) Research.

Action Research is concerned with social practice.
Action Research is aimed towards improvement.
Action Research is a cyclical process.
Action Research is pursued by systematic enquiry.
Action Research is a reflective process.
Action Research is participative.
Action Research is determined by practitioners

 Practical and ethical considerations.
Language is a consideration in this project.
Other considerations.
Description of the training of the facilitators
Description of a normal group session

 The research design is Arboric. (maybe; I'm still not sure of this)
Introduction
The Soil and Roots.
The Stem and Leaves.
The Sap.
The Cell-to-cell Processes.
The Fruit.
The Seed.
139177
Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/1

Summary of research instruments and plan
Description of PAR team member selection

Phase 1: pilot studies; talk, talk, talk
Phase 2:
Phase 3

Page 139: [7] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 139: [8] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [9] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [9] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, Not Italic, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, Not Italic, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, Not Italic, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [10] Formatted	Unknown	26/04/2006 23:27:00
Font: Arial (W1), 12 pt, English (South Africa)		

Page 139: [11] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 139: [12] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 139: [13] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 139: [14] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 139: [15] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 139: [16] Change	Unknown	27/03/2006 09:16:00
Formatted Bullets and Numbering		

Page 139: [17] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

140177
Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/

Page 139: [18] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [18] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [18] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [19] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [19] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [20] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [20] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [21] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [21] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [22] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [22] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [23] Formatted	**Unknown**	**05/05/2006 15:41:00**
Font: 12 pt, English (South Africa)		
Page 139: [23] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 139: [24] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [25] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 139: [26] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [27] Deleted	**Unknown**	
Page 144: [28] Deleted	**Unknown**	**26/04/2006 23:54:00**
Holistic Learning Strategies, Mozambique	- - - -	Scott, MM to PH du Toit 3/14/2006
Page 144: [29] Formatted	**Unknown**	**28/03/2006 22:25:00**
List 3, Indent: First line: 18 pt, Right: 18 pt		
Page 141: [30] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 141: [30] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 141: [30] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 141: [31] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 141: [31] Formatted	**Unknown**	**26/04/2006 23:27:00**

141177
Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/1

Font: 12 pt, English (South Africa)

Page 141: [31] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [32] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [32] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [32] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [32] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [33] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [33] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

English (South Africa)

Page 141: [34] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, Bold, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, Bold, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [35] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, Bold, English (South Africa)

Page 141: [36] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [36] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [36] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: 12 pt, English (South Africa)

Page 141: [36] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: (Default) Arial, English (South Africa)

Page 141: [37] Formatted	**Unknown**	**26/04/2006 23:27:00**

Font: (Default) Arial, English (South Africa)

142177

Page 141: [37] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 141: [38] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 141: [38] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 141: [38] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 141: [38] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 141: [38] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 144: [39] Deleted	Unknown	26/04/2006 23:54:00

Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/14/2006

Page 144: [40] Formatted	Unknown	28/03/2006 22:25:00
List 3, Indent: First line: 18 pt, Right: 18 pt		

Page 143: [41] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 143: [41] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [42] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [43] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [43] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 143: [44] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font: Not Italic, Font color: Black, English (South Africa)		

Page 143: [44] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font color: Black, English (South Africa)		

Page 143: [44] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font color: Black, English (South Africa)		

Page 143: [45] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font: Arial, Font color: Black		

Page 143: [45] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font color: Black, English (South Africa)		

Page 143: [46] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00
Font: Arial, Font color: Black		

143177
Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/

Page 143: [46] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00

Font color: Black, English (South Africa)

Page 143: [47] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00

Font: Arial, Font color: Black

Page 143: [47] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00

Font color: Black, English (South Africa)

Page 143: [47] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00

Font color: Black, English (South Africa)

Page 143: [47] Formatted	JON PAUL SCOTT	04/05/2006 19:31:00

Font color: Black, English (South Africa)

Page 143: [48] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00

Font: 12 pt, English (South Africa)

Page 143: [48] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00

Font: 12 pt

Page 143: [49] Deleted	JON PAUL SCOTT	04/05/2006 19:29:00

.

There are four loops in the spiraling figure below which represents my PAR project. Each loop includes planning – action – reflection —- cycles of research by the various PAR teams in Mozambique. Figure 3.1 below illustrates this.

Figure 3.1   Cycles of Research of The Efficacy of Holistic Learning Strategies in
 the Development of Church Leaders in Mozambique: an Action Research Approach*Holistic Learning Strategies among Nazarene*
 Adults in Mozambique

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00

Font: 12 pt, English (South Africa)

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (South Africa)		

Page 143: [50] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, Italic, English (South Africa)		

Page 143: [51] Deleted	JON PAUL SCOTT	04/05/2006 19:28:00

In my research the spiral is upward bound, holistic learning strategies functioning within a holistic educational system focused ever "upward" on improving learning by means of strategies that are ever more appropriate and relevant to the learners in a holistic system that is ever more coherent and consistent at all levels.

Page 143: [52] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: 12 pt, English (U.S.)		

Page 143: [52] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt		

Page 143: [52] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt		

Page 143: [52] Formatted	JON PAUL SCOTT	04/05/2006 19:30:00
Font: Arial, 12 pt		

Page 144: [53] Deleted	Unknown	

145

Page 144: [54] Deleted	Unknown	26/04/2006 23:54:00

Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/14/2006

Page 144: [55] Formatted	Unknown	28/03/2006 22:25:00

List 3, Indent: First line: 18 pt, Right: 18 pt

Page 144: [56] Deleted	JON PAUL SCOTT	04/05/2006 19:31:00

The spiral in Figure 3.1 indicates the intent for my PAR project to be pursued over time.

Page 144: [57] Deleted	JON PAUL SCOTT	04/05/2006 19:28:00

.

———————————————————Section Break (Continuous)———————————————————

.

Page 144: [58] Formatted	JON PAUL SCOTT	04/05/2006 19:32:00

Font: Bold

Page 144: [59] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [60] Deleted	JON PAUL SCOTT	04/05/2006 19:27:00

———————————————————Section Break (Next Page)———————————————————

Page 144: [61] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [62] Deleted	Unknown	30/04/2006 18:14:00

3.1.4 Action Research as systematic enquiry

Enquiry (UK) or *inquiry (USA)*, depending on geographic context, both indicate the action that questions, examines and probes, seeking truth and accuracy. The motivation for the enquiry is not specified. The quality of the enquiry *is* specified; the enquiry is *systematic*, i.e. it is planned, purposed, and deliberate.

Besides *enquiry and systematic* Kember (2000:148) are *pursued*; pursuit is the continuing, on-going and deliberate movement of the whole process. McLean (1995:ix) phrase this pursuit as "a long-term commitment to action research…we begin using the process, [we] stop searching for 'the' answer and begin examining our current and future practices in a systematic way."

The spiral in Figure 3.1 indicates the intent for my PAR project to be pursued over time. The systematic enquiry will take the forms of literature reviews, e-mailed and face-to-face Interviews, critical discourse (which I have identified as

Page 144: [63] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [64] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [65] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 144: [66] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [67] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [68] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [69] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [70] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [71] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [72] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [73] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [74] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [75] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 144: [76] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 144: [77] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [78] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [79] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [80] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [81] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [82] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [83] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [84] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [85] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 144: [86] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [87] Change	**Unknown**	**27/03/2006 09:16:00**
Formatted Bullets and Numbering		
Page 144: [88] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 144: [89] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [90] Change	**Unknown**	**27/03/2006 09:16:00**
Formatted Bullets and Numbering		
Page 144: [91] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 144: [92] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [93] Change	**Unknown**	**27/03/2006 09:16:00**
Formatted Bullets and Numbering		
Page 144: [94] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [95] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 144: [96] Deleted	**Unknown**	
Page 144: [97] Formatted	**Unknown**	**27/04/2006 02:16:00**
Font: 11 pt		
Page 144: [98] Deleted	**Unknown**	**26/04/2006 23:54:00**
Holistic Learning Strategies, Mozambique - - - -		Scott, MM to PH du Toit 3/14/2
Page 144: [99] Formatted	**Unknown**	**28/03/2006 22:25:00**
List 3, Indent: First line: 18 pt, Right: 18 pt		
Page 144: [100] Formatted	**Unknown**	**28/03/2006 22:25:00**

Font: Arial, 9 pt

Page 145: [101] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [102] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 145: [103] Change	Unknown	27/03/2006 09:16:00
Formatted Bullets and Numbering		

Page 145: [104] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [105] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 145: [106] Change	Unknown	27/03/2006 09:16:00
Formatted Bullets and Numbering		

Page 145: [107] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [108] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [109] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 145: [110] Change	Unknown	27/03/2006 09:16:00
Formatted Bullets and Numbering		

Page 145: [111] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [112] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [113] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, Italian (Italy)		

Page 145: [114] Formatted	JON PAUL SCOTT	04/05/2006 19:50:00
Font: 11 pt, Italian (Italy)		

Page 145: [115] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [116] Formatted	JON PAUL SCOTT	04/05/2006 19:51:00
Font: 11 pt, English (South Africa)		

Page 145: [117] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [118] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [119] Formatted	JON PAUL SCOTT	04/05/2006 19:50:00
Font: 11 pt		

Page 145: [120] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [121] Formatted	JON PAUL SCOTT	04/05/2006 19:50:00
Font: 11 pt, English (South Africa)		

Page 145: [122] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [123] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 145: [124] Formatted	JON PAUL SCOTT	04/05/2006 19:50:00
Font: 11 pt, English (South Africa)		

Page 145: [125] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [126] Formatted	**JON PAUL SCOTT**	**04/05/2006 19:50:00**
Font: 11 pt, English (South Africa)		
Page 145: [127] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [128] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [129] Formatted	**JON PAUL SCOTT**	**04/05/2006 19:50:00**
Font: 11 pt, English (South Africa)		
Page 145: [130] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [131] Formatted	**JON PAUL SCOTT**	**04/05/2006 19:50:00**
Font: 11 pt, English (South Africa)		
Page 145: [132] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [133] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [134] Formatted	**JON PAUL SCOTT**	**04/05/2006 19:50:00**
Font: 11 pt		
Page 145: [135] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 145: [136] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 145: [137] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 145: [138] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 145: [139] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 144: [140] Deleted	**Unknown**	
Page 144: [141] Formatted	**Unknown**	**27/04/2006 02:16:00**
Font: 11 pt		
Page 144: [142] Deleted	**Unknown**	**26/04/2006 23:54:00**
Holistic Learning Strategies, Mozambique - - - - Scott, MM to PH du Toit 3/14/2		
Page 144: [143] Formatted	**Unknown**	**28/03/2006 22:25:00**
List 3, Indent: First line: 18 pt, Right: 18 pt		
Page 144: [144] Formatted	**Unknown**	**28/03/2006 22:25:00**
Font: Arial, 9 pt		
Page 144: [145] Deleted	**Unknown**	**26/04/2006 23:54:00**
Holistic Learning Strategies, Mozambique - - - - Scott, MM to PH du Toit 3/14/2		
Page 144: [146] Formatted	**Unknown**	**28/03/2006 22:25:00**
List 3, Indent: First line: 18 pt, Right: 18 pt		
Page 144: [147] Deleted	**Unknown**	**26/04/2006 23:54:00**

Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/14/2

Page 144: [148] Formatted	Unknown	28/03/2006 22:25:00
List 3, Indent: First line: 18 pt, Right: 18 pt		

Page 149: [149] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 149: [150] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 149: [151] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 149: [152] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 149: [153] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 149: [154] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 149: [155] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 149: [156] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 144: [157] Deleted	Unknown	

Page 144: [158] Deleted	Unknown	26/04/2006 23:54:00

Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/14/2

Page 144: [159] Formatted	Unknown	28/03/2006 22:25:00
List 3, Indent: First line: 18 pt, Right: 18 pt		

Page 154: [160] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 154: [161] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, Not Bold, English (South Africa)		

Page 154: [162] Formatted	Unknown	26/04/2006 23:27:00
Font: Not Bold, English (South Africa)		

Page 154: [163] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 154: [164] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 154: [165] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 154: [166] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, Not Bold, English (South Africa)		

Page 154: [167] Formatted	Unknown	26/04/2006 23:27:00
Font: Not Bold, English (South Africa)		

Page 154: [168] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 154: [169] Formatted	Unknown	26/04/2006 23:27:00
Font: 11 pt, English (South Africa)		

Page 154: [170] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [171] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [172] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [173] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [174] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 154: [175] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [176] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [177] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [178] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 154: [179] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [180] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [181] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: Not Bold, English (South Africa)		
Page 154: [182] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [183] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 154: [184] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [185] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [186] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [187] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 11 pt, English (South Africa)		
Page 154: [188] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [189] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Not Bold, English (South Africa)		
Page 154: [190] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [191] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [192] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 154: [193] Formatted	**Unknown**	**03/04/2006 22:59:00**
Font: 10 pt		
Page 154: [194] Formatted	**Unknown**	**03/04/2006 22:59:00**

Font: 10 pt, Not Italic

Page 154: [195] Formatted	Unknown	03/04/2006 22:59:00

Font: 10 pt

Page 144: [196] Deleted	Unknown	

Page 144: [197] Formatted	Unknown	27/04/2006 02:16:00

Font: 11 pt

Page 144: [198] Deleted	Unknown	26/04/2006 23:54:00

Holistic Learning Strategies, Mozambique   - - - -   Scott, MM to PH du Toit 3/14/2

Page 144: [199] Formatted	Unknown	28/03/2006 22:25:00

List 3, Indent: First line: 18 pt, Right: 18 pt

Page 144: [200] Formatted	Unknown	28/03/2006 22:25:00

Font: Arial, 9 pt

Page 156: [201] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [201] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [201] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [202] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [203] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa), Not Highlight

Page 156: [203] Formatted	Unknown	26/04/2006 23:27:00

Font: Not Bold, English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [204] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, Bold, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, Bold, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: Not Bold, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa), Not Highlight		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [205] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [206] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [206] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [207] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		

Page 156: [207] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00
Font: 12 pt, English (South Africa)		

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 156: [208] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [209] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [210] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 157: [211] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [212] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [213] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [214] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [215] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [216] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [217] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [218] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [219] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [220] Formatted	Unknown	28/03/2006 15:05:00

 No bullets or numbering, Tabs: Not at 108 pt

Page 157: [221] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, Bold, English (South Africa)

Page 157: [222] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [223] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [224] Formatted	Unknown	26/04/2006 23:27:00

English (South Africa)

Page 157: [225] Formatted	Unknown	26/04/2006 23:27:00

Font: 12 pt, English (South Africa)

Page 157: [226] Formatted	Unknown	26/04/2006 23:27:00
English (South Africa)		
Page 157: [227] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [228] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [229] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Bold, English (South Africa)		
Page 157: [230] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [231] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [232] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [233] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [234] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [235] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [236] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Bold, English (South Africa)		
Page 157: [237] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, Bold, English (South Africa)		
Page 157: [238] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [239] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [240] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [241] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [242] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [243] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [244] Formatted	**Unknown**	**26/04/2006 23:27:00**
Font: 12 pt, English (South Africa)		
Page 157: [245] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 157: [246] Formatted	**Unknown**	**26/04/2006 23:27:00**
English (South Africa)		
Page 158: [247] Deleted	**Unknown**	**03/05/2006 00:01:00**

---Page Break---

Conclusions and Further Recommendations

A reflective discussion of

Methodological: break the 2nd good method; tell why you didn't use it
Substantive
Scientific: which is why I earn a PhD
 Recommendations for
Policy and practice
For further research: write paragraph abstracts; a quality study to determine…
Further development work (if applicable)

E.P.I.C. Experiential, Participatory, Image-Based, Community

E.P.I.C. Experiential, Participatory, Integrative, Cooperative

Strategies of learning which are holistic enhance character development regardless of the age of the learner, regardless of the learning preferences of the learner as long as the brain is healthy.

Questionnaires support or tear down the theory, so I probably need to do a wide-spread questionnaire to as many students and church leaders as possible.

We have a theme/goal in IBNAL "to be like Christ" and a theme hymn, "I want to Be Like Jesus. Do you want to be like Christ? Do you feel you are more like Christ this year than last year?

What experience this year (2004) brought you closer to Christ?

See Imel's Transformational learning article

Which brings me full cycle back to Sylvia Scribner's milkmen in their New York dairy, sorting out their deliveries of milk, cream, yogurt, and butter. They were engaged collectively (and expertly) in an 'oeurve' in the sense in which that term was discussed…the oeuvre in question—delivering dairy products in a huge city, the nearest supplier of which is at least fifty miles distant—s composed of hundreds of small 'thing,' small rebuses, ranging from the highly technical (providing regular tuberculosis testing for cows, for example) to the highly traditional (providing the products in canonical containers in traditional colors and flavors, and at a traditional time of day) (Bruner, 1996:158).

We seem to institutionalize knowledge in folklore, in myth, in historical records, eventually in libraries and constitutions, and now on hard disks. And in storing it we shape it to fit the myriad requirements of communal living, squeezing it into the shapes required for dictionaries, legal codes, pharmacopoeia, holy books, and the rest. In some deeply puzzling way, this stored knowledge, replete not only with information but with prescriptions for how to think about it, comes to shape mind (Bruner, 1996: 165).

So, in the end, while mind creates culture, culture also creates mind (Bruner, 1996: 166).

Application: 2nd certificate group How to be a good group, letter or story to leaders who may be new converts.

Development of wholeness within personhood

How? Or why does learning take place
Learner will it – will to be is greater than the will to know

I am _____ African model vs. American model

Tracking PEER TUTORING IN SECOND-CHANCE OCCASIONS

If learners in my population do not accomplish all five criteria to pass a course when the other learners in their cohort pass, then a "second-chance" can be invented for them. In such inventions, the cooperative learning group may assign a peer to tutor the weaker one. This is an academic extension of the previous learning strategy "encouraging and helping colleagues." Gatimu, Gachegoh, et al (1997:27) surely pinpoint one of the activities of peer tutoring, "Dialogue is… found when students

157

study in groups. In these groups they discuss the issues raised in the study material." Peer tutoring is a dialogic review of learning already in process. The readiness and willingness of a colleague to take time to help a peer in this way also is a display of traits like "kindness", "unselfishness", "loyalty" and "self-discipline." Henerson & Morris et al (1987:13) say that attitudes have "many *manifestations* – productivity, attention, interaction with others, verbal responses." They also say that attitudes   When we attempt to measure an attitude such as racial prejudice, we find measurements of attitudes may be "blurred by peer group pressures, the desire to please, ambivalence, inconsistency, lack of self-awareness" so those who volunteer to help others may have some other personal agendas for doing so. Still the learning strategy has validity for certain cases; it is a useful solution for benefiting the weaker learner.

Longitudinal study on a sample measuring development of moral reasoning/judgment using KITCHENER, K.S. & KING, P. (1994) Developing Reflective Judgment (San Francisco, Jossey-Bass).

My research does not nor cannot extend to analysis at such linguistic depths as these but observations like those of Bruner which relate to the responsibility and/or obligation of the self in the various cultural/linguistic environs are fodder for future research on the part of the multi-lingual Mozambicans who are participating with me in action learning and action research. Critical analysis of agentive and patientive forms of grammar even have theological implications. There are multiple aspects of research within each one of the Mozambican people groups.

Goduka (2000:80) rallies Africans to "decolonize the academy" by reclaiming/affirming our indigenous story, cultural identity and voice" and by finding "a synthesis between the [values of 'old'] Africa and the influences which have come with colonialism and 'modernity." Again, I express hope that the Mozambicans participating with me in this PAR project will respond to the challenge to reclaim/affirm the indigenous story, identity and voice and to catch the vision for the depth of understanding concerning learning and identity in their maternal cultures that they could bring to the fore by continuing to probe, research and write. My Mozambican colleagues could respond to Vilakazi in Goduka (2000:80) who challenges Africans to "become anthropologists doing fieldwork on [our] people and on ourselves, as part of a great cultural revolution aimed at reconstructing Africa" by continuing PAR projects in their original contexts.

Categorizing as a kind of pattern-making or pattern-recognizing is widely held as a descriptor for brain-functioning even though the explanations for describing how the brain detects patterns vary. Restrak (1994:70) says [*italics mine*], "one can hardly overestimate the importance of learning more about the categories and how they are organized within the brain. They form the underpinning to *our understanding of ourselves and the world around us*." Curriculum writers frequently wordsmith outcomes which reflect, in the reality of lives of the learners, their *understanding[s] of [them]selves and the world around them*. As more is learned about how the brain detects and recognizes patterns, educators should be able to set up learning situations in which their learners are enabled to better succeed in categorizing which, in turn, will help the learners better succeed in learning.

Chapter 4 Empirical Research Findings

4.1 Introduction

As discussed in Chapter 3, Participatory Action Research (PAR) is cyclical and reflective in nature, so it tends to generate a lot of data. Since I began collecting data six years ago, I have led five different sets of researchers which I call PAR teams and number PAR 1, PAR 2, and so on. The reason that there has not been one stable PAR team is the dynamic nature of the educational context in which I am working, i.e. people change places with frequency, and the fact that the research population has been developing. Table 4.1 below presents the activity of the teams in schematic fashion.

	2000		2001		2002	December 2002 Event Maputo		2003	2004	2005
PAR 1	Active in Maputo				Active In the					
PAR 2	Active in Maputo & 2 districts		Active in 6 Districts		Active in 6 Districts	Bringing Toge-Ther All Active Moni-tors & District Super-intendents		Some of PAR 2 are Part of PAR 5		
								Other are monitors		
PAR 3	–		Active in Maputo & 9 districts		Active in 9 districts			Some of PAR 3 are Part of PAR 5		
								Other are monitors		
PAR 4	–		Active In the		In Maputo & Field			Some of PAR 4 are Part of PAR 5		
								Other are monitors		
PAR 5	–		–		–	Members of PAR 5 are Active in Maputo & the Field				
Phase One	Reflect Plan Refine	Test Re-plan				Reflect Jointly on the Present & Future				
Phase Two			Write Re-Test Reflect							
Phase Three			Plan, Test, Respond, Reflect, Re-Test		Reflect Plan Refine					
Phase Four								Write, Assess, Test, Reflect, Refine, Respond		

Table 4.1 Schematic Representation of the PAR Teams and Phases

Discussion: Table 4.1 presents the activities of the five PAR teams and the four phases of research leading to the empirical research findings detailed in this chapter, so it provides an organizational plan for the reporting of Chapter 4. The PAR teams are identified by their number written as an integer, PAR 1, PAR 2, etc. The phases are identified by their number written as a word, one, two, etc. The shading of some cells in Table 4.1 represents research involvement per team and phase. All of those who are part of PAR 5 had been part of a previous PAR team. In the table "Maputo" means the Bible school in Maputo which is the site of the training of many of the facilitators. "Districts" are ecclesiastical districts of the Church of the Nazarene organized geographically which sometime correspond to an administrative district of the Mozambican government, but usually do not. The districts are out in the "field" since they are not in the formal teaching/learning centre of the Bible school so the terms "districts" and "field" are sometimes used interchangeably. To the right of the PAR team designations, the writing in the cells indicates the place or places where the "action" or "activity" of the Participatory *Action* Research was occurring. The verbs of the cells in the lower half of the table are carefully chosen to classify the type of research activity which predominates in each phase. The spiralled figure at the bottom of the table is a reminder of the cyclic and non-linear nature of PAR.

Because of both the cyclical and reflective nature of PAR and the length of time I have been collecting data directly and through other team members, the volume of research findings to report in this chapter is very large and cumbersome. In order to facilitate the perusal of these findings, I present them from global to specific, first presenting the summarised findings in Sections 4.1 and 4.2 then the more detailed findings according to phase in Section 4.3. Since the first two sections synthesise findings of the third, more detail on any synthesised finding may be found by turning to specific findings in Section 4.3; in this way 4.3 furthers comment on Sections 4.1 and 4.2.

Repeatedly the word "monitor" appears in this chapter so it is important to revisit the term "monitor". This term was adopted for use during discussions of the first PAR team. The creative idea of the other educators who were on the PAR 1 team was the training and deploying of trained pastors (monitors) to train others to pastor, so the role of "monitor" in the Mozambican Nazarene context is a result of this research. Monitors, then, are the church leaders who have at least four but usually sever or more years of formal training in public schooling and three to four years of theological training at one of the Nazarene institutions for pastoral training. They originate in places scattered across Mozambique. When they complete their theological training, they usually return to the region of the country from which they started, and they serve as pastors (leaders) of local churches. In these varying contexts they volunteer to be "monitors", i.e. to facilitate the learning of a group of adult learners, usually on a weekly basis.

4.1.1 Chronological Narrative Report

At the outset of this project, in 2000, the growth of the membership in the Church of the Nazarene had outstripped the potential to prepare leaders adequately by means of the residential Bible School. The faculty of the Bible School was small and already taxed to the limit of their teaching loads so it was beyond the capacity of the education system to send educators out to the learners scattered across the county. The idea to train Bible School graduates to train others in the field to be

pastors was plausible. The question formulated before the research questions of this project was a logical extension of this situation: "what 'package' or 'equipment' could be put in the hands of these Bible School graduates which would equip them for the role of pastor-trainer?" They could be prepared to use the "package" or "tools" while they were at the Bible School. Then, after their preparation as both pastors and trainers-of-pastors they would be located near the learners but far from support structures, human and technical, which would be of help to them, so whatever this 'package' was going to be, it had to have several characteristics: among other things it needed to be portable, basic, biblical, replicable as well as approvable by the powers-that-be in the Church of the Nazarene.

When the task force met which was seeking this "package" and the personnel of the task force turned into a group of Nazarene educators searching for the right answer and their search became systematic, reflective, experimental, and participatory, the task force turned into the Participatory Action Research Team 1. PAR 1 in Phase One produced an optimistic possibility – that the basic TEE model, the whole of it, not just "the TEE books" – would be the package which would have within it, not all, but a lot of what the pastor-trainers would need to facilitate learning towards the projected outcomes which described what a Nazarene leader, particularly a pastor, would "know", "be" and "do". This was the possibility which needed to be tested.

The whole TEE model needed to work in the hands of typical graduates from the residential Bible School, so the ten team members of PAR 2, recent Bible School graduates, were chosen to thoroughly examine and utilize everything within the TEE model. During this phase, the holistic learning strategies that were in the "package" were discovered. "Holistic learning strategies" as a term was also still undiscovered and unused by the PAR team members. The "TEE model" was the term used, but it was understood by those involved in the research project that the model referred to more than "the books", that it was much more holistic than simply reading books; that embedded in it were several educational activities which the PAR team members would later come to call "holistic learning strategies". These educational activities included the three kinds of questions to facilitate cycles of questioning during "discussion" times; the collegiality resultant from the "cooperative learning groups"; the varying mental activities which were facilitated by the special way that the books were written, requiring reading, reflection, reorganization, and review; the spiritual quality of the learning environment which was produced by devotional openings, praying together and singing together and other activities implicit in the model. The findings of PAR 2 verified the possibility that the pastor-trainers, who started to be called "monitors", were able to fully utilize the whole "package" of the TEE model.

In the myriad of experiences outside of the setting of the cooperative learning groups with the team members of PAR 2 several aspects of the realities of Mozambique surfaced as substantially different realities from learners and leaders who live in other parts of the world which continually influence the research population:

- Mozambicans define their identity by place, not by what they "do"; their place is part of their name;

- Mozambicans live very close to death; death is part of their conscious living;
- Consequently, Mozambicans spend a lot of their time comforting the sick (who may die), comforting the dying and their families, comforting and encouraging the survivors of the deceased;
- Mozambican children have very few to no toys and are amazingly creative at making things to serve for their play from things like empty cans, pieces of wire, string, pretty paper, etc. that they find on the ground;
- Mozambique is a long country North to South (± 3,500 kilometres) but only has one highway that runs the length; when the regular rainy season or abnormal conditions like floods or cyclones damage the road, the country may be broken into two or more pieces for weeks.

Phase One ended with the experimental training session in XaiXai to see if monitors could be trained in short sessions, instead of the three-month long pilot programme format for training. By the end of the short session, most of the participants in XaiXai were able to utilize questions within the students texts to adequately conduct the face-to-face session format, so the training session gave evidence to expect that the other pastor-graduates from the Bible Schools, past and present, in Mozambique could be trained to train others by means of this abbreviated training format in the field.

By the end of Phase One the importance of proper, respectful, collaborative interface with the district church leadership had evidenced several times – in the setting up of locations for the praxis of PAR 2 team members in churches around Maputo, in the interview in XaiXai with veteran missionary educators, E Perkins, and in the mature perspectives of the PAR team member who was a district superintendent, P Sueia. Holistic learning strategies would be utilized by the monitors within the refined TEE model, *if* the district leadership favoured the potential. This aspect of favour within the ecclesiastical structure already gave evidence toward one answer the question as to the extent to which the holistic learning strategies would advance the learning of the developing leaders – one indicator of the extent is the support given or not by the district leadership. Any electric appliance depends on being plugged in. The potential for facilitation is built into the appliance, but it must be plugged in to become useful. Most of the eleven districts of Area 1, in the South, were open to plug the refined TEE model into their district structures. The refined TEE model came to be called the model of IBNAL (Instituto Bíblico Nazareno da África Lusófona).

Phase Two was the season of many "firsts":

- the first Area Facilitator to be named and publicly introduced
- the first public explanation of the plan for pastors in the districts who were graduates of Nazarene Bible Schools to be trained to train others to pastor
- the first approval in the Church of the Nazarene a non-academic certificate programme for the preparation of pastors for ordination by the International Course of Study Advisory Committee of the "IBNAL Model"
- the first materials produced from the PAR research which would embed holistic learning strategies into written student guides
- the first feedback from monitors in the field at the Beira meeting of the six male team members of PAR 2.

Findings in Phase Two included some disconforming evidence to the multiple voices which were echoing recurrent themes and opinions. First, from Tete came the finding that the learner materials had to be in the maternal tongue. Second, in the PAR 3 sessions in Maputo, that the way to make "singing for learning" effective in the hands of monitors was not yet discovered. And thirdly, in Beira with the six men, fairly well-trained in the three-month long pilot programme, only two had managed to start cooperative learning groups in the six months – one because of sheer determination, not because he had the support of his leaders, the second because he was determined *and* well supported by his district leaders. Reflecting back on this, five years later, the reports of those six monitors generated evidence that was quite indicative of patterns of success and failure that subsequent groups of trained monitors would have when they returned to their districts. The potential in the monitors of their utilisation of holistic learning strategies within the IBNAL model depends both on their own determination **and** the partnership they are able to establish with their district leaders. If the monitors fail in developing a relationship of trust and respect with their leaders, then the potential of establishing cooperative learning groups in which to utilise holistic learning strategies is greatly diminished.

Another item of disconforming evidence which began to surface in Phase Three had to do with the difficulty the learners had in passing the courses because it was so hard for them to pay for the students texts. This was first voiced in XaiXai and Tete, then in Nampula, then in Beira. Buying the text book was one of the pass-fail requirements; it was intended to be a holistic, role-taking of responsibility toward their own learning. The problem of paying for the books generated some brain-storming sessions and a few limited solutions.

The July 2002 meetings of Nazarene educators from across Lusophone Africa, the "ANCA meetings" generated discussion which was food for hours of reflection by the PAR 4 team subsequent to the ANCA event on how to act on several recommendations. Reflections gave impetus to continued prioritisation of the production of materials in the three main maternal languages of the learner population and to choosing other faculty and students from the Bible School to broaden the base of participation in the planning of the December 2002 learningshop in order for the PAR team members to concentrate on the learning while others orchestrated the logistics. The quizzing event at the learningshop gave evidence to the wide body of attendees that it was possible for the whole set of verses to be memorized. The round table discussions concerning the student texts in formation gave the learningshop attendees authentic participation in the writing of the materials that they would use to facilitate learning in their cooperative learning groups. By the end of Phase Three, December 2002, many of the learners of the research population were already meeting regularly in cooperative learning groups across the country.

During Phase Four, repeated evidence surfaced of the viability of several holistic learning strategies: "teamwork" including "pair or trio groups", "rehearsing integrity" including "role-taking", "hero-identifying" and "hero-modelling", and "classical spiritual disciplines". Team building exercises during the training of monitors, whether in intensive sessions or long-term training, usually contributed to effective teamwork in the real world, particularly in the ecclesiastical districts in which leaders embraced the potentials of the learning system. Several forms of praxis were discovered in the midst of the Participatory Action Research: 1) the

"mini-praxis" of the Bartle model of teaching Bible via stick figures, 2) the social or collaborative praxis which would take place in the meetings of the Area Facilitators and in the meetings of the monitors as they shared in dialogue, reflected on practice, created solutions, 3) mini-praxis together with peer critiquing in the practicum on pastoral ministry of the 2nd certificate.

Throughout Phase Four, an overall geographic inconsistency of effectiveness of the holistic learning system was evidenced. Concern grew among the PAR 5 team members for the lack of consistent implementation across the North. Several team-produced strategies were utilised. Most of the PAR 5 team members, including the area Facilitators from Areas 2, 3 and 4, and the Facilitator from Maputo District, went to the North in July 2004, as a show of support, and to work directly with the monitors on specific solutions for their centres. Research was organized by the monitors of Area 5 (the North) to visit on the districts of the Area the learners in each who had left the system. The Area Facilitator was changed. Insight into holistic learning strategies and appreciation for the potential was evidenced by Area 5 monitors during the discussions on September 2, 2004 in Nampula. Still, the lowest number of respondents in the large hybrid survey are Area 5, the North with only 11.4% of the respondents and Area 2 Sofala/Manica with 11.1%. The relatively successful learning systems implemented in the other three areas give evidence that the other two areas, 2 and 5, with continued research and support, will also be able to facilitate learning in the cooperative learning groups which are now inactive.

4.1.2 Demographics of the Sample Learners and Leaders of the Church of the Nazarene in Mozambique

The following Tables 4.2 and 4.3 present the global demographics of the sample.

SUMMARY: GLOBAL DESCRIPTIVE RESULTS ON BIOGRAPHICAL DATA						
Data Collected Anonymously from Whole Sample						
9	**Where Ministerial Preparation Began**	812 of 933 total	121 = 13%	Place Tavane Furancungo Maputo SNMLaulane IBNAL Other	**Learners** 6 2 18 62 571 2	**Leaders** 15 7 36 55 34
10	**Level of schooling on entering Ministerial Preparation**	742 of 783 total	41 = 5.2%	<3 yrs 4 yrs 5 yrs 6-7 yrs 8-10 yrs 11-12yrs >12 yrs	15.9% 14.7% 15.2% 27.8% 17.4% 4.7% 3.2%	7.7% 15.3% 10.6% 33.6% 17.4% 7.7% .6%
11	**Current level of schooling**	870 of 951 total	81	Mean =	6.3 yrs	7.7 yrs
12	**# IBNAL courses taught or studied**			Count = Mean =	569 6.9 courses	115 16 courses

Table 4.2 Global Descriptive Findings Regarding the Schooling of the Whole Sample of "The Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach"

Data displayed on Table 4.2 were gathered from the anonymous survey conducted in 2005 and those on Table 4.3 from the biographical sheets which were filled out at the same time as the anonymous survey. Together the tables synthesise the findings observed in the many sets of statistics and diagrams which are discussed in Section 4.3.

SUMMARY: GLOBAL DESCRIPTIVE RESULTS ON BIOGRAPHICAL DATA					
Data of Whole Sample, Collected from Biographical Informational Sheets					
	Variable	Sample Totals/	Missing Data	STATISTICAL SUMMARY: Learners /Leaders or Other Sub-Sets & Valid %	
1	Current category of church leadership	906 of 952	46 = 4.8%	**Elders = 64 or 7.1%** **District Licensed Pastors = 200 or 22.1%** **Students = 639 or 70.5%**	
2	Geographical context by "area"	906 of 952	46 = 4.8%	**Area 1 (South) = 326 or 36%** **Area 2 (Centre) = 101 or 11.1%** **Area 3 (Tete) = 158 or 17.4%** **Area 4 (Zambezia) = 218 or 24.1%** **Area 5 (North) =103 or 11.4%**	

3	Geographical context by "category" within "area"	906 of 952 with 46 missing		**Elders**	**D Licensed**	**Students**
			Area 1	36 or 56.3%	41 or 21.2%	239 or 38.7%
			Area 2	3 or 4.7%	6 or 3.1%	87 or 14.1%
			Area 3	12 or 18.8%	40 or 20.7%	104 or 16.8%
			Area 4	9 or 14.1%	98 or 50.8%	99 or 16.0%
			Area 5	4 or 6.3%	8 or 4.1%	89 or 14.4%
				Of category	Of category	Of category

4	Age	854 of 952 with 98 missing		Mean = 38.44 Median = 37 Mode = 30	**"Adult Learners" = 533 or 62.4% by age >25 yrs or 588 or 68.8% by adult circumstance Mean = 37.3 years**
5	**Learners who are IBNAL students**	718 of 952	234		There are **678** IBNAL students make up **71.2%** of the total sample.
6	**Maternal language**	883 of 952	69 = 7.2%		**1. Changaan** = 197 or 22.3% **2. Chewa** = 150 or 17% **3. Lomwe** = 111 or 12.6% **4. Makhua** = 87 or 9.9% **5. Portuguese** = 85 or 9.6% **6. Masena** = 67 or 7.6%
7	**Language preferred for reading**	792 of 952	160	Prefer Portuguese 44.6% of total or 53.7% of respondents Prefer Local Tongue 38% of total or 45.7% of respondents	
8	**Gender** (Statistics taken from 2nd survey)	817 of 897 total	80 = 8.9%		**Male = 79.9%** **Female = 20.1%**

Table 4.3 Global Descriptive Findings Regarding the Whole Sample of "The Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach"

Summary: Tables 4.2 and 4.3 summarise several descriptive aspects of the whole research sample. A secondary intention of this PAR project was to provide this reliable description which is the one synthesized in Tables 4.2 and 4.3 and by the discussion below.

Table 4.2 present findings of particular interest to those from the Church of the Nazarene who may read them. The places where the research population began to prepare for ministry include the former residential Bible Schools in Tavane of Gaza Province and Furancungo of Tete Province. These are esteemed sites in Nazarene history. The curricular reform of ministerial courses of studies in the Church of the Nazarene which us the "4Cs" to categorise the exit outcomes surfaces in the findings as learners perceive that they have improved highly or greatly in three of the "4Cs", i.e. "content", "competency" and "character":

- *content* (knowledge) which 67% judged that they have improved
- *competency* (skills) which 63% considered themselves improved
- *character* (spirituality) which 69% say they have improved

Of the whole sample of 952 leaders and learners, there are 678 respondents who are IBNAL students, 71.2% of the whole sample. According to the row 4 in the table above which accounts for the "age" of the respondents, there are 588 "Adult Learners" by definition of their circumstances. In Row 5 there are 678 IBNAL students. Why are there two different counts of these students? One explanation is the number of respondents who do not respond to the question which generates the statistics. This number varies: only 98 of the 952 respondents neglected to answer the question about age, while 234 respondents did not answer the questions about being an IBNAL student. The other aspect which affects these numbers is that not all the IBNAL students qualify to be in the category of "adult learner". If the student is under 25 and still not in a leadership position, then he or she is not counted as an "adult learner". So, the many references to the "adult learners" in the context of my research apply to at least 588 people, 68.8% of the whole sample. These learners have an average age of 37.3 years. The others in the survey sample are two other sub-groups, church leaders who are no longer studying and IBNAL students, about 100 of them, who do not qualify to be called "adult learners".

The whole sample is made up of "leaders" who are categorized as "district licensed" or "elders" in the biographical survey who are scattered over the 5 geographic areas of Mozambique. They speak 33 different maternal languages, with seven languages accounting for 79% of the sample. They are almost 80% male, 20% female and have an age spread from 14 to 79 years old.

According, then, to the statistical description, the "majority" or "stereotypical" learner of the research population is male, 37 years old, speaks Changaan, Chewa, Lomwe, Makhua, Portuguese or Masena as a first language, prefers reading in Portuguese and already is serving in a position of leadership in the Church of the Nazarene of Mozambique in one of the five areas while he is a learner in the extension system called IBNAL. He has 6.3 years of schooling and has completed 7 courses of IBNAL with a monitor who has facilitated 16 courses.

4.1.3 Refinement of TEE model

Reference to "the TEE model" and "the refined TEE model" surfaced with frequency throughout the empirical study. In Phase One textual assessment of the TEE student texts and monitor training materials gave promise to their capacity to facilitate learning by means of holistic learning strategies that were fabric of the written material and the discussion groups of the TEE model. Interviews, both face-to-face and via e-mail with groups in Mozambique which produced and used the materials were promising as to the fit of the materials to the learner population that the PAR team members then perceived was "out there" which has been validated by the statistical description presented above in Section 4.1.2. The decision to try the TEE model in Phase One B, with PAR 2 and with the group in XaiXai validated the assessment given by the PAR 2 team of the potential of these books which stated clearly that they were "the teacher" in the hands of both the learners and the monitors, who would facilitate the application of the textual and biblical material. The assessment in the large hybrid study, in which 198 of 508 choose "studying IBNAL books at home" as one of the four "spiritual activities" that draw them close to God speaks positively to the spiritual quality of the books.

Evidence from other questions in the hybrid surveys is pertinent to the assessment of the TEE model per se as 64.4% of the whole sample rate "group discussion of the text material" as "very good" or "excellent", and 75.9% are very satisfied to "be together in a study group" which is a classic feature of the model. "Textbooks in Portuguese instead of the maternal language" is one of the top problems noted by the sample, as was the "mixing of academic preparation of the learners in the same group".

With the Nazarene Bible School in Maputo negotiating an articulation agreement that allows TEE courses to be accepted into the academic diploma programme at an approximate two-to-one ratio, within specific course-by-course criteria, the "major obstacle" cited by Gatimu *et al* (1997:14) is greatly diminished. The refinement is a solution to the problem in the context of this study. The articulation agreement[1] is not only a theoretical construct; the fact is that several IBNAL students have transited to the residential programme and have been given credit.

Snook (1992:53-57) cites one of the weaknesses of the TEE model which is consistent with empirical findings of the study in Mozambique –"lack of church acceptance and approval". Repeated voices indicated that the TEE model as well as the IBNAL model and holistic learning strategies can all be effective but always conditioned by the favour of the ecclesiastical district in which they might or might not depending on the favour be utilised.

The refinement which most improves the TEE model is that in the IBNAL model is the deliberate, institutionalized, holistic and on-going *training of the facilitators* to utilize the model and who live near the learners, effectively multiplying the number of facilitators. The fact that these facilitators have a full academic level (diploma-level) more than the TEE learners also adds stability to the learning system.

---

[1] *The details of the articulation agreement are found in Appendix L.*

Discussion: The weaknesses listed by Kornfield and cited in Kenya at the TEE workshop in 1990, were kept in mind throughout the study, and can now be systematically reported in Table 4.4.

WEAKNESS (KORNFIELD)	REFINED RESPONSE FROM MOZAMBIQUE
1 The failure of students to complete assignments because of involvement in more pressing matters.	Response from the Mozambique study: This was cited as a "big problem" by 6.9%. Another 2.4% said it was bad enough to make them quit but a majority, 72.8%, had "no problem" with doing the homework.
2 Lack of identification of the educator with his students because time is brief spent in each extension centre a growing personal relationship is difficult to establish.	The Mozambique model multiplies the number of trainers by not sending educators from the residential institution to the extension centres but by training, equipping and moral supporting trainers (monitors) who identify closely with the learners and live close to them.
3 Lack of time for the educator to be with his family since he travels constantly from centre to centre.	The proximity of the monitors to the cooperative learning group he or she facilitates greatly reduces this problem. Monitors usually do not stay outside the home.
4 Lack of being able to graduate in a relatively short period of time since to cover the same number of courses as a residential seminary would require between two and three times as many years.	If the learners and the monitors are willing and able to put in as many hours a week into extension learning as a student does in a residential institution, then the whole IBNAL programme is structured to be achievable in the same three years as the residential school. However, in practice, no centre moves that quickly.
5 Too much hinges on one individual teacher and there is lack of exposure to many teachers with varying fields, abilities and vision.	The refined model moves monitors to other centres for occasional courses or parts of courses for broader exposure of the learners, and also clusters learners from several centres occasionally for broader experience.
6 It is too easy to quit since there is little initial sacrifice involved in becoming part of the program.	Self-sacrifice is a condition from the outset in the written agreement to 1) pay for the student text, 2) do all the homework, 3) give something to support the monitor.
7 The travelling itinerary could be quite expensive.	Travel still can be quite expensive; that is why placement of monitors close-by the learners is optimal.
8 It would be difficult to be involved in evaluation of non-written assignments and of practical applications of the learner's studies.	Again, with the monitors close-by and closely involved with the cooperative learning group, this becomes a non-issue.
9a The role of the educator, even more than in the residential setting, perhaps, would be that of providing cognitive input in a limited amount of time, so that affective and behavioural changes would have to occur at the students' initiative.	The cognitive input (Quadrant A thinking) comes from the learners' engagement with the material in the textbooks, not from the on-site presence of an educator. Affective and behaviour changes would be consequence of discussions as per others below in 9b.
9b [Others] felt that since teaching material presented the cognitive input, then the TEE teacher, even more than the residential teacher, has time to discuss application and behavioural changes.	The Mozambican model utilizes the TEE model material for the training of monitors to facilitate discussions which lead to reasoning on the materials in the Bible and in the texts and to applying these truths to the contexts of the learner. No refinement deemed necessary. Affirmation of the TEE training materials.
9c Gaddis of TEE in Zimbabwe added that they also have prepared teacher's guides which suggest many affective type activities to promote change in the student.	The Mozambican model agrees with the premise of Gaddis that skills or effectiveness of the monitors can be enhanced by written guides with reasoning & application questions; "affective activities" in Mozambique include critical singing, praxis, & classical spiritual disciplines.
10 Frequent lack of resources, both written and human, to turn to for help during the interim period between the extension educator's visits	The written guides for monitors and the position of the Area Facilitator to encourage the monitors as well as the proximity of the monitors to the learners are proactive solutions to combat this weakness.

Table 4.4 The PAR Study in Mozambique Response to Weakness in TEE Model as per Kornfield

4.1.4 Collectivism vs. Individualism and Use of Maternal Languages

The intent from the outset of this study has been to continually observe two issues in learning settings, that of collectivism vs. individualism and that of the use of maternal languages within an African context, as part of the observations during the data gathering phases but not to draw critical conclusions about either issue. Both issues ended up being important issues; they surfaced repeatedly in the empirical study so they must be taken into consideration in the summary findings of Chapter 5. Brief mention of the connection of these two issues to the essence of the research is included in the next short sub-section.

Mozambique is historically tribal, and is currently also quite multi-lingual (see Section 2.5.2). Mozambican traditional societies demonstrate collectivism in historical structuring and current customs that are considered "cultural". The administrative structures of the Church of the Nazarene are prescribed in the international policy book; the officers, committees and their responsibilities are defined in writing. The findings of this study give evidence to support that the functioning of the administrative structures in Mozambique is different than the functioning of the structures of the same name in Nazarene churches in some other countries. The differences may be accounted for by this factor of societal organization, i.e. individualistic societies vs. collectivistic ones. Evidence researched throughout the study to the essential component of the approval and support of the district leadership for the establishment of any learning setting to take place whereas the control of district leadership of such learning settings is far less in the States, at least, which is individualistic.

In-tribe groups of people in Mozambique count on their extended family to help them in crises, so collaboration is within the common experience of the people. However, collaboration in learning settings is not commonplace so cooperation between learners within learning groups is not automatic. For a learner to open himself to trust another learner from even a slightly different origin, like the next clump of houses two kilometres away, requires a deliberate decision which may be facilitated by team-building skills and attitudes on the part of the monitor of the group. The individuals in a group may even have been on opposite sides of the civil strife. Identifying and modelling common heroes, like those from the Bible, affirm values the learners share because of their religious faith, so this action builds the group spirit and collective persona.

Tension from collectivistic, tribal societal organization probably affects the training groups at the resident school more than the cooperative learning groups scattered across the country because the societal differences are greater within the student body of the residential school. In PAR 2, tempers flared regarding perceived inequality in food distribution to the families of the six male team members. Closer analysis of incidents of conflict like this one might take into account collectivism.

If collectivism includes the norm that *achievement really needs public recognition to be achievement at all* evidence surfaces repeatedly about the importance of students' cards, of the ceremony of certifying monitors, of the certificates themselves, of the recognition of district leadership in the district assemblies, etc. Do individuals in individualistic societies put great importance to such public recognition? This might be seed for comparative research.

If collectivism means that *relationship prevails over task* then this study affirms this as true. The PAR team members showed that "Americans have watches, Africans have time" and that "it is 6:00 o'clock until it is 7:00". Learners and leaders use time to talk, to be together, sit together, pray together, and sing together. It is not used to get more tasks done. The three aspects of togetherness in the IBNAL model – singing, praying and being – were very satisfying to 70 - 77% of the respondents.

The consensus between PAR 2 and PAR 3, groups of monitors in training in XaiXai, Nampula, Beira and Quelimane was that the student books could be written in Portuguese and discussed in the maternal languages which would facilitate the discussions, contribute to the extent learned and make discussions "penetrate" deeply into the learner. The disconforming voice was that the leaders and learners from Tete who consistently maintained that the books had to be in the maternal tongue.

In the July 2002 ANCA meetings, the position of the Ministry of Education of Mozambique (MINED) was described to Nazarene educators who were present. The position of MINED was that of facilitating early learning in children by using maternal languages when requested by the parents but also targets bilingual ness by the end of grade five. The findings of this study also give evidence to support that "singing for learning" seems to facilitate learning when the learners sing in maternal languages.

4.2   Research questions: what do the empirical findings show?

Table 4.5 below introduces the logical format of this section in which findings are presented by their relation to the three research questions.

RESEARCH QUESTIONS:	1. Do holistic learning strategies facilitate adult learning?	2. *To what extent can holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers?*	3. If so, how do holistic learning strategies facilitate adult learning?	
Round Table Discussions	✓	✓	✓	3
Interviews: direct and via e-mail	✓	✓		2
Textual Analysis	✓	✓	✓	3
Hybrid Surveys	✓	✓	✓	3
Video and photos	✓		✓	2
Site visits	✓	✓	✓	3
	6	**5**	**5**	

Table 4.5 Organisation of Empirical Findings by Research Tool

In the research design described in Chapter 3 the empirical findings gathered by six research tools, those listed on the vertical axis of Table 4.5, should apply to the first research question, five or the six should apply to the second research question, and five research tools should apply to the major research question. The reporting in this section is organized by research question with reference to research tools. This section includes two other tables, 4.6 and 4.7, which also anchor the presentation of overall findings by summarising empirical findings at two important points of my study i.e. qualitative findings crystalised by July 2002 (Table 4.6) and the quantitative findings from the large hybrid survey conducted in 2005 (Table 4.7).

4.2.1 Summarised and Interpreted Findings Relative to the Preliminary Research Questions

The findings of this empirical study contribute evidence pertinent to the question, **"Do holistic learning strategies actually facilitate adult learning**? The overall implication is "yes" according to the particular empirical findings which are displayed below. However, there are varying degrees of "yes" which immediately link the findings to the second question which is the **extent** to which they facilitate learning in the developing leaders. The seven holistic learning strategies which were defined and discussed theoretically in Chapter 2 and were being researched during the empirical phases were the following: 1) discussions of several types, 2) cooperative learning groups, 3) praxis, 4) teamwork, 5) rehearsing integrity, 6) singing for learning and 7) classical spiritual disciplines. Each of these seven is presented below in relation to the varying research tools identified in Table 4.54 which yielded findings as to whether or not the strategy facilitates adult learning and to what extent.

The first three holistic learning strategies identified above are embedded in what was referred in the empirical study as the "TEE model" and the "IBNAL model" so in analyzing texts from any of the research tools in which one of these models was referenced, the implication was that these three holistic learning strategies – discussions of several types, cooperative learning groups and praxis – were included in the reference. They were part of the "package" used by trainers of monitors and then by monitors themselves to facilitate learning among the developing leaders of the research population, the "package" referred to first as the "TEE model" then as the "IBNAL model". Therefore, in the qualitative phases of my research, Phase One A and One B, Phase Two and Phase Three, the data generated from face-to-face or e-mailed interviews, round table discussions among several groups of participants in several site visits crystalised a positive answer to this first question and, at the same time, generated some findings relevant to the second question.

Based on recurrent themes which had surfaced by the end of Phase Three A (displayed in a subsequent Table 4.10), Table 4.6 below presents the recurrent themes coded according to their relevance to specific holistic learning strategies. The themes coded include "spiritual learning environment" as well as the seven holistic learning strategies mentioned above and "hero-modelling", an aspect of the "rehearsing integrity" and are below above the table.

Recurrent Finding		Coded		PAR2-	XaiXai	Tete	PAR 3	Nampula	Beira	Area 4
1	♥Starting & ending w/ prayer & Biblical devotion is warm pattern	E		√	√	√	√	√	√	√
2	♥Bonds between members enhanced by prayer	E	T	√	√	√	√	√	√	√
3	♥Sitting in circle & open dialogue are new practices in educational settings, but they are positive.	Q	P	√	√	√	√	√	√	√
4	♥ Relationship prevails over task	G	T	√	√	√	√	√	√	√
5	♥ Holistic learning strategies challenge some old ways & that's OK	E	T	√	√	√	√	√	√	√
6	♥ Goal, song "To Be Like Christ" approved w/ enthusiasm	H	L	√	√	√	√	√	√	√
			R	√	√	√	√	√	√	√
8	♥ Goal, motto, song fit each other	R		√	√	√	√	√	√	√
9	♥ TEE books are appreciated by those present	P	Q	√	√	√	√	√	√	√
10	♥ Books will "work"	2nd	Q	√	√	√	√	√	√	√
11	♥ Training in the hands of diploma grads can work as long as the district leaders are in favour.	2nd	Q	√	√	√	√	√	√	√
12	♥ Much practice is necessary for good discussions	2nd	Q	√	√	√	√	√	√	√
13	♥ Discussions based on the text material are reasonable to use if questions are available to monitors	2nd	Q	√	√	√	√	√	√	√
14	♥ Books can be in Portuguese & discussion in maternal tongues contributes to extent & depth learned in discussions	P	Q	√	√	↓↓↓	√	√	√	√
15	♥Consensus; every one is used to self-sacrifice; learners can do pass/fail requirements	R	T	√	√	√	√	√	√	√
16	♥ Pass/ fail requirements sound reasonable	R	T	√	↓	↓	√	↓	↓	√
17	♥Group consensus: the 3 certificates motivate	R	T	√	√	√	√	√	√	√
18	♥ Public recognition is important confirmation	R	T	√	√	√	√	√	√	√
19	♥Certificates act like symbols	R		√	√	√	√	√	√	√
20	♥ The support of the district leadership is essential	R		√	√	√	√	√	√	√
21	♥ Verse memorization is a priority	R	E	√	√	√	√	√	√	√
22	♥ Visual cues			-	-	√	√	√	√	√
23	♥ Singing for learning	S		↓	-	-	↓	-	-	-

Table 4.6 Coded Interpretation of Recurrent Themes at End of Phase Three A

E = **spiritual learning Environment** G = **cooperative learning Groups**

L = Singing for Learning   Q = Questions posed in **group Discussions**

R = Rehearsing integrity   S = **Spiritual disciplines**

T = **T**eamwork   P = **Praxis** (reflection – dialogue – action)

H = Hero-modelling (as aspect of **rehearsing integrity**)

2nd = reference to the second research question

173

Discussion: Table 4.6 also colour-codes the points of relevance to the research questions, so in consideration of the subject "discussions of several types" (which are embedded in the TEE and IBNAL models), data within the blue coloured cells constitute the first part of this analysis. The recurring theme (numbered "3"), which is "Sitting in circle and open dialogue are new practices in educational settings…" is a consensus recorded from data gathered in each setting identified along the column headings in Table 4.6, i.e. in the pilot programme, in XaiXai (Area 1), Tete (Area 3), in the PAR 3 team, in Nampula (Area 5), in Beira (Area 2) and in Quelimane (Area 4). Recurrent themes numbered 9, 10, 11, 12, 13 and 14 also are coded "Q" and coloured blue to indicate data relevant to "discussions of several types". The discussions are based on the materials in the books, so if the student textbooks had not been appreciated that would have affected the discussions.

In Table 4.6 the code "2nd" refers to the second research question: "To what extent do holistic learning strategies advance learning in developing adults in Mozambique when used by minimally-prepared trainers?" The "voice" of six of seven sets of respondents indicated in finding #10 is that "the books work" in the hands of the learners provide adequate, understandable bases for group discussions. The disconforming voice, that from Tete, reported that the books are valid bases for discussion only if they are written in the maternal language. This "only if" condition relates to the **extent** to which discussions facilitate learning, i.e. to the extent that the books on which the discussions are based are written in the maternal tongue.

Findings numbered 11, 12 13 and 14 also relate to both of the first two research questions. The "training of pastors in the districts in the hands of diploma graduates works" **to the extent** that (#11) the district leaders are in favour and support the efforts of the monitors. Discussions conducted by monitors facilitate learning **to the extent** that (#12) monitors practice discussions during their training to perfect their skill, and (#13) **to the extent** that questions for the monitors are made available in writing as resource materials for the monitors to choose from for use in conducting cooperative learning groups. **The commonly held position in all seven sets of voices is that discussions held in the maternal tongues contribute to the depth and clarity of the learning; Tete, again, held that the books as well as the discussions needed to be in the maternal language.**

The findings in Table 4.6 are some of the crystalised findings of the quantitative aspects of my research. They are not the only quantitative aspects. Other findings of particular relevance to a holistic learning strategy or research question being discussed are cited as appropriate. However, the other findings which come to bear on the discussions are those from the large hybrid survey of 2005, so these findings are displayed as Table 4.7, using the same coding as in Table 4.6. Continued discussion of the empirical findings specific to the research questions in subsequent paragraphs draws from both the codified findings from qualitative phases of Table 4.6 displaying and the more quantitative data from the written several multi-variable questions of Table 4.7.

CODES

	HOW MUCH OF A PROBLEM IS ? / Ranking of sum of responses			
1	Memorizing Scripture to pass the final exam	1	R	S
2	Having the book in Portuguese not maternal language	2	Q	
3	Having to pay for the textbooks	3	R	P
4	Finding time to fill in the books, to do the homework	4	R	P
5	Mixing academic preparation of students in same group	5	G	T
6	Difficulties with the monitor	6	G	T
7	Difficulties with other students in your group	7	G	T
	REGULAR ASPECTS OF IBNAL: % rating Very High/Excellent			
8	Praying together	76.9%	G	E
9	Being together in a study group	75.9%	G	T
10	Skill of the monitor(s)	75.3%	G	T
11	Singing together	70.1%	G	E
12	Goal	69.4%	R	E
13	Memorizing Scripture	67.6%	R	E
14	Group discussion of material	64.4%	Q	G
15	Applying Scripture lessons to life problems	64.0%	R	P
16	Student texts	56.7%	Q	P
	IMPACT OF IBNAL: YOUR CHOICE OF TWO			
17	Increased spiritual growth	59.8%	R	S
18	Increased appetite to study	40.7%	R	P
19	Increased Bible knowledge	38.0%	P	S
20	Improved skills like preaching, teaching	36.0%	P	S
21	Improved Relationships	**8.1%**	T	P
	CHOICE OF YOUR TOP 4 SPIRITUAL ACTIVITIES			
22	Attending church services	63.9%	G	E
23	Studying the Bible	46.2%	S	
24	Fasting	32.9%	S	
25	Reading the Bible	30.6%	S	
26	Going to Sunday School	30.0%	G	E
27	Praying alone	27.4%	S	
28	Studying books at home for IBNAL classes	25.0%	R	Q
29	Singing or listening to music	20.1%	S	
30	Taking holy communion	17.0%	S	E
31	Praying with others in group	16.8%	G	E
32	Being involved in theological class sessions	15.9%	E	Q
33	Meditation	11.0%	S	E
34	Practicing acts of mercy	10.7%	P	
35	Attending funerals	10.6%	G	
36	Evangelizing	9.7%	P	
37	Attending baptismal services	8.3%	G	
38	Being outside in nature	4.6%	S	
39	Attending weddings	4.5%	P	
40	Studying spiritual books at home	3.0%	S	

Table 4.7 Coded Interpretation of Quantitative Response Summary from Large Hybrid Survey of 2005

= spiritual learning **Environment**   G = **cooperative learning Groups**

L = Singing for Learning   Q = Questions posed in **group Discussions**

R = Rehearsing integrity   S = **Spiritual disciplines**

T = **T**eamwork   P = **Praxis** (reflection – dialogue – action)

H = Hero-modelling (as aspect of **rehearsing integrity**)

Returning to the discussion of finding relevant to the holistic learning strategy "group discussions", including the issue of adequacy of the student textbooks to provide appropriate material on which to base valid group discussions and the role of maternal languages in the discussions, Table 4.7 displays relevant data. The position that the books could be in Portuguese and discussions held in maternal languages came from the majority of the voices recorded in 2002. Those speaking then were only the leaders, i.e. monitors-in-training and district superintendents; there were very few IBNAL students at that time. By the time the large hybrid study was administered in 2005, the whole population had grown in size and in experience with "group discussions. Line 2 of Table 4.7 indicates that "having the book in Portuguese, not the maternal language" was the 2nd ranked *problem* "with IBNAL". This problem "with IBNAL" directly affects the learning, and probably contributes to the findings in lines numbered 14 and 16 which show that 64.4% of the sample considers the value of the discussions to be "very high" and 56.7% considers the student texts to be "very good" or "excellent". These two percentages mean that over half the sample rates the texts and discussions highly. However, relative to the top percentage ratings of the "regular aspects of IBNAL", these two percentages are 10 to 20 percentage points below the highest rated "praying together" in line 8. These relatively low ratings can be understood in terms of the "problems" the sample cited, i.e. problems number 2, 3 and 4 all have to do with the students books. Apparently then, leaders from Tete were anticipating correctly in 2001 and 2002 the problems that the learners would have if the learning materials and the learning setting were not both in the maternal language.

The empirical findings in Mozambique infer that the group discussions conducted in maternal languages facilitate learning more satisfactorily when the textual material on which the discussions are based is also in the maternal languages.

The issue of maternal languages also relates to the holistic learning strategy identified as "singing for learning", the theory of which comes from the models of Martin Luther and John Wesley who integrated concepts, even doctrine, into simple, moving melodies which spoke truths deep into the hearts in collective experience, resulting in inspired learning, and the vibrant re-echoing of important words in the heads (brains) and hearts (affections) of the singers. Theoretically "singing for learning" results in holistic learning, however, I have spent five years in trying to make "singing for learning" work in the varying contexts in which I was facilitator. Evidence indicates that I, myself, as a well-trained educator can make it work on a very limited basis, but as a holistic learning strategy useable in the hands of the monitors it usually fails. I attribute this failure to two facts – that the music is in the non-maternal language, Portuguese, and that the music itself is imported, is not grown in the soil of African notes and rhythms. I return to this failure in Chapter 5, because the discussion is theoretical, not empirical.

The exceptional occasions that "singing for learning" give evidence to facilitating learning are settings in which the songs are used repeatedly over a time in which other aspects of the learning setting generate emotions and bonding between the singers, then the words are energized and enhanced in importance because of these other aspects are simultaneously influencing the whole learner. Occasions in which repeated, prayerful, deliberate reflection on the words in the learning setting until their meanings, connotations, poetry, and inspiration, etc. deeply

influenced the learners' affections hence conditions the success of the learning strategy. This happened with the thirteen monitors who asked for extra learning sessions in July of 2004. Another example of this was in the intensive involvement of the learners in the course on "How the Church of the Nazarene got to Your Area" when they sang (in their maternal language) as they marched the two hymns of celebration of the founding of the Church of the Nazarene.

As noted in Table 4.6, lines 6 and 7, the other minor success in "singing for learning" relates to singing the theme hymn "I Want to be Like Jesus" which also is analysed word by word, sung repeatedly and in different settings.[2] However, these successes are sporadic in the research so **the overall finding in relation to "singing for learning" is that it has not been generally successful as a holistic learning strategy, most probably because the singing is not done in the maternal languages and in native musical patterns.**

Another aspect about the books themselves, from line 28 of Table 4.7, which is separate from the issue of them being the base for group discussions, is the surprising importance given to "studying books at home for IBNAL classes". **A full quarter (25%) of the sample consider that reading and filling in the answers to the students pre-programmed textbooks, which include biblical content, is one of the four most important spiritual activities of their lives.**

Returning attention to Table 4.6, three recurring themes found there are coded as relevant to "praxis" – numbers 3, 9 and 14. Number three, "sitting in circle and open dialogue are new practices in educational settings…" was examined above as an aspect of "group discussions" but it is also an aspect of praxis (action-dialogue-reflection). In this case the **praxis** under consideration is active, participatory learning which is quite different from the passive, listening, and copying from the blackboard into their notebooks practice of the previous academic experience of the sample. Active, participatory learning starts as dialogue which passes through a period of critical reflection before it can be achieved in practice. This understanding is certainly a finding from the five years of transforming learning settings from passive, left-brain learning to active and holistic learning.

Many skills are embedded in the **praxis** of action learning, skills needed by both sets of participants, i.e. the facilitators and the learners. These skills include broadening the listening competency of learners to the capturing of what classmates say as well as what the person in charge of the group says and increasing the skills of analysis, reflection, reorganisation and synthesis as brain activities at work on the content of the material in the textbooks during the questioning and answering of group discussion. Sitting in a circle for open dialogue also encourages learners to increase in social skills, like looking at classmates during discourse and around the circle when they themselves speak. Learners and monitors practice public speaking within the safe setting and on the relatively small platform of their group. Learners and facilitators improve in the way they prepare for the oral expression of what they have either thought through and written previously as answers to written questions in the student texts of what they have created in the midst of the group discussion by the mental ping-pong game as they listen to tentative answers from their classmates to questions the

---

[2] *A music video of the theme hymn for use during monitor training might be more effective.*

facilitators pose to the group. Learning to participate in group discussions takes some time and is not automatic; it is facilitated in training sessions that take into account the multiple sub-selves, mental, social and spiritual, of the monitors.

Toward "**praxis**" in active learning and facilitating holistic learning in groups, facilitators must first unlearn an attitude; they must pull themselves out of previous trappings of authority vested by a physical position in front of the group with all eyes focused on them and step into the experience of discovering truth side by side with a cooperative group which all have before them **the same content** (the student textbooks). New knowledge is constructed by kneading, moulding and shaping the content in the context of the group setting. The empirical findings #9 and #14 of Table 4.6 infer that **reflecting** on the book content and **dialogue** in the group setting facilitate **action**; these are the three parts of "praxis".

The area of most change or highest impact from the large sample is on line 17 of Table 4.7, is "spiritual growth". "Increased spirituality" was also the most commonly referred to change in the lives of the fifty-three IBNAL learners who have four years or more experience with holistic learning strategies. What does "spiritual growth" or "increased spirituality" mean in relation to learning? I propose that both are results of "**praxis**". Biblical content is explained and processed when the learners fill in their student books so they **reflect** on that spiritual knowledge and biblical knowledge before and during the dialogue which takes place in the face-to-face sessions of the cooperative learning environment succeeds in putting the new knowledge into **action** in his or her life. "Spiritual growth" is success in transforming biblical theory to practice in social context to the extent that it can be even be noticed by classmates who watch the development of their colleagues.

If "spiritual growth" and "spirituality" are considered as results of "**praxis**", then "dialogue-reflection-action" is a well-succeeded holistic learning strategy in this empirical study both in the lives of the learners and the monitors **to the extent** that the person has personal control over the action. The adults in Mozambique can become "more spiritual" as a result of "mini-praxis" (Bartle) utilized in IBNAL classes because nothing exterior to them, nothing from their context, prevents the manifestation of "spirituality". However, forces beyond the personal control of the learners to transform, like economics, books in a second language that they understand imperfectly and district leadership which does not favour the establishment of holistic learning settings in their district affect the extent to which "praxis" can be fully implemented, hence diminish the learning.

"**Classical spiritual disciplines**" as holistic learning strategies tend to differ from praxis in aspects of social context. The disciplines were and still are practiced as life styles in communities of like believers in convents and monasteries who give each other mutual support and accountability. In a less cloistered but like sense, the cooperative learning groups of the IBNAL model provide encouragement for the members to practice the classical spiritual disciplines when alone and unwitnessed by others. Hence, the aspects marked in yellow in Tables 4.6 and 4.7 refer to "classical spiritual disciplines" as holistic learning strategies. "Singing for learning", reported in line 23 and already discussed above is theoretically a powerful "classical spiritual discipline" but, in practice, it has not consistently been powerful or effective in the research population.

In Table 4.7, line 19 "biblical knowledge" may be a result of the "classical spiritual disciplines" as those listed in lines # 23 and #25 which are practices ranked high in value by the sample surveyed. The instrument did not measure the amount of time devoted to the spiritual activities in lines 22 to 40, it only asked the respondents to indicate their top four choices. The "classical spiritual disciplines" used systematically throughout all the courses in the model of IBNAL include Bible reading and Bible study practiced alone as part of "homework". It is not possible to know (in Table 4.7) if the option "studying the Bible" chosen by 46.2% of the sample as one of their top four spiritual activities is conditioned or not by the study of the Bible being part of the model of IBNAL, so findings displayed in Tables 4.6 and 4.7 in relation to "classical spiritual disciplines" are inconclusive.

However, there are other findings related to the use of "classical spiritual disciplines"; these are found in the responses of the sample to the specific course which deliberately guides learners to experiment holistically with several, less frequently experienced disciplines like corporate silence and spiritual exercises. The findings, already well examined in previous discussions, give evidence to "classical spiritual disciplines" being a powerful holistic learning strategy. This course, "Holiness in Day to Day Life", is one of the two most frequently remembered and cited courses of the group of 53 learners who have the greatest exposure to multiple holistic learning strategies within the four years of learning in over 30 courses of IBNAL. The fact that the course which uses corporate silence, spiritual exercises and Wesley Bands, though complex, was successfully conducted by monitors in the field implies that "classical spiritual disciplines" can, in fact, be used by monitors in learning settings to facilitate learning among adult learners who are developing leaders. **Overall, therefore, empirical findings support "classical spiritual disciplines" as a holistic learning strategy in the research population in Mozambique, including some insight into the metacognitive processes of the learners which are pertinent to the theoretical analysis.**

The holistic learning strategies of "**hero-modelling**" within that of "**rehearsing integrity**" overlap with "classical spiritual disciplines" in which the heroes being modelled are spiritual and, in the case of my study, *biblical* heroes, particularly Jesus, and the rehearsing being done is an imitation of practices the heroes practiced. The integrity of the heroes is identified, analysed, reflected upon, and applied to the current context of the learners for them to "try on" the ethical standards and life practices of the hero. So "hero-modelling" and "rehearsing integrity" are similar to "praxis", the difference being in the site of practice. In both "praxis" and "classical spiritual disciplines" the usual site of the action (of praxis) and the carrying out of the disciplines is in life itself, in the real world context of the learners, while "hero-modelling" and "rehearsing integrity" are usually practiced in the learning settings.

The "trying on" of hero models, like the "trying on clothes" which takes place in a dressing room before investing in their purchase, occurs in the learning setting and is a trying on for fit, a trying on for comfort, mobility, and theoretical applicability to the context in which the model will be used. Learners "try on" spiritual disciplines in "Holiness in Day to Day Living" experimenting with their use in the directed learning setting. They are "rehearsing" practices they might choose to use in life. Learners identify heroes like Jesus and the Apostles who used such practices, and because the learners agree with the values of these heroes,

imitating their lives "makes sense", which is a basic condition for learning. The "classical spiritual disciplines" used by these heroes make sense enough for the research sample to utilize them regularly in life (as indicated in lines numbered 23, 24, 25, 27, 29, 30 of Table 4.6) taking "hero-modelling" in a learning setting to full "praxis" in the setting of life.

Besides the value of singing the goal "To be Like Christ", in lines #6 and #8 of Table 4.6 and discussed above, themes from lines #15, #16, and #21 give evidence that practicing in learning and public setting actions which rehearsed in each face-to-face session act as little rehearsals or "tryings on" of practices which, if carried out in practice become authentic integrity. This sounds a lot like "behaviour modification", however it has more to do with whole-brain utilization than external motivation; the motivation for change has an intrinsic ideal – to be like the chosen hero.

In order to pass the courses of IBNAL (line #15 of Table 4.6**) self-sacrifice** is required of the monitor and the learners. All seven groups agreed with the premise but the break down came (Table 4.6 line #15), in the real world, when paying for the books was very difficult. Learning verses (#21) is a basic, recurrent practice of biblical heroes; it makes sense to this research sample. However, by 2005 putting this ideal into practice (Table 4.7, line #1) had become the biggest problem they found with the IBNAL model. The content of the books is deemed valuable (Table 4.6 line #9) by consensus in each of the seven sets of voices, but by 2005, the "time to do the homework" (Table 4.7) presents a bit of a problem, not as much of a problem as "memorizing Scripture", but it was the 4th ranked problem. The findings specified in this paragraph probably reflect the universal human trend of: aspiration to high ideals and shortfall in putting the ideals into practice. Yet, the sample does not negate the efficacy of "hero-modelling" and "rehearsing integrity" as holistic learning strategies. These strategies are easy for the minimally-trained trainers, the monitors, to use and are highly contextualisable so the strategies are not limited in use by their difficulty. The extent to which "hero-modelling" and "rehearsing integrity" advance learning is inconclusive in the findings.

The high esteem reported in 2005 (Table 4.7 lines 12 and 13) for the goal and for memorizing Scripture in which 69.4% consider the goal and 67.6% consider memorizing Scripture "very good or excellent" indicate a clear "no pain, no gain" stance, in that the sample, even though memorizing Scripture presents the most frequent problem, it has an esteemed place in the learning system because it is recognized as a means to "spirituality", to knowing the Bible, to imitating Christ and the Apostles. These ideals still motivate the learners and the leaders in the research context. The sample insists that self-sacrifice still needs to be their practice. They must endure the "pain" of memorization to "gain" Scriptural knowledge like that of their heroes. The Christian athlete endures the discipline of training to be fit enough to run the race to the end.

Empirical findings also attest to the acceptability to the sample and validity of the construct of deliberately making aspects of the learning environments spiritual and conducive to learning. This is not a holistic learning strategy, but it is a major theoretical premise of this PAR study as presented in Chapter 2, i.e., that the holistic learning strategies are used within spiritual learning environments. Initial

data input from round table discussions (Table 4.6 line #1, 2 and 5) evaluated the establishment of a pattern of meeting which became affectionately known as "our God-sandwich". God, the bread of life, was the top and bottom of each encounter, the focus of the beginning and the end of each meeting, and the "stuff" of what those of us meeting would say or do was the filling between the two slices of Him as the bread. Imperfect as the analogy might be, the practice became the wide spread pattern throughout the learning system of IBNAL. Learning is the filling held together and surrounded by God; the resultant ambient provides predictability and security. Within this spiritual environment, it is natural to expect the theme of line #2 to arise and to be repeated, "that bonds between the members [of the cooperative learning group were] enhanced by prayer". As people open themselves up to pray with others, then bonds of mutual trust develop, so within such bonds, novelties like holistic learning strategies (as per line #5 of Table 4.6) have a greater chance to be effected and effective. These were the thematic positions crystalised by repeated voices during the phases of qualitative research.

Coded in the colour beige, "spiritual environment" shows up several times in Table 4.7 in lines numbered 8, 11, 12, 13, 22, 26, 30, 31, 32 and 33. These ten references are not really the only indications of spirituality in the findings; most every one of the items has spiritual substance to the practice or to the finding however, these ten are sufficient to provide indices to the value ascribed to this factor. "Praying together", "singing [spiritual songs] together", the "goal" [to be like Christ] and "memorizing Scripture" are "regular aspects" of the learning system; they are not occasional events, they are normal happenings. These activities are not regular aspects of non-spiritual learning environments. "Praying together" is a case for courts of law in some settings; the other three activities might be considered "worthless" or of "low value" in other learning systems, however, in the research sample above 67% of those surveyed rate these four practices are as "very good" or "excellent". Spirituality in the learning ambient is esteemed. Other findings corroborate the bent of this sample to seek settings that are spiritual. The spiritual ambient sought by "attending church services" (line #22) which is the top rated choice of the spiritual activities of the sample. Sunday School (line #26), another choice of spiritual environment, is chosen as the 5th rated spiritual activity. Lower percentages of the sample would choose among their top four spiritual activities "taking holy communion", "praying with others in group", "being involved in theological class sessions" and "meditation" and each of these activities takes place in a spiritual environment.

The final two holistic learning strategies to consider in relation to the data gathered in the empirical study and relative to the first two research questions are "cooperative learning groups" and "teamwork". "Work" is the significant difference between the two. "Cooperative learning groups" produce "learning" and are oriented to relationship not to task. "Teamwork" is working together to accomplish a task, so aspects of the group which contribute toward accomplishing the task at hand are positive, and, conversely, aspects which reduce or thwart accomplishment are negative. In Table 4.6, line #2 "bonds between members", line #4 "relationship", line #5 attitude of perceived "challenge", line #15 "self-sacrifice", line #17 "the 3 certificates", line # 18 "public recognition" contribute positively to the working together in team. Not only were these aspects positive in 2002, but also in 2005 when data in Table 4.7 was gathered, the aspects of team and group appear to be among the most consistent data of all reported in the table, at least as consistent as the previous subject, esteeming settings which are

spiritual. The highest rated aspects of IBNAL are, in fact the "group" aspects (lines 8 through 12), "praying together", "being together", "the skills of the monitor" and "singing together", two of which infer task – being together in a **study** group and "the skills of the monitor" to keep the ambient spiritual and to keep them on the task of learning.[3] Since, then, the highest rated regular aspect of IBNAL relates to "group", then it would be consistent and predictable to find that the aspects rated *lowest* as "problems" would also relate to "group". Attention to line numbers 5, 6 and 7 shows that the "group" aspects are, in fact, those *least likely to be considered "problems"* as these occupy 5th, 6th, and 7th places among seven choices. Yet another consistent finding is that a group activity, "attending church services", is the top rated choice of "spiritual activities", selected by 63.9% of the sample out of 19 different possibilities.

It also seems to follow logic to find improved "relationships" at the bottom of the choices of greatest impact. Apparently this sample already had their relationships in tact, so growth or improvement in relationships though learning in the IBNAL system was a very infrequently chosen option (line 21), only 8.1% of the sample.

To what extent does the holistic learning strategy "cooperative learning groups" facilitate learning in developing adults in Mozambique when used by minimally-prepared trainers? The fit of this learning strategy to this sample seems optimal, but, since no base line was laid at the outset, there is no way to actually measure to what extent learning has taken place in the lives of this population. **The evidence seems to indicate that the holistic learning strategy "cooperative learning groups" is extremely well utilized by the monitors and well received by the sample such that there is no apparent limits resultant from the monitors being minimally trained. When (line #9) "being together in a study group" is highly rated by 76% of the sample, the probability surfaces that learning *is* enhanced.**

Finding #4 displayed in Table 4.6, "relationship prevails over task" is a finding that was crystalised by voices in each of the seven sets of participants indicated in the table. This finding is corroborated by data just discussed from Table 4.7 in which the 952 respondents rate as the top two aspects of the IBNAL model "being together" and "praying together".

In the various tribes of population of this research one constant is *collectivism* even though this is probably modified in the urban settings of Mozambique. The collectivistic dynamic, "relationship prevails over task" clearly surfaces in the empirical evidence. Yet, the dynamic often surfaces unpredictably in that I am yet unable to discern *which* relationship will prevail over *which* task. So, in relation to "teamwork" as a holistic learning strategy, the extent to which it enhances learning seems to depend on the perception on the part of the learner as to *what* the task is and *how important* the task is. Perceptions of "task" seem deeply embedded in layers of relationships. For a task to become important to a learner it must be important to *someone* who is important to the learner. This aspect of collectivism is unpredictable and illusive to me, the outsider who was formed in an

---

[3] *"Group discussion" has a rather low 64.4% who consider it "very good or excellent" but this is probably affected by the lack of material in the maternal languages, not deficiencies of the monitors in the task of conducting, or the value of discussions in general.*

individualistic culture; it remains to me the single least understood dynamic involved in the learning system. I have become convinced through the years of this PAR study that the issue of "collectivism vs. individualism" is very important to the study of any human system and is too frequently overlooked in educational studies. This issue tends to be included uncritically as "cultural differences" when it is fundamental and deserves critical attention.

4.2.2   Summarized and Interpreted Findings Relative to the Major Research Question: *How do holistic learning strategies facilitate adult learning?*

This section considers the empirical findings which relate to the major research question: "*How* do holistic learning strategies facilitate learning?" Data collected in first three phases of the empirical study were collected from leaders and not from the learner population which was only in formation at the time. Data collected during Phase Four are more closely associated with the population of learners so provide evidence more relevant to the actual learning being facilitated by the holistic learning strategies.

Holistic learning strategies **satisfy learners** in the sample; this is part of the answer as to "how" they facilitate learning. Observe again in Table 4.8 below how satisfied the learners are with the holistic learning system, aspect by aspect. Satisfaction contributes to how the holistic learning strategies facilitate learning.

REGULAR ASPECTS OF IBNAL: Sum of two highest ratings	Learners	%	Rank
Praying together	503	76.6%	1
Being together in a study group	474	75.7%	2
Skill of the monitor(s)	486	75.5%	3
Singing together	493	67.7%	4
Goal	515	67.7%	5
Memorizing Scripture	487	68.2%	6
Applying lessons to life problems	463	66.3%	7
Group discussion of material	497	63.4%	8
Student texts	477	57.0%	9

Table 4.8 Satisfaction Ratings of LEARNERS with Regular Aspects of IBNAL

In order to support or negate the theoretical explanation at the end of Chapter 2 of how holistic learning strategies facilitate learning, findings from the empirical study which show patterning, ordering, categorizing, congruency, relating, connecting and integrity in the lives of the learners are those to identify and to interpret as demonstrating such relationships. If a finding shows patterning, then it supports the theoretical explanation. If one shows greater connectivity or integrity then is supports the theoretical explanation. Again, it is important to note that the finding must demonstrate one of the relationships, i.e. patterning, ordering, categorizing, congruency, relating, connecting and/or integrity, showing up *in the lives of learners* for the finding to relate to the question: "How do holistic learning strategies facilitate adult learning?"

The data gathered by tools requiring introspection and disclosure of learners provide the deepest look into the actual thoughts and actions of the *learners in the process of their learning*. Such evidence is found particularly in 1) the textual analysis of three video clips taken on site of learners in face-to-face

settings in 2004[4], 2) the impressions captured at the close of the retreat in the South (November 2004) of "Holiness in Day to Day Living", and 3) the written answers (December 2005) to open-ended questions of the learners who have more than four years in the IBNAL system and who identify the changes they perceive to taken place in their lives. Some of the evidence generated in the large hybrid survey of 2005 is also pertinent.

In the workshops of January 2003 on "Using Visual Cue Books for Pre-Literates" the theme of "reproducibility" as a patterning of practice surfaces in the "mini-praxis" settings which Bartle creates within the learning setting. The stories that Bartle tells with stick figures to be retold with miniature stick figures are varied, i.e. the content is diverse, but their method of delivery is standardised, and the set of methods is reproducible by pre-literates rehearsing in class then putting into practice in safe settings outside of class. This gives insight into how the TEE model works, too; the holistic learning strategies enable *the learners* to **connect with** and **order** the content because the content in the Text Africa books always is delivered in the same whole-brained way. Learners are enabled to **connect** new content with previous knowledge because of the familiar **pattern** of delivery.

In the video clip analysed (Appendix G) of a face-to-face session functioning in Matola, a trained monitor from the North was asked to conduct the face-to-face session for the group of learners, from the South, and absolutely unknown to him. He conducted the session and it proceeded in the normal **pattern** just as if the regular monitor was present. The learners and the substitute monitor acted on their knowledge of the **pattern** to actively enter into the learning setting. But not only is the pattern of delivery the same, the learners utilise a **pattern of active learning**, i.e. open discussion, participatory Bible reading, responding to and answering questions. By simply watching the video footage, the predictable **patterning** of both the delivery and the behavioural involvement of the learners is evidenced to observers, even those who do not understand what they are saying. Obviously and visibly the learners know something about the question the monitor poses. They **connect** with each other; they **relate** the Bible on the table in front of them to the question and to life.

Discussion is important of the two courses that tied for first place among those the 2nd certificate learners most remembered spontaneously. One of them "The Shepherd and His Work", gives brief and simple instructions and biblical bases for *how* the pastor can integrate the biblical ideal of pastoring to the life practice of pastoring; this knowledge, when enhanced and improved by discussion with peers in the cooperative learning groups, gives **order** and **congruency** to his or her life as pastor. The learner is enabled to put into practice what he or she desires to effect in his or her role as pastor. The written content and the biblical content are moulded in the face-to-face session until the knowledge "makes sense", "fits" or "relates to" the context in which the learner desires to utilise the knowledge; if the learner succeeds to **connect** the knowledge created in the face-to-face setting to the life settings then learning has actually been facilitated.

The **connection** or **relation** held in highest esteem by this sample of learners, based on the consistent evidence from the large hybrid study and analysed above, showing how they value and seek *spiritual* settings, is "spirituality", the

---

[4] *See analytical textual comparison of three clips as Appendix G*

condition or state of "possessing spiritual wisdom", of "living in the favour and with the blessing of God, the supreme spiritual Being". The sample said the "improved spirituality" in their lives was the area of greatest impact in their learning. What does their perception of their "improved spirituality" show about how holistic learning strategies facilitate learning? The learners perceive themselves to be "more spiritual" when they seem to themselves to be more whole, more complete, when they have fewer holes and gaps in their character, and they possess greater integrity or congruence between what they *want* to say, to do and to be and what they actually *do* say and do and who they actually *are*. They demonstrate consistently that they desire to be *spiritual people.*

The other course most frequently cited by them the learners was "Holiness in Day to Day Living". This preference was probably due, in part, to their demonstrated desire to be spiritual. In the future the surveys might include indication of the reason they chose the books or courses they chose, but that question was not on the short survey they filled in. Yet there are other findings which begin to answer the "why" of this choice, i.e. the responses they wrote immediately at the end of the course. These "post-retreat statements" are formed in the "heat" of an intensive learning experience involving many different senses. The statements written by those learners with at least four years in the learning system which describe "how" their lives are different from before are not exclamations coming from a deliberately emotional period but are broader, "cooler", more cerebral than the emotional statements about their learning. Since both sets of statements disclose cognitive and emotional processing, in the next paragraphs I take three strands and braid them together, two statements (one from each set) braided with an interpretative examination of how each gives evidence to patterning, ordering, categorizing, making congruent, making whole, relating, connecting and integrating.

The meaning of eight terms themselves must also first be briefly explored because there is overlapping between them; "making congruent" is a kind of "patterning", "making whole" is almost the same as "integrating" and certainly includes "connecting". For "ordering" to happen, "categorizing" probably needs to happen first. And so on. The overlapping in meaning contributes to the subjectivity of assigning any example to any one, because it probably is an example of more than one. There are nuances of meaning which I include in the discussions and examples which follow. But logically they must overlap and inter-relate because learning itself also does those things; new learning or new knowledge overlaps and inter-relates to previous learning, so words which speak of learning also coincide.

Patterning is repetitive design. In the following "post-retreat" statement, I found a thrice repeated construction which constitutes a pattern:

> The parts that affected me most were the showing of the Passion of Christ and prayer outside in the sand. The Film showed us the pain that Jesus had with us and the prayer in the sand out where the sun was beating down signified a tiny fraction of the suffering that Jesus endured for us. Tasting the vinegar was a shock to my system because it was like Jesus experienced with the bitterness of our sins.

185

The learner designs three comparisons and the three comparisons form a pattern from the thinking of the learner:

- the pain of Jesus shown in the Film, his own pain experienced in the sand;
- the suffering endured by Jesus, his own tiny fraction of suffering in the beating sun;
- the bitterness of our sins to Jesus, the shocking taste of vinegar to his system.

The "how I have changed" statement which I perceive to evidence patterning is this one by the classmate of the learner:

> *A colleague says: "he is excellent because he has changed so much spiritually: he visits the sick, gives himself sacrificially for others, loves everyone and gives a lot of evidence that he really is a Christian".*

The pattern I see is the repetition of actions which are good works, "he is excellent", "he visits", "he gives himself", "he loves everyone" then the colleague states that the learner "gives a lot of evidence", implying that the evidence is frequent and is repetitive, like the colleague's statements are. The colleague does not make such a big deal about how bad the learner was before he "changed so much", but emphasises the love in action, sacrificial action which has become regular mark (pattern) of the life of the learner.

Ordering is both decreasing chaos and clutter as well as putting into some kind of sequence. The "post retreat" statement showing ordering is this one:

> The experience of the last 15 hours that affected me most was the suffering of Jesus Christ, man without sin, who knew no evil, gave himself for my salvation, died for my liberation and serves as link between me and my God, serving as the Way and the Truth of life.

This is a cerebral, non-emotional statement; the only one like is among the 13 learners. Actually, it is amazingly dry; he uses the word "affected" because that was the word given in the instructions, but he says nothing that denotes affectation. The learner is stating facts, in order, one after another – Christ was "suffering", "man without sin", "knew no evil", "gave himself", "died for liberation", "serves as link", "serves as…". The learner includes himself in three facts – "*my* salvation", "*my* liberation", "link between *me* and *my* God". He enters the ordering of his narration, in an orderly way.

The "changes in me" statement which exemplifies ordering follows:

> *I was one who that knew nothing about God. Since I began to study*
> *I know how to talk to people without arguing with them.*

This statement of order is in the sense of order from chaos, rather than order as sequence. His life was chaotic; he "was pagan", "knew nothing about God" and "argued with people". Now his life is in order; he no longer feels chaotic because he even knows how to talk to people; he has something to talk about.

Categorising is separating by type or kind; it is discriminating one type from another. The "post-retreat" statement which demonstrates categorizing is this one:

> In the last 15 hours I learned many useful things from the Word of God – I learned the practices of the early church, how to talk alone with God, I know what I should do and what should not do, to connect with others by speaking with God. The whole experience was a lesson to lead me to teach my people. Now I know how to defend myself when Satan and his allies want to tempt me; I shall be firm in Jesus Christ, my Saviour.

The learner categorises what he learned: type one learning is "practices of the early church", type two learning is skills of two varieties "how to talk alone with God" and "how to connect with others by speaking with God", type three learning is "rules of two varieties – the "should do's" and "should not do's". Then, because of these different categories of learning he feels able to "teach" his people and to "defend" himself spiritually.

The following short statement of "how I have changed" shows categorizing:

> *My whole life has changed, because I was so closed, and now I am*
> *open to learn. I know how to choose between good and evil.*

The categories in the thinking of this learner are "closed" vs. "open" and "good" vs. "evil" and since he perceives that his "whole life has changed" the categories in which he now operates his life are different from the categories in which he used to operate.

"Making congruent" is the lining up and measuring of wholes, particularly triangles, to verify their "congruency" which is a special kind, a spatial relationship of fit to or matching of each other. Several parts of the wholes are congruent to or equal to one another if the wholes are congruent. The "post-retreat" statement that demonstrates "making congruent" is the following:

> It was wonderful and still is! I think this method is an excellent innovation. I was particularly affected by:
>
> - The silence, from 8:30 p.m. yesterday. I never had experienced such a thing. I read, thought, and everything revolved around our God. No word came from my mouth but my heart was full of poetry, song and praise.
> - The film: the "Passion of the Christ" affected me profoundly. I cried. It is so moving to see the dimensions of suffering that Jesus had to bear to redeem us.
> - The spiritual activities impressed me. The diversity of them always innovative, always keeping us in constant contact with God through prayer.
> - Suggestion: this practice could become an annual event in our courses.

Congruency is more complex than several of the other mental dynamics explored thus far. Within whole entities which are congruent to each other there are several points of matching and relationship. The statement above from the learner has several parts – the introduction and three points of measurement, the silence, the film and the spiritual activities, which function together to make the event

187

"wonderful" and the method "excellent". The learner names the aspect, then describes the affect of the aspect on him, then makes a closing statement. What amazing internal structure in this introspective response: three main points, three constructs per point:

- Silence – new to me – "No word…song and praise.
- Film – profound/ I cried – "So moving...to redeem us".
- Spiritual activities – impressed me – "The diversity…God through prayer".

They all fit together, moving around a common centre that he names – "God" – making congruency.

The next statement which indicates "making congruent" is from the set of statements about "how my life is changed"; it is simpler than the statement just examined but strong in a different way:

> *Studying has changed my family life as well as my preaching. I understand the value of marriage and **living in harmony** with my family. I not only understand the rules of preaching, but God has helped me with my pride, fear and self centeredness (see 1Timothy 3:1-6).*

This learner refers to several parcels of himself: his family, his role in preaching, his values, his ability to live in harmony, his understanding of external rules, and his understand that his inner self is God-touched. His sub-selves are at peace with each other; they fit together, they match, they are congruent one to the other.

Whole-making includes synthesising and integrating but is more complete than either; two parts may be integrated and synthesised and still not be a whole; they might be just a bigger part. Whole-making results in a completed entity, without holes, integral. The "post-retreat" statement which gives evidence to whole-making is the following:

> I want to tell that since the first second yesterday afternoon, many wonderful things affected me that I have not experienced since my childhood. I hope that all that I have learned will be fruit for me and for my children, my grandchildren, my great grandchildren and for people in general. The whole design of this event was very interesting, culminating in the suffering that Jesus had in life because of the love of God. I will carry with me for the rest of my life the memory of these 15 hours. It was a historic event for me.

The statement enfolds aspects which are universal to human experience – time, generations of family, and memories of childhood. This learner emotionally celebrates the "many wonderful things [that] affected" him which constitute a "historic event" which he expects to carry with him for the [whole] "of…[his] life". There a divine centre to the "whole design of the event" which he identifies as "the suffering that Jesus had in life". The feeling of completeness or wholeness is so great that he expects the experience to have an ever-widening ripple effect – "be fruit for" himself, his children, grandchildren, and for people in general. Because the whole-making has a divine centre and a multi-generational effect, the learner perceives that time itself is marked by it – it is "historic".

188

Far less emotional, but other statements which also indicate whole-making come from two learners who write "how their life is changed".

> *I felt very empty, but now I feel complete, I able to serve and ready to teach the Word of God.*

> *The IBNAL books all together are very helpful, because they **touch on all** aspects of my Christian life. They are a good way to **bring learning to life.***

The first learner says it outright, he "felt very empty but now [he feels] complete [whole]"; because of this completeness he is enabled to serve and to teach the Word. The second learner refers to whole-making in different ways. He says the books "*all* together" are helpful because "they touch on *all* aspects of my Christian life". The books, as a whole affect all of life as a whole. The books "bring learning to" an implied *all* of life. The statements from both learners exemplify whole-making.

"Relating" frequently refers to bilaterality, one entity relating to another, a part relating to a whole, a whole to a part. However, relating may be more complex than simple bilaterality; when several parts relate to each other the results are a web of interconnected entities. Relating may refer to people, but not necessarily. In the "post-retreat" statement below the aspect of *relativity* is part of the relating exemplified in it:

> In the last 15 hours the most marked experiences on my Christian life were the following: It is a habit for us to ask Christ to help us with the problems we have. We do so lightly. But today I felt the weight of praying to Jesus in a profound way, He did so much for me before I knew I needed His power. I became convinced that everything that a person does without God destines himself for perdition. Jesus, in His human form, cried out for God to help Him. God was already with Him, but Jesus, in our place, could not sense His presence.

The learner quantifies aspects of the learning he has experienced: "we ask *habitually* and *lightly* but today instead of lightly "I felt the weight of praying" not *habitually* but *profoundly*. The action is still praying but the intensity and the profundity are greater, *relative to* praying before the experience.

The learner also shows **relating** in the sense of relationships: Jesus relating to him (the learner) before the learner "knew…his power", before the learner related to Jesus; people without God relating themselves (destine themselves) negatively to eternity, to perdition, Jesus relating to God in anguish (crying out for God to help), God with Jesus even though Jesus lacked the sense of presence. This statement is a web of relating one thing or one person to another.

The two examples of relating found in the set of "post-retreat" statements both refer to relating to people:

> *I have learned to respect my leaders, both of the church and others.*

> *I did not respect my colleagues but now I know how to love putting it into practice.*

The two learners consider these changes very important. The first one now relates respectfully to leaders in and out of the church. The second colleague learned to respect classmates and to love through actions. The learners' perception of their more proper relating to people is comparative – relative to how they related to people in the past, before they learned.

Connecting is popularly used as linking one thing to another. The "post-retreat" statement which demonstrates connecting is one in which the learner is connecting answers to the questions which came up in his mind during the hours of silence when the answers did not come from discussions but came from his own mind:

> During the showing of the Film, some questions arose. I had this question: "Why did God accept that His Son, Jesus, the all-powerful, would die in that way?" But I ended up understanding that the answer is in John 3:16, that it is because of His love. The second question was "How can God forgive these people who killed Jesus; what can they do to be forgiven?" And the response I find in I John 1:9 that it is through compassion that God forgives. And I am asking God to take away my weakness and arm me to better confront our adversary, the devil. Thank you, Lord God. I am very grateful to be Your son.

The learning experience provokes two big questions in his mind and the learner searches for answers in his own knowledge and understanding and connects to them in ways which satisfy the discomfort he felt when the questions arose in his mind. He ends with another connecting piece – he perceives himself to be weak and inadequately armed to confront "our adversary, the devil" but he is connecting again to "the answer" to these two conditions – being God's son. He is so sure that that connecting to God as a son will prove adequate that he thanks God for the answer that he expects to find in the future when "weakness" and confrontations assail him.

The short statement which follows is from the set of "how my life is changed":

> *Now I know how to apply the Word. I now make visits and know*
> *how to encourage people.*

This is an expression of connecting cognitive learning to practice. The ability the learner now has to "make visits" and to "encourage people" is an ability to put into practice what "the Word" says to do.

Integrating is a more complete kind of connecting; it implies more than one connection, a process which includes synthesis, valuing and internalization. After synthesising, the individual opts by valuing whether or not to integrate it into his or her life. The statement from the "post-retreat" set follows:

> Sincerely speaking, or better, writing, all of the experiences of the last 15 hours affected me. But one affected me most was the film the "Passion of the Christ". I must confess that is was terrible. I always knew that Christ suffered a lot for me but I never had imagined [an unreadable word here], another part that affected me and continues to is the period of silence. I never, never thought that this could happen, that we are together but no one dares to say a single word. To me it is one of the 7 key words of this course "Honourable". In fulfilling one of the words, then we become wise,

loyal, transformed, self-disciplined, full of love and long-suffering, making progress in Holiness in Day to Day Living.

The learner modifies his word choice of "speaking" to "writing", an indication that he intends to be precise in his expression. Previously ("always") he "knew" "that Christ suffered a lot for me"…but he "never had imagined" some unreadable other level of knowledge that he has now. Likewise "silence" in which "no one dares to say a single word" was something he "never, never thought…could happen" in a group of people in community. Two understandings beyond his imagination are now **integrated into** his personal experience, the experience of being "honourable". Keeping "silence" in community acted as a test of "honour" which is, in fact, a test of their individual and communal "integrity".

He **connects** "honourable" to the other six words key words of the course, effactually integrating the whole course. He predicts a ripple effect that being "honourable" would facilitate being "wise" and "loyal", etc. Finally he attaches all seven qualities to the experiential "progress" of **integrating them into living** (living which will have the quality of holiness) similarly to the progress he has just experienced of integrating into his life the two understandings that previously were beyond his imagination.

The "how my life has changed" statement demonstrates integration of theory to practice:

> *I had very little understanding. I was never well prepared for what I was doing. Now I am able to plan well a church service or lead the music or preach from the Bible on a number of topics. I feel well prepared. I didn't know that a pastor should be prepared, but now because of my training I can lead without difficulties.*

"Integrity" is involved in the process which has taken place in the life of this learner. He had the title and responsibility of "pastor" before he was equipped to be a "pastor"; he was tolerating a falsehood, he was called "pastor" but did not know what a pastor knows how to do, nor did he understand what a pastor needs to understand to preach. He now is able to put knowledge into action and he "feel[s] well prepared". Integration has taken place. There is no longer discrepancy or gap between "what is" and "what should be", particularly "who *he is*" and what "who *he should be*"– in his personhood there is integrity. He has become a trained pastor so now he *is* what he *is called*.

Eight mental activities – patterning, ordering, categorizing, making congruent, making whole, relating, connecting and integrating – have been exemplified by statements taken from two sets of statements from the learners of this PAR study. The diversity within both the set of "post-retreat" statements and within the set of "how my life is changed" statements is quite flagrant. Learning certainly surfaces quite differently from one learner to another within the same cooperative learning group. The differences between the eight mental activities have become clearer as the mental workings of the learners were explored in the non-supervised, personal and spontaneous wording the learners chose to describe their experience. Each one of these eight mental activities, explored by the introspective statements of the learners, gives evidence to having some validity. **Therefore, there is empirical evidence to suggest that holistic learning**

strategies facilitate learning by dynamic mental activities like patterning, ordering, categorizing, making congruent, making whole, relating, connecting and integrating.

4.3 Overview of Detailed Findings

My research has been conducted through five PAR teams so the four phases of the research are loosely linked to whichever PAR team is most active at the time. Some teams had shorter lives than others. Some members besides me have been on each team in some capacity: Ken Walker, Paulo Sueia, Filimão Chambo and Jon Scott. As previously noted, each PAR team has other well-trained Nazarene educators called "advisors" who interact particularly with me and only occasionally with the other PAR members, but, who are not regularly involved in data collection. Advisors genuinely "advise" in the workings of the research project. A couple of teams overlap in time and space; others overlap in time but function in different spaces.

The sub-divisions of this section 4.3 are named for the phase of the research that they report. The first three phases record findings which are basically qualitative and were mostly collected from leaders in Mozambique as the learner sub-population was in formation. Phase Four includes empirical findings from the large hybrid survey conducted in 2005, so the report of Phase Four is the largest in volume; the findings in Phase Four are qualitative and quantitative and are also reported in chronological order. The detailed presentation of the findings is chronological because of several factors. First, because, as noted above, the volume of data is large and deliberately planned to overlap; chronological order is a commonly known *order* so it is one aspect that, once identified, does not have to be explained. Second, being cyclical in nature, the knowledge-under-construction is developing knowledge so reporting out of sequence would be confusing. Third, the research population has been in formation throughout the years of the research; to give a description of it at the outset of the empirical findings would be artificial in that most of the research population was not yet members of it.

In order to include almost everything but to simplify and clarify the presentation of the findings, I have many constructed tables which I use to introduce items, report efficiently and synthesize the research findings. Each cell of data in the tables represents critical listening, note-taking, textual analysis and synthesis. Each "site visit" implies a "round table" interface with those on site, holding "interviews" and using the "Delphi technique" which is asking questions orally, conversationally to a group and having them respond individually, in writing, as if the feedback was a one-on-one dialogue. Each "round table" and "interview" is a story, so I have dozens of stories. I choose to include a few stories which provide windows to the reality of my study. It is not an ethnographic study (Mouton 2002:148) because I am not usually immersed in the population of my research. I live in a developed, electrified, computerized, cosmopolitan setting which is one, but only one of the far-flung learning settings of my learner sub-population. The people who live in the setting of my research are the monitors, who I have trained as facilitators of the learner sub-population. During their training these monitors first participated by discussing at "round table" discussions the multiple sub-questions which feed into the answering my research questions. Then they were deployed to be the facilitators of learning within the whole population usually referred to as the

"population of my research" or "population of this study" where they continued in action learning settings and in several large surveys.

4.3.1   Presentation of Findings from Phase One A

The table which follows, Table 4.9, is the first of several which present data in very concentrated and semi-codified form. The table has a title "The Efficacy of Holistic Learning Strategies" and three lines of headings. The first heading specifies when the data was collected: the data from Table 4.9 was collected during "Phase One A" which refers to the first part of the first phase of my research. This heading is separated into "Data collection" and "Evidence" indicating the left side of the table records and classifies the data entering and the right side begins to interpret the evidence. The third heading specifies which PAR team was principally involved.

The second line of headings is the column headings which categorize the data arranged below them in column format. Within the column headings, the first one, "Tool Number and Year", simply provides a tag or label of the research instrument for referencing purposes. In the column heading "Generalities regarding the instrument" the first entry in the cell identifies which kind of research instrument it is, and subsequent information is pertinent to understanding the instrument itself. For example Tool #1 in Table 4.9 specifies the "Generalities regarding the instrument" are "Round table, Sueia, Walk, Scott" which means that the instrument labelled as "Tool #1" was a round table discussion between Sueia, Walker and Scott. The next column heading "Main subject" identifies, in brief notation which is sometimes marked by a code the subject matter treated in the research instrument. The heading "Analysis codes" uses four symbols to classify the data generated during the instrument. A heart ♥ indicates a theme which is familiar already, one which reoccurs in discussions of the participants. A square □ indicates a new fact uncovered in the data from the instrument. An upward pointing arrow ↑ codes an idea or a slant or variation on an idea which is new, and a downward pointing arrow ↓ signals a problem that already exists or is predicted by means of the research instrument. Notations in the columns 5, 6, 7 and 8 begin to interpret the data collected in terms of the specified areas of research. Column 5 indicates findings which are pertinent to issues other than the three research questions, so is entitled "Other issues" and refers to subjects like the refinement of the TEE model as per the ten weaknesses stated by Kornfield, or the issue of collectivism as discussed in previous chapters. The last three columns are headed by the three research questions of this PAR study.

A discussion of the data collected follows each table. A full discussion of the full body of data collected as it pertains to the secondary issues and primary question of this research is the substance of the next two sections of this chapter.

Research Notes: The efficacy of holistic learning strategies in the development of church leaders in Mozambique: an action research approach

Tool Number & Year	Generalities regarding the instrument	PHASE One A: Data collection — Main subject	Analysis codes: ♥ recurrent theme, ▢ new factual data, ↑ new idea or slant, → problem	Other issues: TEE Refinement of model re 10 Kornfield weaknesses/ Collectivism	PHASE One A: Evidence — HOLISTIC LEARNING STRATEGIES = HLS — Do they work?	To what extent do they work w/ minimally prep. monitors?	How do they work?
PAR 1: May to Aug 2000 Two Mozambican Nazarene Church Leader/Educators, One Missionary Educator & M Scott							
#1 2000	Round table Sueia, Walker, M Scott	▢History of work done in TEE; ♥Nazarenes in curricular reform; ↑Train diploma grads to train others	↑will help 2, 3, 5 & 10b				
#2 2000	Round table Sueia, Walker, M Scott	↑Set up PAR 2 of selected graduates for pilot programme with TEE books & learning strategies, for our assessment	▢ Plan to assess the TEE model	▢ This plan will give evidence	▢ This plan will give evidence		
#3 2000	Hybrid Survey of SNM faculty	Their schooling Theology formation	▢ knowledge of their context				
#4 2000	Interviews with TEE book producers	Assessment of TEE books in Moz	▢ names of other educators;	▢ for 10a	♥Affirms books work	▢Prints ±5,000 books for several groups in Moz	
#5 2000	Interview with linguistic expert	Languages of / bilingual ed in Moz	▢ maps & linguistic demographics				
#6 2000	Interview with F Chambo	His experience in South Africa TE & TE Mozambique	♥train trainers; ♥use TEE books	↑ 10a need guides for monitors		Written teaching ↑ guides will support monitors	
#7 2000	Lit review: Mandlate, Sueia, Walker, M Scott,	Critical Reading of TEE literature including student books to assess	♥TEE books will help; ↑other texts must be		▢ TEE model utilizes HLS		

		appropriateness	written for our learners			
#8 2000	E-mail interview to Nazarene educators in the field	Learners living in their contexts; assess-ment of solutions designed so far	❤we can do this: train monitors, use & produce books	→ but buying books is almost impossible for our learners		
#9 2000	Round table: Mandlate,Sueia M Scott	Accountability system for the monitors; monitors to district relationships	↑role of missionary educators, role of national church leaders	Collectivism: Importance of superintendents in system		↑essential to have consensus of local church authorities
#10 2000	Interview w/ Bible society personnel	How to access Bibles in different languages for learners	→ not easy at all to get Bibles in maternal languages			↓best fit (Bibles for every learner in their maternal languages) not possible
#11 2000	E-mail interview w/ TEE users in field	How do they make TEE in the field work? Suggestions	☐ProForbe sent us all of their exams, forms & training materials for use of TEE books ↑selected verses are memorized for each book as part of exams			↑selected verses memorized for each book could be translated into maternal languages by our own monitors
#12 2000	Round table: Mandlate, Sueia, M Scott	How the monitors-in-training will fit into the district structures in the South	↑like current pastoral internships *practica* as "real" monitors in centres	Collectivism: this is administrative cooperation		
		How to integrate aspects of other TEE models into the Nazarene model and pre-literates into learning groups	↑test full refined TEE model in PAR 2; pre-literates okay if a volunteer reads the lesson & writes their answers & they promise to start learning to read	Refined model to be tested / Collectivism: collaborative effort to enable the underprivileged	↑this is a holistic solution for enabling many to learn	↑Idea: taking the best features from several working solutions and testing them should extend learning

Table 4.9 Data presentation from Phase One A – PAR 1 Team

Discussion: Overall, Table 4.9 presents the data collected by means of twelve different research instruments: four round table discussions, five interviews (2 by e-mail), one brief hybrid survey and the review of the TEE literature over the period of time May to August 200. The written documents for tools numbered 8 and 10 are included in Appendix A. As mentioned above, there are stories behind the summary statements and codes of each cell of Table 4.9 and the other tables which follow. I am including some details as narratives of these findings.

Just as the TEE educators observe, the members of groups take roles in relation to the others in the groups, and that is true about PAR teams as well as cooperative learning groups. When PAR 1 was first convened, it was a task force, not a research team. The task to be planned and executed was building an educational system in which to implement a reformed curriculum which would be successful in achieving exit outcomes as prescribed by the Church of the Nazarene. However, several needs of this project surfaced straightaway in the first meeting – the need to be researched, the need for participation and the need for reflexivity. The task force was becoming a Participatory Action Research team; however, group dynamics was an issue.

In the round table discussion of Tool #1, the participants each brought their expertise, as usual in such group meetings: P Sueia, an excellent Mozambique educator, gifted administrator, and the church leader responsible for distance education, was at the meeting with K Walker, American missionary educator in Africa (Swaziland) for 25 years, responsible for all of Nazarene education in Africa, long time friend and co-worker of Sueia; they had worked for years alongside each other in the field; they knew each other well, and they knew Mozambique well. And then there was me, veteran cross-cultural educator and designer of curriculum but brand new to Africa and brand new to working with the other two, definitely the "new kid on the block" and not member of the in-group. However, I was responsible for "designing the system". They would help but I needed to do it quickly according to deadlines they gave me. There was some tension; I was not the convener of the round table, nor did I know enough about working relationships in Africa to do anything about it; I did not handle the tension well. Though trying not to, I shed some quiet tears and got quieter and quieter. They either did not notice or they ignored what was happening, and proceeded to talk – mostly between themselves.

I had (and still have) a lot to learn about working within close relationships in Africa, but through the dynamics and emotions of that meeting, I learned the importance of "team building exercises" in encounters. In these, the ones who sit "at the round table" all have a chance to become *people* sitting together, discussing a cause that has interest to each one. I considered using the term "focus group" instead of "round table" for the encounters which are the very frequent instruments for the collection of data. But "round table" is my deliberate choice of term over "focus group" because the implication of the latter term is the *focus*, whatever it might be, while with "round table" the implication is the *equality* of participation in the circle of discussion. Round table is, then, more of an attitude and dynamic than a concrete "table". It is the sitting in a circle or semi-circle so that everyone can see each other. Sometimes there are actual tables between the participants and so much the better but most of the places in the Mozambique context do not have the luxury of the table itself.

By the time the round table discussions which constitute Tool #2 arrived, I had reflected on the happenings, and gained some notion of African (or collectivistic, perhaps) group dynamics in non-formal conversations, so I was different in the dynamics of this discussion. In Tool #2 the three of us reflected together and came up with some ideas for assessing the viability of the idea which was authored by Sueia, Walker and Mandlate, i.e. that of training the Bible school students to become trainers of pastors in the field. As we reflected on the wide-spread use of the TEE model, our consensus was to research the books by reading them ourselves and then using them in a pilot programme in the two near-by church districts with Bible school graduates in praxis to do the field testing. This decision is what is summarized in the cell of the table which looks like this:

↑Set up PAR 2 of selected graduates for pilot programme with TEE books & learning strategies, for our assessment

The potential impact of this decision is that this plan (to test the model in a pilot project setting) would start us on the path of refining the TEE model as noted in this cell:

☐ Plan to assess the TEE model

and, as noted in the next two cells,

☐ This plan will give evidence	☐ This plan will give evidence

the plan would provide evidence toward answering two of the two preliminary research questions i.e. "*Do* holistic learning styles facilitate adult learning?" and "*To what extent* do holistic learning styles advance learning in developing leaders in the Church of the Nazarene in Mozambique?"

Similar to the narration of the last four paragraphs, each cell and each line of the tables synthesize findings distilled from the instruments used. The tiny group of faculty, seven, was given the hybrid survey[5] which was Tool #3 which asks "Which Christian workers had the most influence on your call? and "Of all the workers in Africa, who would be your choice for teaching the following subject areas…" Only four faculty responded to the questionnaire but the names they wrote began to give face to the educational context which was so new to me, names of people yet unknown to me but who would become known as types of contextual "heroes" to the present-day educators who were responding to the survey. The very fact that only four of seven responded also was informative about the kind of response the PAR teams might expect from future surveying.

In Tool #4, the interviews regarding the TEE books in Africa took place at the office of the S.I.M. mission from where the several step process to produce books in Portuguese was coordinated. S.I.M. paid Evangelit of Kenya for rights to translate the Text Africa books from English into Portuguese. Mozambican pastors translated to a 3rd-grade level target audience. The translations were formatted for printing in the S.I.M. office and printed in Mozambique. I asked R. Hanna, "Who uses the books besides S.I.M.?" He gave a long answer with many names and e-mail addresses which led to connecting with them by e-mails referred to in Tool

---

[5] *See Appendix A1 for the survey to the faculty and A2 for e-mailed interview to Area Coordenators.*

#11 (e-mail interviews). Hanna sold me a couple of TEE titles and lent me a book on training leaders to facilitate the TEE model.

Tool #5 (interview with linguistic expert) led to understanding the linguistic diversity of Mozambique. Gardner, the linguistic expert, took me to the bi-lingual department of Mozambique public school administration and introduced me to linguists and educators he had trained. Each of them, investing their lives in the native languages of Mozambique, emphasize in thought and deed the importance of the use of mother tongues in learning. Gardner had helped to prepare the ethnic and linguistic maps which he gave for my use. These were published in a monograph written in 2002, and as part of the literature review in Chapter 2.

The interview with F. Chambo in South Africa constitutes Tool # 6. A young Mozambican already with experience working in Nazarene theological education by extension in South Africa, Chambo was the curriculum editor for the model already being used in the Church of the Nazarene in Mozambique which was an adaptation of what was being used in South Africa. He gave me the set of twenty-four Text Africa books in Portuguese which belonged to the Nazarene Extension Programme in Mozambique.

"What are you working on at this time?" I asked him. "Writing or actually adapting teacher support materials for the different courses of this 1999 curriculum", he replied.

"Everyone thought you were coming to Mozambique this year; when are you returning? We need you on the team," I told him. "I expected to go this year, but with the new baby at home, we decided to wait until next year [2001]", was his reply. "In the meantime" he continued, "you can get the first monitors trained, and I'll work here on materials for them to use; we can work together". Chambo did move in 2001 and has been an integral part of the research team since then.

The responses from the four missionaries who responded at length to Tool #8 (E-mail interviews to Nazarene educators in the field) provided contextualized opinion about the feasibility of training monitors to train others to pastor. These four missionaries were already involved in teaching by using the curricular model by Chambo and their experience in teaching in context was very important. They lived and interfaced regularly with the people who would become the "sub-population of learners in my study". These missionary educations lived thousands of kilometres from our base in Maputo; I could not go to visit them, yet, so by e-mailed I interviewed them. I asked questions about the learners, "what is the most common level of instruction that your students have?" and "what are the first languages of most of your students?" By that time the PAR 1 team knew there were over 30 Mozambican languages, but did not know which ones were most used by the target sub-population of learners.

Tool #8 (E-mail interviews to Nazarene educators in the field) has four multi-variable questions[6] for them to describe the context and the learners. It also includes four open-ended questions for the respondents to "speak their minds". The subject of students paying for their textbook is not explicit in any of the questions but one of the missionary educators, the one living in the site farthest

---

[6] *See Appendix A2 for e-mailed interview..*

from Maputo – the North – wrote in "the students will not be able to pay for their textbooks". In later discussions with the educators of PAR 1, they felt that the students could pay, so that requirement became part of the modified TEE model.

Another question in Tool #8 asks about the "teachers" who were already actively using the Chambo (1999) curriculum. The answer was telling: Area 1 (the South) had two missionary and two national teachers, Area 2 (Central) had two missionary teachers, Area 3 (Tete, also Central) had three national teachers, Area 4 (Zambezia) had no teachers, Area 5 (the North) had the one missionary educator who had answered the e-mailed interview and one national teacher. The grand total of facilitators in the extension system was twelve. This was a considerable shortfall. This ratio of facilitators to potential learners was the kind of dilemma which had surfaced in other parts of the world in which the numerical growth of the Church had outstripped the capacity to prepare leaders.

Tool #12 (Round table discussion among three PAR 1 members) marks the end of the first half of Phase 1 (Phase One A), the theoretical cycle of PAR 1 before the "action" is taken which is the empowerment of PAR 2 to carry out Phase One B, the research plan. In the long discussions between Mandlate, Sueia and I, we produced a draft version of a refined model of TEE which would be tested by the PAR 2 team. Aspects taken from other programmes are specified in Table 4.4.

The status of the research at end of Phase One A is the following:

- PAR 1 is formed as a research team, not a task force;
- PAR 1 plans for the PAR 2 team to refine by practice the existing model of TEE and to reformulate the existing Nazarene theological education by extension model (Chambo 1999) in Mozambique by critical assessment of other curricular models;
- PAR 1, reflecting critically on the Text Africa books and the cooperative learning group structure of the TEE model, hopes for success in the PAR 2 testing and data collecting.

Summarized in short coded statements in cells of the three columns at the right of Table 4.9, the preliminary data are described in more detail here. In respect to all three research questions, the data generated so far are qualitative. Important findings of Phase One A include the knowledge within PAR 1 that the prescribed model of TEE utilizes holistic learning strategies including the reading/analysis/writing features of the books themselves, the three types of discussion questions prescribed, cooperative learning groups and spiritual learning environments. Before the research, the TEE model was virtually unknown or uncritically assessed among those of the research population. The critical reading of the TEE literature, including student books and monitor training materials gave evidence that TEE might well be a holistic solution for the enabling of many in Mozambique to learn. And the knowledge of the success of the model in other Evangelical groups in Mozambique to the extent that over 5,000 copies of the books are printed for the demand, the PAR 1 members were optimistic about the applicability of the model to the Nazarene learners in Mozambique. Based on this optimism, the plan at the end of Phase One A was to continue reflection and assessment through the members of the PAR 2 team in a pilot programme which generated a broader base of predicting success because the success would depend on facilitators like PAR 2 team members. The model to be tested by the

PAR 2 team would be a combination of the regular TEE model, the existing Nazarene TEE model, edited by Chambo in 1999, other Nazarene models (Troutman 1999) and other Nazarene institutions. The learning sites will be carefully set up within the leadership structure of the districts. Facilitating the use of maternal languages within the learning environments as much as possible, including the use of Scriptures in maternal languages, was also an on-going intention of the model. The Nazarene educators already experienced in the field had given their opinion about the most important of these languages but all of their teaching was being done in Portuguese. As mentioned in Chapter 3 the key activity for PAR 1 team was **Reflective Planning** and the key activity for describing the PAR 2 team is **Reflective Learning**.

4.3.2 Presentation of Findings from Phase One B

During the three months of the pilot programme with the ten recent Bible School graduates who were selected to become the PAR 2 team, six men and four women. The four women team members joined us three days a week, for a total of 200 hours in round table discussions about many topics pertinent to analysis of the TEE model. The six men and I spent five hours a day, five days a week for twelve weeks (300 hours) evaluating every detail that came to mind of the model, the curricular plan as well as many holistic learning strategies; on Sundays, with the men, their wives and children went with J Scott and me to local Churches of the Nazarene to attend services, encourage with special songs and preaching. Besides this time with me and occasional visits from other members of PAR 1, each of the ten team members was involved in praxis, assigned to a group of learners to lead the group in the study of one of the Text Africa books as the monitors of these groups. The pilot programme was a very intense learning experience for all involved.

After one of the first of the five-hour round table discussions with me, one of the men, Questa, asked for a ride with me to the city. Two kilometres from campus, the car I was driving had a flat tire, but I did not have the right tool to change it. The other young man with us made a phone call to a friend to come help us so we sat in the car to wait. Questa said, "While we wait, let me tell you a little bit about my life". I agreed, of course. "There are sixty untrained pastors on my district. I was the only one who could come to the Bible School because the others all have many children. [There is a limit to the number of children families may have to be accepted into the resident Bible School.] I must learn well so that I can go back to teach them". "Where do you live?" I asked. "In Milange, near to Malawi". "Do the men live close to you?" I continued. "Oh, no, they live all scattered out in the district. I will go to them by bicycle. All of us in Zambezia ride all over on bicycles. I'll show you tomorrow on the maps in our meeting room, I will show you where they live". The mechanic came so we changed the tire. The next day, and the day after that, first with Questa, then with the other men students from up-country, I spent hour after hour in front of the maps of Mozambique while they pointed to this river and that village, showing me where they lived and travelled. In discussions everyday, we always referred to their "students back home".

The summarized data in Table 4.3 was gathered by the PAR 2 team during Phase One B of the research. The findings are distilled from the many hours around the table together in reflective discussions, refining the model through simulated classes and round table discussions on many holistic learning strategies. The

regular place of meeting is pictured as Visual 4.1. Table 4.3 follows the photograph.

Visual 4.1 PAR 2 Team Members in Simulated TEE class, Maputo, October 2000

One of the female monitor-in-training, G Macia, second from right leads the group discussion on one of the Text Africa books. A Banda, second from left, participates with his opinion. Each participant has before him or her an open Bible, an open hymnal and an open TEE book. The physical setting for this simulated class is the u-shaped, well-lighted, comfortably outfitted conference room set up especially for the three-month experience of PAR 2 at the Bible School in Maputo.

Research Notes: A STUDY IN HOLISTIC LEARNING STRATEGIES							
PHASE One B: Data collection				PHASE One B: Evidence			
Tool Num-ber & Year	Generalities regarding Instrument	Main subject	Analysis Codes ♥ recurrent theme □ new factual data ↑new idea or slant ↓ problem	Other issues: TEE Refinement of model re 10 Kornfield weaknesses/ Collectivism	Do holistic learning strategies HLS work?	To what extent do HLS facilitate learning in hand of minimally prepared monitors?	How do HLS work?
PAR 2: 9-11/2000 Diploma-level graduates - 4 Females from the South, 6 Males from 3 Central Provinces & MScott							
#13 2000	Round table discussions PAR 2	Team building exercises	□ sitting in circle & open dialogue is new as an educational setting ↑ building bonded relation-ships requires time invested	educational paradigm of lecture & rote is their norm	↓open dialogue is foreign to them	↓open dialogue is foreign to them	□ HLS challenge some old ways
#14 2000	Round table discussions PAR 2	Reading of Text Africa books	♥all 12 on PAR 2 appreciate TEE books □ all agree that those "at home" will appreciate them, too		♥12 say bks work & anticipate success for others		
#15 2000	Textual analysis PAR 2	Three types of TEE discussion questions	□ the 12 learners vary in ability to formulate questions			↓much practice is necessary for good discuxns	
#16 2000	Round table discussions PAR 2	Classical spiritual disciplines	□ reflection, prayer, fasting, are not new to them; silence is less frequent		□ they are at ease with spiritual disciplines		□ include -ing God in class is easy to do
#17 2000	Hybrid survey with PAR 2	Reading of Text Africa books	□ timing their home-work; one unit of learning takes 1 hr – 1 hr 45 minutes to complete	Addresses Kornfield's #1	□ amount of daily time studying is reasonable		

#18 2000	Round table discussions PAR 2	Conducting a short devotional opening	□ is within their training so they feel competent				♥ including God is easy
#19 2000	Round table discussions PAR 2	Content of Text Africa lessons	□ discussions based on text material are reasonable to them ♥TEE books score again	Counters #9	□ such discussions are the kind they'll have		
#20 2000	Round table discussions PAR 2	"Praxis" before the experience	↓all 12 are nervous, unsure, but up for it				□praxis moves learners
#21 2000	Round table discussions PAR 2	"Praxis" after the experience	↑all 12 come back chatty, full of questions and suggestions				♥praxis moves learners
#22 2000	Round table discussions PAR 2	The role-playing of each one as monitor	□↓ Poorly controlled discussion can injure even the strongest; must equip monitors to handle flare-ups			□ need to add conflict management to monitor training	□discus – sions can move learners
#23 2000	Textual analysis PAR 2	Intended learning outcomes / 4 Cs of Nazarene ministerial prep	□ explained as goals these make sense to the 12 of them			□ ILOs as goals in a game are understandable	
#24 2000	Textual analysis	Self-sacrifice / pass-fail requirements	□ consensus; every one is used to self-sacrifice; learners can do these	Addresses Kornfield's #6			□ pass/ fail sound reasonable
#25 2000	Round table discussions	Maternal language learning	□ all 12 agree that books could be read in Portuguese & discussed in maternal tongues		□maternal tongue discuxn will facilitate	□maternal tongue discuxn will contribute to extent learned	□maternal tongue discussion go deep
#26 2000	Round table discussions PAR 2 & 1	The problems the PAR 2 team is having	□↓management of food for their families not going smoothly	□↓Tension betwn egoism collectivism			
#27 2000	Round table discussions	Critical singing	□ This strategy is not easy to use effectively			□ May be too hard to use	

#28 2000	Round table discussions PAR 2	Plan of conferring 3 certificates in prep for ordination	☐ Group consensus: these are wonderfully motivational	☐ Public recognition is important confirmation			☐Certifi-cates act like Symbols
#29 2000	Round table discussions" PAR 2	Rehearsing integrity: Two of six men working off campus after promising not to	☐↑ Lack of integrity discussed openly & consequence was decided by vote	♥Tension between collectivism & egoism			☐↑ Tension affects groups
#30 2000	Round table discussions PAR 2	Taking the hero role knowing goal, theme song & motto	☐ all 12 approve of goal, song & motto "To Be Like Christ"			☐ Goal, theme song & motto are easy to learn to use	☐ Goal, motto, song are congruent
#31 2000	Round table discussions	Qxn from Praxis: how to handle not doing homework in praxis sessions	↑When homework consisting of answering questions is not finished the learner does not take part in the group discussion.	♥This is Kornfield's #1 weakness		☐ Praxis seems to be quite effective	
#32 2000	PAR 1 visits PAR 2	Inspection + round table at learning setting	↑ PAR 2 interpretation: "the big guys are for us! They came & sat with us!	♥Valued as approval of local authority			☐Site visit of elders affirms
#33 2000	Round table discussions	Ending of PAR 2 training period	↑ Theme hymn, dressing up, recognition of wives, certificates – all important	♥Public recognition is an important			☐ Taking of hero role does take place
#34 2000	Interview	Cooperative learning group cohesiveness	☐ When one of six stayed to finish up a course & others left, he lost ability to concentrate & had to leave				☐ Bonds of group affect each one
#35 2000	Round table discussion PAR 1	Assessment of PAR 2 training	♥pilot of training worked ♥small # of centres worked	♥Multiplying trainers can be done		♥ monitors *can* be trained to train others	

Table 4.10 Data presentation from Phase One B – PAR 2 Team

DISCUSSION: Tool #13 on Table 4.10 is "round table discussion" which is used as "team building exercises". Such practices, called "ice breakers" or "warm-ups" in social or some educational settings and are rather common in some places, but they were very new to the PAR 2 team members. Everyday started with singing together, inquiring of each other, and hearing prayer requests before a session of group prayer. The session would proceed to Bible reading and open dialogue about the biblical texts. The PAR 2 team members made comment about the "richness" of such meetings, the "family bonds" that were being knit among the team members, the "example" that creating such a learning environment (spiritual) was to them to replicate. Now five years from the time that PAR 2 met daily, the relational knowledge, the negative as well as the positive knowledge, of all twelve that would sit around those tables is considerable; building bonded relationships requires time invested. After the time is invested, the relationship lasts.

The physical position of sitting in a circle or semi-circle instead of in rows was a novelty which the PAR 2 team also accepted well. Besides facilitating democratic spirit and the free exchange of dialogue, the circular seating was a constant reminder of the "differentness" of the activity of the PAR team as opposed to that in traditional classroom settings in which classes were being held simultaneously to the PAR 2 meetings. PAR 2 never had a negative comment about the circular seating, even though it was very new to them to sit in a circle in an educational setting.

On the PAR 2 team, we exchanged stories, of course, dozens of stories; we spent lots of time together. I shared with the team members that my husband and I were first assigned to come to Mozambique with our two young children in 1974. Our belongings were packed in a container to send to Tete where we would go to teach the untrained pastors there but the escalation of the war kept us from coming; we arrived twenty-six years later. Albino Banda, the student from Tete, spoke up: "If you had come in 1974, my father would have been one of your students. He is a Nazarene pastor but he has never had one class in his whole life; he has been a pastor for forty years without one class".

After class Albino Banda told me more about his family. He, too, was delayed in getting to Bible school to study. He tried studying in Malawi at the Nazarene Bible School there, but he and his family decided it would be better to study in the country of Mozambique. When it was the day for him to come to Maputo, his brother sold a goat to have money to buy a bus ticket. He was on the way to buy the ticket when a family member ran to find him with terrible news. His mother had looked up at a branch of a tree where there was a venous snake that spit in her mouth. She was in a coma. Banda got to her to say good-bye. She died. Banda did not come to Bible School that year. He stayed home to help with the family. The next year his brother, Benjamin said it was time for Albino to go to Maputo, even though Albino's daughter was ill. Benjamin would take care of the daughter and then, when she was well enough to travel, would take the girl and Albino's wife to the Bible College. Albino came to the Bible School. The next week his daughter died.

In time I came to realize that personal losses like these are unfortunately frequent and numerous in the lives of families in Mozambique. As a nation they live much closer to suffering and death than many people in the world. I have lived for years in the Brazil, Portugal, Romania, the Azores and the USA. Mozambicans live

considerably closer to death than any other people group of my experience. This proximity to death is fibre of the reality of their lives. This is a significant aspect to the context of my learners which does not surface in theory but certainly surfaces repeatedly in the learning environments of my population. Death is always near-by.

On the Sundays during the pilot programme, the six men of PAR 2, their wives and children would go in vehicles driven by J Scott, an advisor for PAR 1 and Par 2 and me to local Churches of the Nazarene in the Maputo area. These occasions gave opportunity to observe Mozambican family life in normal settings so that contrasts could be noted from other cultures in our experience. Children are generally very happy, given freedom to play close to the soil, have virtually no commercial toys but create toys out of any little item they find on the ground, and play with people more than things. When young children cry, they are given to their mother to nurse, not on schedules, but when they want to nurse; they spend hours of their day strapped close to the body of the mother or an older brother or sister.

In each local church, the PAR team members would introduce themselves, tell a little bit about the research being conducted and about the Bible School, testify to the change God had made in their lives, and the group would sing a series of three songs I taught them. So yet another observation of difference in Mozambique was found in the way people introduce themselves and even the formation of the name of a person. Introductions in the American context would normally be like this: "Hello. My name is Sam, and I am a fisherman," while in Mozambique the introduction "Hello. I am Rosa António do Carvalho". The differences in the two are striking; Americans, at least, maybe others, identify themselves by what they do, by their profession. Mozambican names have three parts: the first name is their given name; the second name is the given name of their father so it ties them to their father, and the third or last name is the name of the village they come from so it ties them to their heritage. So, the name of Rosa's father is "António" and they are from "Carvalho". Ethnic heritage is embedded in the naming system.

During a round table discussion about the national system of educational the PAR 2 team was telling me something about "external testing" in Mozambique. I understood the words but the process was not clear to me. After the meeting, I asked Mandlate, one of the PAR 1 team, to explain it to me. He gave me an impressive story about his own educational experience. He, like most young Gaza youth, spent his days watching cattle, so he could not attend school. He taught himself to read and loved reading, so he read and read to prepare himself for external exams which, if passed, give 5th grade equivalency. He passed the "external exams" for the 5th, and then each other level the 7th, the 10th and the 12th grade equivalencies without going to school. He did pastoral training at university level in Swaziland, pastored the largest Church of the Nazarene in Africa (in Maputo) and was now going to do a Masters in Theology (at 60-years old). What a model for our Nazarene adult learners!

The male members of the PAR 2 came to the meeting room five days a week and the female members came three days a week. On the days that the women students did not attend session with us, the men and I were working through an extra book of the Text Africa series called *Honouring and Worshipping God*. They

took turns being monitor and leading the simulated class sessions. They really got very involved in discussions and sometimes the "heat" of emotions would rise as they defended one position or another. The behaviour of Alberto Caetano caught my eye. Generally, when they were involved in simulated class sessions, I watched how they handled themselves and listened to them defend their positions. They all could produce Biblical and contextual material for their answers, but Caetano, in a very calm and assured manner, seemed to always come into the discussion basing his reasoning and comments on a very deep understanding of the nature of God. He gave repeated evidence of knowing God very well, and that knowledge was *the* answer to many problems his colleagues presented in their arguments. His knowledge of God inspired an idea – if the learning facilitated in the lives of the learners preparing for ministry could result in their knowing God very well like Caetano does, then they will be well prepared. From this idea, the PAR 4 team wrote the material for a foundational course, built on the attributes of God. Knowing God equals basic knowledge called "The Story of God" and we put it into the IBNAL Student Guidebook – because of what we learned from listening to Caetano.

The features from other curricular models which were considered to adopt for the new Mozambique model were identified by the PAR 1 Team and reconsidered by the PAR 2 in testing mode to ascertain whether the feature would be an improvement. The eight curricular models were from two previous Nazarene TEE programmes (which did not use the TEE books and relied on lectures), the Nazarene residence Bible School in Maputo, and the TEE programmes functioning under other Evangelical groups in other parts of Mozambique, the Nazarene programmes in residence institutions in Brazil, Germany and the USA. The features considered for adoption seemed to offer either an important aspect to make sure was already in the model or promised to be an improvement to it. These include: balance of curriculum, integrity of facilitators, decentralized system of administration, verses to learn and memorize for each course the Text Africa series of student textbooks, materials to train trainers, an explicit philosophy of adult learning, a few of the books in Portuguese from the Brazilian seminary, the 3-tiered model of sequential certificates, well-designed syllabi which include the Nazarene outcome statements organized by the 4 Cs. Within a holistic model which would include all of these features, the actual learning by the adults would be optimized within a stable but contextually moulded learning environment. The two halves of Table 4.11 presented below present the features to adopt as the last row at the bottom and the last column to the right. The model was now a refined model of the TEE model; it was different from the Chambo model and was starting to be called the "IBNAL model".

COMPARISON OF INSTRUCTIONAL PROGRAMMES WHICH HAVE INFLUENCE ON NAZARENES IN MOZAMBIQUE – November, 2000

Programmes: / Descriptive Aspects:	Nazarene Residence Bible School	Nazarene Extension Program Troutman's	Nazarene Extension Program Chambo's	Evangelical Extension Ed PROFORBE, SIM, etc.	Evangelical Extension Ed Kenya, etc.
Location	Maputo	Mozam-bique	Mozam-bique	Mozam-bique	Africa
Years of functioning	1980-2001	1996-99	1999	1985 $\Rightarrow$	1970's $\Rightarrow$
Entry level of learners	4 yrs formal until 2001 7 yrs formal From 2002	Not specified		Varies from group to group	Varies from group to group
Preparation of learning facilitators	Basic diploma in theology	Basic diploma in theology		Learners selected from the groups who are studying together	
Duration of program	8 terms	Variable	Variable	No set program so it continues as long as there are materials.	
Ed resources for learners	Very few	Planned but not developed		Carefully written pre-programmed texts	
Capsule description of program design	Balanced program of lectured courses	A balance program of lectured courses based on model from residential school		Series of text-based Biblical courses given in small group settings linked to local churches	
Perceived strengths	Controlled, consistent content	A move toward decentralizing training	Was approved by group of people	Relevance to adults. Carefully written texts. Widely tested materials. Texts adaptable to varied programs of study.	
Perceived problems	Minimal practice and variety of aca-demic levels	Too few facilitators and incomplete bridge to residence school.		No systematized training of facilitators so program tended to degenerate.	
Aspects to consider adopting	Balance of curriculum; integrity of faculty.	Aspects of the decentralized system of administration		Verses for each course. The student texts.	Materials to train trainers. Philosophy of adult ed.

Table 4.11a Comparison of Instructional Programmes which have Influence on Nazarenes in Mozambique

Programmes: Descriptors:	Nazarene Seminary	Nazarenes in Eurasia Region	Nazarenes in USA	PLAN FOR IBNAL AS OF NOVEMBER 2000
Location	Brazil	Germany	USA	Lusophone Africa
Years of functioning	1970 ⇒	1985⇒	1997	2000 ⇒
Entry level of learners	Post 12 yrs	Post 12 yrs	Post 12 yrs	0 yrs for 1st certificate 3 yrs for 2nd 5 yrs for 3rd
Preparation of earning facilitators	Masters' degree preferred	Masters' degree preferred	Masters' degree preferred	At least diploma plus methodology specific to courses
Duration of program	Normally 4 yrs.	Have 4 programs of 4 lengths	Depends on rate of module offerings	3-8 yrs depending on rate of course offerings
Ed resources for learners	Student texts plus syllabi	Student texts plus syllabi	Student texts plus modules	Student texts
Capsule description of program design	A u-level preparation of Nazarene ministers		Sequence of well designed ed experiences	3-tiered OBE design of 42 courses delivered by trained trainers
Perceived strengths	Decentralized system keeps learner at home church	Choice of 4 programs to train Christian workers	Leader of OBE training; 4 Cs; Flexible	4 Cs design; trained trainers; contextualized materials; holistic learning strategies
Perceived problems	Emphasis on content	Detachment from maternal languages	Lack of systematic training of trainers	Difficulty of long-tem motivation of monitors who are volunteer
Aspects to consider adopting	A few of the books in Portuguese	The 3 tiered model of sequential certificates	Syllabi design; Outcome statements; 4 Cs	Holistic system will be flexible, sound, and relevant to adult learners.

Table 4.11b Continuation of Comparison of Instructional Programmes which have Influence on Nazarenes in Mozambique

Discussion: Table 4.11 is displayed in two parts but is one table. The table presents a critical analysis of curricula which relate to Nazarenes in Mozambique. In the critical assessments of these curricular designs, aspects for consideration to adopt were identified by the PAR 1 Team and reconsidered by the PAR 2 related to combined model for use in IBNAL.

Visual 4.2   M Scott Conducting Round Table Discussions in Monitors Training, XaiXai, 12/2000

Discussion: This seating arrangement may not look like a "round table" but it is seating arranged for equality, dialogue, mutuality and interaction, and it was quite new to all the participants who would normally have sat in parallel rows, decreasing potential for interactivity.

Table 4.12 which follows organises the findings from the week-long series of meetings in XaiXai at which church leaders were introduced to the IBNAL model, including their training to become facilitators of learning for the learner populations in their districts.

MONITOR TRAINING IN XAI XAI – DEC. 2000 – 5 DAY "INTENSIVE" – 25 PASTORES & 7 SUPERINTENDENTS

#	Method	Topic	Observation				
#36 2000	Round table discussions In Xai Xai Sueia, M Scott + Leaders	Classical spiritual disciplines	❤ Starting & ending w/ prayer & brief biblical devotion became a warm pattern in the pilot programme				❤ Bonds between members enhanced by prayer
#37 2000	Round table discussions Sueia, M Scott + Leaders	Team building exercises	❑ even tho sitting in circle & open dialogue is a new educational setting, they respond positively to it	❤ Relationship prevails over task			❤ HLS challenge some old ways
#38 2000	Round table discussions Sueia, M Scott + Leaders	Taking the hero role knowing goal, theme song & motto	❤ all 32 approve w/ enthusiasm the of goal, song & motto "To Be Like Christ"			❤ Goal, theme song & motto are easy to learn to use	❤ Goal, motto, song fit ea other
#39 2000	Round table discussions M Scott + Leaders	Reading of Text Africa books	❤ all 32 present appreciate TEE books		❤ 27 say books will work		
#40 2000	Interview w/ missionary E Perkins, experienced TEE user	Potential of TEE in the districts around XaiXai & geography of area	❤ As long as the district leaders are in favour, the plan, i.e. training in the hands of diploma grads should be able to work.			❑ "To the extent that leaders are in favour" ….	
#41 2000	Textual analysis; M Scott + Leaders	Three types of discussion questions	❑ They are not used to working with discussions so this skill is a stretch			❤ much practice is necessary for good discuxns	
#42 2000	Round table discussions M Scott + Leaders	Content of Text Africa lessons	❤ discussions based on text material are reasonable to them if choices of questions are available to them		❤ such discussions are the kind they'll have	❑ guides with questions for monitors are necessary	

#43 2000	Round table discussions M Scott + Leaders	The role-playing of each one as monitor	□↘ Some of these learners are not yet able to abandon lecture mode to move to asking discussion questions			□ role-playing for training monitors shows how they lead
#44 2000	Textual analysis M Scott + Leaders	Self-sacrifice / pass-fail requirements	♥consensus; every one is used to self-sacrifice; learners can do these			♥pass/ fail sound reasonable
#45 2000	Round table discussions M Scott + Leaders	Maternal language learning	♥ most all 32 agree that books could be read in Portuguese & discussed in maternal tongues	♥maternal tongue discuxn will facilitate		♥maternal tongue discuxn will contribute to extent learned	♥maternal tongue discussion go deep
#46 2000	Round table discussions M Scott + Leaders	Plan of conferring 3 certificates in prep for ordination	♥ Group consensus: these are wonderfully motivational	♥ Public recognition is important confirmation		♥Certificates act like symbols
#47	Interview w/ district superintendents	Their opinions about programme potential & certificates	□ This is not very new for them since Perkins have been using TEE books & Nazarene model; optimistic.	□ This district favour is part of collectivism &		♥Yet another time repeated the need for district favour

Table 4.12 Data Presentation from Phase One B – XaiXai

212

Discussion: The intention of the five-day training session in XaiXai was to replicate as much as possible of the PAR 2 experience over three months. Of course, the time period of three month offered much more opportunity for repetition and relationship than the short-term training could. However, the intensive schedule did offer time to repeat discussion of some of the same subjects treated in round table discussions with PAR 1. This repetition was deliberate to see if the responses from round table discussions in XaiXai would affirm the findings of PAR 3. By means of this crystalisation the responses could be verified. Listening to the perspectives voiced straight from leaders embedded in the context in which learning will take place lent perspective and generalisability to the PAR 3 findings. Repetition, review, reframing are results of the reflectivity that is the nature of PAR.

A quick visual scan of Table 4.12 shows many hearts ♥ which are the code for recurrent theme. That is a good sign. Multiple voices echoing recurrent themes, positions or ideas effectually crystalise qualitative research. The 22 heart-icons recorded in Table 4.12 crystalise the findings of PAR 1 and PAR 2. Each recurrent finding relates, directly or indirectly, to the research questions as is noted in Table 4.13 below which interprets the alignment of the findings within the research.

Recurrent Finding	Research Interpretation
♥Starting & ending w/ prayer & brief biblical devotion became a warm pattern in the pilot	SPIRITUAL LEARNING ENVIRONMENTS: The warmth of acceptance of this familiar pattern is evidence that it increases the possibility that the learning environment will be spiritual. Inviting God to intervene in daily life can be just words or can be genuine invitation for God to interact in the group setting. Sandwiching the meat of the group encounter between the bread of prayer before and after is acting on faith that God will fulfil promises "to be there" and "to teach and remind" of Truth.
♥Bonds between members enhanced by prayer	COOPERATIVE LEARNING GROUPS: Evidence that praying together increases trust, honesty and transparency to the setting of cooperative learning groups to enhance the cooperation between the members.
♥Though sitting in circle & open dialogue are new in an educational setting, they respond positively to them	TEE MODEL; ADULT LEARNING; DISCUSSION. Do these practices enhance or create barriers to learning? In the experience of both PAR 2 and the group in XaiXai, there is evidence that they open the group to learn a new way.
♥Relationship prevails over task	COLLECTIVISM; COOPERATIVE LEARNING GROUPS: Relationship may be the principle task after all.
♥ HLS challenge some old ways	ADULT LEARNING. That PAR 2 and the group in XaiXai first resist a bit, then enter in affirms challenging the status quo of rote learning. Using new learning strategies to connect learners to "old" experience should ultimately enhance learning by dendrite proliferation across hemispheres.
♥ All 32 approve w/ enthusiasm the of goal, song & motto "To Be Like Christ" ♥ Goal, theme song & motto are easy to learn to use ♥ Goal, motto, song fit ea other	HERO IDENTIFICATION, CRITICAL SINGING, CHORAL REPETITION, HERO MODELING. The enthusiasm is evidence of congruence between what is deep desire and aspiration of the learners and their openness to put the goal to use within several modalities.
♥All 32 present appreciate TEE books	TEE MODEL. Appreciate of the "TEE books" implies several holistic learning strategies which are implicit in the model. When learners use the books they read, answer questions in writing, meet in cooperative learning groups in which there is mutual accountability, so the appreciation for "the TEE books" is evidence that supports the viability of the whole TEE model for use with the whole population.
♥27 say books will work	The gap between the 32 who appreciate the books and the 27 who say the books will work accounts for five people who left the course before they had actually worked through the books in simulated class settings.
♥ As long as the district leaders are in favour, the plan, i.e. training in the hands of diploma grads should be able to work.	TRAINING MONITORS TO TRAIN PASTORS. This question lays juxtaposition to the research question "To what extent do holistic learning strategies advance learning [when used by minimally prepared monitors]?" This question can only be answered later on so that the learners can assess the monitors.

♥Much practice is necessary for good discussions	TRAINING MONITORS. This is more evidence to support the need for practicing the leading of discussions during the training of the monitors for them to handle discussions well.
♥Discussions based on the text material are reasonable to them if choices of questions are available to them	DISCUSSIONS; COOPERATIVE LEARNING GROUPS; TEE MODEL; VIABILITY OF MONITORS. Evidence indicates that the discussions the monitors will be able to handle are, in fact, the kind embedded in the TEE model, i.e. those based on the text material which includes biblical material, too. Evidence points to the reasonableness of monitors handling these discussions.
♥Such discussions are the kind they'll have	
♥Consensus; every one is used to self-sacrifice; learners can do these	SELF-SACRIFICE AS PART OF HOLISTIC LEARNING STRATEGY − Rehearsing integrity: hero-modelling / role-modelling / role-taking / self-sacrifice. This consensus in both the PAR 2 team and the XaiXai group supports the PAR 1 position that the self-sacrifice required to pass the courses is embedded in the life role they willingly take up.
♥Pass/ fail sound reasonable	PASS/FAIL REQUIREMENTS AS PART OF HOLISTIC LEARNING STRATEGY − Teamwork: team building work projects/ studying together / peer tutoring / pass-fail requirements. Evidence that the pass/fail requirements are "reasonable" is a nod from the constituency for the Nazarene version of the TEE model which requires more of the learners than is required in other contexts as per curricular comparisons.
♥most all 32 agree that books could be in Portuguese & discuss in maternal tongues	MATERNAL LANGUAGE CONSIDERATIONS. The agreement by all 3 groups so far, PAR 1, PAR 2 and the group in XaiXai, that the potential of the practice of reading the books in Portuguese and discussing the material in the maternal language of the group is optimistic. The impact of such practice is yet to be measured since the practice is still theoretical; the practice to date in the research has been reading and discussion [and singing] in Portuguese.
♥maternal tongue discussion will facilitate them	
♥maternal tongue discussion will contribute to extent learned	
♥maternal tongue discussion go deep	
♥ Group consensus: the 3 certificates are wonderfully motivational	TEE MODEL; NAZARENE TEE MODEL. The idea of conferring certificates 3 times, at the end of each set of 14 courses, is a feature adapted from another TE model [Germany]. At this stage, the certificates are only ideas but the opinion about their value is quite strong, based on the extrinsic motivation they would provide, the affirmation of public recognition. The certificates would become concrete symbols of achievement, self-sacrifice and approval by the educational leaders who sign them.
♥ Public recognition is important confirmation	
♥Certificates act like symbols	
♥Yet another time repeated the need for district favour	TEE MODEL; NAZARENE TEE MODEL; COLLECTIVISM. This finding reemphasises the need for regular, consist, and continual interface between this educational programme which functions within the auspices of the church district. The district superintendents will affect the learning of potential leaders as they affect the viability of the programme function.

Table 4.13 Interpretation of Recurrent Themes at End of Phase One

Discussion: Table 4.13 presents the summary status of the research at the end of Phase One. Phase One was obviously formational and developmental and voluminous in findings. The key words to describe the activity of the Participatory Action Research in Phase One are **Reflective Planning** and **Reflective Learning**. PAR 1 gave important indication as to how to set up relationships for research, relationships for working academically. In Phase One A, the PAR 2 team gave detailed and thorough evidence that much of what was planned by PAR 1 would work. Then the group in XaiXai, with whom the format for concentrated monitor training in the field was tried, also affirmed the strategies to shape training sensitively in relational, spiritual fashion within the modified TEE model, the modified Nazarene TEE model, within "the IBNAL model". By the end of 2000, findings as evidence for answers to the research questions were pencilled in, to be further researched by the PAR teams in cyclic research during Phase Two.

4.3.3   Presentation of findings from Phase Two

The following table introduces the section of the PAR research which reports the findings from Phase Two of the PAR research

Phase Two		2000	20	01	2002	Dec 2002	2003	2004	2005
	Key Word =		**Reflective Writing**						
Actions of PAR 3			Write & Re-Test Reflect	Test in field					

Table 4.14 Schematic Representation of Phase Two and Actions of PAR 3

Discussion: Table 4.14 is a portion of Table 4.1 meant to situate this phase in time and to introduce the key words which describe the activity of the phase and the personnel. From January 2001 to June of 2001, **Reflective Writing** is the key activity, and the writing was done by those on the PAR 3 team within the re-testing of the IBNAL model.

At the outset of Phase Two, the members of PAR 1 team each moved to different job responsibilities so that team, as such, stopped meeting. Each of the four PAR 1 team members was a content specialist. Each of the eleven PAR 2 team members, except for me, was a representative of a particular Mozambican context or type of leader or learner, and each of them was chosen to be on the team. The PAR 3 team members, numbering 15, were except for me, all Mozambican Bible School students or pastors from near the school who had not been chosen by their leaders or by the Bible School faculty but who volunteered to come to the round table sessions to be part of the building of the Nazarene TEE model to

216

prepare pastors. The learning settings for the round table discussions, simulated classes, critical singing, and all of the other strategies which they experienced in their brief (50-60) hours with me were not optimal because the schedules of the sessions conflicted with the class meetings of the Bible School students so the meetings could not take place in the specially lighted and furnished room where PAR 2 had met; they took place in other, less perfect settings. Time constraints also came to bear on the difficulty of their participation in the research. Because half of them were not residence students, they had to block off time from their busy professional schedules to come to the Bible School for sessions with me. The other half of them who were still residential students had to add the hours spent in discussions with me to their already full class load. The desire to become part of a working solution kept these men and women coming to the sessions with me. I salute them. The PAR 3 team members are pictured below include Lévy Mahalambe, Manuel Vale Afonso, and João Manonga who became part of the PAR 4 and PAR 5 teams.

Visual 4.3 PAR 3 team members: (seated left to right) Jorge Macharenga, Augusto Castelo, Isabel Castelo; (standing left to right) Samuel Chone, Manuel Vale Afonso, Margaret Scott, Zeca Pedro, Jonas Mate, José Muiane, Francisco Mathe, Obede Langa, Luis Mbéue, José Macamo , not pictured, Lévy Mahalambe, Jr. and João Manonga.

The most important actions which took place during Phase Two include the sessions with PAR 3 team members and four other items which are listed below:

- January: Youth Camp in Tete; first public explanation of IBNAL model; personally meeting the three district superintendents; investiture of Albino Banda as first "Area Facilitator"; 32 hours of contact time with many diploma-level graduates training to be monitors.

- February: team member of PAR 1, K Walker, presents status report of our research, including the contextualized and pilot-programme tested curriculum, to the International Course-of-Study Advisory Committee (ICOSAC) which approved it unanimously.

- February-May: Weekly round table sessions, totalling 50-60 contact hours, with the PAR 3 team members.

- May field encounter (in Beira) with the six men of PAR 2. Data collection via round table discussions.

Phase Two was short but important. The January Youth Camp in the province of Tete, signalled several "firsts", each one with its own significance. It was my first trip out of the South of Mozambique, to Central Mozambique. Many of the Chichewa majority there had been refugees to Malawi during the years of war, so had been schooled in their mother tongue, unlike most every other linguistic group in the country. (The other exception is that of the Changaan youth who are schooled in Changaan-speaking parts of South Africa.) The difference this makes is that they not only speak it but they also read well in their mother tongue.

The province of Tete is "Area 3" of the five "areas" of the Church of the Nazarene in Mozambique. According to the IBNAL model, each area would come to have a "Facilitator" to facilitate learning in learners through moral and technical support to the monitors in the area and be liaison with the national coordinator. The Coordinator of Area 3 suggested to the three District Superintendents that Albino Banda (PAR 2) be the Area Facilitator, and they agreed. (Ironic – he is the one whose father had served as a lay pastor for 40 years without any pastoral training. Now he would facilitate training across the province.).

The IBNAL model was explained in public for the first time to the group of 200+ youth who were gathered. There were now two viable options for ministerial preparation – in Maputo at the Bible School and extension centres which would be started in Tete. These would constitute a viable option for the many lay pastors who (like Albino Banda's father) had never had a means to prepare for the ministry. Albino Banda was installed as the first Area Facilitator of IBNAL. With the public explanation Pastor Banda and I gave as a public prayer request – that the IBNAL model for preparation would be accepted at the international level of the Church of the Nazarene so that the studies that they would undertake would be approved to qualify them for ordination.

If, as discussed above, the conferring of each of the three certificates has value to the learners, then it is based on the value imputed by the highest authorities of the denomination to be a course of study with "international approval for ordination". That question was answered during Phase Two as PAR 1 team member K Walker presented the full documentation describing the model to the international committee, and it was unanimously accepted. It was the first certificate-level course of study for preparing pastors to be accepted at this international level. The names of all the PAR 1 and PAR 2 team members were on the document as designers of the model. What a cause for celebration for the work of the PAR teams thus far, and an encouragement to continue the reflective task to the end of

real learning taking place for the learners who would now be more encouraged to enter into this system of learning.

In the round table discussions of PAR 3 attention was given to the learning strategies "verse memorization", "singing for learning", "key words" and "use of visual cues". Memorizing Bible verses that state truths linked to the main ideas of the texts is a feature of the ProForbe curriculum which was brought into the IBNAL model by broad consensus of PAR 1 and PAR 2. The verse memorization was given priority as one of the pass/fail requirements of the IBNAL model. But the selection of the verses which would be linked to each of the 42 courses of the IBNAL curriculum had not been chosen yet at the end of Phase One. That selection was one critically reflective activity of the PAR 3 team. Each session, in round table discussion, they assessed verses that I brought as "candidates" for selection, and then they voted on the four or five which would be linked to each course. The total number of verses selected was 169 verses, which means that the learners who complete the IBNAL programme of training have had in-depth exposure and explanation to these key Bible verses. These verses are included as Appendix C.

I experimented again with the use of "singing for learning" as a holistic learning strategy. Singing for other purposes, for spiritual enhancement, for uniting the group, for enjoyment, etc. was easy for the monitors-in-training to make use of but singing which links the words to main ideas of the lesson, was, like in PAR 2, not easy to make happen. I began to suspect that, at least part of the problem with this learning strategy is that the singing I have to work with is in Portuguese, not their maternal languages.

The "use of visual cues" and "key words" as visual cues was assessed during PAR 3 as I explored their responses to different visual stimuli. One day in class I asked them, "What colours do you usually associate with Christmas?" Each person around the circle was free to give their response: "no special colours", "pink and blue", "black", "brown". "Red and green" did not appear one time, clear evidence that colour associations are cultural.

Another day around the round table, I asked them to pick an animal that represented "sin" to them. "Snakes", said the first person in the circle. "Is that because of the Bible story about Eve and the serpent or for some other reason?" I asked. "No, it's not because of the Bible story; it's because even a tiny drop of the poison from their mouths can kill you". "Bats", said another, "because they are always hanging around, waiting to drop on you". "The lion", replied another, "because it is stronger than you, and you can't win over it without help". Still another said, "I know. Sin is like lice, once you have them with you, it is terrible to get rid of". How vivid was the Mozambican imagery for sin that day!

The critical discussions of the PAR 3 team resulted in the material presented in two student texts for the learners of my research population. The first text, the *IBNAL Student Guide*, includes the visual cues, maps and songs to use in learning "The Story of God" as well as the verses selected for memorization for each of the forty-two courses, facilitating the utilization of each of the three learning strategies mentioned above throughout the educational system. The second set of materials is the four leaflets used after a public showing of the JESUS Film. The leaflets, like *The Story of God*, also utilize three of the learning strategies – "verse memorization", "singing for learning" and "use of visual cues",

and became part of another student text[7]. Draft versions of these text materials were the product of the participatory action research of round table discussions of PAR 2 and PAR 3 teams.

The fourth important action of Phase Two was a reunion of the six men from PAR 2 who had been in their home districts from the first of December until the meeting in May. The reunion had been planned since before they left Maputo. They were assigned to bring their reports to the round table as to how they were able or not to set up cooperative learning groups when they arrived home. The six had had mixed success; one was placed in a church setting where he did not speak the maternal language of the people. His colleagues encouraged him to learn the language. One had been cut off from his appointment because the rains had washed out the only road to access the place, so he was biding his time, teaching a small group at the house of his mother-in-law. Another took a job and was working full time so did not yet have his life organized to volunteer. Another had very sick children but had managed to get together several in a class he had started two weeks prior. Questa reported visiting the sixty pastors were there scattered over the district as he expected; his problem was figuring out how to cluster them into groups which could manage to meet together to study. Banda had started a learning group in the church he was pastoring and three other pastors who had already been teaching were also actively leading learning groups. The reports reflected realities infrequently mentioned in educational studies – linguistic barriers, flooding, time constraints of volunteerism, sickness, working without infrastructures in place, widely scattered cooperative learning groups without financial or transportation means – and also the relative success of the one who was properly placed, empowered, equipped and supported.

As a summary status report of the research at the end of Phase Two, Table 4.15, similar to the one at the end of Phase One, is included below and shows the patterns of agreement in the findings thus far.

---

[7] *The leaflets are included as Appendix D are part of the text called Using the Jesus Film to Plant Churches*

Recurrent Finding	Research			
	PAR 2	XaiXai	Tete	PAR3
♥Starting & ending w/ prayer & Biblical devotion is warm pattern	√	√	√	√
♥Bonds between members enhanced by prayer	√	√	√	√
♥Even though sitting in circle & open dialogue are new in an educational setting, the response to them is positively.	√	√	√	√
♥ Relationship prevails over task	√	√	√	√
♥ Holistic learning strategies challenge some old ways-that's OK	√	√	√	√
♥ Goal, song "To Be Like Christ" approved w/ enthusiasm	√	√	√	√
♥ Goal, theme song & motto are easy to learn to use				
♥ Goal, motto, song fit each other				
♥ TEE books are appreciated by those present	√	√	√	√
♥ Those present say books will work (Tete – in Chichewa)	√	√	√	√
♥ As long as the district leaders are in favour, the plan, i.e. training in the hands of Bible School grads should be able to work.	√	√	√	√
♥ Much practice is necessary for good discussions	√	√	√	√
♥ Discussions based on the text material are reasonable to them if choices of questions are available to them	√	√	√	√
♥ Most agree that books could be in Portuguese & discuss in maternal tongues which will	√	√	↓	√
facilitate the discussions	√	√	↓	√
contribute to extent learned make discussions sink in deeply	√	√	↓	√
♥Consensus; every one is used to self-sacrifice; learners can do pass/fail requirements	√	√	√	√
♥ Pass/ fail requirements sound reasonable	√	√	√	√
♥Group consensus: the 3 certificates motivate	√	√	√	√
♥ Public recognition is important confirmation	√	√	√	√
♥Certificates act like symbols	√	√	√	√
♥ The support of the district leadership is essential	√	√	√	√
♥ Verse memorization is a priority	√	-	-	√
♥ Visual cues	-	-	-	√
♥ Critical singing	↓	-	-	↓

Table 4.15 Interpretation of Recurrent Themes at End of Phase Two

Discussion: The majority of the voices, those representing South and Central Mozambique in PAR 2, those volunteers from the South in XaiXai and in PAR 3 were in agreement. In Tete the problem immediately raised was that of the books in Portuguese; for them, at least the first certificate books need to be in Chichewa.

"Singing for learning" is a holistic learning strategy that still has not been presented in a way to make it work for the monitors to utilise.

4.3.4 Presentation of findings from Phase Three A

Table 4.9 below introduces the findings from the first part of Phase Three, which is called Phase Three A.

PHASE Three A	2000	20	01	2002	Dec '02	2003	2004	2005
	Key words =		**Reflective Praxis**		**Reflective Synthesis**			
Actions of the PAR 4, in Dec: PAR 2,3 and 4			**A** Plan, Test, Respond, Reflect, Re-Test, Refine, Re-Write		**B** Reflect, Plan Refine			

Table 4.16 Schematic Representation of Phase Three A and Actions of PAR 4

Discussion: Like Table 4.14, the table above, Table 4.16, is a portion of another table to posit this phase in time and to introduce the key words which describe the activity of the phase and the personnel who are involved in it. At the end of the short Phase Two, the long, complex Phase Three began. The PAR 4 team was formed and was very active. Many more monitors were trained, and team members from the other PAR worked at recruiting learners. From May 2001 to July 2002 *Reflective Praxis* and *Reflective Synthesis* were the key activities among many, many actions taken by the PAR 4 team. The eleven members of PAR 4 team, except for Filimão Chambo and Bonifácio Mirashi, were already experienced in leading cooperative learning groups in the IBNAL model being researched and most had been members of previous PAR teams. The members of the PAR 4 team which functioned during Phases Three A and Three B were the following:

- M Scott, research coordinator of PAR 1, 2 and 3
- F Chambo – editor of the previous TEE model (1999) and advisor of PAR 1
- Bonifácio Mirashi – newly returned to Mozambique after eight years of study in Swaziland and new to PAR and IBNAL
- A Banda, and G Macia – from PAR 2
- Elaine Perkins, Phil Troutman and J Scott – American missionaries, veterans in using TEE books and other holistic learning strategies;
- Manuel Vale Afonso, João Manonga, Lévy Mahalambe – from PAR 3.

The centre of reflection, action and planning of the first three teams, PAR 1, 2 and 3, was definitely wherever I was personally, so that meant Maputo with my occasional visits to the districts in the field. As the first groups of monitors were being deployed in the districts, the number of learners was being built up but the

priority action was the training of monitors. The primary lines of communication and empowerment were between the Maputo national training centre where I spent most of my time to the monitors who became scattered across the country during the course of Phases One and Two.

In May 2001, two Mozambican educators moved from outside of Mozambique to Maputo: F Chambo from South Africa and B Mirashi from Nazarene College of Theology in Swaziland to work full-time and be active PAR team members in Maputo. The PAR activity in May was the formation of a united team of three team members in Maputo as basis for extending unified relationship to the Area Facilitators out in the field. On bases of trust and understanding among the team members in Maputo, I started extensive work with PAR 2 and 3 team members in the field.

Like Phase One, Phase Three was also broken into two parts – A and B. In Phase Three A, the activity at the central office, was coordinated by F Chambo and B Mirashi, while J Scott and I made repeated trips into the field to interface with members of PAR 2 and PAR 3, conducting many data collections via interviews and round table discussions at site inspections, and a few video recordings and photos. During Phase Three A all the team members were involved, as usual, in reflectivity, in Maputo *and* in the field. The types of activity were different – the activity in Maputo was production of educational materials which would facilitate the employment of holistic learning strategies in the hands of the monitors. The action of the PAR 4 members in the field was training, equipping and supporting the semi-trained monitors to facilitate learning directly with the learners. During Phase Three, the centre of planning and decision-making was still Maputo, but the locus of training and equipping monitors as facilitators shifted from only Maputo to include field bases, so the principal instrument of data collection during Phase Three A were round table discussions and interviews during site visits in the field. During Phase Three A there was dynamic communication between the field and Maputo because of the many site visits. The key word to describe Phase Three A is **Responsive Praxis**. Praxis already implies reflection and action; the responsiveness indicates the inclusion of data from the field into the substance of the praxis.

The most important actions which took place during Phase Three A are listed in the Table 4.10 below.

Actions of Phase Three A: May 2001 – June 2002		
1 July 2001	Nampula	My first road trip to the North, (since Tete is Central, not North, and I flew to Tete in January.)
2 Aug 13-17, 2001	Nampula	Intensive course for TEE Monitors
3 Aug 14, 2001	Nampula	Phone request to Maputo for a new graduate, J Manonga, to respond to "cry" from Mooma and to move his family there
4 Aug 21-24, 2001	XaiXai	Intensive course for TEE Monitors, M Scott and B Mirashi
5 Sept 8 2001	Nampula	Receive Manonga family
6 Sept 9 2001	Milange, Zambezia	Site visit to PAR 2 team member
7 Sept 10 2001	Furan-cungo, Tete	Visit ruins of Bible School; stay with District Superintendent Phiri
8 Sept 10 – 14	Tete (city), Tete	
9 Nov12-14 2001	Beira; Sofala.	Intensive course for TEE monitors
10 Nov15-20 2001	Johannes-burg, SA	Presentation of IBNAL model by M Scott and F Chambo at Africa-wide meeting of Nazarene educators
11 Jan 2002	Quelimane	Start translation into Masena (of "Story of God")
12 Feb 2002	Nampula	Short intensive course for TEE students to test materials
13 Feb 2002	Milange, Zambezia	Site visits
14 Feb 2002	Tete	Monitor Encounter
15 Feb 2002	Maputo	Show video footage from Nampula, Milange and Tete to Bible School students
16 March 2002	Quelimane, Zambezia	Intensive course for TEE monitors
17 July 2002	Seven districts of North	Two cars full of leaders to seven districts for several purposes including visits to sites and to former IBNAL students
18 July 2002	Mocuba, Zambezia	Intensive course for TEE monitors

Table 4.17 Actions of Phase Three A and Actions of PAR 4

Discussion: Table 4.17 summarises the principle actions of Phase Three A in which site visits and the team of facilitators across the country was developing and getting some practice at working together. The goal of Christlikeness, as part of the "IBNAL model" was the guiding star in each of the intensive training courses for the monitors; many aspects of the model were packed into that goal including the singing of the theme hymn, explanation of the seal of IBNAL,

memorization of biblical passages, the Bible-based textbooks, written guides for monitors which were being produced and always spoke to the goal. While Table 4.10 is basically organized in chronological order, the following Tables 4.18 through 4.23 present findings, also in chronological order, but per action with coding in ALL CAPITAL LETTERS of the principle points of attachment of the actions to the research and interpretive comments added in the right columns.

Phase Three A: May 2001 – June 2002	IMPACT OF THE ACTION ON THE RESEARCH
1 July, 2001 My first road trip to the North, (since Tete is Central, not North, and I flew to Tete in January.) Hear cries for a "teacher" in the district assembly Nampula Sul; Take video footage of baptisms and of potential students in Nampula Sul.	MAPS/REFLECTION. With the six men of PAR 2, I had stood before the maps on the walls of the Bible School; travelling overland I remembered their stories, saw their people; I "saw" Mozambique from South to North, from East to Tete, through their eyes as I visited PAR 2 members *en situ.* SITE VISIT/VIDEO TAPING. Potential learners asked for one thing – a "teacher"; are willing to build a house like their own (mud and coconut palms) for one to come. Pastoral activities like baptisms, entertaining guests and district assemblies are carried out in ways quite different than in the South.
2 August 13-17 2001 Nampula Intensive course for TEE Monitors	DISTRICT LEADERSHIP/ TEAMWORK. District Superintendent from Nampula Sul wants a monitor to come to his district, so will do his part to make the house construction happen.
3 From Nampula Make phone request to Maputo for a new graduate, J Manonga, to respond to "cry" from Mooma and to move his family there.	TEAMWORK. From the North, M Scott phones F Chambo and B Mirashi to negotiate possibility of one of the August graduates, J Manonga, PAR 3, to go to Mooma instead of home to home district

Table 4.18 Interpretations of Actions #1, #2 and #3 of Phase Three A

Discussion: There are few human experiences that are more moving than personal visits to places on earth that are far different than the reality normally experienced by the visitor. Such is the substance of what is taking place during Actions #1 and #2. The realities of life in remote sites throughout Mozambique compared with the realities of life in Maputo are like those of another "planet". Occasional site visits like these require a bit of courage and spirit of adventure, but the demands on people like J Manonga, in Action #3, to make quick decision to take his wife and two little children from the Bible School to a different district in Mozambique rather than to go home, are greater demands that those of mere visits. Obviously the trust spoken of and hoped for among all of the PAR team members was manifested by J Manonga as he accepted the challenge, site unseen, to move to Mooma. In March of 2006, he is still the principal monitor of the cooperative learning group in Nampula Sul and his students are taking the courses of the 3rd Certificate.

Table 4.19 below continues to present in detail with interpretive comments the next actions of Phase Three A.

Phase Three A: May 2001 – June 2002	IMPACT OF THE ACTION ON THE RESEARCH
4 August 21-24, 2001 XaiXai. Intensive course for TEE Monitors, M Scott and B Mirashi	PRAXIS. The Area 1 monitors bring practice-related questions to PAR team members who conduct practice sessions on new materials and new practice. TEAMWORK. Monitors meet by district with their superintendents to reflect and plan together.
5 September 8, 2001 Mocuba Receive Manonga family/ visit Mocuba.	SITE VISIT. Visit churches which are potential IBNAL centres in Mocuba, PAR 2 member. TEAMWORK. From Maputo Manonga family arrives in North, then goes to visit family in Mocuba while learners finish house in Mooma.
6 September 9, 2001 Milange Site visit to PAR 2 member	SITE VISIT. Visit sites in district, and make plans for other visits. Visit and pray with PAR team member and his family. Take Chichewa materials to him. He still is not facilitating in any centre
7 September 10, 2001 Furancungo, Tete Visit ruins of Bible School; stay with District Superintendent,	SITE VISIT. People on the road direct us to what they called the "venerated place" of the old Bible School. DS Phiri shows us ruins of houses, classrooms, and offices, bullet marks, and graves on old property.
8 September 10 – 14 Tete (city), Tete Intensive course for TEE monitors	TEAMWORK. Monitors work with Area Facilitator to fill out reports on first courses given. Round table discussions about pass/fail requirements; difficulty with payment of books; too few monitors. When terrorists strike World Trade Center, Area Coordinator brings TV to show monitors the newscasts. Monitors pray for Scotts safety in trip planned to US.
9 November 12-14, 2001 Beira, Sofala.	SITE VISIT. TEAM BUILDING. F Chambo conducts first training of TEE monitors in Area 2.
10 November 15-20, 2001 Johannesburg, SA Africa-wide meeting of Nazarene educators, presentation of IBNAL model by M Scott and F Chambo	TEAMWORK. PAR team members work together in and out of PAR environment, reporting to other interested parties on the status of the "IBNAL model" including the training of the trainers at the "hub" (the residential school campus) for deployment to districts.

Table 4.19 Interpretations of Actions #4 through #10 of Phase Three A

Discussion: The planning and reflecting together done by the district superintendents and monitors of Area 1 in XaiXai (Action # 4) was a solution from the participants of the encounter to the communication difficulties they experience in the field. Such work groups by district began to be a regular part of the programmed time during the intensive courses. With the completion of Action #9, monitor training had been initiated in each of the five Areas of Mozambique.

Table 4.20 describes Actions #11, #12 and #13 of Phase Three A of this study.

Phase Three A: May 2001 – June 2002	IMPACT OF THE ACTION ON THE RESEARCH

11 January, 2002
   Stop in Quelimane
   Nampula
 	
Intensive course for TEE monitors
	MATERNAL LANGUAGES. Plans set to translate the leaflets for accompanying JESUS Film into Makhua and Masena as well as Chichewa and Changaan.
	
	SITE VISIT. Visit Manonga on site in Mooma; plan to test "Story of God" among his learners.

12 February, 2002 Nampula Short intensive course for TEE students to test materials	TEAM WORK; SITE VISIT. I test "Story of God" among Nampula Sul learners, on site, translated from Portuguese to Makhua. I learn to hang illustrations by clothespins on string tied to sticks which hold up palm leaf coverings on roof. Simple map drawing takes 3x longer than predicted. Learning to sing a single hymn in two full days was not very successful but choruses were learned faster. Dirt floors work. Memorizing Scripture in maternal tongue works. Meals served in bowls on the ground, shared by 4 or 5 work. Taking a shower in a tiny straw hut, by pouring heated water from a plastic mug works, especially by moonlight works.
13 February, 2002 Zambezia Drive from Nampula to Tete through Milange, Zambezia and on to home of dying monitor Stop in mud church, soon to be an IBNAL centre.	SITE VISIT. where PAR 2 team member, Questa, takes J Scott and me to visit trained monitor, recent grad, dying from AIDS in a **very, very** remote inaccessible family homestead requiring passage of van through small river, up steep rock embankment and through corn fields to reach the site. SITE VISIT/STILL PHOTO. On site dilemma: how can learners sit in a circle in a mud walled church with benches made of mud? Solution: each sits with back to wall, bench between his/her knees to also serve as a desk. See photos below.

Table 4.20 Interpretations of Actions #11, #12 and #13 of Phase Three A

Discussion: Without site visits like these in Actions #11, #12 and #13, any facilitation of learning which the PAR team members in Maputo attempt to prescribe is merely theoretical and ignores the realities of the field. Among the realities is AIDS which, by February 2002 had claimed a trained monitor, his wife and baby. Death lives close-by in Mozambique. AIDS touches IBNAL.

Visual 4.4 Solving the Dilemma of How to Sit in a Circle

Discussion: The dilemma raised by the PAR 2 team member on site in this mud church in a remote site in Zambezia was, "How do the learners sit in a circle when the pews made out of mud and immoveable? Discussion of alternatives followed, and the workable solution which surfaced was the following: learners each sit with the bench between their knees, leaning on walls so that they can look around to other colleagues and can use the benches as desks to hold their books and Bibles.

Table 4.21 continues the interpretations of the actions of Phase Three A.

Phase Three A: May 2001 – June 2002	IMPACT OF THE ACTION ON THE RESEARCH
14 February 2002 Tete Monitor Encounter; put together a book in Chichewa; bought seeds to experiment with gardens.	TEAMWORK; PASS/FAIL REQUIREMENTS. The monitors report increasing difficulty in the learners buying the textbooks, so, in brain-storming sessions, each district devised plan to buy seeds, have learners work gardens, sell products to pay for books. Also monitors collated and stapled a student book newly printed in Chichewa.
15 Maputo, Bible School Show video footage from Nampula, Milange and Tete to Bible School students	TEAMWORK/COMMUNICATION. What amazement from the Bible School faculty and students from the lower five provinces as they see the difficulties in crossing the Zambezee River on the rickety ferry and a little bit of what life in the Church of the Nazarene is like in the most remote places.
16 March, 2002 Quelimane, Zambezia Intensive course for TEE monitors	TEAMWORK; IBNAL MODEL. First training in Area 4 for previous Bible School graduates to learn to be monitors. My first time to meet superintendents from Area 4, and to learn from them the geographic contours of their districts and names of their churches. PAR 3 member, M Afonso is appointed IBNAL Facilitator for Area 4.

Table 4.21 Interpretations of Actions #14 through #16 of Phase Three A

Discussion: The value of showing video footage (Action #15) of some of the most extreme situations in Mozambique contributed to understanding of life in other parts of the country, especially the ferry crossing of the Zambezee River which affects all of those in the research population who live in or come from the four provinces north of the river.

The pragmatic goal of preparing more leaders for every church district attracted the district superintendents and eventually all thirty-one of them participated in the intensive courses organized for the training for monitors. In Action #16, I meet the District Superintendents from Area 4.

Table 4.22 below continues the presentation of details and interpretation of actions from Phase Three A.

Phase Three A: May 2001 – June 2002	IMPACT OF THE ACTION ON THE RESEARCH
17 July 2002 Seven districts of the North Two cars full of leaders to seven districts in the North for several purposes including visits to sites and to former IBNAL students; show JESUS Film in Makhua; test- teaching of leaflets in Makhua Personnel: E Duarte, PAR 3 advisor, L Mahalambe PAR 3 and 4, J Scott PAR 1, 2 and 3 advisor, PAR 4; the superintendent of each district; two Makhua-speaking monitors and me Distribute Bibles in Makhua, take still photos and video footage at each of 7 assemblies	TEAMWORK. Ten days of gruelling schedules across terrible road conditions which break vehicles, consequently the schedules of the occupants, test spiritual, physical and mental fortitude; challenge workings in team, immerse participants in the realities of Mozambique beyond the Zambezee. SITE VISITS. Enquiry about former extension students sober PAR team members as the number of former students now deceased is discovered. Transportation difficulties for the learners and monitors who might be placed in some centres become evident. All pastors serve as pastors without remuneration. The sum total received in offerings during the year usually was not enough to produce the luncheon meal for the district assembly delegates. Some people in the North live in villages where bartering is the economic activity and virtually no cash is used for trading. VISUAL CUES. Using leaflets in Makhua with scenes from film after the showing of JESUS Film gives evidence to effectiveness of using scenes to learn story; all ages eagerly listened and sought to receive all four of the leaflets (of course). Paper for any use is rare. MATERNAL LANGUAGES. Special offerings made possible distribution of Bibles in Makhua to all of the pastors who gave reports at the district assemblies. See pictures below of pastors with their Bibles.
18 July 2002 Mocuba Intensive course for TEE monitors	TEAMWORK. On return road trip from Nampula to Zambezia for intensive course with monitors in Area 4, three of us on PAR 3 were in an automobile accident; team member, L Mahalambe, also in the accident, took my place to conduct the intensive organized by Area Facilitator, PAR 3 team member, M Afonso. The team shows it knows how to function as a team in the field as well as in more controlled settings.

Table 4.22 Interpretations of Actions #17 and #18 of Phase Three A

Discussion: The multitude of experiences involved in Action #17 was a turning point in the PAR research because the experiences brought the participants so close to the realities of the learners. In the seven district assemblies the hearing of report after report of the pastors, over 200 of them – some very young, some very old – all evidencing a great need to be trained but a great dedication to serve whether trained or not was an unforgettable experience for all of the personnel new to their reality. Part of the reality came through reading through the names of previous extension students and hearing how many of them had died.

So among the realities of Mozambique that hurt deeply, like AIDS and other illnesses, are traffic accidents that are always imminent because of the obstructions and pedestrians in the streets and on the roadsides which challenge the most experienced drivers. The accident in Zambezia on the trip from Nampula to Maputo claimed one of the vehicles which had taken half of the personnel to the seven district assemblies in Action #17. Brief minutes after the accident, the Nazarene District Superintendent, saw the accident while passing the site in a public mini-van. He recognized the vehicle, left the van and came to the site to aid the three of us in the vehicle; he mobilized the members of the local Nazarene church to stand guard over the vehicle during the night and then proceeded to Mocuba to attend, with his wife, the intensive course for monitors. He was ill the night he aided at the accident site and during the days of training. In less than two weeks, he died. Death is always close-by in Mozambique. The wife of the deceased superintendent is still a monitor.

The joy of their receiving Bibles in their maternal languages was seven-times evident, i.e. obvious in each of the seven assemblies. See the photo as Visual 4.5 below:
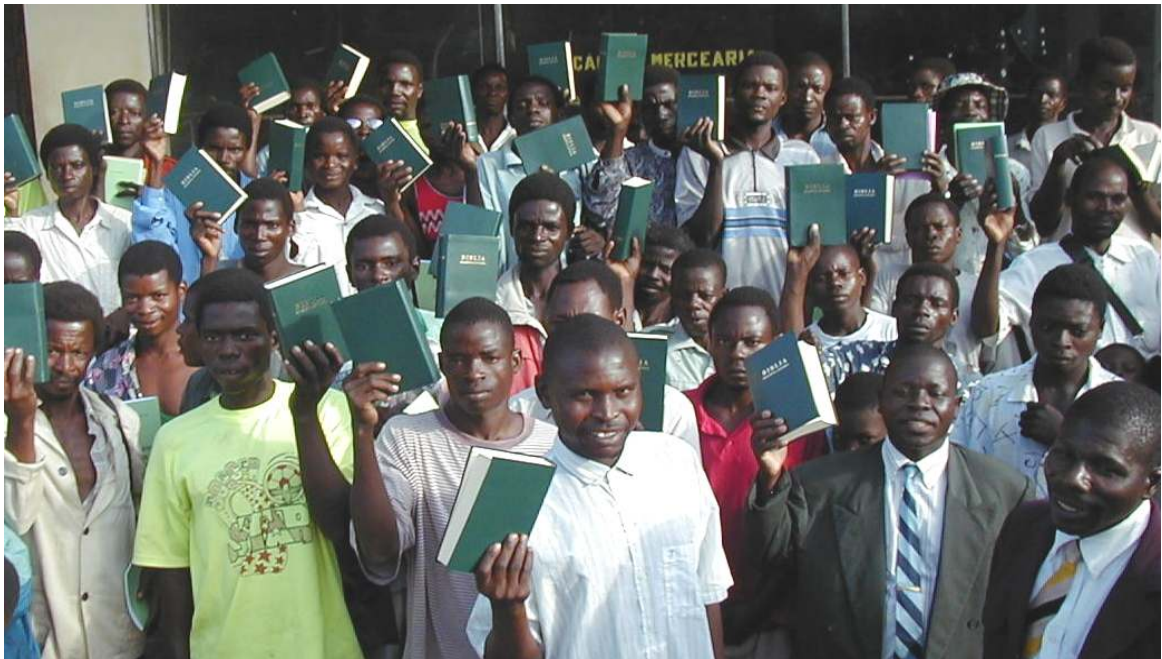
Visual 4.5: Pastors of Area 5 Receive Bibles in Makhua, their Maternal Language

The photo of Visual 4.5 shows men in the district assembly in southern Nampula Province, the ecclesiastical district "Nampula Sul". The two men in the lower right corner wearing suits are the only ones who came to Maputo to be prepared at the resident Bible School. The other men holding up their newly received Bibles in Makhua include those who clearly voiced, in 2001 their deep desire for a pastor and who built a house (like theirs) for us to move a Bible School graduate to live among them. This photo was taken of them a year later in July 2002. Another photo, Visual 4.8, shows them in their district assembly of July 2003 receiving the certificate of completion of their first 14 courses.

Table 4.23 below displays the findings per site which were gathered by Delphi technique, asking all participants to fill out response cards to a few questions I would ask at each site, and then read for consensus and reoccurring themes.

Recurrent Finding	Field Findings						
	PAR 2	Xai Xai	Tete	PAR 3	Nampul	Beira	Queli-mane
♥Starting & ending w/ prayer & Biblical devotion is warm pattern	√	√	√	√	√	√	√
♥Bonds in group enhanced by prayer	√	√	√	√	√	√	√
♥Sitting in circle & open dialogue are new in educational settings buts positive.	√	√	√	√	√	√	√
♥ Relationship prevails over task	√	√	√	√	√	√	√
♥ Holistic learning strategies challenge some old ways and that's OK	√	√	√	√	√	√	√
♥ Goal, song "To Be Like Christ" approved w/ enthusiasm	√	√	√	√	√	√	√
♥ Goal, theme song & motto are easy to learn to use	√	√	√	√	√	√	√
♥ Goal, motto, song fit each other	√	√	√	√	√	√	√
♥ TEE books appreciated by those present	√	√	√	√	√	√	√
♥ Those present say books will work (Tete – in Chichewa)	√	√	√	√	√	√	√
♥ As long as the district leaders are in favour, the plan, i.e. training in the hands of diploma grads should be able to work.	√	√	√	√	√	√	√
♥ Much practice necessary for good discussions	√	√	√	√	√	√	√
♥ Discussions based on the text material are reasonable to them if questions are available to them	√	√	√	√	√	√	√
♥ Most agree that books could be in Portuguese & discuss in maternal tongues this contributes to extent & depth learned by facilitating the discussions	√	√	↓↓↓	√	√	√	√
♥Consensus; self-sacrifice is normal; learners can do pass/fail requirements	√	√	√	√	√	√	√
♥ Pass/ fail requirements are reasonable	√	↓	↓	√	↓	↓	√
♥Consensus: the 3 certificates motivate	√	√	√	√	√	√	√
♥ Public recognition is important	√	√	√	√	√	√	√
♥Certificates act like symbols	√	√	√	√	√	√	√
♥ District leadership support essential	√	√	√	√	√	√	√
♥ Verse memorization is a priority	√	√	√	√	√	√	√
♥ Visual cues	-	-	√	√	√	√	√
♥ Singing for learning	↓	-	-	↓	√	-	-

Table 4.23 Interpretation of Recurrent Themes at End of Phase Three A

Discussion: Table 4.23 above is quite repetitive because the data collected were also repetitive then. The red arrows represent dissent, the dashes represent that the item was not presented to that particular group. The red arrows cluster around three issues: 1) the use of the learning strategy "singing for learning" which was non-essential, so I stopped trying to train with it, 2) the plea in Tete for the student books to be produced in Chichewa and 3) the pass/fail requirement that the books must be purchased by the students in order to pass. Increasingly this opinion began to surface more and more that the students were hard pressed to buy the books.

The difficulty with students buying the textbooks became more frequent, so regularly time dedicated to this problem was allotted during the intensive courses with the monitors, time for them to meet together to brain-storm solutions for small projects to cooperatively generate funds for the books of the whole group. One group cooperatively planted and harvested a peanut garden to buy books for everyone. Another group made baskets to sell. Two or three districts voted to ear-mark money for this cause from contributions made to the district budget.

By the end of Phase Three A the PAR 4 team considered that the first wide-spread "opinion poll" was completed. It was not a written poll or survey. It was data collection using other research instruments during the visits I had made to all ten provinces of Mozambique collecting data from leaders and learners in each of the five administrative areas of the Church of the Nazarene in the country. Some photographs and videos from the many site visits conducted document the visits. The data which are recorded by check marks in Table 4.16 above are sometimes given in interviews, sometimes on cards via Delphi technique. One video with narration in English is presented on a DVD as Appendix G. There were many voices of many strata participating actively in the process of data production and collection. Learning was beginning to take place in remote corners of Mozambique where heretofore no learning groups existed as monitors located those who wanted to learn and started to meet with them. There was no little excitement about that fact. Genuinely it could be said that the leaders and learners had a broad participation in the formulation of the system of learning which would shape the leadership of the Church of the Nazarene for the next few years.

4.3.5 Presentation of findings from Phase Three B

The findings from Phase Three B are reported in this section. The table below introduces the typical actions and the personnel of the phase, and the spiral reminds that all of the action is cyclical.

PHASE Three A	2000	20	01	2002	Dec 2002	
	Key words =		Reflective Praxis	Reflective Synthesis		
Actions of the PAR 4 and, in Dec, PAR 1,2,3 and 4			**A** Plan,Test, Respond, Reflect, Re-Test, Refine, Re-Write	**B** Reflect, Plan Refine	Reflect Jointly on the Present & Future	

Table 4.25 Schematic Representation of Phase Two B and Actions of PAR 4

Discussion: If the centre of activity in Phase Three A was the field, the centre of activity in Phase Three B was definitely Maputo as it begins and ends with large encounters on the campus of the Bible School in Maputo with the weeks in between filled with the key activity **Reflective Synthesis**. The PAR 4 collected data at the encounter in July with a medium-sized group of about forty leaders in open discussions. These data were synthesized at smaller tables of discussion to distil questions for discussions which took place at the second large encounter in December. The July encounter brought together the PAR 4 members from Maputo and those from the field, other Nazarene educators from Maputo and other the church leaders from the field for 4 days of critical dialogue in Round Table Discussions. One Maputo faculty member, who had never yet participated in an event with participants seated in a circle and involved in open dialogue, commented with an enthusiastic smile that it was "like the United Nations". The second encounter, with over 150 in attendance in December of 2002, clearly marked the end of Phase Three by means of several shifts which are delineated in later discussion.

Phase Three B: July to December of 2002

July 2002, Maputo. Medium-sized encounter called Lusophone ANCA meetings

September 2002, Tete. . Intensive course for TEE monitors

December 2-11, 2002, Maputo. Large encounter of District Superintendents and Active Monitors, those who had already taught a course and completed one report form, PAR 1, PAR 2, and PAR 3 all present; PAR 5 is formed.

The five days of meetings of Lusophone ANCA had recording secretaries who transcribed all of the presentations and open discussion sessions. This amounts to forty-four pages of single-spaced notations. Although the PAR 4 team organized the event, only a portion of the meetings concentrated on subjects directly related to IBNAL, and most of that concentration related to issues more political than didactic. However, some of the questions which were initiated from

the attendees identified some of the concerns of the leaders present. "What if there are not enough local churches to support monitors/programme?" This is based on lack of understanding of the finances of IBNAL since the monitors serve as volunteers. "How will a monitor work as a pastor if does not have the gift of preaching and vice versa?" This is a good question which never was well discussed because other questions got in the way. "If a monitor has not pastored, how is he or she able to answer questions from pastors?" After long discussion on this question it was decided that a monitor cannot serve as a monitor without also being a pastor. Several questions dealt with issues of power in relation to one single case that was being disputed by a single district superintendent which unfortunately derailed some discussion of broader issues but re-emphasised the importance of careful interface with the district leadership.

There were three questions discussed which were relevant or challenging to issues of learning. "How will [learning] centres be evaluated to ensure are on track?" The answers generated within the discussions were the following:

   a. *District leadership should evaluate progress of those being trained.*
   b. *When do retraining or in-service training, can be evaluation*
   c. *When train monitors, do have practicum with class have to teach and able to see who can/cannot. Not everyone receives a monitor certificate. If cannot do teaching, will not receive Monitor certificate.*
   d. *District needs to give feedback on students and how are doing, i.e. if some students not serious about subjects, monitors will see and report to district.*
   e. *Question was to see if IBNAL had considered this. If DS, have they attended classes and know how they should work?*
       1) *Not designed to have someone come in every day and take notes, but do expect to see spiritual and personal growth in life of monitor and students.*
       2) *Could attend a class not to say evaluating, but to be present*
       3) *Another way can take place, as District forms, should form own District Ministerial Studies Board.*
       4) *Have Credentials board on every district which monitors those who get their license.*
       5) *All DSs have been at monitor training intensives and are keeping up with the progress.*

An important underlying issue here was "partnership", i.e. may stakeholders working together toward goals which are held in common. The infrastructures of the Church of the Nazarene are engineered to work together in partnership. In this case it would be the educational structure working with the district leadership. One of the frequently voiced important protocols is for the learning system *not* to try to function independently of the church structures. In a previous address, the Field Director, E Duarte had just said:

> It is important that we understand concept of partnership. We have lived for long time in state of dependency, blamed colonialists, and even in the church there is a degree of colonialist spirit. Always thought of someone who has more than we do, he is generous to give and we need it and they will just give it to us. Praise the Lord this way of thinking has left the church.

There is work to be done so we can fully take on our role as partners in education, in all areas of ministry in the church.

Obviously, from the point of view of an African Nazarene leader, Duarte was stating both a truth and a hoped-for-ideal. The truth – that dependency was a historical element of the system and that it was many times paternalistic. The hoped-for-ideal – that the way of thinking had left the church so that the assumption of roles as full and equal partners could take place. The subsequent discussion quoted above give evidence that the terms of partnership were evolving and not yet defined. This reality affects the extent to which holistic learning strategies can facilitate learning because if the structure does not bring the facilitator to the learners, the link to the learning system is absent.

Four other questions had pertinence to Phase Three B of PAR research:

- *Question: In light of cycles of primary education and fact that students to be taught in local languages, should we model our approach along the same lines to reach the majority of our church as it is right now, using local languages in future curriculum?*
- *Response [by a PAR member]: WE DO! Looking at IBNAL, by December 2002, all of 1st certificate books in Portuguese and the three largest language groups, Makhua, Changaan, and Chichewa, in the Church of the Nazarene.*
  - *1st certificate is moving towards being able to be accomplished in languages.*
  - *IBNAL looks closely at what the Ministry of Education does.*
  - *Similarity of terminology used by Ministry of Education and terminology of the Church of the Nazarene over last 5 years.*

The interchange above here indicates the direction toward local languages of IBNAL is parallel to the direction of the Ministry of Education of Mozambique. This was a known dynamic among those directly involved in PAR 1, 2 and 3, but it was only becoming known to other stakeholders of the learning system.

- *Question: Will it be possible to ordain people who do not speak Portuguese?*
- *Response [from a PAR team member]: The statement by the General Church is that anyone can be ordained as long as have met the qualification for ordination in their local language. Every local language does not have the same academic level, but believe we can put the Course of Study into any language – training for ministry, not academic level. Content, Character, Competency, Context. Only content requires academic level. Could go to school to degree level and learn only content to pass. If could chose what want in Minister of the Gospel, character would be number one, Competency would be second – how to pray and minister, then Context to minister to the local church, and content. Content is important to do other things. But keep in mind, we are training ministers for ministry, not for academia. Problem, do not have textbooks, research materials. What have to do? Develop in local languages, as many as we can afford, and get teachers at higher level to learn as much as can and put into local languages. Need diploma in*

236

theology and education. Can take programme back and maybe even write into own languages.

This question and answer interchange asks a question which has come up in Tete. The answer given there was the same – that ordination is not dependent on the language spoken but on the ministerial competencies learned. The response in the ANCA meeting was, again, given by a member of a PAR team, who knew the answer before the answer was known by those in the broader context.

Another question continued to deal with the subject of maternal languages:

- *Question: Are external exams being administered in local languages.*
- *Response [from Nazarene who is a high official in the state Ministry of Education, Mucavele]: keep hearing about 10% of the population [of Mozambique] speaks Portuguese as primary language. Is easier for church to work in local languages than government. Will introduce languages that are homogeneous in linguistic terms, not in big cities. Will use Mozambique languages at parents' request, and will not be obligatory. Problem with lack of understanding of Portuguese and could mean children will be behind. Want to educate children and not make them behind. Objective of Ministry of Education that when student finishes 5th class can speak Portuguese. **Dr Mucavele encourages us, as the church, to teach in Portuguese. Desire for everyone to speak Portuguese but also to value own language.** Good to require pastors to speak Portuguese.*

The question above gave the solution that the Ministry of Education of Mozambique has taken to teaching in maternal languages – that be an option for children, but that by 5th grade the children be bilingual, able to speak Portuguese. The response from Mucavele, Nazarene educator within the Ministry of Education, stated his opinion that Nazarene pastors should also be bi-lingual.

- *Question: How is it possible for someone who has been to Bible School and knows how to preach not know how to teach?*
- *Response [from a PAR team member}: Part of this issue is that the monitor is not a teacher but a facilitator. 'The book is the professor.' The student brings their questions on what have studied and the monitor/facilitator moderates the discussion, similar to what Filimao (F Chambo) is doing right now – facilitating discussion.*

This question and answer began a discussion which was the longest of the ANCA meetings and evolved to the question: "Should it be a requirement at the Bible School that every student be trained as a monitor?" It was decided to highly recommend to the Senate (of the Bible School) that it be a requirement. Those trained might or might not end up qualifying for certification as a monitor, but the church, and they themselves, would benefit from their being trained. Then the question was debated as to which group has authority at the end of the training whether the person can be certified or not as a monitor – the Bible School faculty or the district. There was more long discussion without clear resolution.

After the July event, there were several little meetings between F Chambo, B Mirashi and myself, in which I asked them as well-trained Mozambican Nazarene educators to interpret to me the findings and the cultural nuances of the July encounter. Reflecting on the discussions and presentations of the ANCA meetings, the PAR 4 team understood that the substance of the proceedings was positive toward making IBNAL an effective agent of learning. The church leaders as a body called for all Bible School students to be trained as monitors, that as a faithful partner IBNAL must always communicate closely with the districts on all matters pertaining to Bible School students from the districts as well as the IBNAL students in the districts. The ANCA meetings encouraged parallelism with the Ministry of Education in facilitating learning in the maternal languages by producing, at least, the first certificate material in three languages besides Portuguese. The ANCA discussions also encouraged the goal of bilingual leaders, maternal tongue and Portuguese, or trilingual adding English, as best, and affirmed that ordination qualifications are not linguistic but are competency based.

The PAR 4 team also understood from the ANCA meetings that their work agenda for PAR 4 between July and December was to prepare well for the December encounter to be a participatory learningshop for all who attended. In order to plan effectively for the big event, the PAR 4 recruited student and faculty volunteers from the Bible School to be the steering committee.

In an early meeting of the steering committee, the theme *"Juntos na Missão"* (Together in the Mission) was chosen with the real goal of fixing in the mind of all the participants that the Bible School and the Extension programme (IBNAL) were different but united. *"Juntos na Missão" would* be printed on giant banners in the meeting room, and on t-shirts and programmes and pens for all the participants. The encounter was the first ever of its kind − bringing together pastor-trainers and district superintendents from all over the country.

On December 4, 2002, the group from Northern Manica and Sofala provinces arrived first. Then came the delegation of 17 men and women from Tete Province, some of whom had studied in Tavane before a campus even existed in Maputo. Throughout the day groups kept on arriving from places as far away as Montepuez, some 3,500 km. During the six days of the event, here was preaching by most of the Bible School faculty and from each Area. The five evening meals included foods typical of the area – the Tete delegation brought frozen goats for the meal time dedicated to Area 3.

The editorial work of the learningshop was conducted in small groups which discussed the draft version of a student text. In the plenary sessions the PAR 4 team members in Maputo introduced the whole assembly to several new student books for use in their classes, including the IBNAL Student Guide which would put resources into the hands of the learners which the monitors could use to facilitate learning encounters more holistically. Besides the normal procedures and expectations of the IBNAL student, including the pass/fail requirements, the Guide included all of the verses specified per course, critically selected hymns and choruses to facilitate the monitors use if any singing was done in Portuguese, and many visual resources: maps of Bible lands, of Mozambique and its five Nazarene "areas", of the other countries of Lusophone Africa and their flags, and of each Mozambican province and the visual cues within the short text of "The Story of

God". In the closing message of the learningshop, by D Restrick, Academic Dean, detailed similarities between 18th century England and Mozambique today, then challenged all those assembled to carry the fire of holy living into today's society to heal the country, as John Wesley did in England.[8]

Before the event, the PAR 4 team planned, with the student helpers in the office as the workers, to have a Bible quiz on the verses from the three certificates as a sports-like event during the learningshop. The Bible School students could earn small prizes each week by memorizing the verses from one of the courses. Then the three top winners of the quizzing event in December would get nice prizes.

In one afternoon session of the learningshop, the "quizzing event" took place – with the excitement of a basketball game in the States. The ten Bible School students who had prepared well enough to volunteer as contestants were divided into two teams seated in chairs facing the large audience of about one hundred fifty people. The officials read the Biblical reference to a verse, like "Hebrews 1:1" for one team to hear. The contestants who knew the verse which corresponded to the reference jumped up from their chairs. The referees pointed to the person who jumped first. That contestant recited the verse. If the recitation was perfect, as judged by the referees who had the verses written out before them, the contestant scored a point. If the recitation was imperfect, the question was repeated a second time to those of the other team. If a contestant tried and failed three times to give a correct answer, then they were eliminated from the quizzing. The start was rather slow, but as the number of contestants got smaller and smaller, the suspense and excitement got larger and larger. Five contestants answering with verses, one of them misses for a third time and is out. Four contestants vying for first place, then three, then two contestants for several verses is a row. They obviously knew *lots* of verses with perfection! The audience clapped encouragingly as they recited one verse after another. Then there was one contestant left. He continued to recite verses called out by the officials as *encores* were called for by the audience. How worthy Alexander Bila was to receive the gold-edged study Bible as first prize. He knew all 169 verses perfectly. He showed the whole assembly that it could be done. His performance was a story that every monitor could take home to his students. Bila became the effective "hero" of verse memorization.

Phase Three was at an end. In a break-away session one afternoon, the five Area Facilitators met together with me for the first time. The PAR 5 team is composed of the five of them, the District Facilitators of the southernmost districts – Maputo and Matola – F Chambo, J Scott, K Walker and me. The big event and this small meeting signalled the beginning of decentralization. With authority squarely and publicly vested in the five Area Facilitators of IBNAL, with some struggles for power diminished with the unity experienced in the learningshop, and with most of the resource materials developed for the courses of the first certificate, Phase Four as the time of *Reflective and Responsive Empowerment* began to take this PAR project to fuller, more quantified answers.

The empirical data that was collected and analyzed in Phase Three A was reflectively enfolded throughout Phase Three B into the planning on the December learningshop. The "ticket" for a monitor to attend the event had been their

---

[8] *See photo and news article about December 2002 event as Appendix E*

successful completion of at least one IBNAL course. By the end of Phase Three B participation in the learning system was informed and directed toward common goals through commonly known holistic learning strategies. This status would naturally move the whole learning system toward attention to learning in the cooperative learning groups and to authentic empowerment which is what is presented in the next section.

4.3.6   Presentation of Findings from Phase Four

The authentic empowerment that was budding in Phase Three blooms in Phase Four. Table 4.13 introduces the section which presents the findings from Phase Four.

	2000	2001	2002	Dec. 2002	2003	2004	2005
	Key word =				**Reflective and Responsive Empowerment;**		
PAR 5 in Phase FOUR					Write, Assess, Test, Reflect, Refine, Respond, Quantify Assessment, Report		

Table 4.18 Schematic Representation of Phase Four and Actions of PAR 5

Discussion: As in previous tables of introduction, Table 4.18 simply highlights the key actions of the PAR team most active during the phase. In this case it is PAR 5 active throughout Phase Four. The verbs in the shaded boxes qualify the actions of the team – "Write, Assess, Test, Reflect, Refine, Respond, Quantify Assessment, Report" within the key words recently cited: **Reflective and Responsive Empowerment.** Phase Three was a year and a half long. Phase Four is already full three years long and is still going.

The outcome of the long discussions at the ANCA meetings in July of 2002 and the subsequent discussions with the powers at the Bible School was that the training of the monitors shifted from an add-on option for some students to a required course of the regular curriculum for all students. This shift constitutes part of the ambient of Phase Four – that of greater stability, less need for PAR team members to "sell" the whole idea of facilitating learning in the remote groups of learners by training the Bible School students to become monitors; the idea had become institutionalized. The students took "Monitor Training" as a pass/fail course in Bible School; if they passed it then they would be certified as monitors; if they did not pass they were not certified.

The most important actions which took place during Phase Four are listed in Table 4.26 below:

Phase Four: 2003 - 2005		
1	January 2003, Maputo and Johannesburg	Workshops on "Using Visual Cue Books for Pre-Literates"
2	May 2003, Tete	Visit to conduct first of the larger surveys.
3	August 2003, Maputo	First encounter of Five Area Facilitators, all nationals who are part of the PAR 5 team
4	September 2003, Quelimane	Intensive course for TEE monitors
5	September 2003, Tete	Site visit to facilitate course for first group of advanced students
6	September 2003, XaiXai	Workshop for TEE monitors
7	October 2003, Nampula	Meeting of active monitors of Area 5
8	January 2004	Tete and Zambezia. Facilitators train new monitors up-country
9	May 2004, Tete	First field test of "Holiness in Day to Day Living" course and retreat
10	July 2004, Maputo	Special class of volunteer students for testing other learning strategies.
11	May 2004, Tete	Second larger survey administered
12	July 2004, Nampula Sul	Conferring of 1st Certificates: Tete, Nampula
13	July 2004, Nampula.	Encounter of facilitators with Area 5 Monitors
14	September 2, 2004 Nampula	Short meeting in Area 5 to make plans per district
15	September 2004	Meeting with Active Monitors, XaiXai, Tete
16	Oct-Nov 2004, Maputo	Holiness in Day to Day Living
17	December 2004, Tete	Testing 2nd Certificate Practicum
18	January 2005, Maputo	Post-ordination session with PAR 5
19	Feb 2005, Inchope	Inaugural encounter of monitors in Area 2
20	April 2005, Maputo then all over	Largest survey administered in the PAR study in Mozambique
21	May 2005, Tete	Field test of 2nd Certificate history book
22	July 2005, Maputo	1st Senior Synthesis Seminar, Bible School
23	August 2005	PAR 5 in Literature Workshop
24	December 2005, Tete, Nampula and XaiXai	Monitor meetings and short survey to 2nd Certificate students

Table 4.26 Actions of Phase Four

Table 4.26 above identifies twenty-four actions which comprise the qualitative aspects of Phase Four and introduces the actions which I describe in more detail in subsequent paragraphs and figures including Table 4.27 which follows.

Phase Four: 2003	IMPACT OF THE ACTION ON THE RESEARCH
1 January 2003, Maputo and Johannesburg. Workshops with Neville Bartle on "Using Visual Cue Books for Pre-Literates" (like those in Papua New Guinea)	VISUAL CUE INTERPRETATION. Bartle brought big flip-chart blocks of stick figures which act as visual cues for the Bible story which they symbolize (not illustrate). A pre-literate person can "read" the story, including the emotions and other non-concrete aspects of the interaction, by careful attention to the detail in the stick figures. About 25 attended session with him in Maputo and another 25 in Johannesburg. His was an affirming voice to the action taken by PAR 4 in 2001-2002 to use visual clues in the IBNAL Student Manual. APPROPRIATELY APPLYING BIBLE CONTENT TO LIFE SCENARIOS. By his explanations of how the use of stick figures works in Fiji and Papua New Guinea, it became clear how active in reflection the pre-literate is as he or she reflects on the stick figures and compares them to life scenarios. The stick figures probably relate more to life situations than the geometric figure type visual clues in the IBNAL Student Manual.[11] Around the discussion table in Johannesburg, the subject of "What is 'goodness' in an African context?" An energetic interchange between African Nazarenes from several countries tied "goodness" (from Bible texts) to "ubuntu". PRAXIS (action – reflection – dialogue) and MINI-PRAXIS. After telling the story to the attendees, the group of twenty-five was broken into groups of five to retell the story in small groups. Then re-forming into the group of twenty-five, Bartle asked what people now saw in the story that they had not noticed when he told it. This mini-praxis, a (holistic) learning strategy, is the standard one he uses among pre-literates which empowers them immediately to "read" the story. They take home a miniature version of the chart so they can re-tell the story to their families and friends.
2 May 2003, Tete. Visit to conduct first of the larger surveys.	TEAM WORK. SHORT SURVEY. While the Area Facilitator met with the three District Superintendents, I administered a short survey to the over two-hundred learners gathered for an intensively delivered course. The superintendents made the decision to accept the completion of the first certificate programme of fourteen courses as fulfilment of the study requirements for the pastors-in-training of their districts to receive district licenses. These three districts are the first of thirty-one in Mozambique to officially adopt this position. COLLECTIVISM. The action of these three district superintendents affirmed the efforts of monitors and learners all over the country as they collectively recognized the validity of the preparation. REFLECTION. Reinforcing the frequent voice of those from Tete in discussions who insist their students do not speak Portuguese, most of the students gathered did not speak Portuguese so one of the monitors translated me as I gave instructions on filling out the brief survey.[12]

Table 4.27 Interpretation of Actions #1 and #2 of PAR 5 in Phase Four

---

[11] *See Appendix D*

[12] *See Appendix A for the survey questions and the results below in Table 4.28.*

Discussion: Table 4.27 describes research findings embedded in the web of twenty-four actions which comprise the qualitative aspects of Phase Four that are in the table. I added description in order to make the action more understandable and interpretive comments as to the relation of each action to the essence of my research. The results of the brief survey referred to in Action #3 follow.

The first small survey was administered to groups of learners in the geographic Areas 2 (Sofala and Manica) and Area 3 (Tete). The basic reason for the survey was to investigate the number of books normally owned by Nazarene leaders and learners in order to get a glimpse of that aspect of their reality. The findings of this survey follow. The number of books that each individual owns in the sample surveyed yields a median of 3 books and a mean of 5.9 books per person. The number of books as a frequency distribution is displayed in the table below.

# Of STUDENTS	0	1	2	3	4	5	6	7-10	11-15	16-20	22-30	31-50	>51
80	85												
70	-												
60	-												
50	-												
40	-		40					42					
30	-	27	-	31				-					
20	-	-	-	-	21	21		-	17				
10	-	-	-	-	-	-		-	-	10	14		
05	-	-	-	-	-	-	8	-	-	-	-	4	2

Number of books the leaders own

Of 322 valid responses 85 own no book at all ; 255 or 70% have 5 or less.

Table 4.28 Number of Books Owned by Students and Leaders in Areas 2 and 3

Discussion: The numbers on the horizontal axis of Table 4.28 indicate the number of books the leaders own. The numbers on the vertical axis record the number of students who own x number of books. The table shows that the number who own 0 (zero) books is 85 out of the sample of 322; in other words 23% have no books. The number who own 1 book is 27, and so on. According to the results of this survey, of the 322 valid responses from Central Mozambique, the provinces of Sofala, Manica and Tete, 70% of the leaders or leaders in training have 5 books or less. Considering the total responses, the average number of books owned per person is about 6 (5.9 books). This statistic is a narrow window into their reality.

During the time of this survey, the PAR team was studying the applicability of the Wesley model of praxis to the research population of this research. One aspect of Wesley praxis was to require his pastors-in-training to read for five hours a day

from the Bible and other great books. From the results of this small survey, the PAR team members could see clearly that this advice from Wesley would be very difficult for the pastors-in-training of Mozambique to put into practice.

The following table (4.29) continues the interpretation of the actions of Phase Four of this PAR study.

Phase Four: 2003	IMPACT OF THE ACTION ON THE RESEARCH
3 Aug 2003 Maputo. First encounter of Five Mozambican Facilitators, who are part of the PAR 5 team	TEAM WORK. The work done among the Facilitators in discussions in and out of the meeting room is actually a "building project" as they construct a system in which learning can take place in cooperative learning groups across the country. They share solutions. [13] PRAXIS. Reflecting during dialogue on the action taking place in each of the areas, the Facilitators make plans with me about a future action. They verify different levels of abilities among the monitors in their areas so they decide to create a system of three levels of monitor certification through which the monitors can advance. Each course of the curriculum was then qualified by the level of monitor who could facilitate it. COLLECTIVISM. This action will solve problems in several situations the Facilitators face; it will give them leverage to take some unpopular stands to improve learning environments by bringing in more able monitors for certain courses.
4 Sept 2003 Quelimane Intensive course for monitors	TEAM WORK. The work being done is learning and mastery which permits all of the learners to pass the course. The intensive course periods give opportunity for the several district superintendents, pastor-monitors, missionaries and the IBNAL facilitator to come together for fellowship as well as learning. The same questions discussed with other groups of leaders in round table discussions are addressed to this group of leaders.
5 Sept 2003, Tete. Site visit to facilitate 1st course for a group of advanced students	TEAM WORK. The three districts of Tete Province have identified students who are able to proceed faster than most; they are "fast tracked" by way of more frequent intensive courses which they attend with the monitors. PAIR OR TRIO GROUPINGS. The American pastor who taught this intensive course made several assignments from the Bible that they worked on it small groups. Many photos of this work, shown below, show enthusiastic engagement in this learning strategy. The linguistic advantage is that they can hold these small group discussions in Chichewa even when the large group discussions are held in Portuguese. See photos below.

Table 4.29 Interpretation of Actions #3, #4 and #5 of PAR 5 in Phase Four

Besides making the training of monitors an official and required course in the resident Bible School in Maputo instead of an add-on elective, another official action of the Bible School authorities during Phase Four was to approve the plan for the "articulation" of courses from IBNAL into courses of the Bible School. This plan allows an IBNAL student who comes to be a resident student at the Bible

---

[13] *See photo in Appendix F*

School to receive certain academic credit for courses taken in the IBNAL programme. This articulation presents a viable solution to the weakness of the TEE model cited by (Gatimu *et al* 1997:14), i.e. "the lack of academic recognition outside the TEE programme". The policy takes into account that the nature of IBNAL is not "academic" in terms of content-based measures of learning but has real value in terms of the acquisition of ministerial competencies. So if the IBNAL student becomes identified by the leaders of his or her district as a potential leader[14], specifically as a potential monitor, he or she is recommended to go to the Bible School. Then the courses he or she has from IBNAL are commuted to academic credit at the Bible School, at approximately a two-to-one ratio, i.e. two IBNAL courses are worth one Bible School credit.[15]

Visual 4.6 Pair and trio work groups, Tete, September 2003

Discussion: Even when the furniture is not optimal for pair and trio groups for doing in-class study on certain Bible passages, the mini-praxis of putting the

---

[14] *These students are those that the district leadership tries to select to send to the Bible School so IBNAL becomes both a proving ground and an effective pre-screening for the residence school.*

[15] *The plan is not any two IBNAL courses to count for any one Bible School course; it is worked out specifically which two IBNAL courses can count for courses in the other.*

instructions to work straightaway with the help of a classmate or two appears to be, from the expressions on the faces of the learners an enjoyable learning strategy. The small group work encourages broad participation and enables expression in the mother tongue.

Table 4.30 below continues the interpretations of the actions which constitute Phase Four. These actions take place in 2003 and end with the field testing of "Holiness in Day to Day Living" in May of 2004.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
6 Sept 2003, XaiXai. Workshop for TEE monitors	TEAM WORK and COOPERATIVE LEARNING GROUPS. In order for the monitors in XaiXai to be involved in the writing of a monitor's guide, the small groups each wrote a lesson plan to be published and circulated to help other monitors.
7 October 2003, Nampula Meeting of active monitors, Area 5	ROLE-TAKING. In spite of attention and excellent human resources in place, only two or three of the monitors in Area 5 are actively taking the role of facilitating cooperative learning groups.
2004	
8 January 2004 Tete and Zambezia. Facilitators train new monitors up-country.	TEAM WORK. No one from Maputo was sent to train new monitors. The Facilitators from Areas 3 and 4 handled the training themselves. AUTHENTIC EMPOWERMENT is an anticipated result of Participatory Action Research. The Facilitators have been in the PAR for as long as two years, and accept empowerment.
9 May 2004, Tete. First field test of "Holiness in Day to Day Living" course and retreat	CLASSICAL SPIRITUAL DISCIPLINES. Loosely based on the "spiritual exercises" of St. Ignatius of Loyola, this course which I designed from material from this research project on Holistic Learning Strategies offers the learner opportunity to authentic experiment with several classical spiritual disciplines and also Wesley-type bands. In exit assessment of the experience, the forty people present, monitors and fast-trackers, voted on the stations of the mini pilgrimage that they felt were weakest. The two voted weakest were the two five-minute stations where they were only to rest, where they had no directed spiritual activity. They said to leave those out the next time. The exercises include holistic experiences including movement, tasting, contemplation, tactile stimulation.

Table 4.30 Interpretation of Actions #6 through #9 of PAR 5 in Phase Four

Discussion: Table 4.30 organises actions which take place in many different places in Mozambique during this phase where decentralization is enacted – XaiXai is in the South, Nampula in the North, Tete in the Northwest, Zambezia just South of Nampula and Tete again. The Area Facilitator in Tete paces group of fast-tracked learners to have two intensive courses every year; they are pictured below in Visual 4.7 during the field testing of "Holiness in Day to Day Living".

Visual 4.7 Spiritual Exercises of Retreat Closing "Holiness in Day to Day Living"

Discussion: Though the learners in Tete usually smile for the camera, they do not seem to even notice the camera during this course involving several classical

spiritual disciplines because of their serious engagement and contemplation. The photos show a few of the holistic exercises which are based on Bible passages like Acts 21:5 when they prayed "kneeling in the sand", on the classical spiritual disciplines and on the spiritual exercises of St. Ignatius of Loyola.

Table 4.31 below organises and interprets the actions #10 though #13 of Phase Four.

Phase Four: 2004	IMPACT OF THE ACTION ON THE RESEARCH
10 July 2004, Maputo. Special class of volunteer students for testing other learning strategies.	CLASSICAL SPIRITUAL DISCIPLINES; REHEARSING INTEGRITY; SINGING FOR LEARNING; REFLECTION; PAIR OR TRIO GROUPINGS; DRAMA. These thirteen Bible School students actually pled with me to give them a special class on "methods", so I spent sixty hours with them in deliberate experimentation with learning strategies. The instrument for their assessment of the experience is Appendix A, Example 3. The experiment with "singing for learning" indicates that working with the words in a reflective written exercise, and singing the song repeated times seems to enhance its effectiveness as a holistic learning strategy. Probably the influence of this strategy is conditioned by the "musical IQ" of each learner.
11 Second larger survey administered through Facilitators.	HOLISTIC QUANTITATIVE ASSESSMENT TOOL. This instrument asked six biographical items and three questions requesting ratings of multiple variables and two open ended questions.[16] There was a sample 256 respondents from places scattered across the country. The survey helped to give practice in critical reflection to all who filled in out and in administration of a survey to a wide audience. The questions of the survey were improved and included in the large survey in 2005.
12 May 2004, Tete and July 2004, Nampula Sul. District Assemblies conferring of 1st Certificates	HOLISTIC ACHIEVEMENT. In Nampula Sul (South) one of the poorest settings of the country, seventeen IBNAL students completed the first fourteen courses and, like those in Tete, those who were serving as pastors, were granted district licenses allowing them to marry, bury, baptize and serve communion in their local churches. HERO-IDENTIFYING. These students and their monitors become "heroes" in my eyes because of their self-sacrifice to reach this goal. I shared their story to other groups of students across the country as a means of encouragement. If Nampula Sul was able do it, as poor and remote as their setting was, others could do it, too.
13 July 2004, Nampula. Encounter of Facilitators with Area 5 Monitors	TEAM WORK. The Facilitators from four of the five areas travel far to get to Nampula in the North. The intent of the visit is to encourage the monitors of Area 5 who meet in small groups by district to plan visits to former students to encourage them to come back to their cooperative learning groups.

Table 4.31 Interpretation of Actions #10, #11, #12 and #13 of PAR 5 in Phase Four

Discussion: The four actions reviewed in Table 4.31 are interpreted in the right column. The conferring of the 1st Certificates in two different district assemblies,

---

[16] *A copy of the survey is Appendix A.*

Tete and Nampula Sul was a milestone especially considering that the certified students who were also serving as pastors were also granted license to practice ministerial rituals. The photo of both groups of these learners should be part of this report, but only the photo from Nampula is part of the data collected. It follows as Visual 4.8.

Visual 4.8 Nampula Sul Group of Learners with 1st Certificates in Hand at District Assembly

Discussion: This photo is taken in July 2003 at the district assembly in Nampula Sul in the town of Mooma. The year before Makhua Bibles were distributed at the district assembly and several of the students pictured in Visual 4.5 also appear in Visual 4.5 with Bibles in their maternal language in their hands.

Visual 4.9 District Superintendents and Monitors per District in Area 5

Discussion: The conferring of the 1st Certificates of IBNAL and district licensing of the pastors took place in one of the seven ecclesiastical districts of Area 5 (the North). This action signalled the potential for the success in this district, Nampula Sul, to spur momentum in the other six districts of the Area. To make plans to recover the learners of IBNAL that had been lost from the system, the monitors of

the districts met with their district superintendents; these small planning clusters are pictured in Visual 4.9.

Table 4.32 below shows actions numbered 14 and 15 of Phase Four.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
14 September 2, 2004, Nampula. Short meeting to make plans per district	DISCUSSIONS ON BIBLICAL CONTENT. PRAXIS. After the brief devotional commentary on a biblical passage, I asked the monitors in attendance a question. The several spontaneous answers indicated a degree of synthesis that was a pleasant surprise.
15 Sept. 2004. XaiXai, Tete Brief meetings with Active Monitors	TEAM WORK. Two other PAR 5 team members and I work as a team to conduct this short workshop as a bridge to communication between several parties. TEE MODEL. I begin a short survey of the monitors to discover some aspects of practice in their cooperative learning groups. The results of this short survey are discussed below.

Table 4.32 Interpretation of Actions #14 and #15 of PAR 5 in Phase Four

Discussion: The question I asked in action #14 was the following: "Based on the Scripture we read, *how* does IBNAL correspond to the passage "to combat heresies and interminable genealogies"? The replies of the monitors were the following and my comments [in brackets]:

- "a person who has more experience with the Word [of God] and with knowledge of didactics is able to open the understanding of students in the classes by analysing verses" [The young Mozambican pastor can use rather critical phraseology 'open the understanding of students' and the phrase 'analyzing verses'].
- "interacting with students, correcting certain practices in their lives by showing them how to put the Word into action" [This is 'collaborative praxis'],
- "analysing the singing of the students for us to be able to teach the Word of God through songs well chosen to reinforce the teaching" [Hurray, somebody understood 'critical singing'!]
- "IBNAL opens learning up to mixed groups who come from all social strata" [and this open learning combats interminable genealogies, i.e. dependence on lineage not on personal worth]
- "the IBNAL books contain the Bible in little pieces to be explored in maternal languages" [Evidence of their using the books in Portuguese and discussing in maternal languages],
- "memorizing verses stores the Word in your heart" [This is a familiar Church concept],
- "putting music to the words of the Bible to be able to sing the Word of God makes it penetrate deeply" [Another score for 'critical singing'].
- "IBNAL offers a way for us to do what Jesus did, to concentrate on some as disciples to spend time with them" [To be identified as 'hero-modelling' and 'role-taking'],
- "taking Truth to the context of the student himself, in his own language, bringing the Word as close to him as possible" [Praxis again].

250

The responses of these monitors are appreciated individually, but the collective value of their responses is a positive reading as to the ability they demonstrate to think with a reasonable degree of criticality. These monitors have approximately eight years formal schooling, three years of classes at Bible School, including several weeks of training as monitors. Three of the nine were among the students who sought and received extra learning sessions with me; one is a PAR 3 team member.

The short five-question survey referred to in action #15 was administered to experienced monitors from Area 1 (the South), Area 2 (Sofala and Manica Provinces) and Area 3 (Tete). The eight questions of the survey are found in Appendix A7. Twenty-six monitors filled in the survey: 12 from Area 1, 3 from Area 2 and 11 from Area 3. Between them they had taught 332 IBNAL courses, an average of 13.4 courses. The average was affected by the fact that two of them had only taught two courses each. Excluding the monitors who taught only five courses or fewer, 17 monitors taught 308 IBNAL courses or 18 courses each.

In answering the question "Normally, how many of the learners have the answers written in before they come to the group?" only one monitor answered "almost none of them", 21 or 81% answered "almost all of them" and six answered "about half of them" so usually, **81% of the time, with these monitors, the learners fill in their student books before they come to the face-to-face sessions**. This finding gives a small glimpse into the workings of the face-to-face sessions of these monitors. Nineteen (19) of the 26 or **73% of them say that if the learners do not have their textbooks filled in before the session, the monitor allows them still to participate actively in the discussions.** Still in relation to what normally happens during group discussions, 15 of the 26 or 58% indicated that "all learners participate freely", 8 or 31% marked that the participation varies from week to week and three said "usually 2 or 3 engage in debate and the others are quiet".

In relation to the language in which the discussions are conducted, 5 or only 19% report that the learners speak in Portuguese, 6 or 23% report their learners using their maternal languages in discussions, and 16 or 62% say that "learners speak in Portuguese sometimes, maternal languages at others". Looking just as the monitors from Tete, who usually insist on maternal language use, four of the 11 monitors (36%) report discussions in maternal language, one reports the use of Portuguese, one did not answer the question, and five of the 11 or 45% say sometimes they discuss in Portuguese sometimes in "dialect".

The number of respondents, 26, in this survey is too low to be conclusive about what actually is the normal practice in the face-to-face sessions in regards to filling out the textbooks and the language(s) used in discussion. The questions could be repeated to a broader sample which would include learners, too, to validate the trends in these narrow findings.

There is one finding which may have size enough to be considered significant: of the ten monitors from Tete who answered the question about language usage, the one who answered "in Portuguese" has facilitated 42 of the courses; the four who answered "in dialect" have facilitated 77 courses. The five who reported "sometimes in Portuguese, sometimes in dialect" have facilitated 135 courses. Of the total number of courses represented in this sample or 332, 72% (240) were

facilitated by those in Tete. Of these 240 courses 77 have had discussions conducted "in dialect" – 39% of the coursework so far under these monitors in Tete has been conducted only "in dialect". **This rather surprising finding shows that the Portuguese language shows up 61% of the time in discussions held in Tete, the geographic Area which insists on having the student texts in the maternal language.** In order to properly understand this statistic, the PAR team needs to return to Tete for the interpretation of how this finding fits with their usual position on the student texts

Table 4.33 below displays actions #16 and #17 of Phase Four.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
16 Oct. – Nov 2004 Maputo. Holiness in Day to Day Living.[17]	CLASSICAL SPIRITUAL DISCIPLINES; REHEARSING INTEGRITY. When I field tested this course with its diverse set of holistic learning strategies in Tete, the feedback given was oral in the large group, so it was difficult to capture their words in detail. When I repeated it with the group who did this in Maputo, I asked them to reflect and write right then before they spoke their first impressions of their experiences of previous 12-18 hour period. Several quotes from these written responses are presented below.
17 Dec. 2004, Tete. PRACTICUM of 2nd CERTIFICATE	TEAM WORK; PRAXIS; REHEARSING INTEGRITY; PHOTOS. The IBNAL curriculum of forty-two courses has three practicum – one in prayer, the second in ministerial service, the third in the community. Practicum are holistic – role taking, praxis in which integrity is rehearsed. In this brief course, several of the eighteen ministerial situations were simulated in class during the practicum for on-the-spot peer critiquing. The photos are presented below as Visual 4.8.

Table 4.33 Interpretation of Actions #16 and #17 of PAR 5 in Phase Four

Discussion: The brief Table 4.33 records only two actions of Phase Four, actions that directly involve groups of learners with a few of their monitors. Since the courses being tested are "2nd Certificate Courses" which means these learners have already completed at least the 14 courses of the 1st certificate, implying they have experience with holistic learning strategies. Written impressions of the learning experience, particularly the retreat ending "Holiness in Day to Day Living" give a glimpse of their thinking. The organization and textual content of this culminating experience as well as the full script of the students' written responses are found as Appendix I. A sampling of their introspective comments follows:

Antonio Bernardo Manhiça: I want to tell that since the first second yesterday afternoon, many wonderful things affected me that I have not experienced since my childhood. I hope that all that I have learned will be fruit for me and for my children, my grandchildren, my great grandchildren and for people in general. The whole design of this event was very interesting, culminating in the suffering that Jesus had in life from the love of God. I will carry with me for the rest of my life the memory of these 15 hours. It was a historic event for me.

This holistic learning experience causes Manhiça to recall from
his childhood, and to desire blessing for his offspring. He expects to carry the memory
of the experience for all of his life. He demonstrates considerable emotion by what he

is saying. In fact, there is little substance to what he is saying but the impact is evident. Emotional memory of the event will probably imbed the learning experience in long-term memory.

Israel Munguambe: The parts that affected me most were the showing of the Passion of Christ and prayer outside in the sand. The Film showed us the pain that Jesus had with us and the prayer in the sand out where the sun was beating down signified a tiny fraction of the suffering that Jesus endured for us. Tasting the vinegar was a shock to my system because it was like Jesus experienced with the bitterness of our sins.

Munguambe understands as parallel experiences his little pain (in the sand) and Jesus big pain of suffering, his little shock from the vinegar compared to Jesus big shock with sin. He demonstrates penetrating understanding of Christ's suffering in a new dimension.

Adérito Carlos Mungui: Sincerely speaking, or better, writing, all of the experiences of the last 15 hours affected me. But one affected me most was the film the "Passion of the Christ". I must confess that is was terrible. I always knew that Christ suffered a lot for me but I never had imagined the extent. Another part that affected me and continues to is the period of silence. I never, never thought that this could happen, that we are together but no one dares to say a single word. To me it is one of the 7 key words of this course "Honourable". In fulfilling one of the words, then we become wise, loyal, transformed, self-disciplined, full of love and long-suffering, making progress in Holiness in Day to Day Living.

Mungui is the only one of the 13 participants to write about the key words. He connects the silence they kept in community with the key word "honourable". "No one dares say a single word" show that the group did, in fact, keep the silence when they were away from the eyes of the monitor. Mungui rightly calls this a question of honour. Then he predicts that fulfilling one of the seven key words facilitate the fulfilment of the other six traits. He believes this – he is synthesizing the whole course; it is making sense to him.

Coitado Júlio Conjo: This ceremony was a great marvel for me. I would like to have God to be with me always as I feel He is today. God is powerful! I drink coffee and tea all day long, everyday so I thought I would have a terrible headache, but I don't. I think this is miraculous.
Isaias Simião Gundane:
When I came here I doubted that I could bear to fast for 24 hours. But, thanks be to God, because is IS possible – to go these hours without eating, without speaking, and I don't feel weak nor hungry.

These older gentlemen know their bodies well; they have lived in them for several decades. They evidently were previously concerned about bearing up under the physical duress of the experience, and then relieved, grateful and actually they are amazed that they had managed to fast – even from caffeine. It felt good to them to have had this testing experience; they were grateful.

Chiconela: It was wonderful and still is! I think this method is an excellent innovation. I was particularly affected by:
- The silence, from 8:30 p.m. yesterday. I never had experienced such a thing. I read, thought, and everything revolved around our God. No word came from my mouth but my heart was full of poetry, song and praise.
- The film: the "Passion of the Christ" affected me profoundly. I cried. It is so moving to see the dimensions of suffering that Jesus had to bear to redeem us.
- The spiritual activities impressed me. The diversity of them always innovative, always keeping us in constant contact with God through prayer.
- Suggestion: this practice could become an annual event in our courses.

Chiconela is affected by the silence, the film, and the spiritual activities, in short, most everything involved in the experience. From his perspective as an engineer, used to thinking in Quadrants A and B, he is thinking in D quadrant "poetry, song and praise", he "cries" an emotion from C quadrant, he responds to the spiritual activities with constant

253

prayer, C again. Then he ends up back in quadrant B again – organizing and planning the annual event.

Visual 4.10 Practicing pastoral ministries in 2nd Certificate Practicum

Discussion: Although they are both holistic and require all four quadrants of the brain, the "2nd Certificate Practicum" is very different than second certificate course "Holiness in Day to Day Living" which has been discussed in previous paragraphs. The latter constitutes a mini-praxis of introspective *personal practices* of piety, spirituality and accountability, the "2nd Certificate Practicum" organises mini-praxes of *public acts* of pastoral ministry like baptising believers, officiating funerals, dedicating babies and visiting the sick, 18 mini-praxes in all. The photo above shows a male monitor with a scarf on his head playing the role of a mother who is dedicating her baby. The "pastor" with the book of rituals in his hand is a 2nd certificate learner. They are smiling; the mini-praxes are fun learning experiences, touching on quadrant D learning.

Table 4.34 below continues description of and interpretation of the actions which constitute Phase Four of the research study. Actions number 18, 19 and 20 are described and interpreted in this table.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
18 January 2005 Maputo Post-ordination session with PAR 5	TEAM WORK. In order for pastors to qualify for the international credential "ordination", if they live with a partner they have to be married by the church and by the state, i.e. with a religious ceremony and a legal ceremony. Since the learners who are already in the 2nd certificate are proceeding toward ordination, the current problem in several parts of the country is how to get them married both ways. There are two difficulties presented in their context. The historical one is that many children born during the war years have no birth records and birth records are needed to get a marriage license. The cultural difficulty has financial implications – the expectation of a large meal. One monitor in Zambezia had solved the problem by coordinating multiple weddings in which

	several IBNAL students scheduled their legal ceremonies near the same time, then came to one church for the religious ceremony for whomever might be lacking that service and one simple party for all of them to which each family contributed a share. PRAXIS (action-reflection-dialogue). Reporting and reflecting on past action in dialogue the facilitators come up with solutions for future action. This becomes SOCIAL or COLABORATIVE PRAXIS.
19 Feb/ 2005, Inchope Inaugural encounter of Monitors in Area 2	TEAM WORK. Several factors, not the least being topographical, influence the workings of the IBNAL model in Area 2 (Sofala and Manica provinces) such that February 2005 was the first time that the four district superintendents, the Area Facilitator, the monitors including one missionary, met together. In one sense the team there was just beginning to form, as contrasted with other area teams which come together much more easily and therefore frequently to give impulse to the learning taking place in the local centres. See photo below discussion of this table.
20 April 2005 Maputo Then all over. Largest survey administered in the PAR study in Mozambique	HOLISTIC QUANTITATIVE SURVEY. Based on the hybrid survey completed by 256 respondents in 2004, this four-page survey in two parts yielded the voluminous findings from this long survey which has over 900 respondents are presented in detail below.

Table 4.34 Interpretation of Actions #18, #19 and #20 of PAR 5 in Phase Four

Discussion: The holistic learning strategies always being used in the intensive training sessions and in the cooperative learning groups scattered across the country are always affected by the multiple social connections of the learners. They are not learners who live in the cooperative learning group setting; they are adults who live with and are responsible for families, in villages or towns, as well as their volunteer responsibilities as leaders in their local church settings and as students of IBNAL. Some are also students in public school settings at night. So Actions like #18 in which facilitators who live close to them brainstorm solutions to how the dilemma of weddings can be facilitated deal with subject matter very relevant to the whole success of the learner sub-population.

Visual 4.11 is a set of four photographs from a place called Inchope in Area 2. Area 2 is an area infrequently mentioned in the research so far. Areas 3 and 4 are both single provinces each with a very clear centre point, clear because public transportation converges on the city of Tete in Tete Province and the town of Mocuba, Zambezia. The age of the work in Tete, the existence of a large church building for meetings and the support of the three district superintendents, all contributed to success of learning centres in Tete. The topography of Area 2, the geographic distribution of its four ecclesiastical districts and the lack of infrastructures in which to hold meetings, all contributed to difficulties in establishing learning centres in Area 2, the Provinces of Manica and Sofala. Therefore, the inaugural encounter in February 2005 in the yet-unfinished, but large building which would be the centre of the Area was an important event.

Visual 4.11 Inaugural Intensive Course for monitors in Area 2, Inchope

Discussion: Visual 4.11 pictures monitors in an in-service session to upgrade the training the have started in other places. It was held in the large, unfinished learning centre, meant to be the location where monitors from Area 2 (Sofala and Manica) would gather from time to time for continual improvement of their training and encouragement. The district superintendents from each of the four districts of Area 2 were present in the brief, two-day event which inaugurated the use of the centre.

The learners and their leaders involved in the holistic learning system, IBNAL, constitute the target population for the "large hybrid survey conducted in 2005". This long, hybrid survey of the whole population of my research had two distinct parts to it: 1) a biographical data sheet with names and ages recorded and 2) a three-paged, multi-response questionnaire. The administration of both of these was conducted in the same meetings, but each was administered, collected and stored independently. In this way the biographical data from the first part was be always separate from the second part so that the answers on the second could be anonymous. In general, this seemed to work to give the respondents freedom to respond anonymously.

The size of the whole population of Nazarenes involved either as learners or facilitators in the Nazarene educational system which are those targeted in these surveys is approximately 1,800 people made up of about 300 diploma-level graduates and about 1,500 people who have been students of IBNAL. The size of

256

the sample of respondents on the biographical data sheets is 952 approximately 52.9% of the estimated target population. The results from these 952 give descriptive demographics about the "whole population" which is presented as a whole or sometimes as the set of several sub-populations. One set of sub-populations is the group of three categories within the Nazarene context that indicate how far along an individual has progressed toward being a recognized *leader* in the church; these sub-populations are "elder", "district licensed" and "student". "Elders" have credentials which are internationally recognized within the Church of the Nazarene. "District licensed" people have completed their academic preparation for eldership, are recognized on the ecclesiastical district but still have not attained the years of experience in ministry to be considered for ordination as "elders". "Students" is the category at the beginning of the process of preparing for ministerial leadership. For purposes of analyzing the results of "learners" as opposed to "leaders," the criteria for these two categories of interest to the research are defined by the tag "student", i.e. those who marked "student" whether or not they are already pastoring are placed in the sub-set "learner". Those who did not mark "student" but marked "pastor", "monitor" or other leadership category belong to the sub-set "leader". The responses of those who marked neither "student" nor any category of leadership but answered other questions in the survey get

The presentation of findings in this section is organized by

- the **title** of the variable or set as found on the table,
- the **question** that the data answer, followed by
- the statistic **data** (usually compiled by using SPSS),
- a brief explanatory discussion of the data and sometimes
- **charts and/or graphs** which are derived from the data.

To increase clarity in the discussions, I sometimes highlight in yellow the statistical data or subjects which are being pointed out in the discussion. The impact of the findings on my research has already been presented in the global considerations of Sections 4.1 and 4.2.

Variable "1" Statistical findings of Current category of church leadership

Question: What is the breakdown of the whole sample by category of church leadership?

		Frequency	Percent	Valid Percent	Cumulativ e Percent
Valid	elder	64	6.7	7.1	7.1
	district licensed	200	21.0	22.1	29.1
	student	639	67.1	70.5	99.7
	38354	2	.2	.2	99.9
	38355	1	.1	.1	100.0
	Total	906	95.2	100.0	
Missing	System	46	4.8		
Total		952	100.0		

Table 4.35 Distribution of the Whole Sample by Categories of Church Leadership

Discussion: The total number of respondents who marked the category clearly is 904. Those marked unclearly or not marking are 48. Of the 904 respondents 64 or 7.1 % are "elders", 200 or 22.1% are "district licensed". Together these two categories or 29.8% are already "leaders". Those who marked that they are "students" were 639 or 70.5%. These include students in the residence Bible School as well as the extension system called IBNAL. These statistics show that most of the respondents (95%) indicated their leadership category by responding to the question. They also show that well over half of the respondents are learners. If a majority of the responses came from leaders the results would have had a more external base of reference. With the 70 learners and 30 leaders per 100 respondents, the opinions about learning, which constitute the multiple variable responses to the questions of this survey, yield both an internal voice (that of the learners themselves) and an external voice (that of those already in leadership). A pie chart below, Figure 4.1 illustrates these same statistics.
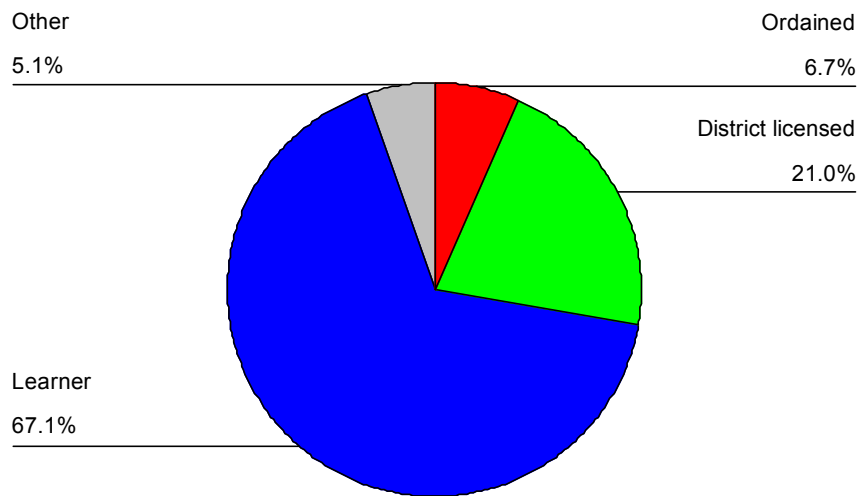
Figure 4.1 Pie Chart of Sample by Category of Leadership: Learner, Licensed or Ordained

Variable "2" Statistical findings of Geographical Context by "Area"

Question: What geographical areas of Mozambique are represented in the sample surveyed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Area 1	South, Maputo	326	34.2	36.0	36.0
Area 2	Sofala, Manica	101	10.6	11.1	47.1
Area 3	Tete	158	16.6	17.4	64.6
Area 4	Zambezia	218	22.9	24.1	88.6
Area 5	Cabo, Niassa, Nampula	103	10.8	11.4	100.0
	Total	906	95.2	100.0	
Missing	System	46	4.8		
Total		952	100.0		

Table 4.36 Distribution Geographic Area of the Sample Surveyed

Discussion: Statistical Table 4.36 above displays the findings of the distribution of the sample of 952 respondents, 46 of which did not answer the question, 906 who did answer. Of these 906 respondents, 326 or 36% are from the Area 1 which is the South of Mozambique, 101 or 11.1% are from Area 2, the provinces of Sofala and Manica, 158 or 17.4% are from Area 3, the province of Tete, 218 or 24.1% are from Area 4 or Zambezia and 103 or 11.4% are from Area 5 which is the North of the country, the provinces of Cabo Delgado, Niassa and Nampula. In order to consider the popularly used divisions "North", "Central" and "South" of the country, Areas 4 and 5 constitute "south" which adds up to 35.5%, Areas 2 and 3 constitute "Central" which adds up to 28.5%. Compared with the 35% from the South, the 35.5% from the North balances it and the 28.5% from the Central, less populated part of the country is quite balanced. These statistics show that each of the five geographical areas discriminated by the Church of the Nazarene have some representation. The least comes from Area 2, Sofala and Manica and the most from the South, where the Church of the Nazarene is oldest and strongest, and where the Bible School is located which increases the count of students. These statistics are illustrated below by both a bar graph and a pie chart.
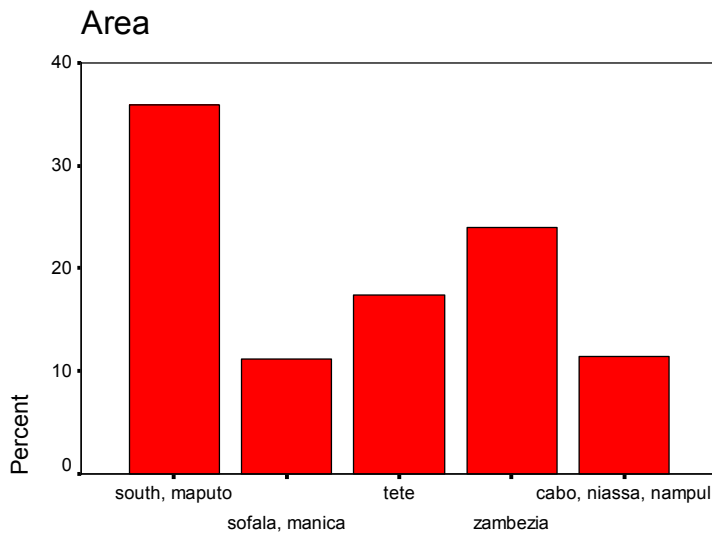
Figure 4.2 Bar Graph of Distribution of the Whole Population by Geographic Area
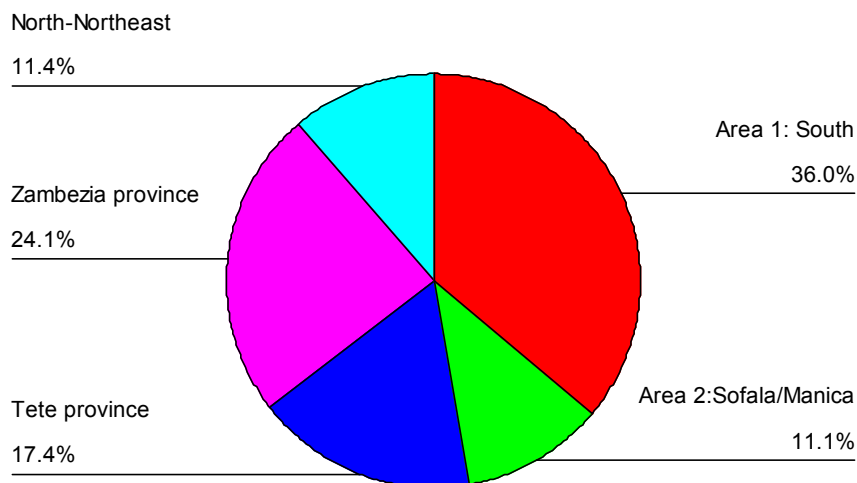
Figure 4.3 Pie Chart by Geographic Area Distribution of the Sample Surveyed

Variable "3" Statistical findings of Geographical Context by "Category" within "Area"

Question: What is the distribution of the varying categories of leadership among the five geographical areas of the country?

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Category * Área	875	91.9%	77	8.1%	952	100.0%

Category Of Leadership		Área 1 South, Maputo	Área 2 Sofala, Manica	Área 3 Tete	Zambezia	Área 5 Cabo, Niassa, Nampula	Total
elder	Count	36	3	12	9	4	64
	% within Category	56.3%	4.7%	18.8%	14.1%	6.3%	100.0%
district licensed	Count	41	6	40	98	8	193
	% within Category	21.2%	3.1%	20.7%	50.8%	4.1%	100.0%
student	Count	239	87	104	99	89	618
	% within Category	38.7%	14.1%	16.8%	16.0%	14.4%	100.0%
	% within Área	75.6%	90.6%	66.7%	48.1%	88.1%	70.5%
	% of Total	27.3%	3	11.9%	11.3%	10.1%	70.5%
Total		367	96	156	207	101	875

Table 4.37 Distribution of the Leadership Categories by Geographic Area

Discussion: Table 4.37 displays breakdown of the total sample surveyed here by categories of leadership within the different geographical areas shows that over half (56.3%) of the elders in the whole country (who responded to the survey) are from the three Southernmost provinces – Maputo, Gaza and Inhambane. This makes sense historically because the residential training for permitting those who desired theological education has been located in the South since the founding of the Bible School in Tavane, and also the Church of the Nazarene is much more developed and mature in the South, thus has produced more ministers qualified to be ordained as elders. The fact that half (50.8%) of the district-licensed pastors who responded are in Zambezia is a relatively unpredictable or unexpected finding. This probably reflects the fact that Zambezia in recent years has made it a priority to get people to the residence school of theology; Areas 2 (Sofala and Manica) and 5 (the North) with low numbers of district licensed people have probably sent a statistically lower number of students to the Bible School.

In relation to the relative equality of the percentage breakdown by geographic area those are in the student category is predictable because the survey was reaching out to as many extension students as possible as well as residential students. The fact that the South, where the residence school is located has about twice as high a percentage (38.7%) as opposed to the other percentages from other areas in the teens (14.1%, 16.8%, 16.0%, 14.4%) reflects the two groups of

students in the South, the Bible school students and the extension school students, while the other four areas only have extension school students.

A multiple bar graph showing this cross tabulation is shown below as Figure 4.4.

Frequency of Category by Area
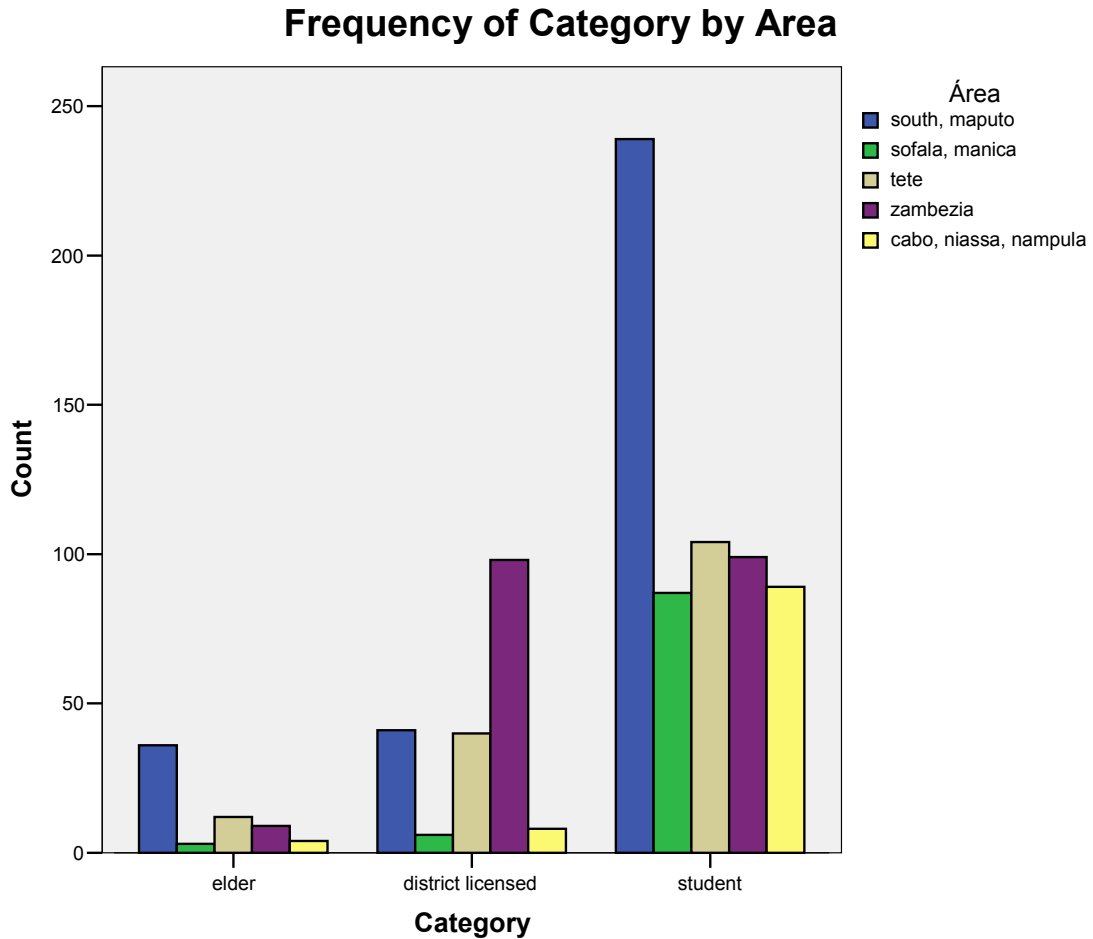
Figure 4.4   Multiple Bar Chart of Distribution of the Leadership Categories by Geographic Area

Variable "4" Statistical findings of Age

Question: What are the ages of the respondents in the survey?

The range of ages in the statistical table is quite broad – from the 13-year old and two 14-year olds to a respondent who is 89 years old. The average age of this group is 38.39 years old. The most frequent age is 30 years old – the age of 47 respondents. In the range from 25 to 45 years old 61.4% of the respondents fit. Another 195 or 22.9% are in the 46-65 age range.

If age is the criterion to categorize learners as "adults" then the number of people who are over 25 years old of the 852 who gave their ages is 743. Combining these statistics those from the variable "category of leadership", there were 533 of these 743, who listed themselves as "students" so 62.6% of the 852 are adult learners, according to date-of-birth listed.

There are 108 others who are listed as "students" but who are younger than 25 years old. If the notion of adult-by-circumstance instead of adult-by-chronological age[18] (Brookfield (2004:1) is applied to this sample, 55 of them are already in positions of church leadership, which in 10 cases is the position of "pastor". So adding the 55 who are adult-by-circumstance, **there are 588 (533 + 55) adult learners in the sample, or 68.8%.** This statistics provides evidence that the majority (68.8%) of the sample of learners are adult learners by circumstance or by being over 25 years old.

The overall frequency distribution of age in the number of years of the whole sample as detailed in the statistics is shown as a bar graph in Figure 4.14 that follows:

Mean = 38.39
Std. Dev. = 12.556
N = 852
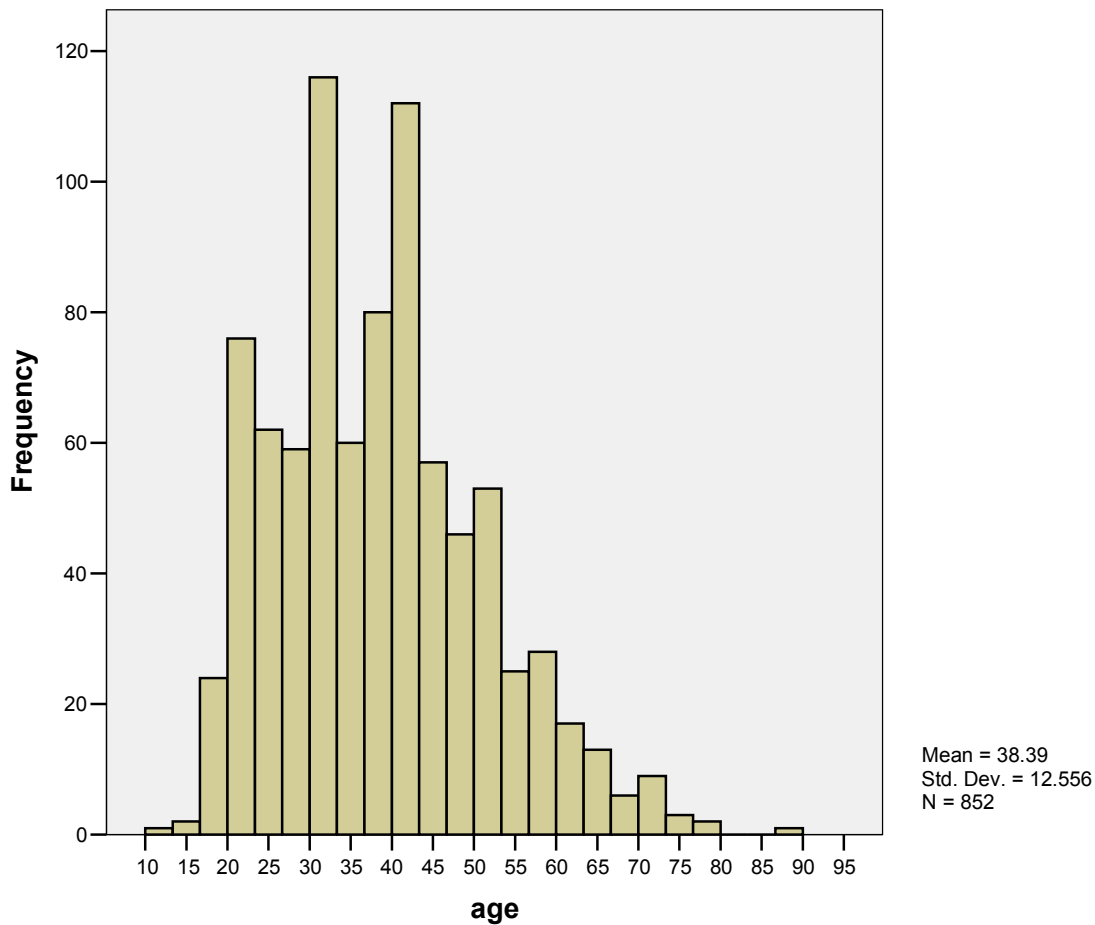
Figure 4.5 Bar Graph of Distribution by Age of the Whole Sample

Discussion: The ages shown in the statistical table above, ranging from 13 to 89 are shown in five-year increments on the horizontal axis of Figure 4.5. The number of respondents per age is marked at increments of 20 on the vertical axis.

Variable "5" Statistical findings of Age by Category of Leadership

---

[18] Brookfield (2004:1) says: "I define 'adult student' experientially, as someone who has been away and then returned to the educational milieu. A straight-to-Ph.D.-candidate wouldn't be an adult student by this definition, but a 16 year-old high school dropout who comes back at age 21 or 22 would be an adult student".

Question: What are the age distributions within the three categories of church leadership of the whole sample?
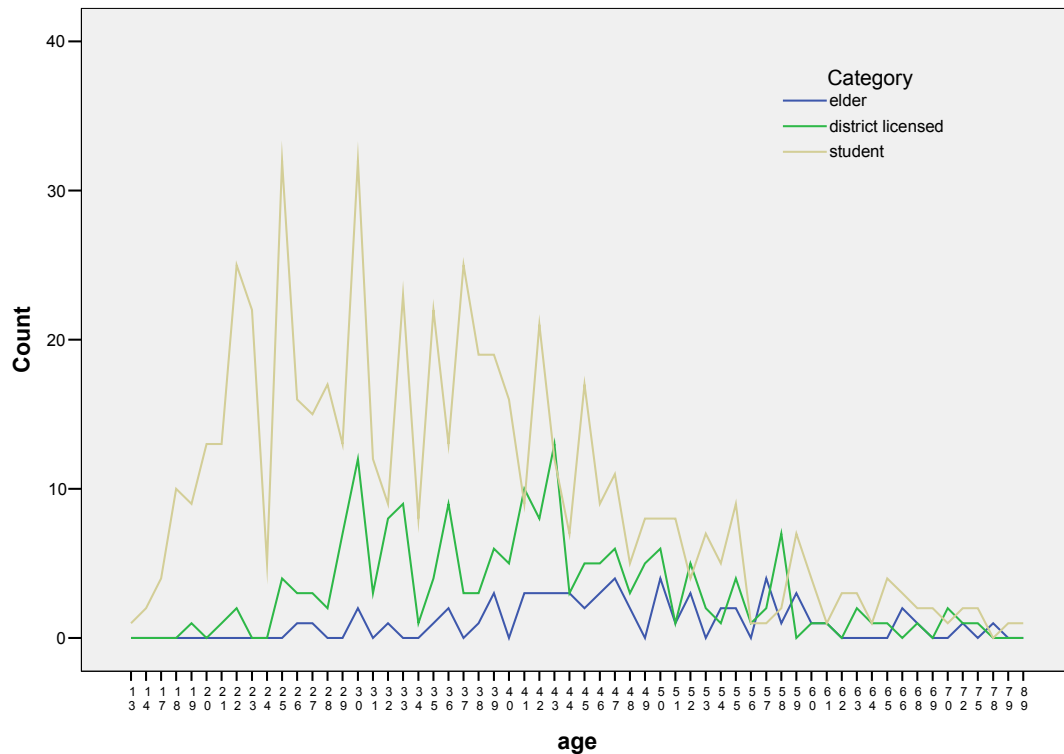
Figure 4.6 Age by Category of Leadership of the Whole Sample

Discussion: As noted previously, the age span of the whole sample is large – from 13 years old to 89 years old. The breakdown of the age frequency of each of the three categories of church leadership – elders, district licensed pastors and students, those just beginning their ministerial preparation, as explained previously. The only ages that "student" category does not have the highest count at 41-years-old at which 3 elders, 10 district licensed and 9 students are found, 43-years-old the age of 3 elders, 13 district licensed and 12 students, 52-years-old, at which there are 3 elders, 5 district licensed and 4 students, at 57 years old at which elders have 4 to the 2 district licensed and 1 student, and at 70 years old where there are 2 district licensed and one students. The relationship of the count per year of age is displayed as a triple line graph in the figure below in which the beige line of the student category is highest at every point except at 41, 43, 52, 57 and 70 as per the statistical table above. In terms of expectations about the age distribution, the distribution by category of those who are 60-years-old or above is unexpected. Instead of "elders" predominating, the statistics show that they are 7 of the 48 respondents, while there are 30 or 62.5% are "students".

Variable "6" Statistical findings on "Learners"

Question: What part of those of the whole sample who call themselves "students" are learners in the IBNAL extension education system?

Two-hundred thirty-four respondents did not answer this question; this is listed as "missing" data and constitutes 24.6%. Of the total number answering the question, 718, there were 678 or 94.4% who said they were IBNAL students and 40 or 4.2% said "no", that they were not IBNAL students. Since 234 respondents did not

answer, we can say that more than 71.2% of the total sample surveyed are students of the extension system, i.e. those referred to throughout this research as the "sample of learners". Of the sample who said they were "students", the 678 IBNAL students are 94.4% of that sample. The "learners" who are "IBNAL students" are those whose learning is being facilitated by monitors. The others are students in the resident Bible School where the learning environment and the learning strategies used are different, but all of the Bible School Students are trained to be monitors. The statistics discussed here are show below in Figure 4.7.
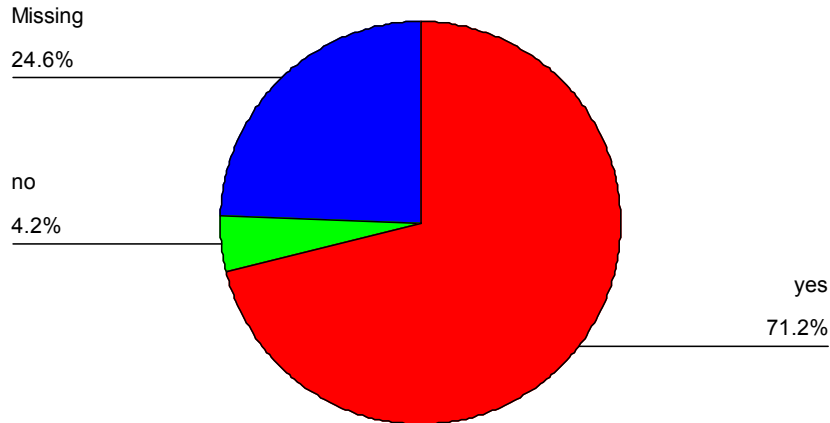
Figure 4.7 Frequency of "Learners" who are IBNAL Students

Variable "7" Statistical findings on Maternal Language

Question: Which maternal languages are spoken by the sample?

		Frequency	Percent	Valid Percent	Cumulative Percent
	changaan	197	20.7	22.3	23.1
	chewa	150	15.8	17.0	40.1
	lomwe	111	11.7	12.6	63.1
	makhua	87	9.1	9.9	73.2
	portugues	85	8.9	9.6	93.1
	masena	67	7.0	7.6	81.8
	chuabo	37	3.9	4.2	46.3
	lolo	20	2.1	2.3	50.5
	tswa	18	1.9	2.0	97.8
	tsonga	16	1.7	1.8	95.8
	chope	15	1.6	1.7	42.1
	nhungue	13	1.4	1.5	83.4
	chimanica	8	.8	.9	100.0
	bitonga	7	.7	.8	98.6
	xitsua	7	.7	.8	98.6
	manhua	4	.4	.5	74.1
	ronga	4	.4	.5	93.5
	chitonga	4	.4	.5	99.1
	chiute	2	.2	.2	40.4
	maconde	2	.2	.2	63.3
	malewe	2	.2	.2	73.4
	mandau	2	.2	.2	73.6
	shona	2	.2	.2	93.8
	takwane	2	.2	.2	94.0
	chicocola	1	.1	.1	40.2
	palanca	1	.1	.1	83.5

Table 4.38 Distribution of the Maternal Languages of the Sample

		Frequency	Percent	Valid Percent	Cumulativ e Percent
	Total	883	92.8	100.0	
	Missing	69	7.2		
	Total	952	100.0		

Discussion: The statistics of the maternal languages of those who responded to the survey are within the expectations of our context. These are displayed below in a bar graph, Figure 4.8.
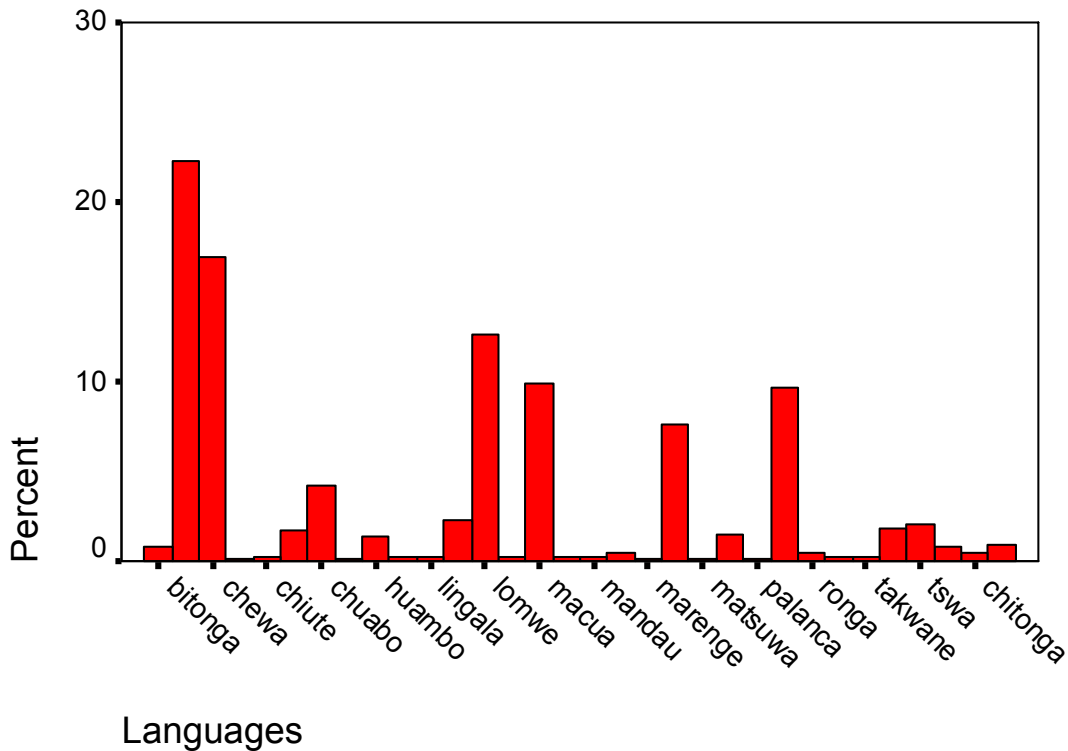
Figure 4.8 Bar Graph of Frequency of the Maternal Languages in Sample

Discussion: In Figure 4.8 half of the languages, every other one, show up labelled across the horizontal axis. "Changaan" is not one that is labelled but is represented by the tallest bar which falls between "Bitonga" and "Chewa"; it does not show up as a name because of graphic limitations. "Masena" is the tall bar between "Marenge and "Matsuwa" and "Portuguese" between "Palanca" and "Ronga".

The maternal languages spoken by 50 or more people in the survey are Changaan with 197 or 22.3% of those who responded, Chewa (or Chichewa) with 150 or 17%, Lomwe with 111 or 12.6%, Makhua with 87 or 9.9%, Portuguese with 85 or 8.9% and "Masena" (usually Sena) with 67 or 7.6%. These six maternal languages, Changaan, Chewa, Lomwe, Makhua, Portuguese and Sena, are spoken by 697 of the 883 those who responded giving them 79% of the sample. The pie chart in Figure 4.8 displays only the languages which are spoken by more than 5% of the respondents. There are six languages above 5% and the others are clustered in the "other" category.

The other 21% of the respondents speak 27 different maternal languages. These statistics are shown below in Figure 4.9
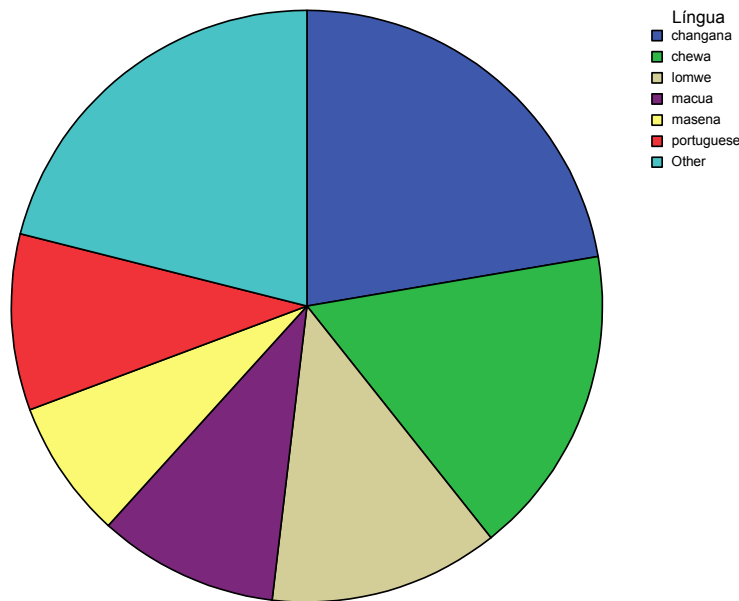
Figure 4.9 Pie Chart of Frequency of the Top Six Maternal Languages in the Sample

.

Question: Does the population prefer to read in Portuguese the language of education or in their maternal languages?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portuguese	425	44.6	53.7	53.7
	local	362	38.0	45.7	99.4
	12	4	.4	.5	99.9
	31	1	.1	.1	100.0
	Total	792	83.2	100.0	
Missing	System	160	16.8		
Total		952	100.0		

Table 4.39 Language of Preference for Reading – Whole Sample

Discussion: Of the 952 of the whole sample, 160 did not answer this question, leaving 792 respondents. Of these 792 respondents 425 or 53.7% prefer to read in Portuguese and 362 or 45.7% prefer to read in their maternal language. The statistics which are found below in the pie chart, Figure 4.10 represent the whole sample including the 160 or 16.8% of the respondents who did not answer the question, and the .5% whose answer was "other". The percentages illustrated are those calculated on the whole sample including the missing data.

Other

.5%

Missing

16.8%

Maternal Language

38.0%

Portuguese

44.6%
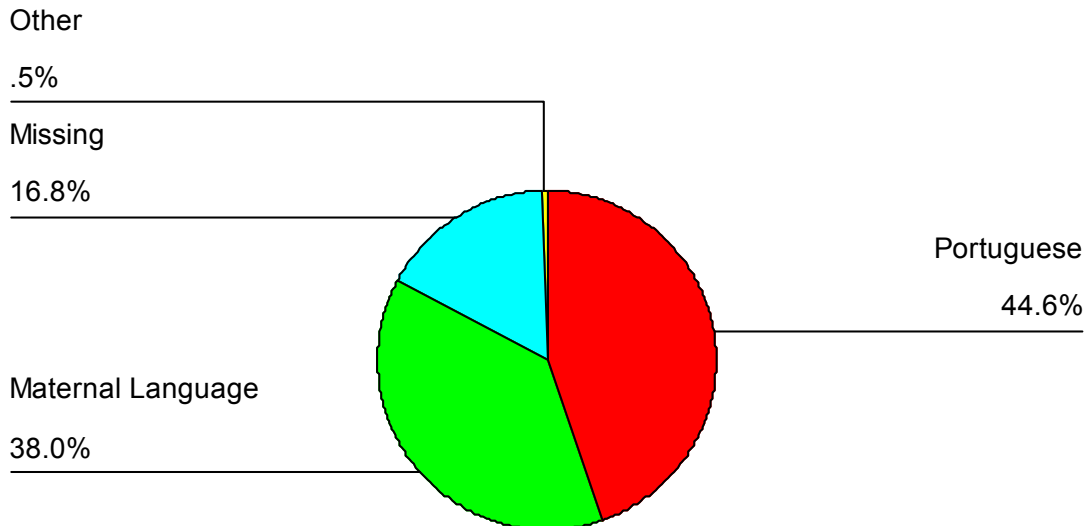
Figure 4.10   Pie Chart Indicating Language Preference for Reading of the Whole Sample

Variable "8" Statistical findings of Sex

Question: What is the male / female distribution?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	653	72.8	79.9	
	female	164	18.3	20.1	
	Total	817	91.1	100.0	
Missing	System	80	8.9		
Total		897	100.0		

Table 4.40 Male / Female Frequency Distribution for Whole Sample

Discussion: The total number who responded to this question is 817 out of a potential of 897. There were 80 which did not respond. Of the 817, females constitute 164 or 20.1% of the sample and males are 653 or 79.9% of the respondents. The number of females as learners or leaders is low. Even though the public educational philosophy of Mozambique welcomes female learners as does the Church of the Nazarene, the amount of physical energy a woman spends on the bearing and caring for the children, which are usually many and close together age-wise, as well as the energy required to gather wood to cook over simple fires and lack of electricity to provide lighting to read or study at night, strangle the hours which might be put into studying.

The next sets of data that I present were collected and analyzed from the second survey which was administered at the same gatherings as the proceeding set of data, so it surveys essentially the same sample but was not connected with the names of the individuals so the opinions solicited were able to be given in a manner that was deliberately and obviously anonymous. This anonymity was called to the attention of the survey takers so that they could more freely express their views. The first variables are biographical in nature so that some cross-tabulations would be facilitated. "Age" as a variable was not included in this

instrument which is unfortunate for some of the cross-tabulations which might have been possible taking "age" into account.[19]

The data collected by the question of anonymous survey are composed of two groups; a group of single variables which are descriptive and another group which is composed of four questions with multiple variables. The descriptive variables are of particular interest to the readership of Nazarene educators and are useful for future, more complex statistical analyses. In respect to the finding of this PAR study, the variables of these four questions provide pertinent empirical findings to the three research questions.

Variable 9 Where Ministerial Preparation Began

Question: Where did the respondents begin their ministerial preparation?

Location of Ministerial Preparation: Distribution of All Respondents
MIN_PREP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tavane	21	2.250804	2.586207	2.586207
	Furancungo	9	0.96463	1.108374	3.694581
	Maputo SNM	54	5.787781	6.650246	10.34483
	Laulane	117	12.54019	14.40887	24.75369
	IBNAL	609	65.27331	75	99.75369
	Other	2	0.214362	0.246305	100
	Total	812	87.03108	100	
Missing	System	121	12.96892		
Total		933	100		

Table 4.41 Locations Where Respondents Initiated their Ministerial Preparation

Discussion: The old residential Bible School in Gaza and Tete which are Tavane and Furancungo, respectively, are the settings where 21 + 9 = 30 respondents began their preparation for ministry. Another 54 respondents indicated they started preparing in "Maputo" during the years that the Bible School functioned in Maputo proper, not at the present campus which is labelled "SNM Laulane". Those who began at the present campus numbered 117 or 14.4% of the respondents. The other respondents started in the extension system (IBNAL) 609 of them or 65.3%; two studied elsewhere, probably in Swaziland, and 121 did not answer the question so are listed at "missing" data. The statistics show that there are people in the system from each of the delivery systems used so far by the Church of the Nazarene in Mozambique to prepare leaders which were presented in Section 2.5.2.4. They show that 75% of the respondents start in the system under closest research scrutiny in this study – the learning system, IBNAL. The pie chart below arranges the data from Table 4.41 in graphic form.

As previously discussed, some students in IBNAL surface as candidates to speed up their preparation. They start in IBNAL and then are sent to the residential Bible School. This would be one explanation why the figure of 75%, those who responded to the question started in IBNAL, is different than the percentage of the sample in a previous table which says there are 678 IBNAL students making up 71.2% of the sample. The difference between 678 IBNAL students recorded in

---

[19] The next time the population is surveyed, the inclusion of "age" as a variable is to be recommended.

one set of findings and 609 recorded here on another question can also be accounted for by the number of students who did not the question. The student difference (678 - 609 = 69) is probably found in the 121 people who did not answer this question.
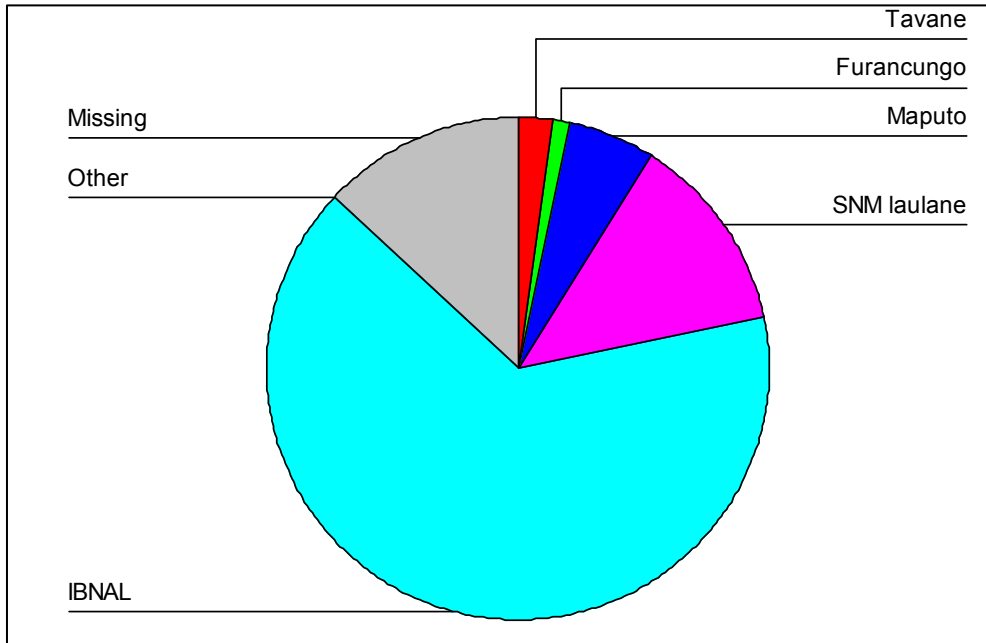
Figure 4.11Pie Chart of Locations Where Respondents Initiated their Ministerial Preparation

Variable 9 Where Ministerial Preparation Began – per Category

Question: What differences are there between location where the LEARNERS began their ministerial preparation and the LEADERS began theirs?

Leadership			Frequency	Percent	Valid Percent	Cumulative Percent
1.00	Learners	Tavane	6	.8	.9	.9
		Furancung	2	.3	.3	1.2
		Maputo	18	2.4	2.7	3.9
		SNM	62	8.2	9.4	13.3
	Sub-total		(88)	11.7		
		IBNAL	571	75.3	86.4	99.7
		Other	2	.3	.3	100.0
		Total	661	87.2	100.0	
	Missing	System	97	12.8		
	Total		758	100.0		
2.00	LEADERS	Tavane	15	9.0	10.2	10.2
		Furancung	7	4.2	4.8	15.0
		Maputo	36	21.7	24.5	39.5
		SNM	55	33.1	37.4	76.9
	Sub-total		113	68.0		
		IBNAL	34	20.5	23.1	100.0
		Total	147	88.6	100.0	
	Missing	System	19	11.4		
	Total		166	100.0		

Table 4.42 Locations Where Respondents Initiated their Ministerial Preparation by Category of Leadership

Discussion: The popular, uncritical opinion of the Nazarenes in Mozambique is that the combination of those who prepared for ministry in the residence Bible Schools is the major impetus of education in Mozambique, i.e. Tavane + Furancungo + Maputo + SNM/Laulane is greater than IBNAL. But, a logical projection on the mathematics of the situation easily anticipates that there are more being prepared by IBNAL than the sum of the other delivery systems because there is a multiplication effect taking place. Those produced in the sum of the other delivery systems are those trained as monitors to each have a group of learners, i.e. they multiply their learning, their influence, their leadership. As expressed in the discussions in the July 2002 ANCA meetings, "the grandparents are few but the grandchildren are many". The statistics do show this. Among the leaders, 68% began training in the residential institutions and only 20.5% began in IBNAL. The two pie charts presented below, graphically illustrate the present distribution in the training of the leaders. Already 20.5% of the leaders who responded to this survey began their ministerial training in IBNAL. In the other category of leadership, "1.00", which refers to those in training, 75% of them started in IBNAL. By the time the IBNAL students finish their course of study, the percentage of leaders trained in the extension programme will be greater.
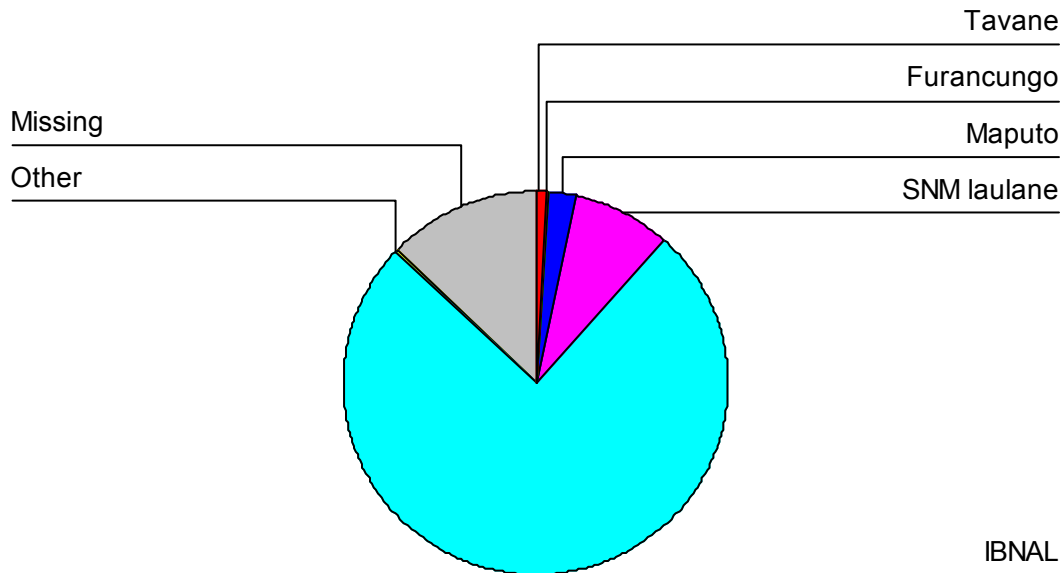
Figure 4.12 Locations Where LEARNERS Initiated their Ministerial Preparation
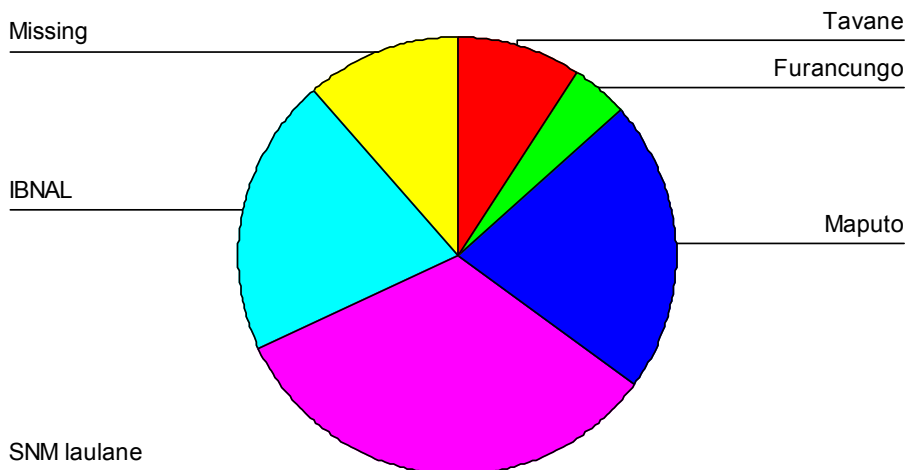
Figure 4.13 Locations Where LEADERS Initiated their Ministerial Preparation

270

Variable 10 Level of schooling on entering Ministerial Preparation

Question: **How much formal schooling do the respondents have when they begin their ministerial training and how does this differ between the leaders and the learners?**

Leadership			Frequency	Percent	Valid Percent	Cumulativ e Percent
1.00 **LEARNERS**	Valid	1	29	3.7	3.9	3.9
		2	27	3.4	3.6	7.5
		3	62	7.9	8.4	15.9
		4	115	14.7	15.5	31.4
		5	119	15.2	16.0	47.4
		6	123	15.7	16.6	64.0
		7	95	12.1	12.8	76.8
		8	47	6.0	6.3	83.2
		9	46	5.9	6.2	89.4
		10	43	5.5	5.8	95.1
		11	10	1.3	1.3	96.5
		12	19	2.4	2.6	99.1
		13	3	.4	.4	99.5
		16	3	.4	.4	99.9
		340	1	.1	.1	100.0
		Total	742	94.8	100.0	
	Missing	System	41	5.2		
	Total		783	100.0		
2.00 **LEADERS**	Valid	1	7	4.1	4.4	4.4
		2	3	1.8	1.9	6.3
		3	3	1.8	1.9	8.1
		4	26	15.3	16.3	24.4
		5	18	10.6	11.3	35.6
		6	20	11.8	12.5	48.1
		7	37	21.8	23.1	71.3
		8	11	6.5	6.9	78.1
		9	13	7.6	8.1	86.3
		10	8	4.7	5.0	91.3
		11	3	1.8	1.9	93.1
		12	10	5.9	6.3	99.4
		13	1	.6	.6	100.0
		Total	160	94.1	100.0	
	Missing	System	10	5.9		
	Total		170	100.0		

Table 4.43 Entry Level of Schooling by Leadership Category

Discussion: The TEE model targets adult learners with three years of formal schooling. The statistics of the sample of learners show that, there are 62 + 27 + 29 = 118 learners or **15.9% of the sample of learners with 3 years or less of schooling**, which is a much lower percentage than presumed at the outset of the study. Going up the educational ladder, 14.7% have 4 years of education upon entering and 15.2% have 5 years of schooling, the end of elementary school in the public education system of Mozambique. This adds up to **45.8% of the sample of learners began ministerial training with 5 years of formal schooling or less**. This figure is under half and, therefore, generally lower than popularly thought in the Nazarene context. Because the policy allows pre-literates to begin to study, the presumption that "almost all" IBNAL students are barely able to read or write is now shown with hard statistics to be false. The statistics also show that the percentage of learners who would not qualify to be students in the resident program (which has a 7 year minimum) is 61.5%. This means that **just over 60%**

of the IBNAL students would be unable to come to the resident Bible School because of their insufficient level formal education.

The learners who start with 6 or 7 years of school, middle school education are 27.8%. Those who start with 8, 9 or 10 years completed are 6.0 + 5.9 + 5.5 = 17.4% and the few with 11 or 12 years or more on entering are only 4.7%, less than 5%. A count of 25 (19 + 3 + 3) learners of 742 or 3.2% have high school equivalency or more. These statistics will be surprising to those from other contexts like America and Europe, who enjoy the opportunity of easy access to schooling and even compulsory education. However, the reality of adequate and easily accessed schooling is not the reality of Mozambique. As pointed out previously, schools are scarce. The person who has managed to eek out 5 years of formal schooling in remote sectors is on top of the socio-educational heap. Those with 7 years are sought as leaders not only in the church setting, but also in other sectors.

The relative adequacy of 7 years of formal schooling for leadership is reflected in the statistics of those who are current leaders in the research sample of my study. The percentage of LEADERS who started with 3 years of schooling or less is 4.1 + 1.8 + 1.8 or 7.7%. Thirty-nine percent (39%) of the current leadership has 5 years or less of schooling. Another 33.6% has 6th or 7th grade completed, leaving 26.5% with 8-12 years of schooling. Only 6.5% of the leaders had 12th grade or higher when they began ministerial training.

Variable   Current level of schooling

Question: What is the current level of schooling of the learners?

	leaders	learners
Mean	7.68	6.3
Mode		
Minimum	1	1
Maximum	13	16
Count	167	622
Missing		81
Valid		870
Total		951

Of 167 LEADERS, the mean for their current schooling is 7.68 years. Of 703-81 LEARNERS, the mean for their current schooling is 6.3 years of school. The number who did answer this question is 81. Frequency distribution of the 622 learners is shown as Table 4.44 below.

Current Years of Schooling	1	2	3	4	5	6	7	8	9	10	11	12	>12
Count of Learners	6	15	42	96	107	102	83	49	36	36	9	25	8

Table 4.44   Frequency Distribution of the Current Years of Schooling of the Learners

272

Discussion: Of the total number of 622 learners, the number who have 3 years or less of schooling is 6 + 15 + 42 = 63 or 10.6% as compared to 15.9% who started ministerial preparation with that level of schooling. As noted above **45.8%** of the learner sample began ministerial training with 5 years of formal schooling or less. The current number of the learner sample with 5 years of formal schooling or less is 63 + 96 + 107 = 266 or **42.9%.** This shift indicates fewer of the learners have that lowest level of formal schooling. The probable reason is that they are studying in the public school classes to increase their general education while they are preparing for ministry.

The line graph below, Figure 4.14, attest to the fact that those who begin their training at one academic level, do not stay at that level, but many of them continue to study in formal academic settings. The double bar graphs show the mean of the entry level of schooling per geographical area represented by the red line and the current mean of schooling per geographical area represented by the green line.

ACADEMIC LEVELS by AREA of Country

Mean of Yrs of Schooling
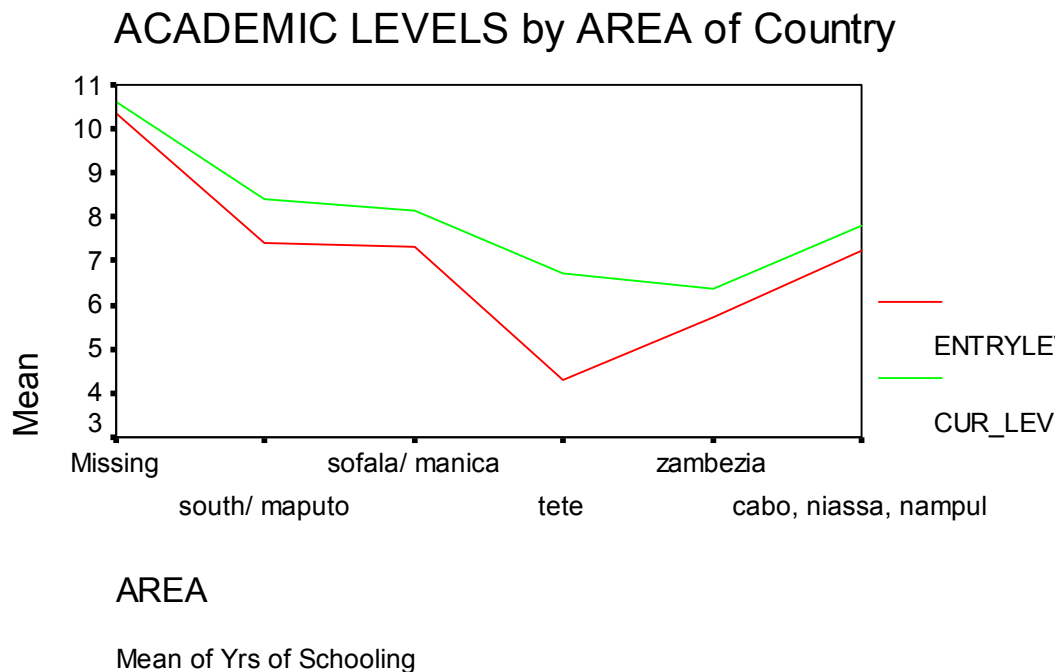
Figure 4.14   Comparison of Means per Area of Years of Schooling on Entering Ministerial Training and Years of Current Schooling

Variable 12 Number of courses taught or studied of IBNAL programme (MEAN)

Question: How much experience in the learning system does the sample have?

LEARNERS	Cases						
	Valid		Missing			Total	
	N	Percent	N	Percent		N	Percent
QUANTITY	569	74.6%	194	25.4%		763	100.0%
			Statistic	Std. Error			
QUANTITY	Mean		6.86	.329			
	Median		3.00				
	Range		34				

Table 4.45 Number of IBNAL Courses Studied by the Learners

273

LEADERS	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
QUANTITY	115	68.9%	52	31.1%	167	100.0%
			Statistic	Std. Error		
QUANTITY	Mean		16.04	1.174		
	Median		14.00			
	Minimum		0			
	Maximum		49			
	Range		49			

Table 4.46 Number of IBNAL Courses Studied or Facilitated by the Leaders

Discussion: There is a broad range of experience with the IBNAL system as indicated by the number of courses a learner has studied, indicated in Table 4.45 or a leader has studied or taught, indicated in Table 4.46. The leader sub-population has exposure to the courses in training to be a monitor, and then the leader facilitates the courses so the maximum number indicated in Table 4.46 of 49 exceeds the number of courses in the IBNAL curriculum (42) because leader can have experience with courses both as a trainee and as a monitor. In this way a respondent may have more than one experience with a course. The monitor may have facilitated a specific course more than one time by leading more than one cooperative learning group which would also increase her or his experience with the programme.

The statistics indicate that the learners have had between 0 and 34 courses. How could a learner have "0" courses and still be categorized as a "learner"? If the learner is at the Bible School during the first year, he or she may not have any experience with IBNAL yet but they could have an opinion about it formed from the experience of others involved on his or her district. In a similar way, leaders may have "0" experience with IBNAL if they have never attended an intensive session to train monitors; these are all for volunteers. **The average number of courses of experience for the learners is 6.9, i.e. about 7 courses and for the leaders is about 16 courses.**

Variable 13 Problems encountered with IBNAL

The task of surveying this population took many people several months and hundreds of kilometres of travelling. Early in the period of conducting the survey those of us on PAR 5 tabulating the initial data noticed a problem relating to the question relating to identification of the "Problems with IBNAL". (See the four-page survey in Appendix I. The problem was the number of times the respondents skipped the question. Perhaps it was too negative for them or too complex to do the rating. Since it was near the beginning of the surveying time, the PAR 5 team made the decision to reformulate the question to make it easier to answer.

Instead of rating each aspect as a potential problem as in Version A, the respondents only identify the two aspects of IBNAL which were most problematic to them in Version B. What the PAR 5 team did not estimate accurately in deciding to make this change was the size of impact on the data collection. The fact that the initial wording of the question had been photocopied already many times means the decision effectively divides the sample surveyed into two groups – one which answered the question with version A, the other which answered

according to Version B. The data collected in this way provides two ways of looking at the problems experienced, first through the lens of responses to Version A, then through the responses of version B. Both sets of data are reliable; each is smaller sample than those of other questions. I present first the statistical findings for the responses from Version A, the ratings of different aspects on a 1-4 scale, 1 being "no problem", 4 meaning "it was such a problem it made me seek another way to prepare for ministry".

The overall question rates eight areas of IBNAL in terms of the problem they pose or do not pose to the respondents. The average of the total count for each of the eight areas to assess, calculated from the samples responding to each of the eight aspects, is 275 which means that 275 people from the whole sample identified problems with IBNAL by responding to Version A. The first aspect of IBNAL to assess was the requirement that the students "pay for books".

Question: How much difficulty have you had with paying for student textbooks?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	242	23.1	79.1	79.1
	little problem	42	4.0	13.7	92.8
	big problems	10	1.0	3.3	96.1
	made me seek other way to prepare	10	1.0	3.3	99.3
	0	1	.1	.3	99.7
	21	1	.1	.3	100.0
	Total	306	29.2	100.0	
Missing	System	742	70.8		
Total		1048	100.0		

Table 4.47 Ratings of "Paying for Books" as a Problem with IBNAL – Group A

Discussion: The "valid percent" column is calculate on the count of valid respondents – 306. On this particular issue, paying for the books, of the 306 who responded to the question, 242 or 79.1% had no problem with paying for books, but for 10 respondents or 3.3% the paying of books presented such a problem that it "made them seek another way to prepare" for ministry. Figure 4.15 below presents these statistics in a histogram.
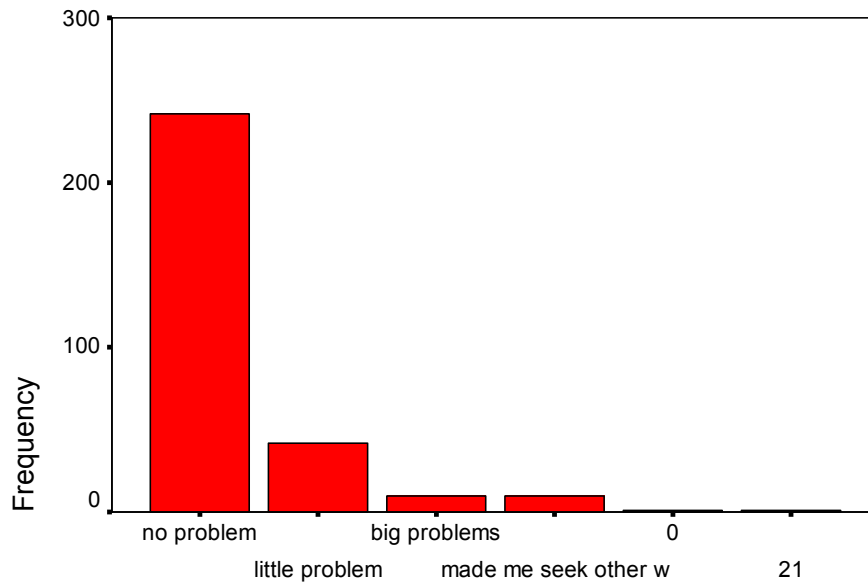
Figure 4.15   Histogram of Ratings of "Paying for Books" as a Problem with IBNAL – Group A

Question: How much difficulty have you had with memorizing the Bible verses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	213	20.3	72.0	72.0
	little problem	73	7.0	24.7	96.6
	big problems	8	.8	2.7	99.3
	made me seek other way to prepare	2	.2	.7	100.0
	Total	296	28.2	100.0	
Missing	System	752	71.8		
Total		1048	100.0		

Table 4.48 Ratings of "Verse Memorization" as a Problem with IBNAL – Group A

Discussion: The question concerns memorization of Bible verses which is one of the requirements to pass the courses. Of the 296 who responded to this, 213 (or 72%) had no problem with it. There are 8 (2.7%) who had "big problems" with this aspect, and 2 report that it "made [them] seek another way to prepare". Two is a small number, but every reason for lack of retention of students in an educational system must be considered important. The statistics discussed here are represented graphically in the figure below.

276
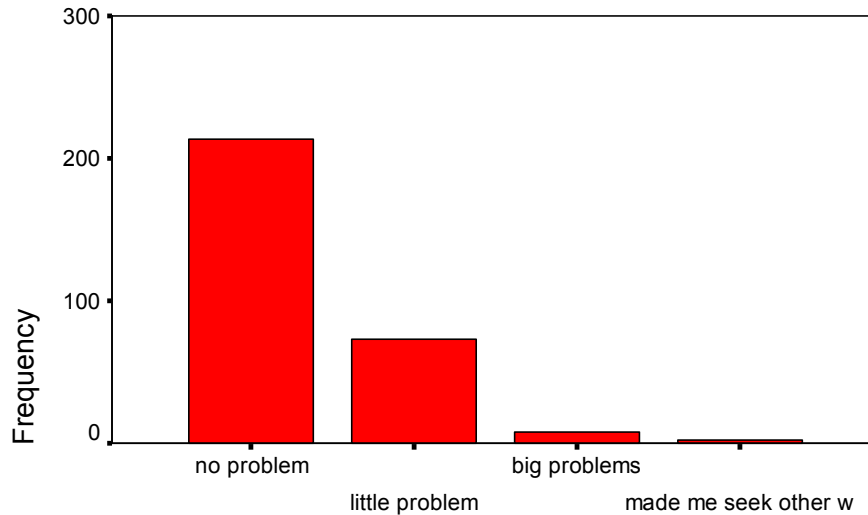
Figure 4.16 Histogram of Ratings of "Verse Memorization" as a Problem with IBNAL – Group A

Question: How much difficulty have you had with the skills of the monitors?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	211	20.1	74.6	74.6
	little problem	41	3.9	14.5	89.0
	big problems	22	2.1	7.8	96.8
	made me seek other way to prepare	9	.9	3.2	100.0
	Total	283	27.0	100.0	
Missing	System	765	73.0		
Total		1048	100.0		

Table 4.49 Ratings of the "Skills of the Monitor" as a Problem with IBNAL – Group A

Discussion: In this question the skills of the monitor(s) are being assessed as potentially problematic. 74.6% of the 283 who responded to this question said the monitors were "no problem" but 22 or 7.8 said the skills of the monitors presented "big problems" and 9 respondents or 3.2% said they sought another way to prepare because of the skills of the monitors. The schematic presentation of these statistics follows.
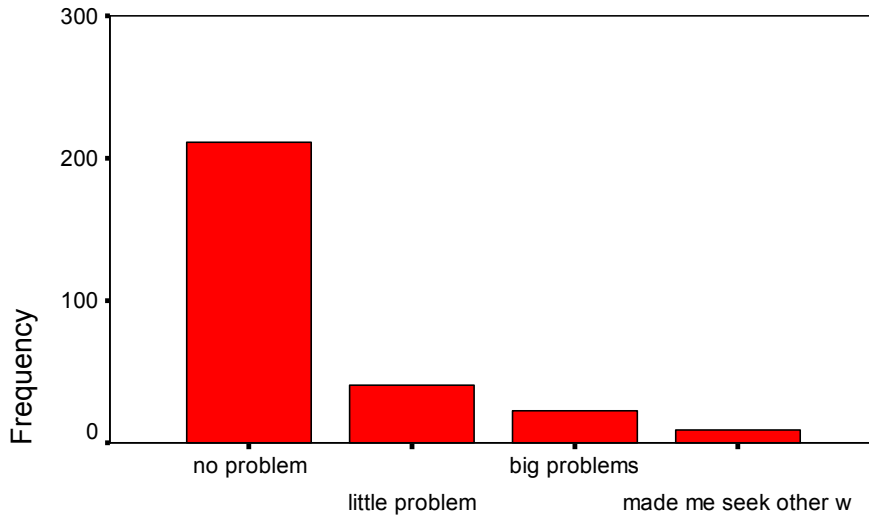
MONITOR

Figure 4.17   Histogram of Ratings of "Skills of the Monitors" as a Problem with IBNAL – Group A

Question: How much difficulty have you had with other learners in your group?

		Frequency	Percent	Valid Percent	Cumulativ e Percent
Valid	no problem	218	20.8	78.7	78.7
	little problem	32	3.1	11.6	90.3
	big problems	16	1.5	5.8	96.0
	made me seek other way to prepare	11	1.0	4.0	100.0
	Total	277	26.4	100.0	
Missing	System	771	73.6		
Total		1048	100.0		

Table 4.50 Ratings of the "Having Difficulty with Other Learners in the Group" as a Problem with IBNAL – Group A

What difficulty with other learners in the cooperative learning group caused them "no problem". For 4% of the respondents (11 in number), difficulties with other learners made them find another way to prepare for ministry.

Question: How much difficulty have you had with finding time to fill in the book and studying your homework?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	211	20.1	72.8	72.8
	little problem	42	4.0	14.5	87.2
	big problems	20	1.9	6.9	94.1
	made me seek other way to prepare	7	.7	2.4	99.7
	Total	290	27.7	100.0	
Missing	System	758	72.3		
Total		1048	100.0		

Table 4.51 Ratings of the "Finding Time to Do Homework" as a Problem with IBNAL – Group A

Discussion: One of the ten weaknesses cited by Kornfield of the TEE system relates to this question of the learners having enough time (or *not* having enough time) to do the homework which is reading the lessons and responding to the questions in writing in their textbooks. Of the 290 respondents, 20 or 6.9% said this caused them "big problems" and 7 respondents or 2.4% said it made [them] seek [an]other way to prepare. The sum of 2.4% and 6.9% 9.3% of this sample, as always, is important to note. Of the respondents 211 or 72.8% had "no problem" with the homework, a strong majority for the positive position. The statistics above are represented graphically in the figure which follows.
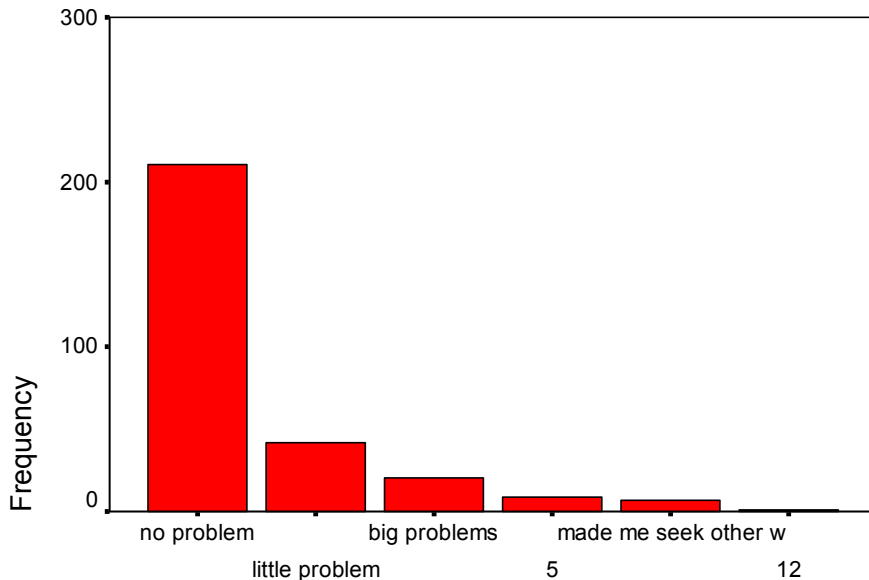
Figure 4.18 Histogram of Ratings of the "Finding Time to Do Homework" as a Problem with IBNAL – Group A

279

Question: **How much difficulty have you had with the books being in Portuguese and not the maternal language?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	188	17.9	65.7	65.7
	little problem	51	4.9	17.8	83.6
	big problems	29	2.8	10.1	93.7
	6	(10)	1.0	3.5	97.2
	made me seek other way to prepare	8	.8	2.8	100.0
	Total	276	27.3	100.0	
Missing	System	762	72.7		
Total		1048	100.0		

Table 4.52 Ratings of the "Books in Portuguese and not the Maternal Language" as a Problem with IBNAL – Group A

Discussion: This question speaks to the important issue of learning in the maternal language. The percentage of those who state they have "no problem" with this is lower (65.7%) than the percentage of "no problem" responses in the table above. Compared with percentages from other problems there is an increase in the number who responded that it was a "little problem" that the books were in Portuguese. Eight (8) respondents or 2.8% considered it a big enough problem to leave the system and 29 others (10.1%) considered books in Portuguese a "big problem". The graphic representation of these statistics follows.

PROBLEM OF BOOK IN PORTUGUESE
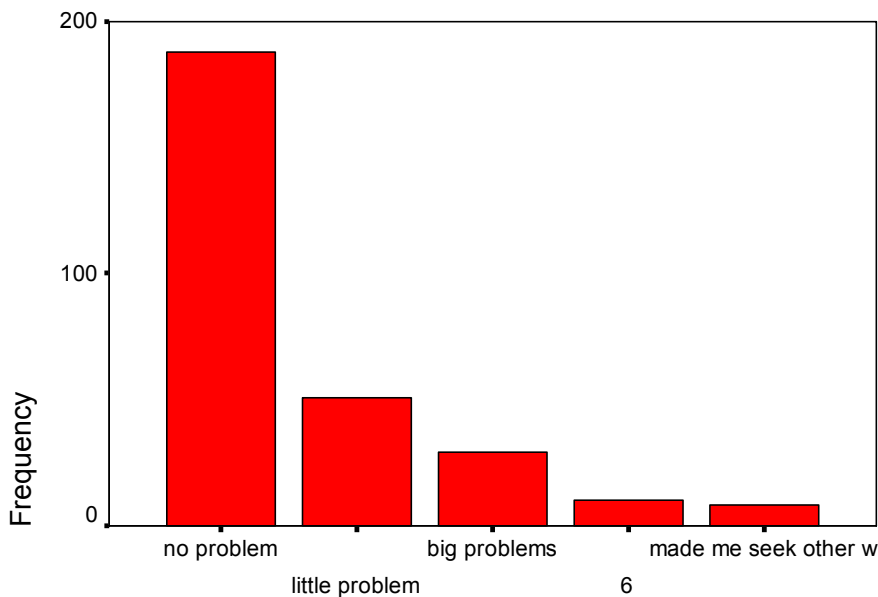
Figure 4.19 Histogram of Ratings of the "Book in Portuguese and not the Maternal Language" as a Problem with IBNAL – Group A

Question: How much difficulty have you had with varying academic levels in the same cooperative group?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	190	18.1	67.9	67.9
	little problem	50	4.8	17.9	85.7
	Made me seek other ways to prepare	19	1.8	6.8	92.5
	big problems	16	1.5	5.7	98.2
	Total	275	26.7	100.0	
Missing	System	768	73.3		
Total		1048	100.0		

Table 4.53   Ratings of the "Varying Academic Levels in the Same Cooperative Learning Group" as a Problem with IBNAL – Group A

Discussion: As noted previously in respect to the demographics of the learner sub-population, there is great diversity in the levels of formal schooling which the learners have. This diversity is essentially ignored in the formation of the cooperative learning groups which are based on the accessibility of the learners and monitors to the learning setting. The practice of training trainers produces a number of trainers which is larger than in the past but not sufficiently large to sub-divide learning groups according to the level of schooling they have. These practical limitations make the learning groups diverse but there is also a philosophical rationale for this practice; in order for the learners to succeed in the contexts where they will be leaders, it behoves them to learn to relate effectively to people of differing educational and social levels. Effective leaders *do* learn this. The statistics show that this practice causes "big problems" to 16 respondents (5.7%) and made 19 or 6.8% of the respondents "seek other ways to prepare". This means 35 or 12.5% of the respondents (280) were very bothered by this practice. On the other hand 190 or 67.9% of the sample considered that this practice gave "no problems". The statistics discussed above are graphed below.
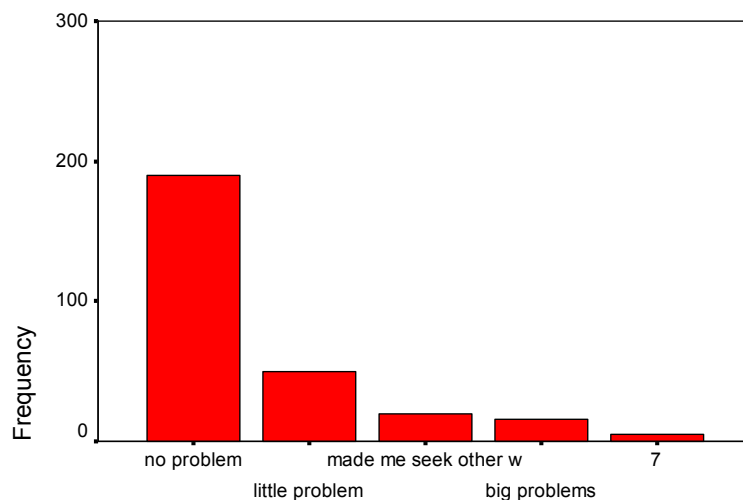
Figure 4.20 Histogram of Ratings of the "Varying Academic Levels in the Same Cooperative Learning Group" as a Problem with IBNAL – Group A

281

Question: How much difficulty has another problem not listed been for you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no problem	132	12.6	71.4	71.4
	little problem	24	2.3	13.0	84.3
	big problems	13	1.2	7.0	91.4
	8	10	1.0	5.4	96.8
	Made me seek other way to prepare	5	.5	2.7	99.5
	0	1	.1	.5	100.0
	Total	185	17.7	100.0	
Missing	System	863	82.3		
Total		1048	100.0		

Table 4.54 Ratings of the "Some Other Aspect" as a Problem with IBNAL – Population A

Discussion: Version A of this question allowed the respondents to indicate that there was "something else" about IBNAL that created problems for them. This option elicited fewer responses (185) than previous items in this question and of those 13 considered some other problem "big" and 5 considered it big enough to seek another way to prepare. A few respondents wrote in "lack of transportation [money] for monitors". The statistics represented graphically are found in the Figure 4.21 below.
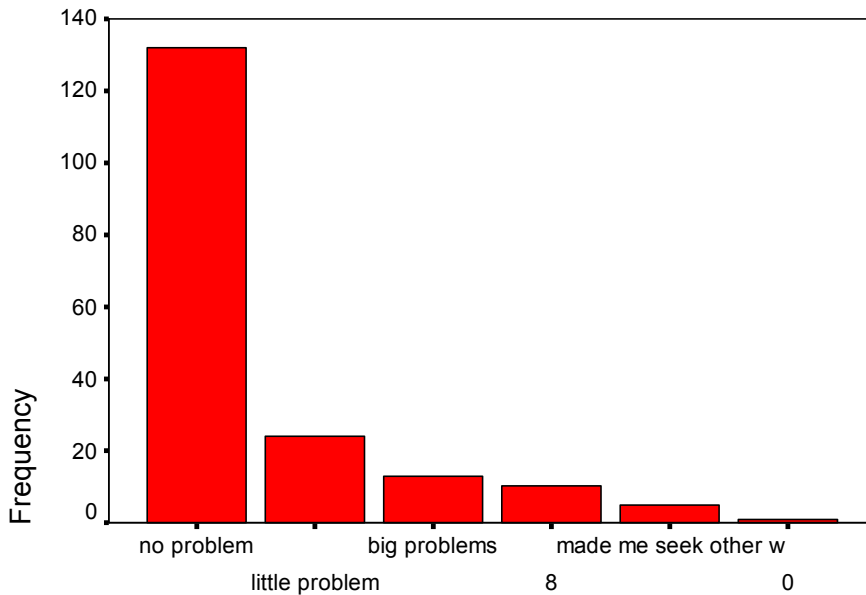
Figure 4.21 Histogram of Ratings of the "Some Other Aspect" as a Problem with IBNAL – Group A

The items from Version A of the question about problems with IBNAL have been presented item by item. In Table 4.48 below I bring the frequencies presented above into one table for analysis of the whole set of issues which may be considered problems of IBNAL.

	PROBLEMS WITH IBNAL: HOW MUCH OF A PROBLEM IS IT?	Re-spon-dents	No pro-blem	Little pro-blem	I had "big pro-blems" with this	This made me seek another way to prepare
			FREQUENCIES			
1	Having to pay for the textbooks	304	242	42	10	10
2	Memorizing Scripture to pass	296	213	73	8	2
3	Difficulties with the monitor	283	211	41	22	9
4	Difficulties with other students in your group	277	218	32	16	11
5	Finding time to fill in the books, to do the homework	290	211	42	20	7
6	Having the book in Portuguese not maternal language	276	188	51	29	8
7	Mixing academic preparation of students in same group	275	190	50	16	19
8	Some other problem not listed	185	132	24	13	5
	Mean of number of respondents	273	200.6	59.1	22.3	11.8
	TOTALS	2186	1605	355	134	71
	Valid percentages		73.4%	16.2%	6.1%	3.2%

Table 4.55 Summary of the Ratings of the Eight Aspects of IBNAL as per Group A

Discussion: Gathering data regarding problems perceived with IBNAL into Table 4.55 makes it easier to see that the large majority of the whole sample finds no problem with these seven aspects of IBNAL; 73.4% find "no problem". The issue with the smallest number of responses is #8, "Some other problem"; these were 185 respondents. In other to answer this question the respondents must think more than in the other seven items because they have to think of the "other problem" so more people elected to not answer it. The next set of statistics is the tabulation of answers from the Version B question on this same set of items.

	BK PAY-MENT	VERSE MEMO-RIZE	MONITOR SKILLS	OTHER LEARNER	TIME FOR HOMEWK	BKS IN PORTUGU	ACAD E-MIC	OTHER	NO PROB
Valid	306	296	283	277	290	286	280	185	117
Missing	742	752	765	771	758	762	768	863	931

Table 4.56 Statistics of Problems Identified with IBNAL – Sample B

Discussion: The data in Table 4.56 above reflect responses from the sub-group of respondents who responded to Version B of the question regarding problems with IBNAL. In this version, the respondents indicated which two items were problematic for them; they did not rate each item so the number of data missing is high because with each choice of two items, the respondents were automatically not putting any value into the other seven columns of potential choices.

	HOW MUCH OF A PROBLEM IS THIS ASPECT OF IBNAL?	A Version A Respondents who had some problem with	B Version B Respondents marked two problems	C Sum of Responses Versions A and Version B	Rank Order Of Problems Per C
		FREQUENCIES			
		# of responses minus number who had no problem with item	Count given in Table 4 above as raw data	Indication of frequency within the whole sample	Ranking of sum of responses
1	Having to pay for the textbooks	304 - 242 = **62**	+ 306 HIGHEST	368 4th RANKED	4
2	Memorizing Scripture	296 – 213 = 83 4TH RANKED	+ 296 2ND RANKED	379 HIGHEST	1
3	Difficulties with the monitor	283 – 211 = 72	+ 283	355	6
4	Difficulties with other students	277 – 218 = 59	+ 277	336	7
5	Time to fill in the books, to do homework	290 – 211 = 79 5TH RANKED	+ 290 3RD RANKED	369 3rd RANKED	3
6	Book in Portuguese not maternal language	276 – 188 = 2ND HIGHEST 88	+ 286 4th RANKED	374 2ND HIGHEST	2
7	Academic mix in same group	275 – 190 = 85	+ 280	365	5
8	Some other problem not listed	185 – 132 = 53	+ 185	238	9
9	No problem with IBNAL	Mean = 200.6 HIGHEST COUNT	+ 117 LOWEST COUNT	318 8TH RANK	8
	Responses	2186	2036		
	Respondents Mean of	273.3	226.2		
	TOTALS				

Table 4.57 Comparison of Responses of Versions A and B to Question on Problems

Discussion: Putting together responses from Version A and those from Version B in Table 4.57 the findings show a small range of difference of responses within the sums shown in the highlighted column of sum of responses. The highest score is 379, the lowest score 336, a difference of 43 responses is small among 1048 responses. The net result of putting together the two sets of responses is to render the responses contradictory in respect to the option of selecting "no problem". With the ratings given in Version A, the 73.4% of responses concur that there is "no problem". In Version B, when it is made easier to choose a problem, then the choice of problem ranges from 304 votes for the biggest problem being "buying the books" to the next to the lowest number of votes going to "no problem".

The set of "missing data" contributes to the inconclusiveness of these data sets. There is more than one reason why a response may end up as "missing data; in version B they are directed to only choose two responses so the other response possibilities are counted as "missing data". Respondents in both versions who did not have any particular problem with IBNAL frequently chose to not mark anything, putting their opportunity to respond into the "data missing" category. Why did they do that? They may have made the choice (not to "vote") because they are not used to pointing out problems, especially in written form, or because they really do not have problems with IBNAL so they assumed, wrongly, that not marking anything would be an automatic scoring for "no problem" or because they simply may be a bit lax about putting thought into their own opinion about the matter.

The statistics do indicate that three of the potential eight choices surface as the most frequently cited problems. According to which set of responses is considered, they surface with different rankings so there is no problem which can be called the "top problem" cited by the respondents. Three are cited. "Having to pay for the textbooks" does not surface as a top-ranked problem in results from Version A, is the highest ranked problem cited in Version B and the 4th ranked problem in the combined responses of A and B. "Memorizing Scripture" is ranked 4th, 2nd and 1st according to the sample of responses. "Having the book in Portuguese not maternal language" is 2nd ranked among Version A respondents, is 4th ranked among Version B respondents and is 2nd ranked in the combined results. **So these problems are considered to be the top three ranking problems of IBNAL: "Having to pay for the textbooks", "having the book in Portuguese not the maternal language" and "memorizing Scripture".**

Variable 11 Ratings of structured aspects of IBNAL (1-4)

As mentioned above, items which relate to the problems cited by respondents are also assessed in other questions. The question on the "Structured Aspects of IBNAL" has nine variable items in the question, i.e. the goal, the student books, the skills of the monitors, group discussions, memorizing Scripture, applying the lessons to life, singing together, praying together and just being together.. Those being surveyed are requested to rate each of these one a 1-4 scale, 4 being the highest. The respondents do not always rate all nine which creates "missing data". The question in the survey is presented below followed by the table of statistics of the number of responses.

	GOAL	BOOKS	SKILS_ Monitor	DIS- CUXN	MEMO- RIZE	APPLI- CXN	SING_ TOG	PRAY_ TOG	BE_ TOGET
Valid	629	585	594	605	594	565	607	610	569
Missing	304	348	339	328	339	368	326	323	364

Table 4.58 Structured Aspects of IBNAL – Whole Sample

Discussion: Table 4.58 above answers only indicates how many respondents rated each of the variables. The ratings of each variable organized by category of leadership of the respondents are presented in the statistics which follow. Each of these aspects is presented and discussed in more detail in the subsequent pages.

		Cases Valid		Missing		Total	
GOAL		N	Percent	N	Percent	N	Percent
Leadership	poor or low	16	61.5%	10	38.5%	26	100.0%
	normal	103	55.1%	84	44.9%	187	100.0%
	very good or very high	153	62.2%	93	37.8%	246	100.0%
	excellent	168	71.2%	68	28.8%	236	100.0%
		424		245		669	

Table 4.59 Ratings of the "Goal of IBNAL" by the Whole Sample

Discussion: Table 4.59 details the number of responses which are valid across each of the possible ratings of "goal". The goal of IBNAL is "to be like Jesus" and is kept before the learners by means of the theme hymn, reference to *Christlikeness* as the goal of faith and living, and the goal is written into the intent of the programme outcomes. The assessment of this goal has more than nuances of interpretation. The wording of the question asks respondents to rate "the helpfulness of the goal of growing toward Christlikeness". How is "poor or low" to be interpreted as a response to this question? It may be that some learners would say "poor" if their monitor rarely makes any reference to that goal; if something is not known or used, it cannot be deemed "helpful" (as per the wording of the question), so the rating would actually be the effectiveness of the monitor in inculcating or promoting the goal of Christlikeness. Maybe the goal simply is not helpful to some learners.

"Leaders" are so categorized by virtue of their responses on another field of the survey where they designated that they are already serving in positions of leadership in the Church of the Nazarene in Mozambique; there are 96 LEADERS. The category of those who, according to their designations, are studying to be leaders number 499. The other set of answers come from other group of respondents, numbering 56 who did not indicate their leadership status so they did not get tagged so the software counts them as "missing". The total number of valid responses is 657 composed of responses from 96 leaders, 499 learners and 6+56 = 62 of unknown status. The following table, Table 4.53 displays the statistics organizing them by category of leadership, including the "zero" category of unknown classification.

RATINGS OF REGULAR ASPECTS OF IBNAL:	Sum of Ratings by LEARNERS		Ratings by LEADERS		Ratings by Unclassified or Missing		Combination of Sub-sets to give Overall		
GOAL								%	
Poor or low	21	4.2%	2	2.1%	0	0.0%	23	3.5%	4
Normal	142	28.5%	24	25.0%	12	19.5%	178	27.4%	3
Very good or very high	162	32.5%	37	38.5%	34	54.8%	233	35.5%	1
Excellent	174	34.9%	33	34.4%	16	25.8%	223	33.9%	2
Total number Of responses	499	100%	96	100%	62	100%	657	100%	

Table 4.60   Summarised Ratings of GOAL of whole sample (657) by LEADERSHIP Category

Discussion: Table 4.60 above shows that 4.2% of the learners and 2.1% of the leaders find the helpfulness of the goal to be "poor or low". That is the position of 3.5% of the whole sample of respondents (657). The percentage which found the helpfulness of the goal to be "normal" is 17.4%. Adding together those who found the goal to be "very good" or and those who found it "excellent" comes to 68.4% (35.5 + 33.9), so it may be said in summary that **a large majority of the sample surveyed (68.4%) find the helpfulness of the goal of IBNAL to be very good or excellent.** The next two figures present the data by category of leadership, first the "Learners" and then the "Leaders".
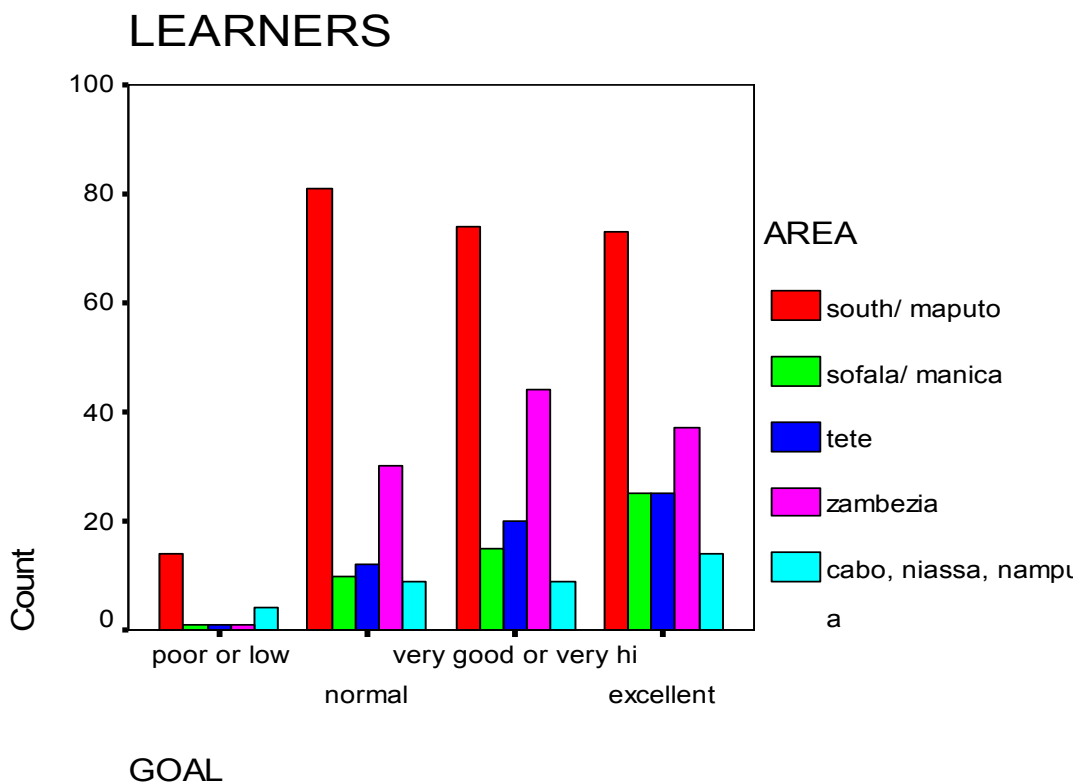
Figure 4.22 Bar Chart of Rating of Goal by Learners by Geographic Area

Discussion: The frequency distribution of the rated responses of the sub-set "learners" is represented above. The bars are coloured according to the geographical area of the respondents. It shows that the majority of the learners are from the south (red), and the distribution of their responses is over 60 for each of the first three ratings. The lowest number of learners is from the North, Cabo, Niassa and Nampula (aqua blue). They, as well as learners from Tete (medium blue) and Sofala/Manica (green) give the most ratings as "excellent" to the goal.
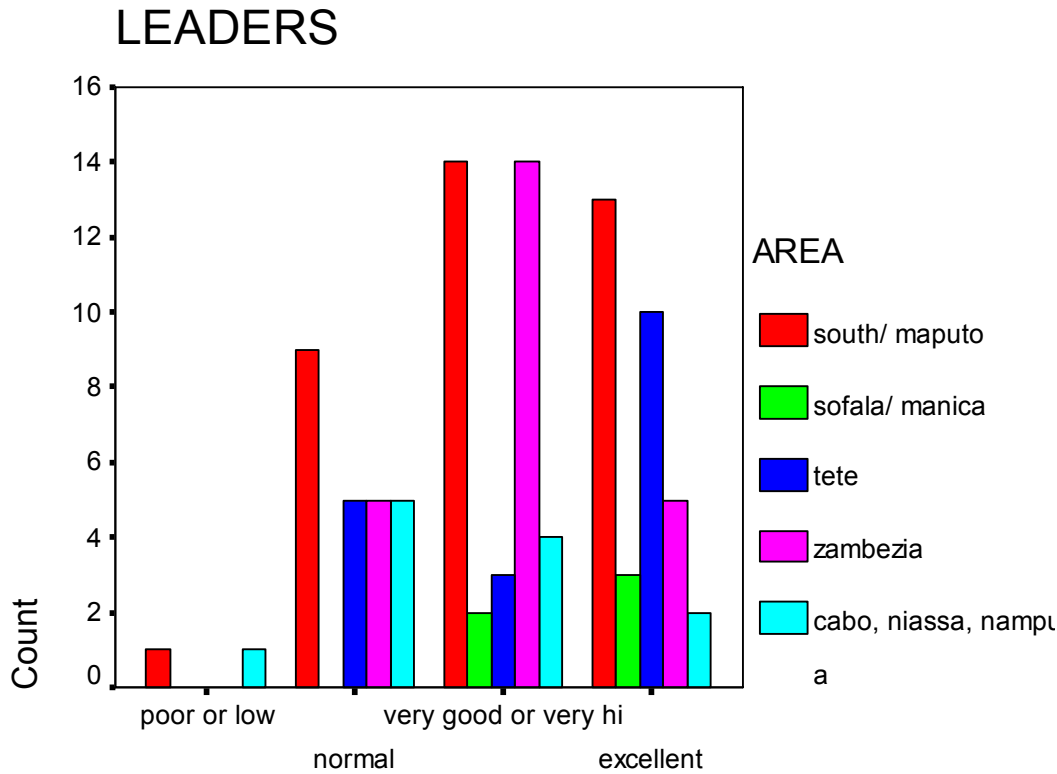
LEADERS

Figure 4.23 Bar Chart of Rating of Goal by Leaders by Geographic Area

Discussion: The bar chart above shows the frequency distribution of the rated responses of the sub-set "leaders". The bars are coloured, as above, according to the geographical area of the respondents. It shows that many of the leaders are from the south (red) but there are also many leaders from Zambezia. Leaders from both the South and Zambezia rate the goal as "very good". The leaders from Tete give an "excellent" mark to the goal. The votes of all of the leaders from Sofala/Manica were either "excellent" or "very good".

The next four variables to be analyzed of the normal aspects of IBNAL are those of the books, skills of the monitors, discussions and verse memorization. The summarized statistics of these four are organized for presentation in the table below.

RATINGS OF REGULAR ASPECTS OF IBNAL:	Overall RATINGS OF **BOOKS**		Overall RATINGS OF **SKILLS OF MONITOR**		Overall RATINGS OF **DISCUS-SIONS**		Overall RATINGS OF **MEMORIZING VERSES**	
		%		%		%		%
Poor or Low	26	4.5%	17	2.9%	24	4.0%	19	3.2%
Normal	221	37.8%	124	20.8%	191	31.6%	174	29.2%
SUM of "low ratings"		42.30 %		23.70 %		35.60 %		32.40%
Very good or Very high	169	28.9%	219	36.8%	213	35.2%	222	37.3%
Excellent	168	28.8%	235	39.5%	177	29.2%	180	30.3%
SUM of "high ratings"		56.7%		75.3%		64.4%		67.6%
Total number Of responses	584	100%	595	100%	605	100%	595	100%

Table 4.61 Ratings of Regular Aspects of IBNAL Problem: Books, Skill of Monitors, Discussions and Memorizing Verses

Discussion: Table 4.61 above has the ratings from "Poor or low" to "Excellent" listed on the vertical axis and the statistical findings displayed first as a raw count of the responses then the percentage of those responses to the total number of valid responses for that variable. Below the line displaying the findings of "normal" is the "Sum of 'low ratings'" which is the simple addition of the percentages of "Poor or low" and "Normal". Similarly the sums of the "high ratings", i.e. the percentage of "very good" added to the percentage of "excellent".

In the phrasing of the question in the survey about the books, the respondents are asked to give their personal opinion in the form of a score about the "helpfulness of the student books in general". Other aspects about the books, e.g. "having to pay for the textbooks" and "having the book in Portuguese not the maternal language" were two of the top three problems of IBNAL as discussed above. This question refers to the "helpfulness" of the books. The highest percentage (37.8%) rates the usefulness of the books as "normal". Only 4.5% judge the usefulness as "low," and over half of the respondents, 56.7%, rate the highly the "helpfulness of the student books in general". So although the ratings are lowest of what has been discussed so far, the overall ratings are still positive.

The question about monitors asks the respondents to rate "the ability of the monitor(s) to conduct classes properly". The skill of the monitors earns a high score from the respondents: 75.3% rate their skills "very high" or excellent and only 2.9% rate them "low". This statistic gives evidence as to the feasibility of the diploma-level monitors facilitating learning.

The item about group discussion asks the respondents to rate "the value of group discussion of the material". This material, in general, is the content of the student texts, handled by the monitors through different forms of questions. The two middle scores, for "very good" and "normal" total just under 70% (31.6% + 35.2%) of the sample of respondents. Few score discussions "low" – only 24 respondents

or 4.0%. The ratings are quantitative evidence of the positive opinion held about the value of discussions.

Regarding the memorization verses, the fourth variable found on the table above, the question on the survey asks about the "value" that memorizing Scripture has to the respondents. The response pattern is similar to the other three variables presented in this table. The percentage of respondents who rated the value "low" is low itself, 3.2%, "normal" is the response of 29.2% and the highest percentage response is for "very good" which has 37.3%.

The data presented in the next table is organized in exactly the same format as the table above, but it considers four other variables from the question on the regular aspects of IBNAL.

RATINGS OF REGULAR ASPECTS OF IBNAL:	Overall RATINGS OF LIFE APPLI-CATION		Overall RATINGS OF SING TO-GETHER		Overall RATINGS OF PRAY TO-GETHER		Overall RATINGS OF BEING TO -GETHER	
		%		%		%		%
Poor or Low	30	5.5%	28	4.6%	14	2.3%	18	3.2%
Normal	173	30.7%	153	25.2%	126	20.7%	119	21.0%
SUM		36.20 %		29.80 %		23.00 %		24.20%
Very good or very high	180	32.0%	231	38.0%	242	39.7%	201	35.4%
Excellent	180	32.0%	195	32.1%	227	37.2%	230	40.5%
SUM		64.0%		70.1%		76.9%		75.9%
Total number Of responses	563	100%	607	99.9%	609	99.9%	568	100.10 %

Table 4.62 Ratings of Regular Aspects of IBNAL as Problems: Life Application, Sing Together, Pray Together and Being Together

Discussion: The respondents are asked to rate "the value of applying the lessons to life problems". This is the only one of nine aspects of the research model that has a "poor or low" rating that exceeds 5.0%; in this case it is 5.5%. This is also the least answered variable of the nine, with 563 choosing to rate it. However, the positive ratings are also strong, 32% say "very high" the value of applying lessons to life problems, and another 32% say the value is "excellent".

The monitors are encouraged to make singing in the cooperative learning groups a frequently-used activity, singing together more than once in each encounter. The survey asks the respondents to rate the "value of singing together". Of the 607 respondents to this question 28 of them or 4.6% rate it "low", 25.2% rate it "normal", 38.0% rate it "very high" and 32.1% rate it "excellent". "Singing together" is one of the learning strategies discussed in Chapter 2 and is further discussed at the end of this section.

For the learners and their monitor to pray together, at least at the beginning and the end of the face-to-face session, is a regular feature of the IBNAL learning session. The survey asks respondents to rate the value of "praying together with

colleagues". The percentage of the 609 respondents who rate it "low" is only 2.3%. Those who rate it "normal" is 20.7%, and the sum of those who rate it "very high" (39.7%) and "excellent"(37.2%) is a high 76.9%.

The last regular aspect of IBNAL the respondents are asked to rate is the "value of just being with others in a study group". Again the sum of those who rate this practice "very high" or "excellent" is high, 35.4% plus 40.5% for a sum of 75.9%. Further discussion of these statistics follows the next table, Table 4.63.

REGULAR ASPECTS OF IBNAL	WHOLE SAMPLE								
	Goal	Books	Skills of Monitors	Group Discussion	Verse Memorisation	Life Applicaxn	Sing Tog	Pray Together	Be Together
Number of respondents	657	584	595	605	595	563	607	609	568
	69.4 %	56.7 %	75.3 %	64.4 %	67.6 %	64.0 %	70.1 %	76.9%	75.9 %
Ranking of satisfaction level	5	9	3	8	6	7	4	1	2
	LEARNER SUB-SAMPLE								
Number of respondents	515	477	486	497	487	463	493	503	474
Satisfaction level as %	67.7 %	57.0 %	75.5 %	63.4 %	68.2 %	66.3 %	67.7 %	76.6%	75.7 %
Ranking of satisfaction level	4	9	3	8	7	5	4	1	2
% rating it "poor"	4.5 %	6.7%	2.9%	3.8%	2.7%	3.7%	4.7 %	2.6%	2.5 %

Table 4.63 Satisfaction Ratings of the WHOLE Sample and LEARNERS with Nine Regular Aspects of IBNAL

Discussion: Table 4.63 is a summary of some data presented in the previous three tables. It displays the number of respondents for the questions pertaining to each of the nine regular aspects of IBNAL under assessment and records a "satisfaction level" which is the sum of two percentage ratings, the rating of "very good or high" and the rating of "excellent" given for each of the nine aspects. **Essentially, then, the data from this table indicates that the whole sample surveyed and the sub-sample of learners alone display a high satisfaction with the learning system as a pattern across all of its regular aspects.**

Of the whole sample 69.4% and 67.7% of the learners who responded are satisfied with the goal of IBNAL, "to be like Christ", which is one of the ways in which the hero, Jesus, is kept in the consciousness of the learners. This implies the extent to which the learning strategies of "hero identification" and "hero modelling" are satisfactory.

The table also displays the relative rank of each aspect among the nine. The lowest ranking aspect is "the helpfulness of the student books". The satisfaction level is still over half (56.7% for whole, 57.0% for learners) but considerable dissatisfaction is implied. The data from the "Problems of IBNAL" may provide help in understanding the relative dissatisfaction since "having the book in Portuguese, not the maternal language" was one of the top three problems cited. If the sample considers that the books in Portuguese are far less helpful than the books would be in their maternal languages, then such thinking would account for ratings of "normal" or "poor" in the opinion of these respondents as to the "helpfulness" of the texts. Another one of the top three problems also is a reason for dissatisfaction; the learners have to pay for the books or they do not pass the course. Paying is a problem, one of the top three problems, so the level of satisfaction with the books, even their "helpfulness" would naturally be diminished. The data collected can be used in other research projects to calculate further relationships and correlations within the sample as to what about the books renders them less satisfactory.

Table 4.63 shows that the third ranking aspect of satisfaction is the "skills of the monitors" and the eighth ranked aspect is the "value of group discussion". These data seem to present contradiction because one of the "skills" that monitors use certainly is that of conducting the group discussions. If the sample is highly satisfied (75.3% from the whole, 75.5% from the learners) with the skills, in general, of the monitors but not as satisfied (64.4% whole, 63.4% learners) with group discussions, the implication is that there are other skills of the monitor which are taken into consideration with the satisfaction indicated in their assessment of the monitor skills. Another implication is that the value of the group discussions is somewhat diminished by factors other than the skill of the monitors, like the academic diversity of the groups, for example. Further statistical correlations might generate more evidences to explain these differences; however these are outside the plan of this research project. The overall satisfaction with "group discussions" is not really low; it is just relatively low in comparison to other aspects. Taken by itself, the fact that 64.4% of the whole sample and 63.4% of the learner sub- sample are highly satisfied with "group discussions" is a positive statistic that gives evidence to the extent that this aspect, which is also a holistic learning strategy, is satisfactory.

"Verse memorization" scores 67.6% among the whole sample and 68.2% among the learners in "voter satisfaction" yet, among the problems with IBNAL, this is one of the top three. Not many of the sample votes it "low" or "normal" – only 32.4% vote it low. Memorizing verses has confirmed "value" (67.6%), however, the act and accomplishment of memorizing the verses is a difficult task, so it also surfaces as a top "problem". [20]

---

[20] *Verse memorization has some parallel to "raising children" – this life skill is both the source of greatest satisfaction and the cause of great problems, sometimes on the same day.*

"Life application" is the fifth ranking aspect of IBNAL; it is in the middle of the nine, but well over half of the sample (64.0% of the whole, 66.3% of the learners) considers it, at least, "very high". The last survey conducted so far in this research, the one with open-ended questions to the limited sample of 53 students in the 2nd Certificate which is reported below, yielded findings which contributed more perspective to the assessment of the aspect of "life application" as these learners report numerous ways in which their learning has applied to their lives – spirituality, biblical knowledge, increased ability to minister, to care, to relate to family members and to do the workings of the church.

"Praying together" is the number one ranked aspect of the learning environment of the sample and "being together" is a close second place. As mentioned in previous descriptions of the physical settings of the population, the cooperative learning groups are scattered and remote. The leaders and learners who compose the sample of the "whole population" give strong evidence that meeting together and praying together when they meet is significant to them. The high esteem for "praying together" contributes evidence to the value and efficacy of considering it as an effective strategy to be employed in the learning environment. "Praying together" is also part of making the learning environment "spiritual" as was discussed at length in the models of spiritual learning environments of Section 2.4.2. The satisfaction with "being together" is tied to the strategy of "cooperative learning groups" and shows that the whole surveyed sample is 75.9% (75.7% of learners) satisfied with coming together.

The assessment by the whole sample surveyed of regular aspects of IBNAL gives data which relate to the research questions of this PAR so in a subsequent section I return to it when I organize the empirical data in respect to these questions. Particularly pertinent to the research questions is the assessment of the learner sub-sample of the nine regular aspects. The highest ratings of the learner sub-sample maintain the same rank order as that of the whole sample. Learners are slightly less positive about the goal and singing together than the whole sample and slightly more positive about memorizing the verses and applying learning to life than the whole sample.

Before then, the data from two other multiple variable questions is presented. The first one asks the sample to choose between potential areas of impact, the two that they perceive to be those of "the greatest impact" of IBNAL.

Variable 15 Opinion about area of greatest impact of IBNAL

Question:　　**What does the research sample indicate as the greatest impact of IBNAL – better relationships, greater capacity to minister, more knowledge of the Bible, opening up of the appetite to study and learn more or personal spiritual and more growth resulting in more dedication to God?**

Category label	Code	Count	Pct of Responses	Pct of Cases
RELATIONSHIPS	1	71	4.2	8.1
CAPACITY	2	314	18.7	36.0
KNOWLEDGE	3	332	19.7	38.0
APPETITE	4	443	26.3	50.7
GROWTH	5	522	31.0	59.8
		–––––	–––	–––-
Total responses		1682	100.0	192.7

158 missing cases; 873 valid cases

Table 4.64 Statistics of Responses to Choosing Two Areas of "Greatest Impact"

Discussion: The term "impact" in the question is used in the popular sense, not in relation to making an "impact study" which would have required implementation of many other constructs and research tools. Table 4.64 displays the five potential choices of "greatest impact" in the order that the options appeared on the survey. In Table 4.64 this is the order identified by the numerals "1" to "5". The easiest option for the respondents to mark would have been the first one, "relationships" if they had taken the survey uncritically yet this ends up to be the one least chosen, the lowest ranked.

Over half of the 873 respondents, 59.8% of them (522) chose the 5th option in the question –"Growth" – as the greatest impact of IBNAL. By "growth" they are indicating "personal spiritual and moral growth resulting in more dedication to God" according to the full wording of the question. This finding is supported by the findings from responses to the questionnaire to the limited sample of 53 learners with at least four years of learning in IBNAL. Spontaneously, in open-ended questioning, they report that the aspect of their lives most changed by learning is personal "spirituality", and this is affirmed in many of the responses of their classmates.

That just over half of the whole sample attests to IBNAL "opening up [their] appetite to study more" is also supported by the findings which show that the current level of schooling of learners is higher than the entry level of schooling. Because they started in self-disciplined further preparation for ministry, which gave them appetite to study more, they also manage to work more public schooling into their schedules. There is evidence that this is a trend.

The options of "biblical knowledge" and "increased skills" are not chosen as frequently as "spirituality" and "increased appetite to study"; they were chosen by 35-40% of the sample (38.0% and 36.0% respectively). Considering, again, the findings from the group of 2nd Certificate Students in December 2005, 36 of them or 69% respond that "biblical knowledge" and 33 or 63% "increased abilities like preaching" are changes that they perceive in their own lives. The 36 and 33 learners who respond in December 2005 are likely to be in the count of those who responded positively to "spirituality" as the greatest area of impact, then split their vote between "biblical knowledge" and "skills" for their second vote.

The statistics regarding the perceived "greatest impact" are separated into two categories, "leaders" and "learners" and presented as statistical graphs in Table 4.65 below. Note that the numerals 1-5 correspond to different options than those in the presentation of the statistics above

	1 Appetite to learn	2 Spiritual Growth	3 Skills	4 Biblical Knowledge	5 Improved Relationships
Learners	50.6%	56.2%	36.8%	44.3%	9.8%
Leaders	38.3%	57.4%	30.5%	29.2%	9.7%
% Difference	12.3%	0.8%	6.3%	15.1%	0.1%

Table 4.65 Statistics of Responses to Choosing Two Areas of "Greatest Impact" by Category of Leadership

Discussion: Table 4.65 shows that the comparison of percentage response from leaders to learners varies from an insignificant 0.1% and 0.8% in regards to "relationships" and "spiritual growth" respectively, and as much as 12.3% difference in regard to "appetite to learn" and 15.1% difference in "biblical knowledge", the category of learners regarding both considerable more than the group of leaders. Such differences and similarities are easy to discern in Figure 4.24 below, a chart of three-dimensional columns in which the blue represent the choices of leaders and burgundy the choices of learners.
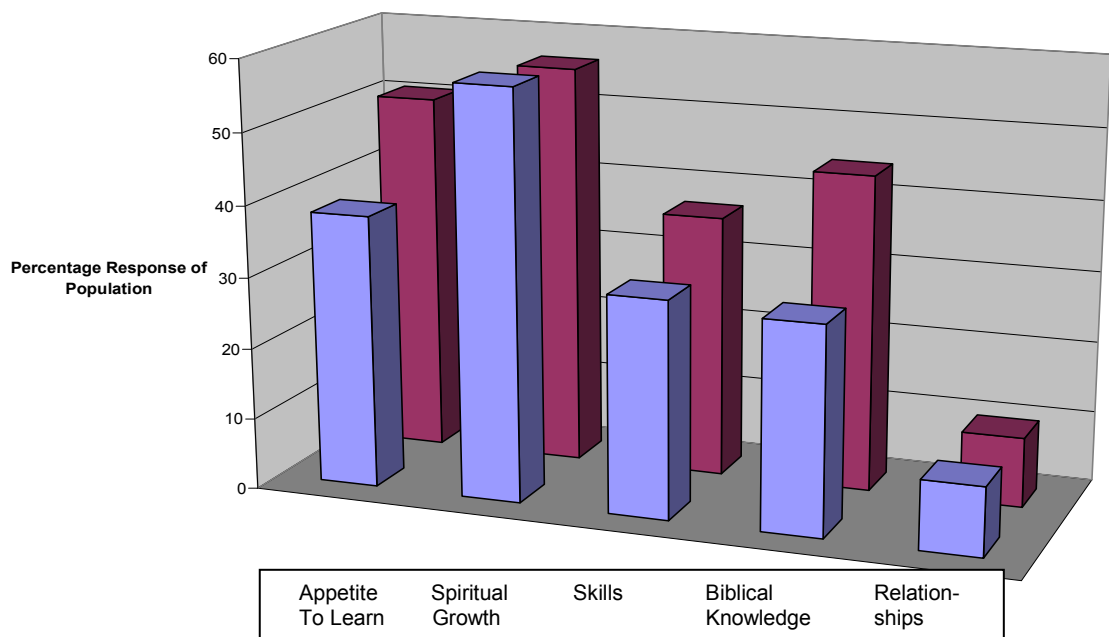
Figure 4.24   Impact of IBNAL Comparison of Percentage of Responses from Leaders and Learners

Variable 16 Four spiritual activities which most help to draw close to God

Question: What kinds of activities do the leaders and learners perceive to draw them closer to God?

This question pertains to spiritual activities that they value which take place in places other than the learning settings. The intent with this question was to give many different means that might draw people to God in order to give them a lot on which to reflect before they responded. The respondents took a long time during

295

administration sessions of the survey to answer this question. Several asked, "Only four?" implying that they would rather have chosen more. The full tabulation of the statistical results of this 19 variable question is displayed in Table 4.66:

Spiritual Activity	Whole Sample 793 Valid Cases			Sub-Sample Of Unmarked 84 Valid cases			Sub-Sample Of LEARNERS 575 Valid cases			Sub-Sample Of LEADERS 134 Valid cases		
	Total Count	Pct of Cases	Rank	Count	Pct of Cases	Rank	Count	Pct of Cases	Rank	Count	Pct of Cases	Rank
Church	507	63.9	1	55	59.5	1	380	66.1	1	72	53.7	1
Study Bible	366	46.2	2	30	35.7	4	269	46.8	2	67	50	2
Fasting	261	32.9	3	21	25	7	183	31.8	3a	57	42.5	3
Read Bible	243	30.6	4	24	28.6	5	168	29.2	5	51	38.1	4a
Sunday School	230	30.0	5	35	41.7	3	183	31.8	3b	21	15.7	9b
Praying alone	217	27.4	6	21	25	8	145	25.2	7	51	38.1	4b
Study IBNAL books at home	198	25.0	7	43	51.2	2	131	22.8	8	24	17.9	8
Through music	159	20.1	8	22	26.2	6	104	18.1	9	33	24.6	6
Taking communion	135	17.0	9	5	6	13	103	17.9	10	27	20.1	7
Praying in group	134	16.8	10	18	21.4	9	98	17.0	11	18	13.4	11
Theology class	126	15.9	11	18	21.4	10	93	16.2	12	15	11.2	12a
Meditating	88	11.0	12	9	10.7	11	58	10.1	11	21	15.7	9a
Doing acts of mercy	85	10.7	13	7	8.3	12	63	11	14b	15	11.2	12b
Attending funerals	84	10.6	14	4	4.8	16	73	12.7	13	7	5.2	16
Doing evangelism	77	9.7	15	5	6	14	63	11	14a	9	6.7	15
Attending baptisms	66	8.3	16	5	6	15	50	8.7	16	11	8.2	14
Being outdoors	38	4.6	17	2	2.4	18	31	5.4	17	5	3.7	17
Attending weddings	36	4.5	18	3	3.8	17	29	5	18	4	3	18
Studying spiritual books	24	3.0	19	2	2.4	19	21	3.7	19	1	0.7	19
	3,083	388.2			329.0		2,245	390.5		509	379.7	

Table 4.66   Statistics of Responses to Choosing Four "Spiritual Activities" which Draw the Respondents "Closer to God" – Whole Sample by Category of Leadership

296

Discussion: Whether the sample is considered as a whole or broken into the sub-samples of "leaders" and "learners" the variables end up being ranked rather equally across the sub-sets. The top three variables are the same for both "leaders" and "learners", i.e. 1) "attending church services", 2) "studying the Bible", and 3) "fasting", which ties for 3rd with "attending Sunday School" for the "learners". These are three classical spiritual disciplines which rank among this sample as the best ways to draw close to God. It was probably artificial to separate "studying the Bible" from "reading the Bible" and, in a repetition of the survey, it would be recommended to put them together.

There is agreement across the sub-groups as to the *least* preferred ways of "drawing close to God" – "studying spiritual books" ranks last, then "attending weddings" and "being outdoors in nature" vie for the next to the last place. Maybe "being outdoors in nature" does not particularly draw them closer to God because they spend so much time outside that it is hardly novel or inspiring. "Attending weddings" may be seen more as a legal ceremony than a spiritual activity since weddings ceremonies in the churches have not been widely practiced.

Those spiritual activities in the middle of the list of nineteen are basically consistent across the sub-groups. An exception is the sacrament of "taking communion" which ranked 3rd for the "leaders" which is higher than the 7th ranking given by "learners" and the 13th ranking by the "unmarked" group.

A relatively high ranking of "studying IBNAL books at home" was a surprise to the PAR team members who did not expect it to outrank "taking communion" or "praying in group" or even "meditating" but it did. The 84 respondents of the "unmarked" category rank 2nd "studying IBNAL books at home" while this comes in 8th for "leaders" and "learners" and 7th overall. This relatively high ranking of IBNAL contrasts greatly with the other option they could choose which had to do with books, i.e. "studying spiritual books" which was ranked in last position so the sample definitely perceives that "IBNAL" books draw them closer to God far better than "spiritual books" in general. Remembering that the survey from Areas 2 and 3 showed that this research population tends to have very, very few books so they may never or almost never had the opportunity to read "spiritual books".

Table 4.67 below returns to the interpretation of details of the other actions of Phase Four. It presents only one action (#21) which yielded findings relevant to the holistic learning strategies of the research study.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
21 May 2005 Tete Field test of 2nd Certificate history book	IDENTIFYING HEROES. The content of the material being tested in Tete, Nazarene Church History, presents story after story of people who have demonstrated significant self-sacrifice and determination in the pursuit of their personal life goal to spread Biblical holiness to as many as possible on the continent of Africa and into Mozambique. The names of some of these people were known to those present at the field testing of the material; most were unknown. The material included details about the ways these folk travelled, the means they had of communication, the lives they touched are the stuff of stories which commonly are told about ancestors; these people are spiritual ancestors, even Nazarene ancestors, so the leaders and leaders-in-training responded to the material with enthusiasm and acted out several historical scenes which were easy to put into drama. Identifying people who become "heroes" is a process that starts with being introduced to them personally or by stories about them. This intensive course introduced potential heroes to the group in Tete. PHOTOS. The photographs for the book were not in the drafted manuscripts put together for testing the material, so I arranged to have a video projector in learning setting so that I could show the group of 40-some people the pictures which would illustrate the finished book. They watched quietly and tried to pronounce the names of those who went from America and from the British Isles to South Africa, those who went to Swaziland, and to Gaza. But when I showed the photos of those who taught in the Nazarene Mission in Tete (Furancungo), their area, the group was quiet no more. A stir moved so noisily among them that I turned from the business of projection to watch them pointing to the pictures, whispering and talking animatedly to each other. I was not prepared for their reaction. I suppose it was like a "visit" of an esteemed leader. The pictures of those whose memory was kept alive by stories from the several old monitors who were their students spiked the learning event – unexpectedly. The learners were connecting stories from their past with images. A picture is worth one thousand words, one thousand happy words in this case. CRITICAL SINGING. Applying experience gained in the experimental Bible School group in July 2004, I used two hymns again and again during this intensive, two which are critically linked to the historical content and which they have in Chichewa. By the end of the four days, they could sing them with gusto. Look at their faces singing in the picture in Appendix H.

Table 4.67 Interpretation of Action #21 of PAR 5 in Phase Four

Discussion: The discussion of this action is contained in the interpretive comments in the right column of Table 4.67. The table which follows, Table 4.68, presents descriptive and interpretive detail for the last actions to be reported as this PAR study, Actions numbered 22, 23 and 24.

Phase Four: 2003 – 2005	IMPACT OF THE ACTION ON THE RESEARCH
22 July 2005 Maputo First Senior Synthesis Seminar at Bible School	TEAMWORK. As a result of knowing from dialogue and reflecting on solutions that Nazarene educators in other countries are doing to move learners toward balanced and holistic learning (OBE expressed in 4C competency statements) Nazarene educators in Mozambique adapted an idea which called the "Senior Synthesis Seminar". Several faculty members participate in this. I led the first one. The intent is to lead the students to reflect on their whole Bible School experience and synthesise it before they return to their districts. PRAXIS (action – reflection – dialogue). Each participant had also been trained to be a monitor so the quality of their preparation to be successful leaders is important because of the multiplied influence they have when they get to the field and are training others to be leaders. REFLECTION. The overall position of the learners was that the experience was "excellent but late", that they would have liked to have started the synthesis earlier to allow more time to devote to the experience. Learning strategies of this experience will be Incorporated into one of the 3rd Certificate learning sets of IBNAL.
23 Aug 2005 Maputo PAR 5 in Literature Workshop	TEAM WORK. The PAR 5 team has worked together as trainers, facilitators, administrators, friends, and writers. In this August experience, the PAR 5 team was called together to work as editors. PRAXIS. The action to be taken was for PAIR GROUPINGS to read aloud to each other books from the 3rd certificate to reflectively dialogue on changes to make in the wording or the analogies given in the books for increased appropriateness in expression and imaging for the learner sub-population.
24 Dec 2005 Tete, Nampula and Matola Meetings of fast-tracked students for field testing (in Tete) and for short survey	This one week-long trip was packed with many actions in which TEAMWORK (with its implicit COMMUNICATION) was *the* key word. F Chambo made it to Tete to meet on site for the first time the team of monitors and fast-tracked learners he had heard so much about. The Facilitator of Area 1 (the South) travelled to other areas for the first time by road and began the course in Tete and anchored the one in Nampula. The Facilitators of Areas 2 (Central Sofala and Manica) and 4 (Zambezia) assisted J Scott and the Area 5 (North) Facilitator implemented the complex course on CLASSICAL SPIRITUAL DISCIPLINES in Area 5 without my presence. Cell phones and e-mail instructions made essential communication possible. They managed to do it. SHORT HYBRID SURVEY. A short survey administered to all of the 2nd Certificate students produced some excellent data which is presented below.

Table 4.68 Interpretation of Actions # 22, #23 and #24 of Phase Four

Discussion: In relation to Action #24, as soon as they finished the course in Nampula, Holiness in Day to Day Living, which ends with an intensive group experience of immersion in the disciplines (24 hours of fasting from food, use of the film "The Passion of Christ" within 16 hours of silence, etc.) the Area 5 Facilitator, J Manonga, phoned me. "Mama", he said using his normal title for me but a very special tone of voice, "Mama, you didn't tell me what was in store for us

in this course". "What do you mean?" I ask, "Was it good?" "Good?!" he replied, "we are touching heaven…I've got to run back now to the others, but I had to call you for you to know". In a relationship of trust and caring, the PAR 5 team member, wanted to share as soon as silence was broken, the success of the unique learning experience for his group of learners and the success of the team in managing the complexities of the retreat.

Action # 24 refers to the last and most recent data collections which are the responses from the survey administered to the 2nd Certificate students in December of 2005. The fifty-three respondents are all IBNAL students who have had at least eighteen courses and most of them over 30 courses now, so of the whole research population they have the most time in the learning system and the most experience with the books/courses. The names of the books or courses were not on the survey; this means the respondents drew from their memory to name these books/courses. The four cooperative learning groups who were the respondents to this survey have classes in Maputo and Matola in the South, in Tete (Central Mozambique) and in Nampula Sul (Northern Mozambique). Not all of them have studied all of these courses. The shaded cells indicate courses which have only been studied by one or two of the four sub-groups, so this fact limits the possibility of their choosing the experience from that particular course. Their choices are listed in order of the greatest to the least number of learners indicating the title.

Approximate date that most studied the course	Rank of selection	Request to name of "a few" of the courses that had greatest impact on them"	Raw count	% of 53	Brief interpretation
2001	1	The Shepherd and His Work	21	39.6%	This is a "how-to-do" book of the Text Africa series
2004	1	Holiness in Day to Day Living	21	39.6%	This is a "how-to-be" course, product of the PAR research in Mozambique.
The Shepherd and His Work: Each of ten chapters focuses on a different skill of pastoral ministry. Learners had this course five years ago. Holiness in Day to Day Living is a combination of spiritual exercises and Wesley Bands – is non-textual, experiential and relational which emphasizes character development.					These two books/courses which tie for first place are vastly different from one another.
2004	3	Study the Book of Mark By Yourself	13	24.5%	This is a Text Africa book introducing exegetical tools for study of any textual material; is a "how-to" book.
2001	4	Bringing People to Jesus	10	18.9%	These are all books from the Text Africa series that they studied five years ago. All of them have the same 10-lesson format, all on Bible bases of different subjects of Christian life.
2001	4	Speaking with God	10	18.9%	
2001	6	Life of Jesus, Vol. 1	9	17.0%	
2001	6	Foundations of	9	17.0%	

		the Faith			
2001	8	Life of Jesus, Vol. 2	8	15.1%	

2003	9	Learning Like the Disciples	8	15.0%	Not a Text Africa book, I wrote this study of five Bible "heroes" who write biblical books and tell in them what it was like to learn from Jesus and the Scriptures.
2002	10	Caring for God's Things	7	13.0%	Other books from the Text Africa series.
2005	11	Studies in the Old Testament,Vol 1	6	11.3%	
2005	11	How did the Church Get to Us?	6	11.3%	Only one (Tete) of the four groups had this original (non-Text Africa) book/course.
2004	13	Acts, Vol. 1	5	9.4%	Text Africa books
2004	14	Studies in the NT, Vol. 1	4	7.5%	
2004	14	Life & Work of a Pastor	4	7.5%	Only one (Tete) of the four groups had this original (non-Text Africa) book/course.
2005	14	Studies in OT, Vol. 2	4	7.5%	Text Africa books.
2005	14	Studies in OT, Vol. 3	4	7.5%	
2005	14	Studies in OT, Vol. 4	4	7.5%	
2002/3	19	Honouring & Worshipping God	3	5.6%	
2002/3	19	Intro to the Holy Scriptures	3	5.6%	
2003	19	The Mission of the Nazarene	3	5.6%	An original text edited by all the monitors in December 2002.
2004	19	Studies in the NT, Vol. 2	3	5.6%	Text Africa books
2004	19	Studies in the NT, Vol. 3	3	5.6%	
2004	19	The Practice of Preaching	3	5.6%	
2005	19	Practical Service	3	5.6%	This is a brochure of practical plans for them to elaborate about ministerial service.
2003	26	The Story of God	2	3.0%	Within the Guide Book, this course is short and visual. It may be rated low because the songs and framework become a part of every course so it "disappears" as

					a course on its own.
2004	26	Acts, Vol. 2	2	3.0%	
2004	26	Powerful Bible Teaching	2	3.0%	Text Africa books
2003	29	Using the Jesus Film to Plant Churches	1	1.9%	An original text of the PAR teams.
2004	30	Christian Family Life	1	1.9%	Text Africa book. I do not know how to account for the low rating of this book. It may only be relatively unexceptional, therefore, not frequently remembered.
2005	30	Four Brochures about Health	1	1.9%	Non-exceptional, non-theological material
2005	30	Lessons from the Past	1	1.9%	Text Africa book only studied by one or two group.

Another question on this survey asked: "How much have you have changed since you started to study? The learners had three answers to choose from: "very little", "a normal amount", and "a lot".		Response	Count	%
		"very little"	0	0
		"normal"	7.0	13%
		"a lot"	46	86.8%
		Totals	53	100%

Table 4.69   Results from Survey of Four Groups of Learners in the System for >4 Years

Discussion: Some discussion of the choices is found in the column farthest right of Table 4.69 and is also discussed in the summary comments found at the beginning of this chapter in Sections 4.1 and 4.2. Besides the descriptive findings concerning the choices of courses which most impacted them which are tabulated and interpreted in the table, they also gave a blanket response to "How much have you changed since you started to study?" to which none of the 53 chose "very little", 7 of 53 or 13% chose "normal" meaning a normal amount, and 46 of 53 or 86.8% responded "a lot". The learners also wrote answers to a few short-answer questions and asked one of their colleagues to write a short response to qualify the change(s) they could note. Many of the short-answers are found in Appendix K and a few are given as examples below:

(From the South): Before entering IBNAL, I knew very little about the Word of God. I preached poorly, but now that I know the Bible, I feel so much better. Studying has changed my family life as well as my preaching. I understand the value of marriage and living in harmony with my family. I not only understand the rules of preaching, but God has helped me with my pride, fear and self centeredness (see 1 Timothy 3:1-6). A colleague says of him, "my brother Antonio Manhiça has changed a lot. In the beginning he would hardly participate in the debates, now he even starts them at times. In the last lesson, as leader, he showed how much he had changed in the way he led the class".

(From the South): Before coming to IBNAL, my life was very different than it is now. I didn't understand prayer very well. I only prayed when I was

really sad. Now I understand that prayer is what connects me to God in all situations. I am grateful to God that I was able to enter IBNAL to study. My life has changed from speaking evil. Before I enjoyed talking about others, but now I understand that gossip is wrong.

(From the North). Before I became an IBNAL student I was very nervous and confused. Now I know how to speak very well in front of 100 or more people. I like to compare my past with the present, my present being such a better life. I console the sad and sick, hear the opinion of others and I like the Bible.

(From Tete): Before I started IBNAL, I had great difficulty understanding the Bible. Now I enjoy studying, I am getting better as a pastor. I know how to lead in the services and serve Holy Communion. One of his colleagues says about him, "It is true that this brother was very backward in his spiritual life, because he understood so little of the Bible. Now because of IBNAL, both his spiritual life and his leadership skills have improved".

Analysing the textual content in order to categorise the statements in the narrative, the following system of coding was applied so that the responses could be tabulated numerically:

- A = Abilities in preaching, etc.
- B = Biblical knowledge and understanding
- C = Caring, loving, visiting the sick, etc.
- D = Dependability, responsibility in church ministry, etc.
- F = Family relations improved
- S = Increased Spirituality, prayer life, love for Scriptures, purity, etc.

For example, analysis of the textual narrative of the learner from Tete above shows that he considers himself improved in biblical understanding, and in his ability to be "a pastor" because he knows "how to lead services" and "serve Holy Communion". His narrative was coded "A" and "B". The comments of his colleague were coded "S" (spirituality) since "his spiritual life…has improved" and "A" (abilities) because "his leadership skills have improved".

	Responses Of Learners	Responses Of Colleagues	Maputo South	Matola South	Tete Cen-Tral	Mooma North	
Count	52		8	12	18	14	
# responses			16	24	36	28	
Abilities	33 /63%	11	4	7	20/36 =56%	13/28 =46%	44
Biblical knowledge	35 /67%	2	4	7/24 =29%	17/36 =47%	9/28 =32%	37
Caring	14/27%	10	2	1	9	12	24
Dependabilit y	6	26	4	1	15	12	32
Family relations	9	3	5/16 =31%	2	1	4	12
Spirituality	36 /69%	21	10/16 =63%	23/24 =96%	7/36= 19%	15/28 =54%	55

Totals	133	73	29	41	69	65	204

Table 4.70 Codification of Changes Narrated in the Lives of Learners for >4 Years, Organised by Geographical Area

Discussion: Table 4.70 is a tabulation of findings from the open-ended questionnaire given to four groups of learners who have been studying for more than four years in IBNAL. The responses were all narrative. Of the 52 respondents who wrote about the kind of changes that had taken place in their lives 36 or 69% of them refer to increased "spirituality" and 67% to "biblical knowledge" and 63% to increased "abilities" of some kind, frequently the ability to preach. The highest ranking change that was noted by their peers is dependability at a count of 26 or 50% and the second most noted change was in spirituality noted by 21 or 40%.

Taking note of the counts per centre (in the right side of the table) there also seems to be a trend by geographical area. The two centres of the South are frequent to note increases in "spirituality"; 96% of the responses from Matola and 63% of those from Maputo speak of "spirituality". In Tete, only 19% mention "spirituality"; the two high scoring for improvement are "abilities" which are mentioned in 56% of the responses and "biblical knowledge" 47% of the responses, not frequently mentioned in the South. The fact that most of the learners in the South are not pastoring; most in Tete and the North are pastoring may influence the findings. Such a trend would have to be researched further.

These perceived outcomes in their lives correlate with the "4 Cs" (content, competency, character and content) of the Nazarene OBE curriculum. These learners perceive that they had improved in the first three "Cs":

- *content* (knowledge) which 67% judged that they have improved
- *competency* (skills) which 63% considered themselves improved
- *character* (spirituality) which 69% say they have improved

The fourth Nazarene "C", *context* could be calculated by their responses which fall into the categories C, D, and F, and improvement in these areas does not surface frequently from the spontaneous responses.

The same data displayed in Table 4.70, organised by geographical area, is re-organised by the age group of the respondents and displayed in Table 4.71 below:

	Ability	Biblical knowledge	Caring, loving	Family improved	Dependability improved	Increased spirituality	# learners / responses
Group A 30 yrs & under	10 28%	7 19%	5 14%	0	7 19%	7 19%	8 /36
Group B 31-40 yrs	11 22%	6 12%	5 10%	4 8%	4 8%	19 39%	12/ 49
Group C 41-50 yrs	15 27%	9 16%	6 11%	2 3.5%	9 16%	15 27%	17/56
Group D 51-55 yrs	2 9%	3 13%	4 17% together	4 17% = 34%	5 22%	5 22%	6/23
Group E learners 68-75 yrs	3 16%	6 32%	0	1 .5%	2 1.0%	7 37%	5/19

Table 4.71 Codification of Changes Narrated in the Lives of Learners for >4 Years, Organised by Age

Discussion: The type of instrument and coding used above could be repeated with a broader sample to yield more reliable findings. "Increased spirituality" is the greatest perceived change in Groups B and E and ties for first place in Group C. The youngest group, A, perceived that they changed most in their abilities, 28% of them said that, then other improvement is scattered out over three categories. Group D has a unique pattern; since both categories C (caring, loving, visiting the sick) and F (improved relationships within the family actually deal with relationships, putting the two together in Group D indicates the area of greatest perceived change in them – relationships, which account for 34% of their responses.

Chapter 5 Synthesis and Conclusions

5.1   Reflective Discussion of Methodology

"The Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach" could have been designed within an "ethnographic research" framework because of the proximity to natural settings of the research population which was intended from the outset. However, as the lead researcher, I participated more actively than researchers normally do within ethnographic frameworks. Ethnographic researchers are typically less subjective, non-involved, almost "invisible" observers of the research process in order for the observations to be as objective and free from bias as possible. I needed to be an active learner-coordinator watching, listening, reflecting and acting alongside the other participants.

My research might have been a type of "evaluation research"; however, the learning system in which learning was going to be observed and researched did not exist yet when the data collections began in the year 2000, so that design would not work within the setting. Since there was no learning taking place, no resting base line was measured so quantitative comparisons were not possible either. Now, in 2006, "evaluation research" would fit well and would be beneficial to the parts of the learning system and the human components of it.

Participatory Action Research has been an excellent fit for the research study. Every characteristic of PAR is compatible with what has taken place in the study in Mozambique. Because I was a foreigner to Mozambique, living in an urban context, not the smaller villages of most of the learner population, it was extremely important for me to conduct the research within teams so that the data collected from round table discussions and analysed from other sources would not be interpreted by me alone but in team encounters which included long-resident missionary educators and Mozambican educators. The actions and reflections in the cycles which repeated several times during the phases of the research allowed the research to take place as the learning system grew and as the process of learning was taking place in the cooperative learning groups which were the settings for the reflections of the PAR team members. The other PAR team members have learned, with me, the practice of critical reflectivity, the importance of team-building and communication, and the potential of participatory expression.

Because of its holistic, relational style, sociological goals, and philosophical underpinnings, PAR research may not "seem like" research to positivists. It almost defies linearity, so positing "if 'x', then 'y'" argumentation promises only quase fit to PAR findings and presentation. The dynamic spirals of PAR inspire plausible explanations expressed in words of improved understandings not as hard facts.

Participatory Action Research conducted with all its style and goals within a conceptual framework of Arboric Research seemed to be an even better fit for my research. The Arboric framework is dynamic, even organic, and recognises that the system being researched is undergoing change such that the system at the beginning of the research is not the system at the end of the research. The parameters of the research setting itself change. In Arboric Research that change

is a "given", it is a known condition at the outset, and the action of the research is carried on within the ever-changing structures of the system by focusing on a "moving target" which, in the case of my study, was the learning in the minds of the developing leaders of the Church of the Nazarene in Mozambique. The learning was the life-giving sap within the semi-rigid but growing structures of the learning system. The structures affect the sap and the sap affects the structures, because the structure is a human structure, ever-changing.

5.2   Substantive Conclusions

From the outset, this study proposed to investigate "how holistic learning strategies facilitate learning" with learners from a specific context so it is called "The Efficacy of Holistic Learning Strategies in the Development of Church Leaders in Mozambique: an Action Research Approach". To define what "holistic" is, the broader constructs of holism and holistic personhood were explored, and a graphic model evolved which illustrates three sub-selves of a whole person, each one of the three sub-selves having aspects which impact the self.

In order to determine whether or not holistic learning strategies actually facilitate learning, a basic question was researched theoretically and empirically − *"Do holistic learning strategies facilitate learning?"* − and the concept itself "holistic learning strategies" was explored and well-defined. Models from other places of the world which used strategies which fit the definition of "holistic learning strategies" were explored theoretically and gave promise to the answer, "Yes, they do facilitate learning". The question "Do holistic learning strategies facilitate learning *in Mozambique*?" had to be answered empirically. Another preliminary question, "To what extent do holistic learning strategies advance the learning of leaders in development when used by minimally-prepared trainers?" was not answered in theory but several empirical findings contributed evidence to recognize, at least, some factors which limit the extent to which such strategies are effective.

The term "learning strategies" as opposed to "teaching strategies" focuses on the learning that is targeted to take place in the minds of the learners rather than the activities engaged in by the teachers. The "teachers", more appropriately called "facilitators of learning", contribute actively to the learning taking place within their learning setting by making multiple, tactical choices which affect aspects of the learning environment in which they are conducting learning encounters. Facilitators make decisions regarding aspects of the **physical setting** which are within their control, about their **relationships** to the learners and other **non-physical aspects** of the learning setting, about the **planning of series of "learning strategies"** which enhance the possibility of each learner to construct within her or his personhood and within the set of learners the knowledge, attitudes, skills and character traits defined and targeted as intended learning outcomes.

"Learning strategies" are considered "holistic" when they take into account that the learner who is benefiting by the "learning" is not considered only in terms of the cognitive increase but as a person who has spiritual dimensions and is learning within a social context. Holistic learning strategies, therefore, include social and spiritual learning as well as whole-brain learning. "Whole-brain learning" refers to

learning which activates the limbic brain as well as the cerebrum and the right hemisphere as well as the left hemisphere. Several holistic learning theories and "whole-brain" models were explored, Multiple Intelligences Theory (Gardner 1983), modular brain theory (Restack 1979, 1988, 1994, Gardner 1987, Pinker 1997, Harth 1982, 1993, Csikszentmihalyi 1993), several models of brain duality, the Triune Brain Theory (MacLean 1952 in Gross 1991) and the Four-Quadrant Brain Model (Herrmann 1994). Because it is so easy to understand and explain, I use the metaphoric four-quadrant model of Herrmann more often than the others, but all of the theories and models investigated in the literature contributed to the knowledge about holistic learning strategies which has been constructed during this study in Mozambique.

Within models of adult learning considered to be successful, "learning strategies" utilised which took into account spiritual and social learning were examined as potential candidates for use in the Mozambican context. Models screened in this way were those of Moses, the Synagogue, Jesus Christ, the Apostles, St. Augustine, Martin Luther, St. Ignatius of Loyola, the Wesleys, Freire, Laubach, and the educators who created and developed "Theological Education by Extension" (TEE). Within these models 31 learning strategies were identified as potentials to be used by the group of facilitators, called "monitors". Among those 31, seven seemed to fit the research definition of "holistic learning strategies" so these seven became the focus of the empirical research. The list below displays the 31 learning strategies including four kinds of discussions. The last six which are **in bold** plus "discussions of several kinds" constitute the "holistic learning strategies", i.e. those affecting all four quadrants of the brain, taking into account the social and spiritual sub-selves of the learner. The listing is organised by the brain quadrant of the four-quadrant model, with the main types of activity which Herrmann (1994) attributes to the quadrant:

Quadrant A: CODING / DECODING ACTIVITIES:
  1. actively and independently assessing Bible content
  2. hearing the Bible and text material read and explained
  3. memorizing Bible content
  4. reading the programmed Text Africa books
  5. regular group discussions based on main ideas (informational)

Quadrant B: ORGANISING / ORDING ACTIVITIES:
  6. taking of written exams
  7. answering questions in writing in the Text Africa books
  8. attending class at least 67% of the time
  9. discussions based on reasoning questions

Quadrant C: REFLECTING / ORAL-SOCIAL ACTIVITIES
  10. inviting God to intervene (prayer)
  11. encouraging and helping colleagues
  12. including peer tutoring in second-chance occasions
  13. reflection using several applications
  14. regular singing of songs
  15. choral reciting of truths
  16. working on projects together to buy books
  17. discussions based on application questions

Quadrant D: SYNTHESISING / GRAPHIC INTERPRETING ACTIVITIES:
  18. icon or visual clue interpretation

19. key words as tags, labels
20. pictures, maps, graphs
21. discussions based on key words
22. identifying heroes
23. appropriately applying Bible content to life scenarios

FOUR QUADRANT ACTIVITIES
24. rehearsing integrity: hero modelling / role-modelling /
25. role-taking/ self-sacrifice
26. team work: team building work projects /
27. pair or trio groupings /peer tutoring
28. classical spiritual disciplines
29. singing for learning
30. cooperative learning groups
31. praxis

The findings in the empirical study in Mozambique are inferential evidence, not the result of direct measurement. The findings consist of tabulating perceptions of the research population and reporting textual data gathered from many and varied sources, analysing discourse texts, coding themes and interpreting recurrent themes and disconforming evidence. By the end of the empirical study, the theoretical answers to the two preliminary questions and the empirical implications were those summarised in Table 5.1 below:

Do these holistic learning strategies facilitate learning?			
		THEORETICALLY	EMPIRICALLY
1	**Discussions** – of several different kinds	Yes, as per models: Freire, Laubach, Wesley, theological ed by extension (TEE), and theories of several adult learning theorists	Yes, as per multiple voices captured in round table discussions in multiple settings which crystalised and comparative analysis of video clips.
To what extent?		Learning from group discussions is definitely enhanced by having facilitators who speak the maternal languages even when written texts are in Portuguese and is optimal when materials to be discussed are written in the maternal languages of the learners.	
2	**Cooperative learning groups**	The same models as for discussions	Yes, as per the same research instruments as "discussions".
To what extent?		The fit of this strategy to the population was excellent, an extension of natural learning patterns in the collectivistic culture. When rated by 598 respondents, 96% found discussions "normal, very good or excellent".	
3	**Praxis:** action / dialogue / reflection	Yes, as per Jesus and the Apostles, Freire; TEE and Hasbrook (2002).	Yes, as per "how my life changed" statements from learners with >4 year of learning.
To what extent?		Success of praxis in "active learning" is manifested weekly in face-to-face sessions throughout 97 centres; of learners with >4 yrs of experience with holistic learning strategies, 89% of them perceive the change in their lives from learning has been "very great".	
4	**Teamwork**	Yes, as per theorists	Yes, as per data collections in many site visits across the country

To what extent?		Completion of any one course of IBNAL requires "teamwork" in many ways; support from leaders of church district, hours volunteered by the monitor, *cooperation* within learning group to discuss each unit of learning, to memorise in group the verses required working for book money. From 09/ 2000 to 09/2005, the number of courses completed via *bona fida* teamwork was 16 per monitor as per survey in 2005. Perception of "task" seems to be modulated by collectivism.	
5	**Rehearsing integrity**	Yes, as per theorists and models of Moses, the Synagogues, Jesus and each Christian model cited.	Crystalised findings in qualitative phases; ratings in hybrid survey.
To what extent?		Involving hero-identification, hero-modelling, role-taking & self-sacrifice, rehearsing integrity is not limited by circumstance. Goal of Christlikeness rated 96.5% "normal to excellent" of 598 respondents; high ranking of verse memorisation, too.	
6	**Singing for learning**	Yes, as per models of Martin Luther, John and Charles Wesley, African traditions	Occasionally yes, based on several trials, in several contexts, related to several content themes.
To what extent?		"Singing for learning" was generally unsuccessful in the research, probably because the singing was not being done in maternal languages or music in native rhythms and melodies; exceptions seem to indicate the need for learners to very thoroughly appreciate the words and/or to be emotionally linked to the song being sung.	
7	**Classical spiritual disciplines**	Yes, as per models: Jesus Christ, the Apostles, St. Augustine,Martin Luther, St. Ignatius of Loyola	Yes, based on introspective evaluations of course which includes them.
To what extent?		Though commonly practiced as habits in research population, use of classical spiritual disciplines as learning strategies produced glowing statements of value.	

Table 5.1 Summary of Empirical Findings Applied to Preliminary Research Questions

Discussion: Tables pack extensive data into brief words which occupy small spaces. My research report has many tables but probably none more important than Table 5.1 which displays the essence of about 250 pages of theory and empirical enquiry which constitute Chapters Two and Four of this report, so there is nothing in it that is not described in far more detail in previous discussions.

Theoretical research toward answering the major research question, "How do holistic learning strategies facilitate learning?" sought answers among several disciplines: cognitive science and cognitive psychology, neurology, brain-based education, and model describers and model builders. Expecting other findings to surface from the empirical study which proceeded in the manner described above, I formulated a tentative answer to the question at the end of the theoretical research: holistic learning strategies seem to facilitate learning by assisting the learner to make the sub-selves of his or her personhood "congruent" and "integral". The basic brain operations to produce congruency and integrity are patterning, categorizing, relating and connecting. By the end of the empirical study, some evidence had surfaced to support this explanation and that among basic brain operations were eight overlapping activities: the six already identified –

making congruent, whole-making, patterning, categorizing, relating, connecting – plus ordering and integrating.

One rationale for my Participatory Action Research project was to construct knowledge from Mozambique to add to five of the areas of adult learning which Brookfield identified in 1995 (7-8):

- Other cultural perspectives to break the Eurocentric and North American dominance in research in adult learning
- Solidify qualitative studies by means of survey questionnaires or experimental designs
- Work on spiritual and significant personal learning
- Understanding adult learning as a socially embedded and socially constructed phenomenon (as per Jarvis, 1987)
- Attention to the interaction between emotion and cognition

He urged "**inclusion of other cultural perspectives to break the Eurocentric and North American dominance in research in adult learning**" and as well as **"solidifying qualitative studies by means of survey questionnaires or experimental designs".** The whole project was carried out in Mozambique, led by an outsider but researched in broad and authentic teamwork for five years. As such it is an authentically Mozambican study in adult learning. The language used in the meetings of the teams of PAR was usually Portuguese, occasionally English. The languages used in the interface with the learner population in the field were the maternal languages of the learners (which number 33) or Portuguese. As Brookfield recommended, the statistics are derived from a hybrid survey, administered to adult learners and leaders scattered across the country. In the spirit of PAR which ascribes to participation as full as possible, the publishing of this research validates the "voice" given to Mozambican learners and church leaders who genuinely participated and actively benefit from the knowledge generated throughout the five years of this study.

The size of the whole population of Nazarenes involved either as learners or facilitators in the Nazarene educational system which are those targeted in these surveys is approximately 1,800 people made up of about 300 diploma-level graduates from the residential Bible School in Maputo and about 1,500 people who have been students of IBNAL, the decentralized delivery system of education through extension centres. The size of the population of respondents on the biographical data sheets is 952 approximately 52.9% of the estimated target population. There are 678 respondents who are students in the extension education system, 71.2% of the whole population. There are 588 "Adult Learners" by definition of their circumstances (they are students who are already 25-years old or more or they are younger students but already serving as church leaders, i.e. in "adult capacities".) The difference between 678 and 588 = 90 are learners who are not by age or position "adult learners". The stereotypical learner in this research, according to the descriptive findings gathered, is **male, 37 years old, speaks Changaan, Chewa, Lomwe, Makhua, Portuguese or Masena as his first language but prefers reading in Portuguese and already is serving in a position of leadership in the Church of the Nazarene of Mozambique in one of the five geographic areas of the country while he is a learner in the extension system called Instituto Bíblico Nazareno na África Lusófona**

(IBNAL). He has 6.3 years of formal public schooling and has completed 7 courses of IBNAL with a monitor who has completed 7.7 years of formal public schooling and who has facilitated 16 courses of IBNAL since September 2000. The statistics also show that the percentage of learners who would not qualify to be students in the programme of preparation in the residential Bible School (which has a seven year minimum of public schooling) is 61.5%. This means that **just over 60% of the IBNAL students (those learning in the cooperative learning groups of the extension centres) would be unable to come to the resident Bible School because of their insufficient level of their formal education.**

Among the research findings from Mozambique are themes Brookfield frequently discusses in the literature. Findings on three of these are briefly cited below"

- Sitting in a circle and open dialogue. These were very new strategies for learning settings in Mozambique, but the participants responded positively to them across the country. There was no dissenting voice among the many groups who gave spontaneous written responses individually to oral questions addressed to the group (Delphi technique). The ascent to "sitting in a circle and open dialogue" became a consistent and well-accepted strategy in learning sessions and in PAR sessions within the learning system across the country.

- Group discussions. Discussions are a natural "good fit" for the learning population in Mozambique. According to the model of Theological Education by Extension, TEE, the discussions are based on the uniquely designed student texts which standardise the knowledge base for all who participate in the discussions. They are conducted by the minimally-trained monitors who are at least bi-lingual, (several speak more than two languages), and so they can facilitate discussions in Portuguese and in one or more of the maternal languages. A high 75% of the research population is highly satisfied with the "skills of the monitors" even though the monitors only have, on the average. 7.3 years of formal schooling and the learners 6.6 years. The overall position of the research sample is that group discussions more satisfactorily facilitate learning when the group discussions themselves are conducted in the maternal languages and the textual material on which the discussions are based is also in the maternal languages.

- Critical reflection. I consistently consider critical reflection as a part of "**praxis**", as "dialogue-reflection-action" and it is a well-succeeded holistic learning strategy in this empirical study both in the lives of the learners and the monitors. The extent of the success of the learning strategy seems to be linked with the personal control the learner has over the *action* after specific dialogue and reflection have taken place in the cooperative group setting. The adults in Mozambique can become "more spiritual" as a result of "mini-praxis" utilized in extension education classes because nothing from their context, prevents them from "growing spiritually". However, forces beyond the personal control of the learners to transform, like economic ability, books in a second language that they understand imperfectly or district leadership which does not favour the establishment of

holistic learning settings in their district affect the extent to which "praxis" can be fully implemented, hence diminish the experiential aspect of the learning.

Brookfield recommended (1995:7-8) that more work be done among adult learners **"on spiritual and significant personal learning".** The PAR study in Mozambique consistently fits into this category of learning research**.** From the outset, the research takes several aspects of "spiritual" into account. Different views of "spirituality" as a theoretical construct were explored. A fundamental difference in these views is the source of "spirituality" which can be 1) within the self, 2) outside of the in some indefinite cosmic sense or 3) in God with a capital *G,* the Supreme Being, the position taken to define the locus of "spirituality" for the purposes of this research project.

Tri-dimensional personhood, the model of "self" used in this research includes the "spiritual self", "social self" and "whole-brained self" as the three principle and sub-selves, with "God" and "memory" always present and influencing the "whole person". The three sub-selves of the whole person can also be called "dimensions" of personhood, hence the term "tri-dimensional personhood". All three dimensions have points of entry and attachment, of input and output which are explored and illustrated in greater detail in graphics which follow.

Taking a number of learning strategies from historic models of "spiritual learning environments", "holistic learning strategies" was defined in this research as "whole-brained learning strategies" which also take into account God and the social self of the learner. Empirically, personal value is given to "spirituality" by the Mozambicans on the five different Participatory Action Research teams population by virtue of their life vocation. The population of leaders and learners in the PAR study in Mozambique are all actively involved in serving as or preparing to serve as leaders in the Church of the Nazarene, a Christian denomination. Overall, this research fits the recommendation of Brookfield to study "spiritual and personal learning".

"Spiritual learning" is evidenced empirically in findings which become crystalised by multiple voices in agreement from multiple contexts in the country during the qualitative phases of research and then from the choices indicated and quantitatively displayed as findings from the large hybrid survey administered. Finally, the introspective reports from the 53 learners with the broadest base of experience in the learning system (at least four years) express spirituality in repeated ways in the wording they choose to describe changes in their lives.

Several empirical findings corroborate the value the population attributes to environments which are "spiritual", among the findings:

- During phases of qualitative research (2000-2004), a recurrent theme was that "starting and ending learning sessions with prayer and brief attention to the Bible" was a pattern repeatedly affirmed by groups of participants all over the country. The results from the broad survey conducted in 2005 show that 503 learners or 76.6% rate the practice of "praying together" in the learning environment as "very good" or "excellent".

- The rating given by the learners concerning the overall goal of the learning system to "be like Christ", a spiritual goal, was highly rated by 67.7% of the learners and 69.4% of the whole population. Only 2.7% of the population rated the practice of "memorization of Bible verses for exams" as "low or poor", meaning that 97.3% of the population rated it as normal-to-excellent.

- The most frequently chosen area of impact of the learning system on their lives was "spiritual growth" (60%).

Gardner (1997) and Brookfield (1998) both write reflectively on people they call "moral exemplars" who are considered to be outstanding because of the lives they live poured out for the good of others. Gardner notes that these moral exemplars harness "knowledge…interests….skills" to a concern broader than self. I expected to find in the empirical study, that the research population would show that the people of the population regularly and consistently harness their "knowledge …interests…and skills" to concerns broader than their personal ones. The fact that the monitors who utilise holistic learning strategies to facilitate learning all are volunteering their time week after week, month after month and now have done this for over four years speaks highly of their lives poured out for the benefit of their learners and other wider concerns. The findings show that each leader who responded in survey had facilitated 16 courses of IBNAL; each one takes about three months to teach, 2-3 hours a week so these leaders have volunteered 400 hours of meeting time to benefit others by this particular ministry of service.

Brookfield ponders the lack of critical reflectivity of the moral exemplars observing that they seem to take pleasure in behaving in ways usually considered highly moral. Findings from three of the multiple variable questions of the broad hybrid survey show choices which reflect the pleasure the population finds in being "spiritual" which usually is considered within "high morality". Table 5.2 displays these findings:

Three Items Below are Multiple Variable Survey Questions					
	Rating of structured aspects of IBNAL (1-4)	Mean of number of respondents 598	**Value to Whole Population**		
			REGULAR ASPECT	RANK ORDER	PERCENTAGE
			Pray together	1	76.9%
			Be together	2	75.9%
			Skills of monitors	3	75.3%
			Sing together	4	70.1%
			Goal	5	69.4%
			Verse memorization	6	67.6%
			Group Discussions	8	64.4%
			Life Applications	7	64.0%
			Books	9	56.7%
`	**Choice of two aspects of GREATEST IMPACT of IBNAL -**	873 of 1031 total 158 missing	**Whole Population**	**Learners %**	**Leaders %**
			Relations 8.1%	07.6	09.6
			Skills 36.0%	36.2	35.3
			Knowledge 38.0%	38.0	37.2
			Appetite 50.7%	52.0	44.9
			Spiritual Growth ……………….59.8%	57.9	70.5
	Four spiritual activities which most help to draw close to God	**Whole population (793)** Attending church 64.7% Studying Bible 45.9% Fasting 32.8% Reading Bible 30.5%	**Learners (575)** Church 66.1% Study Bible 46.8% Fasting 31.8% Sunday School 31.8% Reading Bible 29.2%	**Leaders (134)** Church 53.7% Studying Bible 50.0% Fasting 42.5% Praying alone 38.1% Reading Bible 38.1%	

314

Table 5.2 Quantitative Response Summary from Large Hybrid Survey of 2005

Discussion: The 598 respondents rating 1 to 4 (1 = poor, 4 = excellent) the nine regular aspects of the learning system called IBNAL rate "praying together" highest among the nine regular aspects. Aspects more typical of learning settings like "group discussions" at 64.4% "very good or excellent" and the student books at 56.7% "very good or excellent" are lower than the ratings of "praying together" = 76.9%. "Praying together", "singing together" and "verse memorisation" are consistent patterns or habits of the population *in their weekly sessions of the learning groups*. These are not "church activities" but rather habits of their learning groups.

The research sample was asked to choose the "spiritual activities" they most preferred (implying the use outside of the cooperative learning group settings). They chose "attending church", "studying the Bible", "fasting" and "reading the Bible" as the practices most esteemed by the population. Gardner (1997:132) notes about the moral exemplars that they "established habits that led them to devote their lives to serving their fellow human beings. And, inspiringly, they saw service to others as part of their own personal growth". Within the research population in Mozambique findings in Table 5.2 show that habits of devoted service to God and to others are consistently practiced by the research population in Mozambique. These findings seem to show that actions, habits, interests and service in the population in Mozambique show patterns similar to those noted by Gardner and Brookfield in the lives of moral exemplars.

The fourth of the five areas mentioned by Brookfield for further work in adult learning and cited previously is **"understanding adult learning as a socially embedded and socially constructed phenomenon (as per Jarvis, 1987)"**. Jarvis was not an author of literature I reviewed, however, several of the African writers I reviewed spoke of the need to understand well the social realities which relate to learning in Africa. These writers described perspectives that were very pertinent for me, particularly, to take into account as I was new to Africa and I worked, researched and lived alongside Africans in various settings. The perspectives were like coloured threads of a new tapestry of meaning which was taking shape before my eyes, so I colour the quotes brightly:

- African learners should be given much more opportunity to work together in the classroom and on projects outside school. Grading of learners should be based on the ability to work together and facilitate the potential of others….most African people were required to adjust to the solitary nature of Western education, people used to the Western system can be expected to adjust to the co-operative system. Ideally, both systems need to be explored and, if possible, be made mutually inclusive (Mkabela & Luthuli 1997:8).
- In traditional African life a person depends on others just as much as others depend on him/her. The task of African philosophy is therefore to speculate about the communality of the individual in the African setting. It should provide conceptual frameworks for interpreting and analysing the humanness that *botho* and *ubuntu* capture. It should provide rational tools for critical reflections on personal wellbeing or human flourishing, on communal ethics and how these ought to impact on human conduct (Letseka 2000:182).

- Effective learning and teaching depend upon a learner's ability to comprehend what is communicated. At the same time language plays a major role in maintaining the culture and the identity of people (Mkabela & Luthuli 1997:55).
- If someone becomes arrogant or disrespectful of others on account of being rich, Africans have ways of cautioning against this sort of behaviour. The Sotho expression 'monomo ke moholi ke mmuoane' warns that worldly riches are like mist, which evaporates when the sun rises and begins to heat our surroundings....you might not be rich forever, but family and friends will always be there for you, through thick and thin (Letseka 2000:183).
- The holistic frame of reference for Africans therefore calls for a holistic approach in education to accommodate the African perspective (Mkabela & Luthuli 1997:39).
- The need in Africa is for an affordable model of theological training capable of helping the churches to reach as many Christians as possible in order to equip them to meet the challenges they encounter in their environment…as it [residential theological education] becomes more and more expensive, fewer and fewer people find their ways to residential theological institutions while the demands for more Church workers increase (Gatimu *et al* 1997:3).
- There is ample evidence to show that myths, folk tales, proverbs, songs and drums have always played an important educational role in traditional African life (Letseka 2000:189).
- Emphasis on an African language will create a consistent African value system which serves as a major carrier of culture (Mkabela & Luthuli 1997:56).
- When theological poverty has found its way into the pastorate, the result can only be a deterioration of the Christian ministries and loss of vision as to what the Church is all about (Gatimu *et al* 1997:3).
- Language has played a primary role in hampering African education and has contributed to the injustice and inequality experienced at African schools (Mkabela & Luthuli 1997:54).
- Nazarene leaders in Mozambique should be bilingual or "tri-lingual" (maternal language, Portuguese and English) (Mucavele 2002).
- The position of the African kings also reveals the African democratic traits. They are said to have been subjected to very specific authoritative orders from their people. Although being a leader was based on good qualities, being older in a group would not command respect if one was lazy, a troublemaker or a fool (Mkabela & Luthuli 1997:60).

I will not attempt to improve the clarity of what these African writers are saying. I quoted them in previous chapters and the above statements are strong in themselves. The intention for their inclusion in this summary is for non-African readers to revisit the perspectives on life in general which are different in Africa than in some other parts of the world. I hold that these differences are, as Thomas (2004:178) says "valid contributions to the process of education in the global village" not only the global village of the Church of the Nazarene to whom he was writing but also in the global village of reflective educators throughout other world contexts:

It is time that we as African begin to contribute [resources of all kinds to other world areas]. I am not contending that we have never contributed; I am suggesting that we work proactively and together with our US, English, Australian, Philippine, Korean and European counterparts. Every group, irrespective of their origin in the world, must make use of every opportunity to make valid contributions to the process of education in the global village of the Church of the Nazarene (Thomas 2004:178).

Gleaning from these and other African writers regarding Africanisation and from Hofstede (1997) regarding the issue of *collectivism vs. individualism* in societal structure, I determined to keep two issues ever before me as a backdrop to the action of research which was taking place in Mozambique under my leadership: 1) the influence *of societal* organisation, i.e. collectivism vs. individualism plus that of *instruction in maternal languages*. During the empirical phases of the study both the issues surfaced too many times for them to be authentically considered as "backdrop"; both definitely affect "*how* holistic learning strategies facilitate adult learning". Both grew in importance during the study so they became substance as they have been woven throughout the study…and on to "recommendations for further study".

The PAR research population in Mozambique has the multiple social contexts which influence the individuals who constitute it. These were identified and explored linguistically, academically, historically and categorically in the distribution of the ecclesiastical categories within the population. Figure 5.1 illustrates the kind of groups to which they belong:

Figure 5.1 The Social Contexts of the Research Population in Mozambique

The research population in Mozambique is

- "tribal", by birth into one of the 33 distinct ethnos identified by SIL
- "multi-lingual", by experience within the ethnic group and schooling and other public communication normally conducted in Portuguese

- "learner", by choice, part of a cooperative learning group
- "Mozambican", by birth
- "African", by birth
- "Christian", by choice
- "leader", by choice of those who are their followers
- "Nazarene", by choice or by influence of birth family

According to sociological theories, *in-group bias*, i.e. favouring those who belong to the same group, influences behavioural and attitudinal choices. Conflict arises within an individual when favour to one of the groups to which he or she belongs may be prejudicial to another group of his or her attachment.

The learning on which this study focused was learning constructed within "cooperative learning groups" which met and continue to meet weekly in the collectivistically-organised country of Mozambique for the several years of preparation it takes to become duly qualified and certified as ministerial leaders in the Church of the Nazarene. Although Portuguese is the official language the surveyed population numbering 952 speak 33 different maternal languages of which six languages accounting for 79% of the research population answering this question: Changaan, Chewa, Lomwe, Makhua, Portuguese and Masena. The other 27 languages account for 21% of the respondents. They are almost 80% male, 20% female and have an age spread from 14 to 79 years old, and average age of 37.3 years. This population chose "praying together" as the highest rated aspect of the learning system and "being together" as the 2nd highest rated. The second indicates individual satisfaction in the belonging to a "group of learners", one of the groups of attachment indicated above in Figure 5.1. The first rating indicates satisfaction with the group acting on the value they attribute to God by praying to Him *in the learning setting.*

The embedding of this population in a highly collectivistic societal structure provided continual challenge for me, the "outsider" (to collectivism) who grew up in an individualistic society, to be able to interpret with understanding some of the behaviour which was affected by dynamics of collectivism which I had read about but have not learned to predict with accuracy. This cultural and experiential limitation on my part constituted a significant reason for conducting the research in participatory teams with Mozambicans. Certainly the collectivistic dynamic 'relationship prevails over task' clearly surfaces in the empirical evidence. In the establishment of centres of holistic learning in the ecclesiastical districts, this dynamic is at work. In relation to "teamwork" as a holistic learning strategy, this dynamic influences. The importance of a task is affected by relationships. In teamwork, then the importance of the task to be jointly undertaken by those in the group is influenced by multiple relationships. Overall, for a task to become important to a learner it must be important to *someone* who is important to the learner. The issue of *collectivism vs. individualism* during the empirical study in Mozambique surfaced many times so that I have become convinced that is very important in the study of any human system. Sometimes it is loosely interpreted as "cultural differences" but that I consider to be too broad and uncritical a category. The issue of *collectivism vs. individualism* affects learning systems.

I end up agreeing very strongly with Brookfield that further work in adult learning include "understanding adult learning as a socially embedded and socially

constructed phenomenon". The PAR study in Mozambique offers a little insight into the truly interwoven ways that adult learning is socially embedded in collectivistic societies; but more accurate insight will be offered by the Mozambican(s) who will pick up the research and continue to interpret the study that has been jointly investigated so far. To this end I agree with another African, Vilakazi in Goduka (2000:80) who challenges Africans to "become anthropologists doing fieldwork on [our] people and on ourselves, as part of a great cultural revolution aimed at reconstructing Africa". At the end of my reporting, I keenly feel the need for Africans to do anthropological fieldwork on their own people, rigorously and academically to accurately describe to the rest of us African diversity, African transformation and African learners.

The final of the five areas recommended by Brookfield for further work in regards to adult learning which are addressed in my research is "attention to the interaction between emotion and cognition". In terms of models of the whole brain and the language which underpin them, this area could be restated as "attention to the interaction between right and left hemispheres of the brain" or "attention to both limbic and cerebral function in adult learning". The whole focus on "holistic learning strategies" throughout this study is attention to holistic learning, learning which includes *interaction between* and brain activity within both the domain of emotions and that of cognition. The next section posits a hypothesis which relates to this emotional/cognitive interaction.

5.3   Research Findings

Action research typically is concerned with social practice. One aspect of social practice scrutinised in this study is that of the facilitation of learning practiced by minimally-trained facilitators, called *monitors*, with learners, most of whom are adult learners already in positions of leadership in the Church of the Nazarene in Mozambique. Another is the interface of these learners with the several social groups to which they belong. A third aspect of social practice inherent in this research is the wide participation of several groups in the research which requires sensitive and consistent social ethics. The research teams which I led had to be sensitive to the diversity in some of the participating groups, homogeneity of others, in terms of language, economics, age, maturity, health and academic level of instruction, and we also had to be consistent throughout all phases and all encounters. Such rigor has produced a reliable set of empirical data which relates to adult learning. Action research, through consistent and scrupulous social practice, employs systematic enquiry which results in contributions to theorising.

The most significant contribution of my research is that, according to the empirical findings, **holistic learning strategies enhance the quality of adult learning, at least in settings like those in which learning was facilitated in Mozambique**. The findings indicate that the learning is improved by narrowing several gaps, perceived or real − 1) the gap between theory and practice, 2) the gap between right-brain and left-brain learning, 3) the gap between cognitive and emotional learning. The narrowing of these gaps ultimately leads to narrowing the important gap in the lives of the learners, 4) the gap between their aspirations and their performance.

When the gap between aspirations and performance is narrowed, the learner is satisfied. The learner experiences intrinsic satisfaction. The filling of this ultimate gap is attested to by the response from one of the men who has been in the learning system (IBNAL) for four years. When asked how learning had changed his life, he said:

> I had very little understanding. I was never well prepared for what I was doing. Now I am able to plan well a church service or lead the music or preach from the Bible on a number of topics. I feel well prepared. I didn't know that a pastor should be prepared, but now because of my training I can lead without difficulties.

This learner is typical of many in the research sample; he received the title and responsibility of "pastor" before he was equipped to be one; he was tolerating a falsehood, he was called "pastor" but did not know what a pastor knows how to do, nor did he understand what a pastor needs to understand to preach. He now is able to put knowledge into action and he "feel[s] well prepared". After learning holistically, here is no longer discrepancy or gap in his life between "what is" and "what should be", particularly "who *he is"* and "who *he should be"*. He has become a trained pastor so now he *is* what he *is called.*

Throughout my research I have believed that holistic learning strategies will be of interest to many educators, *if,* it could show that they do enhance learning. The findings seem to give evidence that holistic learning strategies contribute to the achievement of complex outcomes like attitudes and character traits which are frequently-targeted outcomes in many learning settings. In order for the wording of the findings to be clearer, I briefly describe some of the terms I used in the research.

Holistic learning strategies are a particular kind of learning strategies. I define *learning strategies* as deliberately chosen activities to engage a particular population of learners to facilitate their learning toward intended learning outcomes. The deliberate choices that the facilitators make of which learning strategy to utilise relates to the fit of the strategy in relation to several variables: the time, the learners and the other strategies being used in the learning encounter. The facilitators make in-process assessment of the appropriateness of a strategy and may switch strategies deliberately in order to better accommodate the dynamic evolving in the learning encounter. These activities are focused on a "mission" which is to build competencies into the life of the learner, thus they are *strategic* activities, i.e. "strategies" which focus on the learning in the lives of the learners. *Holistic* learning strategies are those which take into account that the learner is more than a brain-holder, that he/she is a person with social and spiritual aspects. *Holistic* learning strategies recognise the tri-dimensional nature of personhood of each learner, that he/she has a spiritual self to develop, a social self which needs to learn to relate to the several social groups to which he/she belongs as well as the mental self which is more frequently targeted in formal educational settings. So the focus on holistic learning strategies of this research naturally positions its content and findings in arenas of spiritual learning, personal learning and socially-embedded learning.

"IBNAL" is another term which merits definition at the outset of this discussion. IBNAL is the learning system in which the PAR study in Mozambique took place; it

is an acronym which in Portuguese stands for the "Nazarene Bible Institute of Lusophone Africa". Of relevance to understand concerning the research, IBNAL is a holistic system of learning in which pastors are trained to establish spiritual learning environments for groups of learners to learn cooperatively by the facilitators use of six other holistic learning strategies. Therefore, the seven holistic learning strategies which were researched in IBNAL were cooperative learning groups, praxis (dialogue, reflection, action), teamwork, singing for learning, rehearsing integrity, classical spiritual disciplines and group discussions of several kinds. When questions in the hybrid surveys of 2005 asked about aspects of "IBNAL", the respondents knew that IBNAL meant all of these aspects. Respondents knew that IBNAL included the seven holistic learning strategies specified above.

If holistic learning strategies enhance the quality of adult learning, then what about this empirical research qualifies it for contribution to "adult learning"? A large hybrid survey administered in 2005 as broadly as possible within the whole population of about 300 leaders of the Church of the Nazarene in Mozambique and 1,500 leaders-in-training in either the resident Bible School or the extension learning network (IBNAL), gathered responses from a self-selected sample of 952 people. The sample is geographically scattered throughout Mozambique, accessed by the monitors. Of the whole sample of 952 leaders and learners, there are 678 respondents who are IBNAL students, 71.2% of the whole sample. Students who were at least 25 years old or in a positions of church leadership normally occupied by an adult, were considered "adult learners" which includes 588 people or 68.8% of the whole sample. The other sub-group of the sample, i.e. the "leaders" who constitute the other 27.8% of the sample, would all be considered "adults", by virtue of their age or position, but not "adult learners". They are adults involved in the learning system.

My research starts with the exploration of the huge construct "holism" and proceeds through several other large theoretical constructs, like "holistic learning", "spiritual learning environments", "models of brain functioning" and "brain-based practice". However, the framework of Arboric Research helped me maintain the focus on the questions underlying the meta-theory:

- How do the parts impact the whole?
- How does the whole impact the parts?
- How does the germ impact the mature and vice versa?
- What are the elements the environment and the relation of it to the whole, and the relationship of the whole to the environment?

The "whole" of my study is the Nazarene system of education in Mozambique which has two main branches: the residential Bible School where the trainers (monitors) are trained and the extension education network called "Instituto Biblico Nazareno na Africa Lusófona" (IBNAL). The "parts" of my study are the people, the leaders and learners and the PAR team members, including me, all within the Nazarene system of education in Mozambique. **The "germ" of my study is the holistic learning occurring in the minds of the learners.** The "elements of the environment" are the varying contexts in which the leaders and learners of the Nazarene system of education in Mozambique live, work, minister and learn, not the least being the Church of the Nazarene.

Using the analogy of a tree, sometimes the bushy, overlapping branches of several sizes" i.e. the "messiness" of looking at the whole, would obscure for a time the "germ" of learning that was taking place in the minds of the learners. That is why their introspective statements which allow others to see into their own experiences allow me and others to zoom in like a microscope on the essence of the change occurring.

If holistic learning strategies *enhance the quality of adult learning,* then what kind of evidence would indicate "enhancement" of "quality"? Several descriptors of quality of adult learning surfaced in the theoretical sections of research: "better at reconciling thoughts and feelings" (Cohen 2006:83), "wisdom, practical intelligence…expertise…fluid intelligence" (Gravett 2005:6). Donovan and Wonder (1994:38-40) claim that "changing and learning are the keys to an exciting, fulfilling life". Hudson (1991) refers to mastering the "art of self-renewal". Taylor (in Marienau *et al* 2000:12) cites the reframing *life themes* which results in "a more complex, self-construction, and the possibility to be some other way". Evidence" of enhanced quality of learning would come from the learners' comments and choices about the learning taking place in their lives.

Descriptors from IBNAL students of the changes in their lives include the following (from Appendix K) who are among those in the learning system for over four years:

- I understand the value of marriage and living in harmony with my family. I not only understand the rules of preaching, but God has helped me with my pride, fear and self centeredness.

This IBNAL student mentions changes in his relationships, increased understanding of an ability (to preach) and different attitudes.

- Now that I am a part of IBNAL, I have learned much more of the scriptures and I am not embarrassed like before:

The self concept of this learner has shifted; since he has learned Scriptures he is no longer "embarrassed".

- I like to compare my past with the present, my present being such a better life. I console the sad and sick, hear the opinion of others and like the Bible.

This learner experiences pleasure when he thinks on what his life was compared to what it is not. This pleasure sounds like the "exciting, fulfilling life" that Donovan and Wonder describe above as a result of changing and learning.

- My whole life has changed, because I was so closed, and now I am open to learn. I know how to choose between good and evil.

This learner notes the "bottom line" – learning has changed his "whole life".

- From a 79-year old student: Before I started IBNAL, I had great difficulty understanding the Bible. Now I enjoy studying, I am getting better as a pastor.

This little old man bends and squints over his homework, but he "enjoy[s] studying" and he implies that this enjoyment is result of "understanding the Bible" and "getting better as a pastor".

The above quotes are from five of those who had been learners in IBNAL for more than four years. Another question on the survey asked them to choose how much

their lives have changed since they have been exposed to holistic learning strategies. Of the 53 of them 46 or 87% marked that their lives had changed "muito" (a lot). Their answers to open-ended questions for them to describe the changes in their lives, like the five examples above, were codified into six categories: abilities, biblical knowledge, more caring and loving, improved family relationships, increased dependability and increased spirituality. The results were then organised by the age of the learners in Table 4.71. The results show differences from one age group to another, the youngest learners noting increases in their abilities much more than those over 50 years old. Those over 50 noting progress in relationships. All 53 respondents noting increase in their spirituality.

In survey results from the large sample of 952 leaders and learners, increased biblical knowledge is only ranked third of five areas of impact of IBNAL. Bible knowledge would seem to have been an important outcome from their learning but "increased spiritual growth" was what those of the sample most esteemed. Spiritual growth seems to be fit the descriptor by Taylor (2000) of a "more complex, self-construction, and the possibility to be some other way".

If holistic learning strategies enhance the quality of adult learning, then what about this PAR study indicates *how* they enhance the quality? This question delves into the essence of learning and how holistic learning strategies relate to this essence. The answer to this question constitutes a synthesis which also relates to the narrowing of the four gaps specified above: 1) the gap between theory and practice, 2) the gap between right-brain and left-brain learning, 3) the gap between cognitive and emotional learning, and ultimately 4) the gap in the lives of the learners between their aspirations and their performance. The gap between learning theory and learning practice is the specific first gap. One of the holistic learning strategies researched, "praxis", specifically targets diminishing that gap but all seven of them help narrow this gap by dealing with the whole brain, so the first three gaps are narrowed by brain-based considerations.

The scientists describing brain functioning, especially the theory of modularity enabled me to *begin* to grasp some of the complexities and infinities of connections within the brain. However, because the modularity model is so difficult to explain and the four-quadrant metaphoric model (Herrmann 1994) is so user-friendly, I most frequently use the four-quadrant terminology. I use the metaphor to imagine and to lead others to imagine approximate ways that varying learning strategies work within the brain, activating first one quadrant, and then another, imagining other learning strategies which simultaneously activate more than one quadrant, and whole-brain ones which activate all four. Brain-based practioners, like Sprenger (1999), Caine and Caine (1991), Jensen (1994, 1997, 1998), Hulme (1996), De Boer *et al* (2001), du Toit (2002), Linksman (1996) and Gravett (2005), urge facilitators of learning to deliberately use varying strategies of facilitating learning. One reason to do this is to condition the learning to the preferences of the learners so that they will have a greater interest in the experience. The other reason is to strengthen synapses and grow more dendrites in the brains of the learners. I use the four-quadrant model to illustrate the plausible explanations that I give for how holistic learning strategies work in a brain-based way which will end up contributing to the question as to how holistic learning strategies enhance learning.

The "A" and "D" quadrants of the Herrmann (1994) model or the left and right cerebral hemispheres are connected by the *corpus collosum* (which is spelled two different ways in the literature, *callosum* and *collosum*). This structure of fibres is sometimes surgically severed to relieve patients of epilepsy of affectation of seizures to the whole brain. Cohen (2006:86) interprets the HAROLD model (Cabeza 2002) to include the possibility that neurons expand along the *corpus collosum*, crossing the divide between A and D.
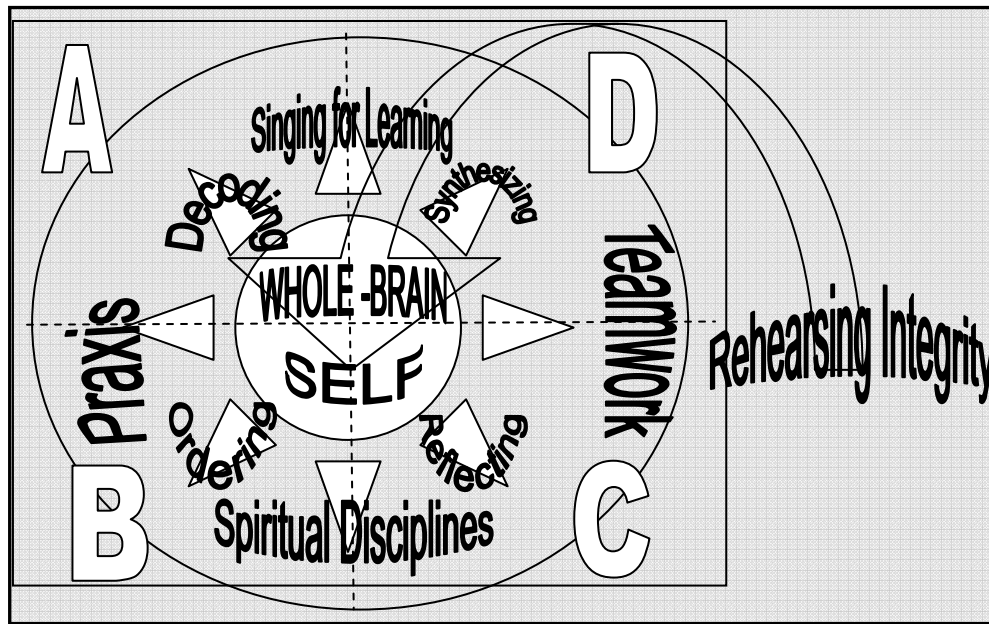
Figure 5.2 Holistic Learning Strategies Positioned on Four Quadrant Model

Figure 5.2, repeated from an earlier presentation, helps to visualise this: applying the ideas of movement of impulses generated by learning strategies across the *corpus collosum* by using the graphical representation of the four-quadrant brain model, switching from learning strategies which require the mental activity "decoding" of learners to a strategy requiring the brain activity "synthesising" would encourage the movement of impulses within the brains of the learners from quadrant A to quadrant D. Showing learners a photograph for them to observe critically, a quadrant D activity, then asking them to write about the photo, requiring quadrant A activity, would encourage movement of impulses from quadrant D to quadrant A, across the *corpus collosum.* The gap between right brain and left brain learning would be diminished by strategies which would stimulate both sides of the brain.

The limbic brain also has two hemispheres, the "B" and "C" quadrants of the four-quadrant brain model (Herrmann 1994) which are connected directly by the hippocampal commissure. Brain-based educators Sprenger (1999), Caine and Caine (1991), Jensen (1994, 1997, 1998), Hulme (1996), De Boer *et al* (2001), du Toit (2002), Linksman (1996) and Gravett (2005), and those who promote emotional intelligence (Goleman 1996, 1998), spiritual intelligence (Zohar & Marshall 2000) and spiritual learning Miller and Nakagawa (2003), O'Sullivan (1999), affective learning, Sonnier (1989), Wilson (2003) cognitive *and* emotional

Erickson (2001), Johnston (1996) all recognise the role of emotions in learning. The limbic brain functions in emotional learning and memory.

Learning strategies require the brain to sequence, reorganise and reorder are linked to quadrant B and those requiring reflection, discussion and tactile handling are C quadrant type activities so using them develop more dendrites and stronger connections in the limbic brain. To close the gap between cognitive and emotional would require movement from "A" (cognitive) to "B" or "C".

In the modularity theory of brain, the modules can be thought of as organised *vertically* in the brain. Applying this aspect to the four-quadrant model, impulses flashed instantaneously across vertically organized modules could travel from "A" to "B" or "A" to "C", crossing another "divide". This is how I imagine impulses using the theory of modularity imposed on the four-quadrant metaphor. For example, the encoding of language which activates quadrant "A" is vested with meaning by the reorganizing and sorting brain activities in "B" and rehearsed to speak aloud in "C" and represented recognized graphically in "D". For instance, while d-o-g is being encoded in quadrant "A", "B" gets busy sorting d-o-g into multiple categories "house pets", "furry" or "noisy mammals", "expensive" but impulses flashing over to "C" activate a connection between "d-o-g" and "fear" because of "a d-o-g that bit" a friend so the brain in "C" responds with a burst of impulse to "D" to put together the whole picture. "D" quadrant is not moved by the "fear" and sends the big picture back to "C" – "most d-o-g-s are harmless – relax".

The metaphor of brain modules being organized like "sprawling road kill" (Pinker 1997) can also be imagined on the four-quadrant model: a learning strategy starts activity in quadrant "D", a photo of Paul McCartney, for example and such knowledge (of who is in the photo) reminds the brain of knowledge in quadrant "C" of the tune "Yesterday" and when you begin to hum, and want to sing all the words, your brain searches here and there, in "A" for the proper encodings, and "B" for sentence sequences, back to "D" for the synthesis of words to melody and then the emotions flow, the emotions attached to the song from your past experiences with it. If the path of this processing could be drawn, it would not be a point to point, spiny geometric figure, but irregular bursts jumping multiple synapses to other neural clusters which also burst and scatter. The path of processing would look something like an egg splattered into hot oil or like road kill sprawled on the pavement.

> Cohen (2006:83) states that "magnified tremendously, the brain of a mentally active 50-year-old looks like a *dense forest of interlocking branches* [italics mine]". This image could also be combined with the four quadrant model. If the same sequence from "photo of Paul McCartney" to "the emotional flow from singing the words again to "Yesterday'" were imagined as "almost instant" growth of a grape vine, planted in one quadrant which quickly, like an image in a bad nightmare, grows, divides into branches that curl, twist and extend to each other. If this happened time and time again, the result would look like "a dense forest of interlocking branches". Perhaps the black squiggles lines on the four-quadrant figure below might help to imagine the idea of the "interlocking branches":
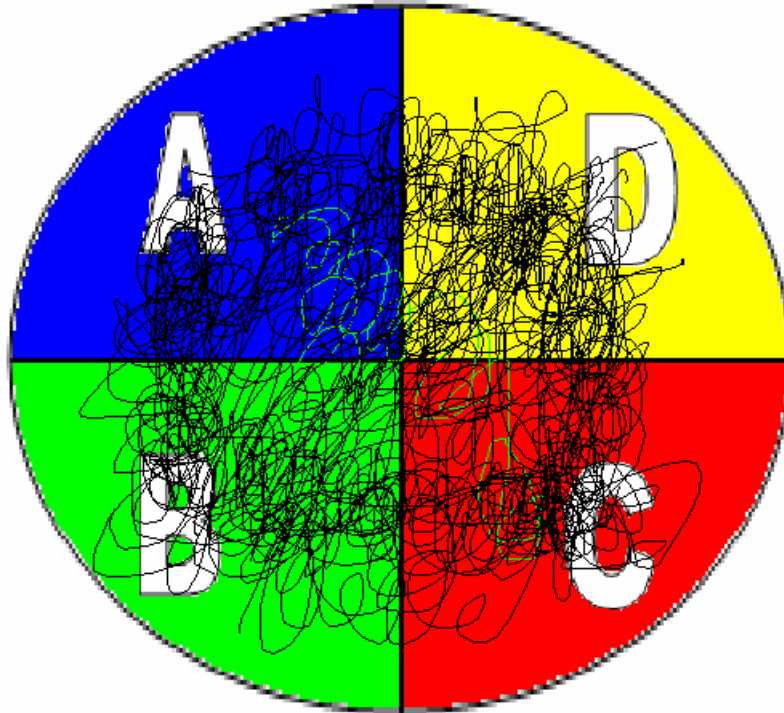
Figure 5.3 Four-quadrants of Brain with "Interlocking Neural Net" Sketched

Cabeza also refers specifically to the difficulty in determining "the cognitive processes engaged" by those undergoing neuro-imaging "since cognitive tasks can be performed in many different ways and *introspective reports* [italics mine] provide very limited information about the actual cognitive operations recruited by human subjects" (2002:92). Introspective reports are part of the empirical findings of my PAR study. As per Cabeza in the reference above, these reports provide "very limited information about the actual cognitive operations recruited", but they do provide *some* information. Cabeza does not call such information *invalid*; he calls it *very limited*. The technology of neuro-imaging that Cabeza uses will not soon get to Mozambique, not to Maputo in the South and much less to Mooma or to small centres in Tete Province, so the introspective reports in hand from these remote parts of the world do count as some, very limited information about the cognitive operations of these adult learners in Mozambique. From their introspective reporting of the learning which has taken place in their lives through the holistic learning strategies used with them over the period 2001-2005, findings surface that eight mental activities which I named patterning, ordering, categorizing, making congruent, making whole, relating, connecting and integrating have been evidenced by statements taken from two sets of introspective reports from the learner population of this PAR study in Mozambique.

In 1986 (148-49) adult learning expert Brookfield wrote, "We have had our attention as trainers and educators forced back onto the phenomenon of adult learning – how, when, and where adults learn". He indicated a return to a "bottom line basic" of education and training – is learning taking place? Can it be described? Can it be explained? Then in 1995 (1) Brookfield disputed the idea of constructing an "exclusive theory of adult learning – one that is distinguished wholly by its standing in contradiction to what we know about learning at other stages in the lifespan" and proposed that variables other than chronological age

326

may be more significant in explaining how learning occurs, like "culture, ethnicity, personality and political ethos" as potential variables of significance, but he said there may be others". This statement opens the distinct possibility that significant variables involved in learning may be:

- The use of the maternal tongue rather than a second or third language
- The issue of collectivism / individualism in the society of the learners
- The health of the brain of an individual
- The use of learning strategies which encourage whole-brain activity within a safe social context which respects diversity, in-group loyalties and spiritual preferences of the tri-dimensional learners
- Attention to developing the neural networking of the brain, specifically cross-hemispheric connections.
- The learner's sense of their own mortality.

Cohen, referring to his empirical work among older adults, says "a growing awareness of our own mortality" precipitates in adults in their 40s and 50s a re-evaluation of their lives which give "new perspectives on who we are and what we really care about...a new sense of quest and personal discovery (2006:83)". From the empirical study in Mozambique, I note that the proximity of death cannot be overlooked in the learning setting. Mozambicans deal with death very frequently. Since the proximity of death may create in learners in Mozambique a state-of-mind similar to the adults that Cohen studies who are in their 40s and 50s, i.e. their "awareness of [their] own mortality", then perhaps in Mozambique a more persistent or precocious "awareness of their own mortality" might contribute to them similar "new perspectives" on who they are and what they really care about and "new sense of quest and personal discovery" in their lives. Cskiszentmihalyi (1994:106) notes that "the early lives of successful men and women are often filled with an unusual amount of trauma and hardship (Cskiszentmihalyi & Cskiszentmihalyi 1993; Goerzel & Goerzel 1962)". Similarly Campolo (1994:215) joins with an observation from Frankl which is pertinent:

> While trapped in that nightmarish Nazi concentration camp, [Victor Frankl, the great Jewish psychotherapist] carefully studied and kept notes on the others around him…the difference between those who survived and those who died was not in their physical health or strength. Instead it was primarily dependent upon their ability to imagine a future that would express the joys of Shalom...the peace and joy of God…to see beyond the present.

The trauma and hardship of frequent deaths around them in Mozambique are aspects which are part of their reality. I expect this reality reinforces to the values of collectivism – the tremendous importance on relationships. In the hybrid survey, the least mentioned aspect of five selected as having the "greatest impact" of the holistic learning system, IBNAL, by far was "relationships". I interpret that their learning affects relationships very little because their relationships are already so well in tact. This finding from Mozambique, although not age-related but circumstance-related, would be consistent with the findings of Cohen that the awareness of mortality sharpens the sense of whom and what is really cared about. In general, the Mozambicans have reason to live prepared to die, facing

their own mortality, because they might die soon – their social context constantly tells them that.

The empirical section of this study ended with identifying eight types of actions I called "mental activities". I resonate with Gardner (1987:383) when he makes a plea for "cognitive science…to agree upon a language for talking about a range of representational phenomena – even if that language turns out to harbour various dialects". By now, 20 years hence, such language may exist. Perhaps the term "cognitive strategies" which Cabeza uses refer to the same thing as the term "mental activities" which I am using.

Gardner also (1987:394) describes the "parallel distributed processing" approach which helps me interpret my "mental activities". I break his description into parts in order to clarify the reference of my interpretations.

> ….there has been a shift to a different 'modal view' of cognition – a view in which psychological, computational, and neurological considerations are far more intricately linked…

The shift is towards holism, towards integrating knowledge from the three disciplines which he names: psychology, information processing, and neurology.

> Within the last few years, the principal claims and the broad ambitions of this the 'parallel distributed processing' …PDP approach…typically posits thousands of connections among hundreds of units (in principle, the approach can be extended to millions or even billions of connections).

Although the term "parallel" is used in this description it seems important to not get stuck on the idea of *two* parallel entities because the quantitative aspects of the processing he is describing are huge – thousands or millions or even billions of connections among hundreds of units. Few people deal normally with such numbers so, it requires reflection on vastness to capture the implication of this operation of "connecting" among millions or billions, "everything to everything" as Pinker (1997) put it.

> The resulting networks feature the signalling of excitations or inhibitions from one unit to another.

This "signalling of excitations or inhibitions" could apply to "patterning", "ordering" and "categorizing". It seems to me to be pertinent. I would like to explain this by means of the following anecdote: I am imagining an infinitesimally small signal (compared to the complexity of billions) from an "Impulse X" at the end of one dendrite close to the end of another dendrite. "Recognise me?" signals "Impulse X" to the end of the near-by "Dendrite A". "Remember a pattern like me?" "Oh, yes, you are like "Impulse R" who jumped the synapse to me five minutes ago. Come on across [the synapse]. "Impulse X" jumps across. "Excitation" occurs along the neighbouring dendrite as "Impulse X" proceeds to another potential synapse jump, another potential connection. The signal is repeated "Impulse X" asks again, "Do I fit a pattern you have met?" "NO!" says neighbouring "Dendrite B, "Go away. You are not welcome to my territory". "Inhibition" has taken place. "Impulse X" scurries elsewhere among the other billion pathways open to her. She

328

will find a synaptic "door" more open to her because she will fit a "patterning" or an "ordering" or a "categorizing" found in other dendrites.

> 'Perception,' 'action,' or 'thought' occur as a consequence of the altering of the strengths (or weights) of connections among these units.

When more impulses jump the synapses, the connection is strengthened. I picture the paths in Mozambique through knee-high grasses; at first pass, there is little change in the grasses; when a line of people walk the same path in file, the path is more easily seen to those who follow. "Weighting" of the connections can be influenced by frequency of passage across the synapses and also strength of individual impulses which pass. A child minimally affects the way the grass lies but heavy men wearing boots quickly bare the path to the soil, leaving clear marks of passage. Strong signals are sent by impulses which carry emotional loads with them and by impulses vested with importance and significance. Irrelevant and unimportant impulses make "light-weight" connections, if any at all.

> A task is completed or an input processed when the system ultimately 'settles' or 'relaxes' (at least tentatively) on a satisfactory set of values or 'stable states' in short, upon a 'solution'.

This settled, stable state could relate to "making congruent", "integrating" and "whole-making". As such, "making congruent" would be the stablising of a pattern, "integrating" would be combining sets of impulses satisfactorily, and "whole-making" would result in the most settled state, the most complete "solution". The "settled, stable state of solution" is the brain state of intrinsic satisfaction.

Now at the end of my research report, I am still seeking a more perfect metaphor or model for brain functioning. The four-quadrant metaphor is very user-friendly but it is static, it stands still, it doesn't move or relate, it is not organic, moving and dynamic like learning really is; it is not relational. I keep on using the several metaphors – dense thickets, holograms, road-kill, the "Y" – and usually opt to use the most user friendly, the four-quadrant to describe brain function but I have a hunch the 3-point "Y" is more accurate and that parallel processing theory within modularity to be more comprehensive.

This study continues to be cyclical and reflective, genuinely action research to the end. Reflecting over all the cycles I acknowledge that "whole making" produces intrinsic satisfaction in many human experiences:

- Listening to favourite music, thrilling to the patterns of the rhythms, and rising with the variations in the crescendos
- Solving puzzles, mysteries with "good endings"
- Watching a great movie which tells an "epic story in a moving way", "ends with a happy-ever-after relationship", "ties up the bad guys", vindicating the effort of "the good guys", "ends with provocative questions
- Intimate sexual encounters; climax
- The solution to a math problem an engineering problem, a relationship problem – the solution that works

- Wonderful worship in community, re-encountering the Saviour
- Saviour-encountering, be the saviour a cause, a person, or Christ Himself

Holistic learning strategies encourage the brain activity in both left and right hemispheres, in both cerebral and limbic regions in all four quadrants. This active learning narrows the gaps by deepening connections all over the brain. When educators encourage only cognition, they do not lead learners to their full learning potential When educators ignore the social self and/or the spiritual self of the learner, the learning does not reach its full potential. When full potential is not developed, gaps are created in what the learner knows, what she can do, who she is. As holistic learning strategies deliberately include aiming for social, spiritual and mental development, they enhance the quality of the learning by their whole-making; they fill in the holes and bridge the gaps.

At this point in joining theory and empirical findings, I feel I have not yet found the whole answer. After six years of enquiry in Mozambique and reading thousands of pages of literature produced by learned experts, I find this point in time to be only a pause…the end of the first course of a long meal; it is a foretaste, an appetizer with the real meal yet to come. At the end of six years of participatory action learning, I have more questions, perhaps better, more-informed questions than when I started.

- What are the components of "critical reflection"? Are the eight "mental activities" which I have identified part of critical reflection? If so, which of them are components of it?
- Do Mozambicans or Africans have more developed right-brain modalities of thought than Westerners? If so, is this linked with the collectivistic organisation of their society? If so, is it linked to their early life relational learning experiences liked being held close to the bodies of their principle care-givers during the early years of life?
- Do words people use reflect the way their brains are functioning? Are expressions like "tie it up", "connect the dots", "I got it together", something is "penetrating", "probing", "we connected", "we're 'on the same wavelength'" metaphoric descriptions of basic activities going on inside their brains?
- As Wesleyan theologians frequently say about the Christian sacraments – they are "outward signs of inward grace" – behaviour is outward sign of inward workings. Is this true about the relationship of outward human behaviour to brain workings?
- What happens when we spend time intensely thinking on something, deliberately analyzing what happened, or why, how, when or where it happened or should happen and do not find the answer then we "sleep on it" or "take a break" and the answer "appears" out of "no where"? Is that a relaxation of the left brain so that the right brain can synthesis the thinking and create an answer?
- Is "vertical thinking" (De Bono 1973) basically left-brain thinking and "lateral thinking" basically right-brain thinking?
- People who are left-brain dominant seem to take great pleasure in coding, ordering, sequencing, using simple and complex mathematical

operations: they seemed turned on by left-brain cerebral functions. Is this not emotional, hence limbic? If this observation is true, is it not consistent with the "Y" (MacKay cited by Harth 1993) metaphor of brain functioning?

I have a little understanding but I long to understand better. So, I end up sounding like so many of the writers I have quoted, "I know something…but the whole understanding of how learning is facilitated is still beyond me".
'

5.2 Recommendations for further research

As discussed previously the "seed" of this Arboric Research framework would be recommendations for further research like those described below.

- Other phases of this same project within the same population, continuing it as Participatory Action Research, continuing analysis of the data already collected as well as collection of further data toward improved understanding.

- Based on the findings of this PAR study in Mozambique, a PAR study in Angola could be conducted with similar research tools within the small, but developing network of IBNAL centres there. The population of Nazarene learners in Mozambique and that in Angola share several sub-groups so comparison of results from the two populations might substantiate or negate the findings of the study in Mozambique.

- During this study several questions concerning learning in a second or third language arose in respect to sub-selves of personhood. The questions were the following: What is the impact on learning in a second or third language? The perception of and expression of reality is altered, so is the reality itself altered? Is one social self the one that speaks the maternal tongue and another social self the one that speaks the colonial tongue? Can those two selves meld? What melds them? Exploration of these topics could be conducted using a series of short questionnaires and/or interviews of learners participating in the research which would end up being comparative case studies. Resting base lines on specific competencies could be established by the learners doing performance trials at the outset of the research.

- Institute a longitudinal study on a sample of the population measuring development of moral reasoning/judgment using Kitchener & King. (1994). *Developing Reflective Judgment.* (San Francisco: Jossey-Bass).

- What are the components of "critical reflection"? Are the eight "mental activities" (categorising, ordering, patterning, making congruent, connecting, integrating, relating, making whole) which I have identified part of critical reflection? If so, which of them are components of it? Research to answer these questions would be evaluative, using multiple reflective assessment tools in series.

- Table 4.49 shows that the third ranking aspect of satisfaction is the "skills of the monitors" and the eighth ranked aspect is the "value of group discussion". These data seem to present contradictions because one of the "skills" that monitors use certainly is that of conducting the group discussions. If the

population is highly satisfied (75.3%) with the skills, in general, of the monitors but not as satisfied (64.4%) with group discussions, the implication is that there are other skills of the monitor which are taken into consideration with the satisfaction indicated in their assessment of the monitor skills. Another implication is that the value of the group discussions is somewhat diminished by factors other than the skill of the monitors, like the academic diversity of the groups, for example. Data already collected can be used in other research projects to calculate further relationships and correlations within the surveyed population, including evidence as to what about the books renders them less satisfactory. After inferential analysis of the data collected, other exploratory surveying could be used to clarify and verify the findings.

- Do Africans, at least Mozambicans, regularly utilise more right-brain modalities of thought than Westerners? If so, is this linked with the collectivistic organisation of their society? Answers to these questions would require careful formulation of research tools probably within a design of ethnological research or comparative case studies, probably longitudinal.

- Research recommended for a student in theology: Is there any correlation between Wesley's quadrilateral of theology and brain functioning, particularly with the 4-quadrant model of brain functioning and personhood? If so, how is it linked, and how does such linkage relate to effectiveness in the practice of pastoral ministry?

- The last recommendation for further research would be very complex, requiring careful structuring and planning of the research design. It is a response which puts together positions from two writers previously referenced, Goduka and Bruner. Goduka (2000:80) rallies Africans to "'decolonize the academy' by reclaiming/affirming our indigenous story, cultural identity and voice' and by finding 'a synthesis between the [values of 'old'] Africa and the influences which have come with colonialism and 'modernity''. Bruner critically analyses "agentive and patientive forms of grammar" which may relate to the responsibility and/or obligation of the self in the various cultural/linguistic sub-selves of an individual. As Goduka observes, Mozambican would need to do this research. The population of my PAR study offers possibility for such probes since the learners in it are multi-ethnic and are already learning to be reflective. The stability of their current educational settings offers a semi-controlled space for careful linguistic analysis. The substance of the linguistic research would be result of the questions posed to the learner population, spoken and answered in both their maternal language and in Portuguese, the answers would be recorded and the texts critically compared. According to the substance of the questions, the research could have more than one application -- ethics, theology, sociology, learning or other.

Again, in this very last paragraph, I express the hope that the Mozambicans themselves, those participating with me in this PAR project and others will respond to the challenge to reclaim/affirm their indigenous story. They are equipped to accurately identify, give voice and share the vision for the depth of understanding concerning learning and identity in their maternal cultures and their maternal languages that could be brought to the fore by continuing to probe, to research and to write for the rest of the world to appreciate.

REFERENCES

REFERENCES

Anderson, L. W. & Sosniak, L. A. (1994) *Bloom's Taxonomy, a Forty-Year Retrospective*. Chicago: The National Society for the Study of Education.

ARCOSAC. (2003). *Sourcebook for Ministerial Development: Africa Region Manual Extension*. Florida, SA: Nazarene Education Service. Maputo.

Armstrong, T. (1987) *In Their Own Way.* Los Angeles: Tarcher, Inc.

Armstrong, T. (1993). *Seven Kinds of Smart: Identifying and Developing Your Many Intelligences.* New York: The Penguin Group. Armstrong.

Armstrong, T. (1994). *Multiple Intelligences in the Classroom.* Alexandria, VA: ASCD.

Atenmuller, E. O. (2004). *Music in Your Head*. New York: Scientific American, Inc. Scientific American Special. 4(1).

Bartle, N. R. (1998). Developing a Contextual Theology in Melanesia: Teaching the Bible with Stick Figures with Reference to Death, Witchcraft, and the Spirit World. Asbury Theological Seminary, Wilmore, KY. Unpublished paper.

Bartle, N. R. (2001). Developing a Contextual Theology in Melanesia with Reference to Death, Witchcraft, and the Spirit World. Asbury Theological Seminary, Wilmore, KY. Unpublished doctoral dissertation.

Bediako, K. (1995). *Christianity in Africa, the Renewal of a Non-Western Religion*. Maryknoll, New York: Orbis Books.

Bee, H. (1996). *The Journey of Adulthood.* Harlow, Essex: Prentice Hall.

Bergland, R. (1985). The *Fabric of Mind*. New York: Penguin Books.

Bible, K. (1982). *Wesley Hymns*. Kansas City: Lillenas.

Boddy-Evans, A. (2004). *About African History.* Available on line at: *http://africanhistory.about.com/library/weekly/aa-SharpevilleMassacre-a.htm.* Accessed 20 Nov. 2004.

Boff, L. (2000). *Holy Trinity, Perfect Community*. (Santissima Trindade , a Melhor Comunidade, Editora Vozes Ltda, Petropolis, Brasil, 1988.) Maryknoll, New York: Orbis Books.

Bonhoeffer, D. (1953). *Letters and Papers from Prison*. London: SCM.

Borda, O. F. (1998). *People's Participation, Challenges Ahead*. Bogota. Terceiro Mundo S.A.

Borror, D. J. (1960). *Dictionary of Word Roots and Combining Forms*. Mountain View, CA: Mayfield Publishing Company.

Bowling, J. Ed. (1997). *Church of the Nazarene, Manual, 1997-2001.* Kansas City: Nazarene Publishing House.

Brennan, H. (1997). *Memory*. London: Scholastic.

Briggs, P. (1997). *Guide to Mozambique*. Bucks, England: Bradt Publications.

Brookfield, S. (1986). *Understanding and Facilitating Adult Learning*. San Francisco: Jossey-Bass Inc., Publishers.

Brookfield, S. (1987). *Developing Critical Thinkers, Challenging Adults to Explore Alternative Ways of Thinking and Acting.* San Francisco: Jossey-Bass Inc., Publishers.

Brookfield, S. (1988). *Training Educators of Adults, the Theory and Practice of Graduate Adult Education.* London & New York: Routledge.

Brookfield, S. (1995). *Adult Learning: An Overview in A. Tuinjman* (ed.) International Encyclopaedia of Education. Oxford: Pergamon Press.

Brookfield, S. (1998). Understanding and Facilitating Moral Learning in Adults. *Journal of Moral Education*. 27(3) 283-301.

Brookfield, S. (2004). Stephen Brookfield: Teaching and the Adult Student, an interview. Jan/Feb 2004. CTE Newsletter (electronic version).

Brother Lawrence. (1982). *The Practice of the Presence of God* (1672 originally). Springdale, PA: Whitaker House.

Brown, L., Farr, B. & Hoffman, R.J. (1997). *Modern Spiritualities: An Inquiry.* Amherst, New York: Prometheus Books.s

Bruner, J. (1986). *Actual Minds, Possible Worlds*. Cambridge, MA and London: Harvard University Press.

Bruner, J. (1996). *The Culture of Education*. Cambridge, MA and London: Harvard University Press.

Bruner, J. (1966). *On Knowing, Essays for the Left Hand*. Cambridge, MA: The Belknap Press.

Burgess, S. (2002). *S.A. Tribes: Who we Are, How we Live and What we Want from Life in the New South Africa*. Epping, SA: David Phillip.

Byrnes, J. P. (2001). (2nd Edition). *Minds, Brain and Learning.* New York: Guilford Press.

Cabeza, R. (2002). Hemispheric Asymmetry Reduction in Older Adults: The HAROLD Model. *Psychology and Aging*. 17(1):85-100.

Caine, R. N. & Caine, G. (1991). *Making Connections: Teaching and the Human Brain*. Alexandria, VA: ASCD.

Campbell, D. (1997). *The Mozart Effect*. New York: HarperCollins.

Campolo, T. (1994). *Carpe Diem*. Milton Keynes, England: Word Books.

Chambo, F., ed (1999). Theological Education by Extension in Mozambique. Unpublished paper presented at Regional Conference of the Church of the Nazarene, Johannesburg, November 1999.

Clarke, A. & Erickson, G. (2003). *Teacher Inquiry Living the Research in Everyday Practice*. London: Routledge Falmer.

Civen, J. D. (1984). *Illuminations, a Ro-Mlen Alphabet, a Modern Spiritual Alphabet*. New York: Dodd, Mead & Company.

Cohen, G. (2006). The Myth of the Midlife Crisis. *Newsweek*. 16 January 2006.

Coleman, R. E. (1973). *They Meet the Master: A Study Manual on the Personal Evangelism of Jesus.* Wilmore, KY: Asbury Theological Seminary.

Colson, C. (1990). *The God of Stones and Spiders: Letters to a Church in Exile*. Wheaton, IL: Crossway.

Copley, B. (2000a). Holistic Intelligence. Presentation for Swedbank, Dublin, Ireland. 14 Sep.

Copley, B. (2000b). Community Building Principles and Practices. Presentation at Cogmotics Learningshop. Cape Town.

Copley, B. (2000c). Calling Circle, Crafting Council, Co-Creating Community and Making the World Round Again. Presentation at Cogmotics Learningshop. Cape Town.

Country Profile Republic of Mozambique. Review of African Political Economy. Available on-line at: http://www.roape.org/cgi-bin/roape/show/cmzb.html Accessed 30 December 2004.

Craker, R. J. (2000). Personal interview. Maputo, Mozambique.

Cranton, P. A. (1992). *Working with Adult Learners*. Toronto, Ontario: Wall & Emerson, Inc.

Crow, K. (1991). Essential Characteristics for Nazarene Pastors. Available on-line at: http://www.nazarene.org/ansr/articles/crow_01.html. Accessed 20 May 2003.

Csikszentmihalyi, M. (1993). *The Evolving Self*. New York: HarperCollins.

Dass, R. & Gorman, P. (1985). *How Can I Help? Stories and Reflections on Service*. New York: Alfred A. Knopf.

De Boer, A-L, Steyn, T., & du Toit, P. H. (2001). A Whole Brain Approach to Teaching and Learning in Higher Education. *South African Journal of Higher Education*. 15 (3), 185-193.

De Bono, E. (1973). *Lateral Thinking: Creativity Step by Step*. New York: Harper & Row, Publishers, Inc.

De Bono, E. (1976). *Teaching Thinking*. London: Penguin Books.

De Bono, E. (1985). *Six Thinking Hats*. Boston: Little, Brown & Co.

de Caussade, Jean-Pierre. (1989). *The Sacramento of the Present Moment*. San Francisco: HarperCollins Publishers.

de Dalmases, C. (1985). *Ignatius Loyola, Founder of the Jesuits: His Life and Work*. St. Louis: Institute of Jesuit Sources Fusz Memorial St. Louis University.

de la Hunt, R. (1990). A Man and His Vision, special review of the book The Holistic Smuts--a Study in Personality by Piet Beukes. *Odyssey*. April/May.

DeLong, R., Taylor, M. (1955). *Fifty Years of Nazarene Missions, Volume II*. Kansas City, Mo: Beacon Hill Press.

Diez, J. N. (1998). *Education and Participatory Research in People's Participation, Challenges Ahead*. Bogotá: Tercero Mundo S.A.

Diphofa, M., Vinjevold, P. & Taylor, N. (1999).Introduction in Getting Learning Right Report of the President's Education Initiative Research Project. Wits: The Joint Education Trust.

Donovan, P. & Wonder, J. (1994). *Forever Mind, Eight Ways to Unleash the Power of the Mature Mind*. New York: William Morrow Company, Inc.

Du Toit, P. (2002). Diagnostic Assessment of Educational/Training Practice. Unpublished Manuscript: University of Pretoria

Easum, W. (1993). *Dancing with Dinosaurs, Ministry in a Hostile and Hurting World*. Nashville: Abingdon.

Emge, D. R. (1988). Base Christian Communities: A Challenge to the Status Quo. Tulsa, OK: Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education (Tulsa, OK, November 5, 1988).

Erickson, H. L. (2001). *Stirring the Head, Heart, and Soul: Redefining Curriculum and Instruction*. London: Sage Publications Ltd.

Esselstyn, T. (2003). The Development of Nazarene Theological Education. E-mail response to outline of Nazarene history of theological education.

Esselstyn, T., Ed. (1999). *Sourcebook for Ministerial Development: Africa Region Manual Extension*. Florida, SA: Nazarene Education Services.

Fairbanks, L., Ed. (2001). *Manual (2001-2005) Church of the Nazarene*. Kansas City, MO: Nazarene Publishing House.

Ferris, R. W. (1990). *Renewal in Theological Education: Strategies for Change*. Wheaton, IL: Billy Graham Center, Wheaton College.

First, R. (1983). *Black Gold, The Mozambican Miner, Proletarian and Peasant*. New York: St. Martin's Press.

Floeter, N. (2004). The Meat and Methods of Military Survival Training. Ritzville, WA. personal interview. 15 Feb. 2004.

Foss, M. (1969). *The Founding of the Jesuits 1540*. London: Hamish Hamilton.

Foster, R. J. (1998). *Streams of Living Water: Celebrating the Great Traditions of Christian Faith*. New York: HarperCollins.

Freeborn, E. D., Tartaglia-Metcalf, J., Tracy, W., & Weigelt, M. A. (1994). *The Upward Call: Spiritual Formation and the Holy Life*. Kansas City: Beacon Hill.

Freire, P. (1970). *Pedagogy of the Oppressed*. New York: The Continuum Publishing Company.

Freire, P. (1994). *Pedagogia da Esperança, Um reencontro com a Pedagogia do oprimido.* (Pedagogy of Hope, a Re-encounter with the Pedagogy of the Oppressed). Sao Paulo: Colecao Leitura, Paz e Terra.

Freire, P. (1996). *Pedagogia da Autonomia, saberes necessarios a pratica educativa . Pedagogy of the Autonomous, Knowledge Needed for Educative Practice*. Brazil: Colecao Leitura, Paz e Terra.

Gardner, H. (1983). *Frames of Mind, the Theory of Multiple Intelligences*. New York: Basic Books.

Gardner, H. (1993). *Creating Minds, an Anatomy of Creativity*. New York: Basic Books.

Gardner, H. (1997). *Extraordinary Minds, Portraits of Exceptional Individuals and an Examination of our Extraordinariness*. New York: Basic Books.

Gardner, H. (1999). *Intelligence Reframed, Multiple Intelligences for the 21st Century*. New York: Basic Books.

Gardner, H. (1985-87). *The Mind's New Science, a History of the Cognitive Revolution*. New York: Basic Books.

Gatimu, K., Gachegoh, J., Oyiengo, K., Kithome, L., Suwa, B. (1997). *A Manual for Writers and Designers of TEE Study Materials.* Nairobi, Kenya: Uzima Press.

Gellatly, A. and Zarate, O. (1999). *Introduction to the Mind and Brain.* Lanham, MD: Totem Books.

Gifford, W. A. (1946). *The Story of the Faith; A Survey of Christian History for the Undogmatic.* New York: The MacMillan Co.

Goduka, I. N. (2000). African/Indigenous Philosophies: Legitimizing Spiritually Centered Wisdoms within the Academy in Balchin (2000) *African Voices in Education*. Landsdowne: Juta & Co. Ltd.

Goleman, D. (1996). *Emotional Intelligence: Why it can Matter More than IQ*. London: Bloomsbury.

Goleman, D. (1998). *Working with Emotional Intelligence*. London: Bloomsbury.

Gonzalez, J. L. (1985). The *Story of Christianity: The Reformation to the Present Day; Volume 2*. New York: Harper Collins Publishers.

Grandpierre, D. (1997). *Como Ter Uma Boa Memoria* [Avoir une Bonne Memoire]. Mem Martins, Portugal: CETOP.

Graves, F. P. (1910). *A History of Education During the Middle Ages and the Transition to Modern Times*. New York: The MacMillan Co.

Gravett, S. (2005). *Adult Learning, Designing and implementing learning events, a dialogic approach.* Pretoria: Van Schaik Publishers.

Grayzel, S. (1968). *A History of the Jews*. New York: Mentor Books.

Gross, R. (1991). *Peak Learning; How to Create your own Lifelong Educational Program for Personal Enjoyment and Professional Success*. New York, Penguin Putnam Press

Gultug, J. (Ed.) (1998). *Understanding Outcomes-Based Education: Teaching and Assessment in South Africa - Learning Guide*. Capetown: Oxford.

Gumbo, M. (2003). Action Research as a Relevant Process. Paper presented at Pretoria: Unpublished manuscript.

Hanna, R. (2000). Personal interview with Margaret Scott Maputo, Mozambique. 11 May 2000.

Harth, E. (1982). *Windows on the Mind, Reflections on the Physical Basis of Consciousness*. New York: William Morrow & Company, Inc.

Harth, E. (1993). *The Creative Loop, How the Brain Makes a Mind*. Reading, MA: Addison-Wesley Publishing Company.

Hasbrook, M. (2002). Blah or Praxis? Reflection in Freirean Pedagogy. Paper presented at the Annual Meeting of the National Council of Teachers of English, 92nd. Atlanta, GA, 21-26 November 2002.

Heimlich, J. E. & Norland, E. (1994). *Developing Teaching Style in Adult Education*. San Francisco: Jossey-Bass.

Henerson, M. E., Morris, L. L., & Fitz-Gibbon, C. T. (1987). *How to Measure Attitudes*. Newbury Park, CA: SAGE Publications, Inc.

Herrmann International. (2002). http://www.hbdi.com/SolutionsFor/education.cfm. Accessed 05 November 2005.

Herrmann, N. (1994). 5th printing. *The Creative Brain*. Lake Lure, NC: The Ned Herrmann Group.

Hiebert, P. G. (1976). *Cultural Anthropology*. Grand Rapids, MI: Baker Book House.

Hofstede, G. (1997). *Cultures and Organizations, Software of the Mind*. New York: McGraw-Hill.

Holdstock, L. (1987). *Education for a New Nation.* Johannesburg: Africa Transperson Association.

Holland, F. (1975). *Teaching Through T.E.E*. Nairobi, Kenya: Evangel Publishing House.

Holland, G. (1992). *Theological Education by Extension Study Materials: Which Way for a Changing Africa?* Nairobi, Kenya: Evangel Publishing House.

Hollingsworth, S. & Sockett, H., eds. (1994). *Teacher Research and Educational Reform*. Chicago: National Society for the Study of Education.

Howie, F. (1993). *The Mozambique Story.* Kansas City, MO: Nazarene Publishing House.

Howie, G. (1969). *Educational Theory and Practice in St. Augustine*. London: Routledge & Kegan.

Hudson, F. M. (1991). *The Adult Years, Mastering the Art of Self-Renewal*. San Francisco: Jossey-Bass Publishers.

Hulley, L. D. (1987). *Wesley, a Plain Man for Plain People*. Durban: Christian Printers.

Hulme, R. D. (1996). Use of Decision Models in a Diverse Learning Environment. Available on line at: http://www.csupomona.edu/~jis/1996/Hulme.pdf. Accessed 05 November 2005.

Hurst, D. V. (1994). *E Ele Concedeu Uns para Mestres* [And He Gave Teachers]. Deerfield, FL: Editora Vida.

Imel, S. (1995). Inclusive Adult Learning Environments. ERIC Clearinghouse. Digest #162.

Ingersol, S. (1998). Why These Schools? Historical Perspectives on Nazarene Higher Education. Paper presented to The Association of Nazarene Sociologists of Religion, March 1998 . Paper presented to ANS. Didache Faithful Teaching.

Ivan-Smith, H. (2004). Ministry Beyond Generationalisms. Keynote address at pastors' and spouses retreat, 20 January 2004. Camp Taconic, New York. Unpublished manuscript.

Jensen, E. (1994). *Super-Teaching, Master Strategies for Building Student Success*. Del Mar, CA: Turning Point for Teachers.

Jensen, E. (1997). *Brain Compatible Strategies*. San Diego: The Brain Store.

Jensen, E. (1998). *Introduction to Brain-Compatible Learning*. San Diego: The Brain Store.

Job, R. P. (1997). *A Wesleyan Spiritual Reader*. Nashville: Abindon.

Johnston, C. A. (1996). *Unlocking the Will to Learn*. Thousand Oaks, CA: Corwin Press, Inc.

Jones, A. (1992). *Sacrifice and Delight: Spirituality for ministry*. San Francisco: HarperCollins.

Jones, E.S. (1942). *Abundant Living.* New York: Abingdon-Cokesbury Press.

Jourdain, R. (1997). *Music, the Brain, and Ecstasy*. New York: HarperCollins.

Kelsey, M. T. (1984). *Christo-Psychology*. London: Crossroad.

Kember, D. (2000). *Action Learning and Action Research: Improving the Quality of Teaching and Learning.* Virginia: Stylus.

Kemmis, S. (1993). Action Research and Social Movement: a Challenge for Policy Research. Education Policy Analysis Archives.1(1).

Killen, R. (2000). *Teaching Strategies for Outcomes-based Education*. Lansdowne: Juta & Co. Ltd.

Kimbrough, S.T. (2002). *Orthodox and Wesleyan Spirituality*. Crestwood, New York: St. Vladimir's Seminary Press.

Kinlaw, D. (1998). *The Mind of Christ.* Wilmore, KY: The Francis Asbury Society.

Kivett, F. (1995). *John Wesley's Use of Small Groups For Spiritual Renewal*. North Carolina: Wesleyan Church Local Church Education.

Kornfield, D. (1976). Weaknesses in Theological Education by Extension. Discussion paper at Conference of Association of Christian Theological Educators in Africa (ACTEA) 30 May 1990. Limuru, Kenya.

Kreeft, P. (1990). *Making Choices: Practical Wisdom for Everyday Moral Decisions.* Ann Arbor: Servant Publications.

Lai, J. C. (1995). Andragogy of the Oppressed: Emancipatory Education for Christian Adults. Available on-line at http://www.eric.ed.gov/ contentdelivery/servlet/ERICServlet?accno=ED396104 Accessed on: 15 October 2005.

Laine, T., Ed. (1982). *Hallelujah March.* Lubbock, TX: Duncan Press.

Lambert, J., Ed. (1995). Oxford Affirmation. Oxford Consultation on Global Strategy for Nazarene Higher Education. Published position paper. Oxford, England.

Lambert, J., Truesdale, A. & Vail, M. W. (2000). Identity and Relationship, Emerging Models in Higher Education, Church of the Nazarene. Paper presented at Harvard University: October 2000.

Laubach, F. C. & Laubach, R. S. (1954). *Channels of Spiritual Power*. Westwood, NJ: Fleming H. Revell Co.

Laubach, F. & Laubach, R. S. (1960). *Toward World Literacy*. New York: Book Craftsmen Associates, Inc.

Laubach, F. C., Kirk, E. M. & Laubach, R. S. (1981, 1991). *Laubach Way to Reading, Teacher's Manual for Skill Book 1.* Syracuse, New York: New Readers Press.

Lawson, A. B. (1963). *John Wesley and the Christian Ministry, the Sources and Development of his Opinions and Practice*. London: S.P.C.K.

Leonard, R., Ward, P.M. & Schipull, D. (1989). *Individual Differences Due to Hemisphericity in Affective Education: Methods and Techniques*. Sonnier, I. New Jersey: Educational Technology Publications.

Letseka, M. (2000). *African Philosophy and Educational Discourse in African Voices in Education.* Landsdowne: Juta & Co. Ltd.

Lewis, H. (1990). *A Question of Values, Six Ways we Make the Personal Choices that Shape our Lives.* New York: Harper & Row, Publishers, Inc.

Lindsay, T. M. (1941). *A History of the Reformation*. New York: Charles Scribner's & Sons.

Linksman, R. (1996). *How to Learn Anything Quickly*. New York: Barnes & Noble Books.

Machava, M. (2004). Personal interview with Margaret Scott. Tavane, Mozambique. 28 December 2004.

Marienau, C., Taylor, K. & Fiddler, M. (2000). *Developing Adut Learners: Strategies for Teachers and Traineers.* San Francisco: Wiley.

Mandlate, S. (2005). Public class session, Seminario Nazareno de Mocambique, 21 February 2005. Maputo: Mozambique.

Mario, M., Fry, P., Levey, L. & Chilundo, A. (2003). *Higher Education in Mozambique*. Oxford: James Currey Ltd.

Master, J., Burish, T. and others. (1987). *Behavior Research*. San Diego: Harcourt Brace Jovanovich.

Maxwell, J. (2001). EQUIP material on Biblical models for leaders. Johannesburg: Unpublished manuscript.

Maytham, J. (2002). In Her Own Right - Graca Machel. ICON. Vol. 2:2003.

McKenna, D. L. (1999). *What a Time to Be Wesleyan!* Kansas City, MO: Beacon Hill Press.

McLean, J. E. (1995). *Improving Education Through Action Research, a guide for administrators and teachers.* Thousand Oaks, CA: Corwin Press, Inc.

McMorland, J. (2003). ALARPM World Congress, Reflective Session. Pretoria, SA.

McNiel, J. T. (1935). *Makers of the Christian Tradition From Alfred the Great to Shleiermacher*. New York: Harper & Row, Publishers, Inc.

McNiff, J., Lomax, P. & Whitehead, J. (1996). *You and Your Action Research Project*. London: Routledge.

Mezirow, J. (1999). Transformational Theory -- Postmodern Iues 1999 AERC Proceedings. Available on-line at: http://www.edst.educ.ubc.ca/ aerc/1999/99mezirow.htm#Top. Accessed 4 Feb 2006.

Middlewood, D., Coleman, M. & Lumby, J., Eds. (1999). *Practitioner Research in Education, Making a Difference.* London: Paul Chapman Publishing Ltd.

Miller, J. & Nakagawa, Y., eds. (2003). Nurturing our Wholeness, Perspectives on Spirituality in Education. Available on-line at: http://www.great-ideas.org/jmiller.htm. Accessed 3 March 2003.

Miller, K. A. (1990). Christian History: The 100 Most Important Events in Church History. Carol Stream, IL: *Christianity Today*, Inc. X(4).

Mindell, A. (1995). *Sitting in the Fire, Large Group Transformation Using Conflict and Diversity*. Portland: Lao Tse Press.

Mkabela, NQ & Luthuli, P.C. *(*1997). *Towards an African Philosophy of Education*. Pretoria: Kagiso Publishers.

Mouton, J. (1993). Critical Social Science and the Emancipatory Interest in *Emancipatory Education and Action Research, Davidoff, Sue, Julie, Cyril, Meerkotter, Kirk, Robinson, Maureen, Eds*. Pretoria: HSRC Publishers.

Mouton, J. (2002). *How to succeed in your Master's and Doctoral Studies, a South African Guide and Resource Book*. Pretoria: Van Schaik Publishers.

Mucavele, S. (2002). Recorded comments in minutes of Lusophone ANCA Conference. Maputo, Mozambique.

Neethling, K., Stander, H. & Rache., R. (2001). *Think Like Jesus*. Vanderbijlpark, SA: Carpe Diem Books.

Newberg, A., D'Aquili, E. & Rause, V. (2001). *Why God Won't Go Away, Brain Science and the Biology of Belief.* New York: Ballantine Books.

Newitt, M. (1995). *A History of Mozambique.* London: C. Hurst & Co.

Noelliste, D. (1993). *Toward a Theology of Theological Education*. Seoul: World Evangelical Fellowship Theological Commission.

Noffke, S. (2001). *Action Research: Towards the Next Generation in Day, Christopher, Elliott, John, et al, Eds*. Oxford: Symposium Books.

Nouwen, H. J. M. (1972). *The Wounded Healer*. New York: Doubleday.

Nouwen, H. J. M. (1977). *The Living Reminder, Service and Prayer in Memory of Jesus Christ*. Minneapolis: The Seabury Press.

Nouwen, H. J. M. (1981). *The Way of the Heart, Desert Spirituality and Contemporary Ministry*. New York: The Seabury Press.

O'Dell, C., Grayson, Jr., Jackson, C. with Essaides, N. (1998). *If only we Knew what we Know, the Transfer of Internal Knowledge and Best Practice*. New York: The Free Press.

Olasky, M. (2005). Model Missionary, David Livingstone. World, 16 July 2005.

Olin, J. C. (1990). *Catholic Reform: From Cardinal Ximenes to the Council of Trent 1495 - 1563.* New York: Fordham University Press.

O'Mearg, J. (1965). *The Young Augustine.* New York: Alba House.

O'Sullivan, E. (1999). *Transformative Learning: Educational Vision for the 21st Century*. Toronto: University Press.

Outler, A. (1964). *John Wesley*. New York: Oxford.

Palmer, D. (2000). *The Eureka Effect, the art and logic of breakthrough thinking.* New York: W. W. Norton & Company, Inc.

Palmer, D. (2001). *Breakthrough Thinking and The Eureka Effect, an interview with Professor David Perkins.* Boston: HGSE news of the Harvard Graduate School of Education.

Payette, F. A. (2002). The Role of the Holy Spirit in Transformational Learning. Asbury Theological Seminary, Wilmore, KY. Unpublished manuscript.

Pederson, E. (1993). *The Message*. Colorado Springs, CO: NavPress.

Pink, D. H. (2005). *A Whole New Mind, Moving from the Information Age to the Conceptual Age.* New York: Penguin Group.

Pinker, S. (1997). *How the Mind Works*. New York: W.W. Norton & Co. Inc.

Plueddemann, J. (2004). Do We Teach the Bible or Do We Teach Students? *ACTEA Forum*. No. 4

Plunkett, D. (1990). *Secular and Spiritual Values: Grounds for Hope in Education*. New York: Routledge.

Polman, A. D. R. (1961). *The Word of God According to St. Augustine*. Grand Rapids: William B. Eerdmans Publishing Company.

Posner, G. J. & Rudnitsky, A. N. (2001). *Course Design: A Guide to Curriculum Development for Teachers (6th ed.).* New York: Longman.

Reason, P. (2003). Quality in Action Research. Keynote address,.Pretoria: ALARPM 6th and PAR 10th World Congress. September 2003.

Reed, R. (2003). Lessons From the History of Higher Education in the Church of the Nazarene. Paper presented at Africa Region Theology Conference, November 2003. Johannesburg.

Reed, R. (2004). Minutes of ARCOSAC, August 2004. Unpublished minutes of meeting.

Republic of Mozambique - Council of Ministries. (2001a). Plano Estrategico da Educacao (PEE): Estrategia do Sub-Sector de Alfabetizacao, Educacao de Adultos e Educacao Nao-Formal (AEA/ENF) 2001-2005 .[The Strategy of

the Sub-Sector of Literacy Education of Adults and Non-Formal Education 2001-2005]. Maputo: Published public document.

Republic of Mozambique - Ministry of Education of Mozambique (MINED). (1998). Plano Estrategico de Educacao 1999-2003: Combater a Exclusao, Renovar a Escola. [Strategic Plan of Education 1999-2003: to Combat Exclusion and to Renovate Schooling]. Maputo: Published public document.

Republic of Mozambique - Ministry of Education of Mozambique - (MINED). (2000). Report on Literacy in Mozambique. Maputo: World Bank.

Republic of Mozambique - Ministry of Education of Mozambique - (MINED). (2001b). Estrategia para o Ensino Secundario Geral e Formacao de Professores para o Ensino Secundario. [Strategy for General Secondary Education and the Formation of Teachers for Secondary Education]. Maputo: Published public document.

Restrak, R. M. (1979). *The Brain, the Last Frontier*. New York: Warner Books, Inc.

Restrak, R. M. (1988). *The Mind*. New York: Bantam Books.

Restrak, R. M. (1994). *The Modular Brain*. New York: Touchstone.

Restrick, D. (2001). The Church of the Nazarene and the Mozambican Revolution, 1975-1987. Boston: Unpublished doctoral dissertation.

Restrick, D. (2004). Personal interview with Margaret Scott. Xai Xai, Mozambique. 27 December 2004.

Restrick, D. (2005). Handbook for Seminario Nazareno em Mocambique. Maputo: mimeographed handout.

Resource Institute International of Education (RIIE). (2003). A Global Strategy for Theological Education. Unpublished position paper.

Rothwell, W. J. (1999). *The Action Learning Guide Book: A Real-Time Strategy for Problem Solving, Training Design, and Employee Development*. San Francisco: Jossey-Bass.

Savahl, C. (1993). What Kind of Knowing is Socially Critical Action Research? in *Emancipatory Education and Action Research, Davidoff, Sue, Julie, Cyril, Meerkotter, Kirk, Robinson, Maureen, Eds.* Pretoria: HSRC Publishers.

Schank, R. C. (1991). *The Connoisseur's Guide to the Mind, How we Think,How we Learn & What it Means to be Intelligent*. New York: Summit Books.

Schirrmacher, T. (1999). An Appeal for Alternative Education Models for Church and Missions. Presented at the 1999 annual meeting of the Association of German Evangelical Missiologists.

Schultz, L. O. (1982). *Mozambique Milestones*. Kansas City: Nazarene Publishing House.

Schultz, L. O. (1997). *Only One Life? the Autobiography of Lorraine O. Schultz*. Kansas City: Nazarene Publishing House.

Scott, M. M. (2003). Down the Up Staircase. Johannesburg: Workshop presentation document.

Scott, M. M. (2001). The Formation of Nazarene Leaders in Mozambique. Maputo, Mozambique: Unpublished manuscript.

Scott, M. M. (2001). ACESA: ACESA (AFLAME) Supporting Growth by Education for the Harvest in Lusophone Africa, A Four-Year Thrust. Maputo, Mozambique: Unpublished manuscript.

Scott, M. M. (2002). *Aprender Como os Discipulos* (Learning Like the Disciples). Maputo, Mozambique: Empresa Moderna.

Scott, M. M. (2002). *Guia do IBNAL (Guide to the Nazarene Bible Institute of Lusophone Africa).* Maputo, Mozambique: Empresa Moderna.

Scott, M. M. (2004). Holiness Day In and Day Out. Maputo, Mozambique: IBNAL

Scott, M. M. (2004). Annual Report of IBNAL to SNM Board of Trustees. Maputo, Mozambique: IBNAL.

Scott, M. M., Scott, J., Chambo, F, Mirashi, B. & Mahalambe, L. (2003). *From JESUS Film to Viable Church*. Johannesburg, SA: Africa Nazarene Publications.

SIL. (2004). Ethno-linguistic map of Mozambique. Available on-line at: http://www.ethnologue.com/show_map.asp?name=Mozambique&seq=1. Accessed on: 5 July 2002.

Smit, B. (2004). Classnotes: Qualitative Research Designs, Qualitative Data Analysis. Pretoria: University of Pretoria. 16-19 August.

Smith, M. K. (1997). Paulo Freire. INFED. Available on-line at: http://www.infed.org/thinkers/et-freir.htm. Accessed on 14 July 2003.

Smith, R. G. & Thornton, M. (2001). *Tutor Training Manual, a Course for Those Facilitating T.E.E. Student Groups in Certificate and Higher Level Studies*. Nairobi: Evangel Publishing House.

Smith, T. (1962). *Called Unto Holiness, the Story of the Nazarenes: the Formative Years.* Kansas City: Nazarene Publishing House.

Snook, S. G. (1992). *Developing Leaders through Theological Education by Extension, case studies from Africa*. Wheaton, IL: Billy Graham Center, Wheaton College.

Snyder, H. A. (1980). *The Radical Wesley & Patterns for Church Renewal*. Downers Grove, IL: InterVarsity.

Sonnier, I. L. (Ed). (1989). *Affective Education: Methods and Techniques*. New Jersey: Educational Technology Publications.

Spener, D. (1990). *The Freirean Approach to Adult Literacy Education*. ERIC: National Center for ESL Literacy Education.

Spickard, P. R. & Kevin, C. M. (1994). *God's Peoples; A Social History of Christians*. Grand Rapids, MI: Baker Book House.

Sprenger, M. (1999). *Learning and Memory: The Brain in Action*. Alexandria, VA: ASCD.

Stockwell, M. (1992). *The Lord's Boy*. Kansas City: Nazarene Publishing House.

Stone, J. (2006). Report of the 2006 General Board, Church of the Nazarene. Available on line: http://www.ncnnews.com/archive/gnews0609.html#content449. Accessed 3 March 2006.

Strauss, C. (1998). *A Cognitive Theory of Cultural Meaning,* American Anthropological Association Meeting 1989. Washington, DC: Naomi Quinn.

Storr, A. (1992). *Music and the Mind*. New York: Ballantine Books.

Taylor, N., Diphofa, M., Waghmarae, V., Kholofelo, P. & S. (1999). Systemic and Institutional Context of Teaching and Learning in Getting Learning Right Report of the President's Education Initiative Research Project. Wits: The Joint Education Trust.

Taylor, P. V. (1993). *The Text of Paulo Freire*. Buckinham: Open University.

Teffo, L. J. (2000). *Africanist Thinking: An Invitation to Authenticity in African Voices*. Landsdowne: Juta & Co. Ltd.

Thomas, P. (2004). When the Bull Stops Bellowing: Hope for African Theologians and Educators of the Church of the Nazarene in Africa. Didache. Available on-line at: http://www.nazarene.org/iboe/riie/Didache/didache_vol3_2/thomas.html. Accessed on 9 Aug 2004.

Thornton, M. (1990). *Training TEE Leaders: a Course Guide*. Nairobi: Evangel Publishing House.

Tillich, P. (1968). *A History of Christian Thought*. New York: Harper & Row, Publishers, Inc.

Tracy, W., Ingersol, S. (1998). *What is a Nazarene? Understanding our Place in the Religious Community*. Kansas City: Beacon Hill.

Troutman, P. (1995). Theological Education by Extension in Mozambique. Unpublished paper.

UEM. (1999). Reforma Curricular Documento Base. Maputo Curriculum Committee.

Vail, M. R. (2000). Developing an Outcomes-based Curriculum. Johannesburg: Unpublished manuscript.

Vail, M. R. (2001). Outcome-based Ministerial Preparation – A Case Study. Available on line: http://www.nazarene.org/ed%5Fdidache/vol2_1.html. Accessed on 20 May 2003.

Vail, M. R. (2004). E-mail communication to Margaret Scott. 31 May 2004.

van der Horst, H. & McDonald., R. (1997). *Outcomes-Based Education: Theory and Practice*. SA: Kagiso Publishers.

Vulliamy, G., Lewin, K. & Stephens, D. (1990). *Doing Educational Research in Developing Countries*. Basingstoke, UK: The Falmer Press.

Vygotsky, L. S. (1962). *Thought and Language*. Cambridge, MA: The M.I.T. Press.

Walker, P. K. (2000). Personal interview. Maputo, Mozambique. 20 May.

Walker, P. K. (2001). Personal interview. Maputo, Mozambique. 24 August.

Walker, W. (1908). *Great Men of the Christian Church*. Chicago: University of Chicago.

Walker, W. (1959). *A History of the Christian Church*. New York: Charles Scribner's & Sons.

Webber, R. E. (1986). *The Majestic Tapestry*. Nashville: Thomas Nelson, Inc.

Wegner, D. M. (2002). *The Illusion of Conscious Will*. Cambridge, MA: The M.I.T. Press.

Wetmore, G., Ed. (1989). Extended Report of the Education Commission to the Twenty-Second General Assembly of the Church of the Nazarene. Indianapolis: Published report for international assembly.

Wilks, F. (1998). *Intelligent Emotion, How to Succeed Through Transforming your Feelings*. London: William Heinemann.

Wilson, R. (2003). Deep Teaching. Available on line**:** http://www.great-ideas.org. Accessed on 12 June.

Winter, R. D., Ed. (1969). *Theological Education by Extension Study Materials: Which Way for a Changing Africa?* South Pasadena, CA: William Carey Library.

Woodruff, R. L. (2001). *Education on Purpose: Models for Education in World Areas*. Kansas City: Beacon Hill.

Wurmbrand, R. (1982). *100 Prison Meditations*. London: Marshalls.

Zohar, D. & Marshall, I. (2000). *Spiritual Intelligence, the Ultimate Intelligence*. London: Bloomsbury Publishing Plc.

Zuber-Skerritt, O., Kalliath, T. (2003). From Little Things Big Things Grow. Keynote address. Pretoria: ALARPM 6th and PAR 10th World Congress.

A P P E N D I C E S

CD with Visuals of

- **Centres in South**
- **PAR team member comments**
- **Travel footage between Centres in Tete and North**

Appendix A Surveys Conducted in Phases One and Two

Sample A 1:
Survey questions to the lecturers at the Nazarene Bible College, Maputo, May 2000

1. Name, name of wife.
2. Where born.
3. 1st language
4. 2nd language
5. Present occupation
6. Present role in church
7. Which Christian workers had the most influence on your call?
8. What books (beside the Bible) contributed the most to your spiritual formation?
9. Of all the workers in Africa, who would be your choice for teaching the following subject areas:

   a. New Testament
   b. Old Testament
   c. Basic Theology
   d. Wesleyan Theology
   e. Church History
   f. Christian Ethics
   g. Christian Education
   h. Preaching
   i. Administration
   j. Music and Worship.

Example A2: The following questionnaire was sent by e-mail to the, then, four Area coordinators of the Church of the Nazarene in Mozambique. All four filled them out in detail.

July, 2000.

Dear Area Coordinator:

I know "surveys" can be a pain but I need information that only you have in order to put together a more relevant and complete plan for TEE in Mozambique. Jon and I have only been in country since May 5th so we are in a learning mode with a very sharp curve. My assignment is to develop to a new phase the plan proposed by Fili Chambo last fall. [Nov. 1999] Please, please take 5 minutes to answer these few questions. Thank you. Margaret Scott

1. Your centres:
   a. How many centres had classes in 1999 or 2000?
   b. How many of these have electricity?
   c. How many centres would you like to have functioning?
   d. What is the limiting factor for these to function?
   e. I'd like to recommend a very basic set of educational tools for each centre (who know where the money would come from, but…hey, let's dream a little). I'm thinking of a Bible dictionary, a Bible atlas, a world map, Bible maps, an Africa map, a Mozambique map, a Portuguese dictionary and a wind-up (for power) cassette recorder with an audio version of the "JESUS Film" sound track at least. What do you think of this idea? Do you have additions to the "basic set"?

2. Your students:
   a. What is the most common level of instruction that your students have? I mean do "most" start TEE with a 2nd or 3rd grade level of learning of "most" start with 5th? Or with zero instruction?
   b. Please guess at a percentage between students studying to be pastors, students planning to be laymen.
   c. What are the first languages of most of your students?
   d. Do you think it would be of some advantage for your students to do their TEE work in their first language? Or do they do fine in Portuguese?   Please comment:
   e. We are thinking of encouraging TEE students to improve their instructional level by also studying as "external students" in order to take the 5th grade and then 7th grade exams, especially if the students want to seek ordination. What do you think would be the biggest limiting factors on this recommendation: expense of coming into town to take the exams? Lack of time to study independently? Lack

of motivation or interest in doing this? Lack of competency in Portuguese? What do you think about this idea?

3. Your teachers:
    a. About how many teachers do you have?
    b. What preparation do they have?
    c. If a seminar (2-4 days) were planned this year for your teachers, what month and what locality would be the best place for it to happen?

4. The licensing on your districts:
    a. When people on the districts of your area are seeking a local license, what are the prerequisites for them to complete?
    b. When candidates are seeking a district license, what are the prerequisites?

5. If you had a "magic wand" what would you love to see happen for TEE in your area?

6. What could we (the Scotts) do to help you in your area?

7. We are thinking of requiring three quarters worth of work in TEE before admission to the Seminary in Maputo for any student. This would give more connection with the local church, time for confirmation of the call, etc. What do you think of this idea?

8. What could/should the Bible School do to help you in your area?

Appendix A 3: Instrument to Assess Learning Strategies in Experimental "Methods" Class Of Volunteer Students at Bible School, July 26, 2003

Assessment of Strategies Used

0 = I don't remember this one so I don't have an opinion.
1 = I did not like it; I would prefer not to use it again.
2 = It was okay but not very positive.
3 = It was all right for me.
4 = I liked it.
5 = I liked it a lot and intend to use it in groups that I lead.

- Verse-by-verse analysis of a Bible passage   0 1 2 3 4 5
- Group discussion about a passage 0 1 2 3 4 5
- Individual meditation on a passage   0 1 2 3 4 5
- Reading a passage from several versions 0 1 2 3 4 5
- Comparing versions in group discussions 0 1 2 3 4 5
- Identification of attitudes and characteristics of "saints" today 0 1 2 3 4 5
- Identification of activities that strength me spiritually 0 1 2 3 4 5
- Representação duma passagem por drama 0 1 2 3 4 5
- Reflecting about the feeling and thoughts of the disciples in the boat 0 1 2 3 4 5
- Individual meditation on the title of Jesus in songs that I know well 0 1 2 3 4 5
- Reflecting and writing about what happened in class sessions 0 1 2 3 4 5
- Choosing someone in the group to be the representative 0 1 2 3 4 5
- Choosing a hymn for the group to learn well   0 1 2 3 4 5
- Singing songs that linked with the Bible   0 1 2 3 4 5
- Hearing little explanations about the link between songs and the Bible 0 1 2 3 4 5
- Lectures about the 4 quadrants of the brain 0 1 2 3 4 5
- Demonstration of cerebral matter of a goat 0 1 2 3 4 5
- Putting notes up on papers on the walls 0 1 2 3 4 5
- Having debates, discussions and questions in class 0 1 2 3 4 5
- Reading and filling out a student text   0 1 2 3 4 5
- Giving attention to the Disciples as models 0 1 2 3 4 5
- The use of active songs and movement in the classroom 0 1 2 3 4 5
- Sitting in a circle   0 1 2 3 4 5
- The use of several different activities in each session 0 1 2 3 4 5

- Which strategy did you appreciate the very most? (Put a ✛ behind it)

Appendix A 4: HOW do you study? And how do you get closer to God? 7-12- 2004

Put an "X" in the all the squares that identify you
1. male ☐ or female ☐
2. student of SNM ☐ student of IBNAL☐ pastor☐ monitor☐, superintendent☐
   other ☐
3. from which area of Mozambique are you? 1 ☐, 2 ☐, 3 ☐, 4 ☐, 5 ☐

Put a circle around the last grade level that you passed:
<div align="right">

1ª 2ª 3ª 4ª 5ª 6ª 7ª 8ª 9ª 10ª 11ª 12ª Higher

</div>

> **This is not an exam!** It is a written interview for you to give your own opinions and experiences. Please respond with sincerity. Doing this you will help us in IBNAL.

For each one of the following questions, first read all of the answers that are possible. Then choose the answer that you think best and write "**1**" on the line in front of it. Then select another answer that is your second choise and put a "**2**" on its line. Then choose one to be your third choice and put a "**3**" on its line.

A. When you are preparing for tests, which method do you prefer?
   _____ 1. Talking with classmates about class notes
   _____ 2. Studying alone
   _____ 3. Copying my class notes onto a clean notebook
   _____ 4. Writing out my class notes in a different way
   _____ 5. Reading over my notes, silently, to myself
   _____ 6. Reading over my notes, aloud, to myself.

B. Now about prayer, we would like to know which way of praying brings you closer to God. Please mark your 1st, 2nd and 3rd choices.
   _____ 1. Alone and silently
   _____ 2. Alone and aloud
   _____ 3. In church when everyone prays at the same time
   _____ 4. In church when one person leads others in prayer
   _____ 5. In a small group of 5-12 people, all praying at the same time.
   _____ 6. With one or two other people.

C. There are several spiritual activities that help us to strengthen our faith. Choose the three that help you the most by putting a 1, 2 and 3 beside them.
   _____ 1. Praying alone   _____ 5. Going to church
   _____ 2. Praying in group   services
   _____ 3. Reading the Bible   _____ 6. Fasting
   _____ 4. Studying the Bible   _____ 7. Singing or music
                                          _____ 8. Meditation

D. All of us face temptations. Sometimes it takes us a while to realize that we are being tempted. But when we see, "I am being tempted", what happens in your mind in that exact moment that helps you to resist the temptation? What do you think in that exact instant?

E. Which course that you had this year was the one you think learned the most from and why did you learn more from it than from others?

F. In your whole life, through what experience do you think you learned the most about God? Was it in a class or in a crisis or a spiritual meeting or through a book or some other means? Please it with me, writing about it on the back of the page.

Appendix A5 Instrument to collect input from District Superintendents May 28, 2003

BIBLE INSTITUTE OF LUSOPHONE AFRICA

Dear District Superintendent of Fingoe:

Christian greetings from Maputo. IBNAL wants to serve the districts of the Church of the Nazarene in the Lusophone Field. We would like to improve our service to you. We are asking you to respond to three questions to help us in this intent. These three relate to the period of time from June 2002 to May 2003.

- ✓ To the positive: IN your opinion, what was the value of IBNAL for your district?
  _____
  _____
  _____

- ✓ To the negative: What do you think are the weakest point of IBNAL on your district?
  _____
  _____
  _____

- ✓ Suggestions Please complete this sentence: if I could change one thing about IBNAL it would be
  _____
  _____
  _____

For the Facilitator of IBNAL in your area or district to complete:

1. Name of your district: _____
2. How many centres were active during this period _____
3. How many monitors turned in reports of courses of IBNAL during this period? _____
4. How many students completed at least one course in this period? _____
5. What do you think are the biggest needs of your district that IBNAL may be able to help with?
   _____
   _____
   _____
   _____

Thank you for your attention to these subjects. MM Scott

Maputo, 28 May 2003

A 6 Instrument to comment input about books and reading: May 3, 2003

IBNAL   NAZARENOS EM TETE   3 de Maio de 2003

1. Your name is _____

2. How old are you ? _____   Man or woman ? ____

3. Which administrative district do you live in? Zumbo Maravia Chifunde, Macanga, Angônia, Tsangano, Moatiza, Changara, Chiuta, Cahora Bassa, Magoe, Mutarara

4. When you were a child, did you go to school? Yes or No

5. If "yes", for how many years did you go to school? _____

6. If you went to school, what did you use to take notes?   _____

7. If you went to school, did the teacher have a blackboard and chalk? Yes or no

8. Do you know how to read? Yes or no

9. If "yes", do you read in Portuguese or another language? _____

10. Do you have books in your house? Yes or no

11. If you have some books in your house, how many, (approximately)? _____

A7 Short Survey Administered to Monitors to Discover Current Practices in their Cooperative Learning Groups

1. Aproximately how many courses of IBNAL have you facilitated?_____

2. In relation to filling in the student texts before arriving to the cooperative group, we would like to know how this works in your setting. Pick the answer that best describes what happens in your face-to-face sessions, by putting an "x" in front of it.

Normally, how many of the learners have the answers written in before they come to the group?
   A. almost none of them
   B. almost all of them
   C. about half of them

3. Still in relation to filling in the student texts before arriving to the group session, what is your procedure during the session toward the learners who do not have their textbooks filled in?

   ____A. they can be in the group session but they are not allowed to participate in the discussions

   ____B. they can be in the group session and they participate actively in the discussions

4. In relation to what normally happens during group discussions:

   A. learners speak in Portuguese
   B. learners speak in their maternal languages
   C. learners speak in Portuguese sometimes, maternal languages at others

5. Still in relation to what normally happens during group discussions: learners speak in Portuguese
   A. all learners partipate freely
   B. usually 2 or 3 engage in debate and the others are quiet
   C. the participation varies from week to week

Appendix B: Arboric Research: Human Systems Analysis

Description/ Definition	Arboric research aims to assess a whole human system by critical discourse about its parts and accurate description of them and of the inter-relationships between the parts and the whole and between the parts.
Design classification	Empirical	Hybrid data
	Quantitative & Qualitative	Medium control
Key research questions	How do the parts impact the whole? How does the whole impact the parts? How does the germ impact the mature and vice versa? What are the elements the environment and the relation of it to the whole, and the relationship of the whole to the environment?
More specialized design types	Research questions represent varying domains of functionality such as "the four C's" of learning domain: Content, Capacity, Character and Context.
Typical applications	Multi-level assessment over time, *in situ*, of the satisfaction of the partners in the community with the empowerment and functionality of the system which is described by community members; assessment of process management is pertinent.

Meta-theory	Critical observation of the whole instead of the parts plus integrative analysis are reliable because
	    A. every part impacts the whole;
	    B. the whole impacts the parts;
	    C. parts impact each other;
	    D. isolation or dissection of the parts means
	        a. alteration of the natural state at best
	        b. crippling or death at worst.

Conceptualisa-tion /mode of reasoning	What are the parts of a system which produces authentic learning? Analogous to any complex plant or animal, the living, dynamic whole consists of the following:
	    A. a cycle of life; life from life; "chicken or egg?" – either may be chosen to begin dialogic observation.
	    B. fertilization; union, genetic coding;
	    C. embryonic life: vulnerable, potential, immature in function and structure, different from its adult form;
	    D. growth: dimensions;
	    E. development: diversification of structure and gradual achievement of function of all parts;
	    F. renewal or rigidity-to-death

Selection of cases/sampling	Sampling intends to be extensive to all levels and to many parts of the whole; full participation encouraged.
Mode of observation/ sources of data	All available data collection methods, including structured and semi-structured methods.
Analysis	Integrative, synthetic descriptions; comparative analysis, including relational, chronological and dialogical; descriptive statistical graphics including tables and examples.
Strengths	High usefulness to the specific "whole" and all of its parts; affirmation of value, ownership and empowerment of the parts.
Limitations	Possibility to access only approximate real "whole"; medium generalisability.
Sources of error	Participant bias; sampling errors; selectivity effects.

Appendix C Verses to Commit to Memory for the first 14 Courses of the IBNAL Programme

Worldviews

In the past God spoke to our forefathers through the prophets at many times and in various ways, but in these last days, he has spoken to us by his Son, whom he appointed Heir of all things, and through whom he MADE THE UNIVERSE! The Son is the radiance of God's glory and the exact representation of all things by his powerful word. Hebrews 1:1-3

Just as a man is destined to die once, and after that to face judgement, so Christ was sacrificed once to take away the sins of many people; and he will appear a second time, not to bear sins, but to bring salvation to those who are waiting for him. Hebrews 9: 27-28

God's Plan for Health & Peace

Therefore confess your sins to each other and pray for each other so that you may be healed. The prayer of a righteous man is powerful and effective. James 5:16

Do you not know that your body is a temple of the Holy Spirit, who is in you, whom you have received from God? You are not your own; you were bought at a price. Therefore honor God with your body. 1 Corinthians 6:19-20

Make every effort to live in peace with all men and to be holy; without holiness no one will see the Lord. Hebrews12:14

Therefore just as sin entered the world through one man, and death through sin, and in this way death came to all men, because all sinned. Romans 5:12

The Minister as a Student

But the Counselor, the Holy Spirit, whom the Father will send in my name, will teach you all things and will remind you of everything I have said to you. John 14:26

There are different kinds of spiritual gifts, but the same Spirit. 1 Corinthians 12:4

I can do everything through him who gives me strength. Philippians 4:13

Then Jesus came to them and said, "All authority in heaven and on earth has been given to me. Therefore, go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And Surely I will be with you always, to the very end of the age". Matthew 28:18-20

The Minister as Communicator and Model

Set an example for the believers in speech, in life, in love, in faith, and in purity. 1 Timothy 4:12b

It was he who designated some to be apostles, some to be prophets, some to be evangelists, and some to be pastors and teachers, to prepare God's people for works of service, so that the body of Christ may be built up until we all reach unity in the faith and in the knowledge of the Son of God and become mature, attaining the full measure of perfection found in Christ. Ephesians 4:11-13

Worship

Do any of the worthless idols of the nations bring down rain? Do the skies themselves send down showers? No, it is you, O Lord our God. Therefore, our hope is in you, for you are the one who does all this. Jeremiah14: 22

God is spirit, and his worshippers must worship him in spirit and in truth. John 4:24

Sing to the Lord a new song, sing to the Lord all the earth. Psalm 96:1

For great is the Lord and most worthy of praise; he is to be feared above all gods.Psalm 96:4

Introduction to the Holy Scriptures

Jesus did many other miraculous signs in the presence of his disciples, which are not recorded in this book. But these are written that you may believe that Jesus is the Christ, the Son of God, and that by believing you may have life in his name. John 20:30-31

Above all, you must understand that no prophecy of Scripture came about by the prophet's own interpretation. For prophecy never had its origin in the will of man, but men spoke from God as they were carried along by the Holy Spirit. 2 Peter 1:20-21

Life of Jesus I

[Mary] will be with child and give birth to a son, and you are to give him the name Jesus. Luke 1:31

Jesus said to him, "Away from me, Satan! For it is written, 'Worship the Lord your God and serve him only.'" Matthew 4:10

 [Jesus said], "Anyone who does not carry his cross and follow me cannot be my disciple". Luke 14:27

In the same way, let your light shine before men, that they may see your good deeds and praise your Father in heaven. Matthew 5:16

Life of Jesus 2

Simon Peter answered, "You are the Christ, the Son of the living God". Matthew 16:16

Jesus said to her, "I am the resurrection and the life. He who believes in me will live, even though he dies". John 11:25

At that time, the sign of the Son of Man will appear in the sky, and all nations will mourn. They will see the Son of Man coming on the clouds of the sky, with power and great glory.
Matthew 24:30

Now that I, your Lord and Teacher, have washed your feet, you also should wash one another's feet. John 13:14

The Foundations of the Christian Faith

In the beginning, God created the heavens and the earth. Genesis 1:1

If you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him. Romans 10:9

For God so loved the world that he gave his one and only son, that whoever believed in him shall not perish, but have everlasting life. John 3:16

But the cowardly, the unbelieving, the vile, the murderers, the sexually immoral, those who practice magic arts, the idolaters and all liars—their place will be in the fiery lake of burning sulphur. This is the second death. Revelation 21:8

Evangelizing and Church Planting

For all have sinned and fall short of the glory of God. Romans 3:23

For the wages of sin is death, but the gift of God is eternal life through Jesus Christ our Lord. Romans 6:23

Jesus declared, "I tell you the truth, unless a man is born again, he cannot see the kingdom of God". John 3:3

From JESUS Film to Viable Church

[Jesus said], "When I am lifted up from the earth, I will draw all men to myself". John 12:32

To the weak I became weak, to win the weak. I have become all things to all men so that by all possible means I might save some. 1 Corinthians 9:22

A gentle answer turns away wrath, but a harsh word stirs up anger. Proverbs 15:1

Thy word is a lamp to my feet and a light for my path. Psalm 119:105

The Mission and Manual of the Church of the Nazarene

We proclaim him, counselling and teaching everyone with all wisdom, so that we may present everyone perfect in Christ. Colossians 1:28

Then [Jesus] said to his disciples, "The harvest is plentiful, but the workers are few. Ask the Lord of the harvest, therefore, to send out workers into his harvest field". Matthew 9:37-38

Let us not give up meeting together, as some are in the habit of doing, but let us encourage one another—and all the more as you see the Day approaching. Hebrews 10:25

He must hold firmly to the trustworthy message as it has been taught, so that he may encourage others by sound doctrine and refute those who oppose it. Titus 1:9

The Life of Prayer

Do not be anxious about anything, but in everything, by prayer and petition, with thanksgiving, present your requests to God. Philippians 4:6

Faith comes from hearing the message, and the message is heard though the word of Christ. Romans 10:17

If we confess our sins, he is faithful and just and will forgive our sins and purify us from all unrighteousness. 1 John 1:9

For where two or three are gathered together in my name, there am I with them. Matthew 18:20

Practicum in Prayer

This is how you should pray:
"Our Father in heaven,
hallowed be your name,
your kingdom come,
your will be done,
on earth as it is in heaven.
Give us this day our daily bread.
Forgive us our debts,

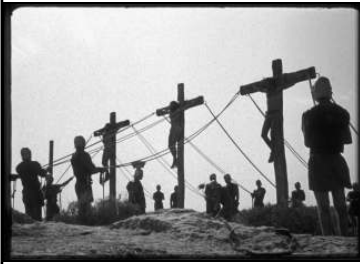as we also have forgiven our debtors.
And lead us not into temptation,
but deliver us from the evil one.
For yours is the kingdom, the power, and the
glory, forever.
Amen".
Matthew 6:19-13

Appendix D1 Visual Cues from Leaflets used with the JESUS Film

What kind of changes does Jesus' death on the cross make in people who repent of their sins?

From **Luke** 24: 46-47: [Jesus told His friends]: "This is what is written: The Christ will suffer and rise from the dead, and repentance and forgive-ness of sins will be preached in His name to all nations".

Read **John** chapter **5,** verses **24-27**.

People who have had many sexual partners become faithful in the way they live.

Luke 7:37, 38, 48 tells how a sinful woman visited a Pharisee's house where Jesus was eating. She brought an alabaster jar of perfume and wept at his feet. As her tears wet his feet, she wiped them with her hair, kissed them and poured perfume on them. Jesus said to her, "Your sins are forgiven".

Read **John 11:1-5, 21-25,** and **45.**

**Even friends of Jesus who betray Him can repent and be forgiven and blessed by Him.**

Luke 22:45-62 tell how Jesus was arrested. In verse 34, Jesus told Peter: "I tell you, Peter, before the rooster crows today, you will deny three times that you know me". Peter insisted that he would never deny Jesus, but he did, the rooster crowed, and Jesus looked at Peter. Peter went away and wept bitterly. And Jesus forgave him.

Read **John 21: 11-17**.

356

Appendix D2 "ICON-LIKE FIGURES WHICH ARE "PACKED"WITH SIMPLE CONCEPTS OF THE "STORY OF GOD" COMPILED BY *MÁRIO NETO JORDAO MARRENGULA*, 04/05/2002; MAPUTO- MOCAMBIQUE
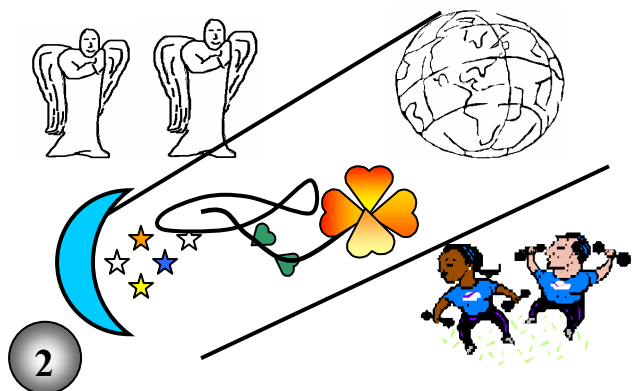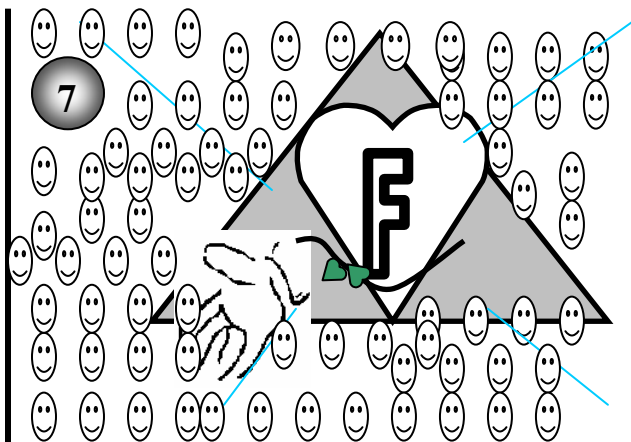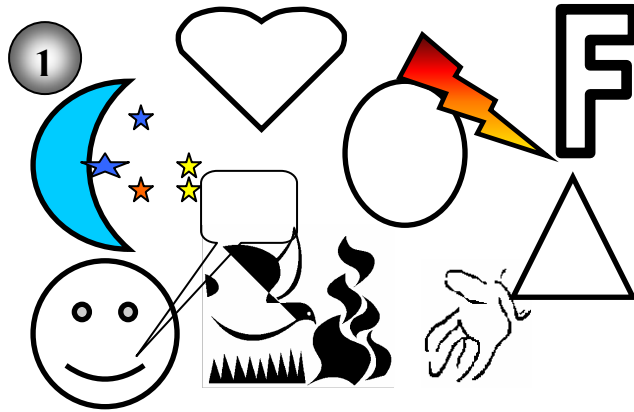
3
- Adão, Eva, Filhos
- Noé
- Abraão, Isac, Jacó
- Moises, Josué

Reis, Juízes, Profetas

4
3 anos
V.T.

5

6
2ª
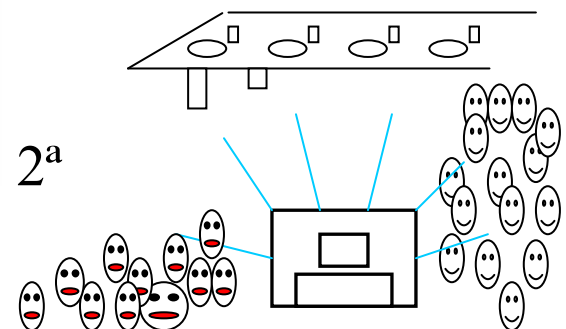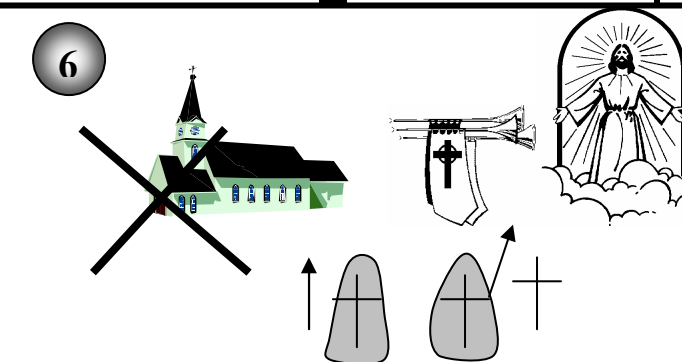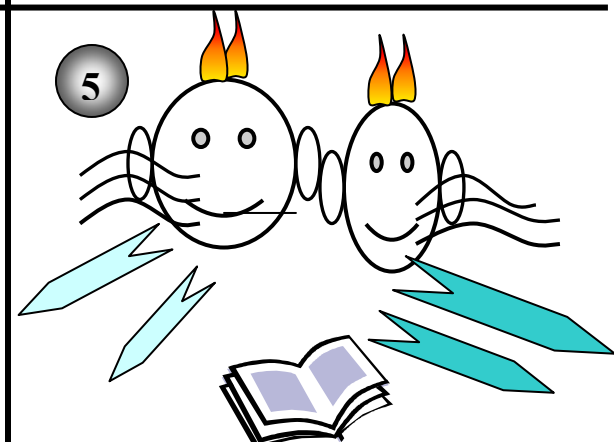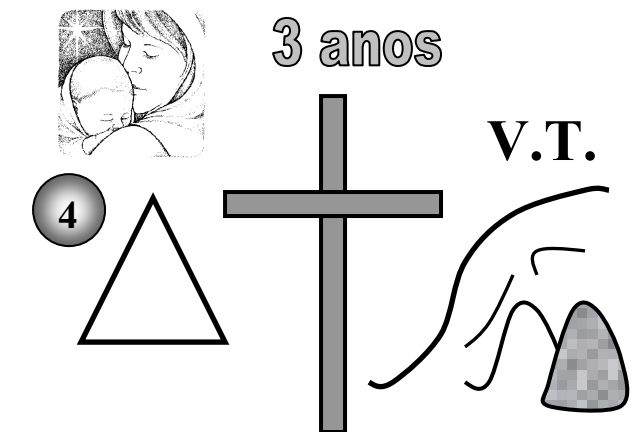
Appendix E News Article about December 2002 event with picture

Maputo, Mozambique. The place: campus of Seminario Nazareno em Mocambique. The occasion: the first ever encounter of pastor-trainers and district superintendents from all over the country. The group from Northern Manica and Sofala provinces arrived first. Then came the delegation of 17 men and women from Tete Province, some who had studied in Tavane before there was a seminary in Maputo. Throughout the day groups kept on arriving by minivan from places as far away as Montepuez, some 3,500 kilometres. Directing the opening service, Dr. Filimao Chambo welcomed the tired but joyous conferencees. Including the present students, there were over 200 people. Rev. Margarida Langa delivered the opening message.

Giant banners, t-shirts, program covers, theme chorus and messages on Body life all accented the theme: "JUNTOS NA MISSAO" (TOGETHER IN THE MISSION)! Both SNM, the resident school, and the extension centres are united in the task of preparing leaders for the growing Church of the Nazarene. All Nazarenes, indeed, all Christians are together in the mission of proclaiming Christ and establishing His church.

"Together in the Mission" included inspiration from the Word by teaching from Rev. Paulo Sueia and Rev. Simeao Mandlate and by evening services which were directed by leaders from each one of the 5 Areas of Mozambique. Fellowship at mealtimes was enhanced by meals prepared to celebrate diversity through foods typical of the different areas.

The conferencees were seminary graduates or current students who have received additional preparation in methods and materials to become trainers of pastors in extension centres. They teach 1,272 current students in the 97 extension centres in the Lusophone Field TEE Network. During the 7 days of the encounter, they received several new books to use in their classes. In small group editorial sessions, the conferencees examined the semi-final draft of the book: The Mission of the Nazarene by Rev. Bonifacio Mirashi and suggested modifications. Another new book, Using the JESUS Film to Plant Churches was presented by its group of 5 writers: Rev. Jon & Margaret Scott, Dr. Filimao Chambo, Rev. Bonifacio Mirashi and Pr. Levy Mahalambe. Two other new books written by Margaret Scott, Field Extension Coordinator for Lusophone Africa, were detained at the local printers because of a workers' strike. Through prayer, the conferencees liberated the books the day before the conference ended! The workers even delivered the books to the campus.

The closing message, by Dr. David Restrick, Academic Dean, detailed similarities between 18th century England and Mozambique today, then challenged all those assembled to carry holy fires of sanctified living into today's society to heal the country, as John Wesley did in England. The Lord moved over the service with great power.

Rev. Eugenio Duarte, Field Director said the conference achieved "much more than an educational agenda". Others said it was "the first but cannot be the last [national encounter]," "a dream come true", "a revival for all", "a God-filled meeting to bring us together—on our knees". Rev. Isaac Baloi, Coordinator of NCM / Mozambique and overall coordinator of the event said, "It was historic; much more than I imagined it could be". All spoke gratefully of the great evidence of God's Presence throughout, and the wonderful gift given by Harvest Partners who helped fund the encounter.

Appendix F Photographs: Lead Facilitators of IBNAL and PAR Team Members

Area Facilitators: Area 5 - Rev. Gervásio Raimundo, Area 1 - Rev. Josias Langa, Coordinator Rev. Margaret Scott, Area 3 - Rev. Albino Banda, PAR Team Member - Rev. Bonifácio Mirashi, Area 4 - Rev. Manuel Vale Afonso, Area 2 - Rev. Phil Troutman (Dec. 2002)

Lead Facilitators and PAR 5 Members: Matola - Rev. G. Macia, Area 5 - Rev. J. Manonga, Area 4 - Rev. M. Afonso, Area 3 - Rev.A. Banda, Area 2 - Rev. E. Sombreiro, Area 1 - Rev. J. Langa, Maputo - Rev. L. Mahalambe (Maputo, Aug. 2005)

Appendix G Comparative Analysis of Video Capture of Three Cooperative Learning Groups Functioning

Centre	A Matola City	B Liberdade	C Mahalhane
Locale	Urban church	Suburban church	Neighbourhood
Physical Setting	Spacious, modern, Tables to sit at, Electric lighting	Spacious, modern, Tables to sit at, Electric lighting	Small, reed construction, Small, plastic table Kerosene lamp
Experience of Monitor	Substitute monitor who works w/ other groups	The regular monitor of group; much experience	The regular monitor of group; much experience
Experience of Learners	Much – 2nd certificate	Much – 2nd certificate	Much – 2nd certificate
Demographics of Learners	Middle-aged men and women	Mix of 20-35 year olds plus a couple of older adults	Mostly middle-aged men and women; 2 youth
Time Period of Observation	About an hour	About an hour	About an hour
Discussion Details			
Group Use of Bible	Frequently – in opening, in text readings	Frequent use throughout the session	They read from Bible to begin, and then spoke in their dialect.
Group Dynamics	The learners responded openly to the substitute monitor even thought they did not know him. Two women spoke the most, more than the monitor.	Balanced participation between monitor & several learners asking questions and answering each other's questions	The group dynamics were slower than the other two groups but a balance of participation was shown among group members.
Life Situations as Part of Biblical Discussions	The two women brought life and Bible together with a lot of vigour and conviction.	The monitor posed application questions which generated debate on life situations	Discussion took place in maternal language so I could not evaluate the discussion content.
Use of Material in Student Text	The monitor guided in the regular weaving of text material with questions	This monitor also guided in the regular use of the text weaving it in and out of questions posed.	Group appeared to lean more on *reading* from the book than Group A or B or than using text for discussion base.
Use of Memorized Verses	Did not use them; may be result of absence of regular monitor	They used them to open and close the meeting.	They used verse recitation at the opening.

Appendix H Holiness in Day to Day Living Retreat Organization and Written Responses from Students

Program for the End-of-Course Retreat
Holiness in Day-to-Day Life
November 19-20, 2004
Nazarene Seminary of Mozambique

Friday

Arrival of the students: give attention to the book *Talking to God or* other devotional material	16:00 hs.
All participants come to the IBNAL room. Visit the installations of the Seminary	18:00 hs.
Rehearse the seating positions and the bell ringing signal for the activities for Saturday, then hold class to review:	19:00 hs.
The Lord's Prayer = last words spoken aloud until Saturday's communion hymn	20:30 hs.

Saturday

Wake up; personal hygiene and personal devotions (all in silence)	5:00 a.m.
Return to the classroom of IBNAL	6:30 a.m.

Presentation of the Film: The Passion of the Christ

Moments of silence in the classroom

Brief interval until the bell rings

Each to his/her first station at the ring of the bell

When the bell rings again start to observe the 5 minutes at the first station

When you have visited all 30 stations, you can return to any one of the stations one time (for 5 minutes).

Then there willbe a 10 minute break before the bell is rung to return to the big classroom for the next activities.

Before communion you are requested to write a statement about what you have experienced.	About 12:30 p.m.

Turn to hymn # 11 of your IBNAL chorus book to begin Communion service

ACTIVITIES IN EACH OF THE 30 POSITIONS OF THE PRAYER RETREAT

1) Consummation: Go outside to the mat. Lie down and look up to the sky. Try to imagine how the 2nd Coming of the Lord Jesus will be. How will you feel when He comes back? Imagine this. (Return to the room when the bell rings.)

2) Look around the room at your colleagues. Pray for them quietly, with your eyes open. Give thanks to God for each one of them.

3) "It is to a man's honor to avoid strife, but every fool is quick to quarrel". Proverbs 20:3 Think about the Proverb and take notes for your Journal under the heading "Honorable".

4) Mission: our "Jerusalem":   This photo represents your local community. Think about your neighborhood.
   a. Are you in good relationship with everyone there?
   b. Is there someone who has something against you?
   c. Is there someone who needs your help?

5) Mission: our Judea. Consider this map of Mozambique. Can you identify your province? What areas in your province are more spiritually needy? Take some time to pray for the growth of the church in your province.

6) Mission: our "Samaria": people with AIDS. Sooner or later this sickness will affect your life.
   a. Are you prepared to deal with people suffering with AIDS and their family?
   b. Are you prepared to extend the love of God to them?

7) Mission: our "ends of the earth":
   a. Has your church given money for people in other world areas? --Do you have monthly Missionary meetings?
   b. What do you do personally for people in other world areas?
   c. Write in you Journal under "Transformed" your plan to make a difference in the world.

8) Kneel face down to Worship God: "Come, let us bow down in worship, let us kneel before the Lord our Maker". Psalms 95:6

9) Eternity: Imagine what it will be like when you first get to heaven. What would you like to ask when you first get there? Write this in your Journal under "Wisdom".

10) Practice the verse: in whatever language you like Matthew 5:43-46 You have heard that it was said, 'love your neighbor and hate your enemy', but I tell you: love your enemies and pray for those who persecute you, that you will be sons of your Father in heaven. He causes his sun to rise on the evil and on the good, and sends rain on the righteous and the unrighteous. If you love those who love you, what reward do you get ? Matthew 5:43-46

11) Love to the 4th Degree. In which degree do you need to improve: Love toward God? to yourself? to others? or to your enemies? God wants to fill you with His love. Let Him love through you.

12) Children are loved of God. How do you treat children? With dignity? Do you work with children? Do you need to change the way you treat them? Make notes of the way you work with children in your Journal under "LOVE".

13) Make a plan to improve your spiritual diet. Write about this plan in your Journal under "SELF-DISCIPLINE".

14) Practice the Verse Romans 12:1-2 Therefore, I urge you, brothers, in view of God's mercy, to offer your bodies as living sacrifices, holy and pleasing to God – this is your spiritual act of worship. Do not conform to any longer to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is – his good, pleasing and perfect will. Romans 12:1-2

15) Connect Romans 12:1-2 with Psalms 90:12 "Teach us to number our days aright, that we may gain a heart of wisdom. Take notes in your Journal under "WISDOM".

16) God. Open your Bible to read Isaiah 6:1-5 with attention. Read more than one time. Close your eyes and try to imagine the scene with the angels and God. Let the images fill your imagination. Can you imagine that you are in their presence??

17) Creation: God made the earth like a gigantic globe and put Adam in it to tend and protect. But…man is walks around destroying the land he was given to protect. What can you do to improve the situation on earth? What could you do each day for the good of the earth for the sakes of your grandchildren and great – grandchildren? Spend some time thinking about this. Take notes in your Journal under "Honorable".

18) Creation: "And God blessed the seventh day and made it holy, because on it he rested from all the work he had done". Genesis 2:3.   You can also rest now.

19) Alliance: Genesis 2:16 e 3:6: "And the Lord God commanded the man, 'You are free to eat from any tree in the garden; but you must not eat from the tree of the knowledge of good and evil…when the woman saw that the fruit was good for food and pleasing to the eye…she took some and ate it". Look at the fruit in front of you. Smell the fragrance of it. When Eve ate of it, she broke the alliance with God. Eve was not God's faithful friend. In the midst of temptation will you be faithful? Make a plan to be able to escape temptations when they come and write about it in your Journal under "Faithful" .

20) Alliance: Read about FASTING in Isaiah 58:5-7. Verses 6 and 7 speak of the kind of fasting God chooses. Write about fasting in your Journal under "SELF-DISCIPLINE".

21) Alliance: Pray like Jehoshaphat in 2 Chronicles 20:18 "bowed with his face to the ground, and all the people of Judah and Jerusalem fell down in worship before the Lord".

22) Practice the verse: John 16:33 [Jesus] "In this world you will have trouble. But take heart! I have overcome the world". John 16:33   Think about this truth and write about it in your Journal under "SUFFERING".

23) Christ: What part do you have in the sufferings of Jesus? Matthew 27:48 says: "they…filled it with wine vinegar, put it on a stick and offered it to Jesus to drink". Take some of the vinegar and taste it like Jesus did. He suffered the pain of rejection, condemnation and worse, the separation from his Father…for us. (After tasting the vinegar on the cottonette, throw it away.)

24) These are symbols of the crucifixion. Meditate on them. Continue to think about the suffering of Jesus…for me, for you, and be grateful.

25) Lie down on the cold hard floor – just like the floor of the tomb. Lie still with your eyes closed, and head covered. You are dead with Christ. Stay quiet until the bell rings.

26) Read the Hymn # 110. He Has Risen! Celebrate (without making any noise) dancing, running and praising Him. Afterwards, be seated and take notes in your Journal under "SUFFRERING". (Please leave the hymnal.)

27) The Church: Read Hymn # 103. Record the day or days when the fire of God fell on your heart. Write about these memories in your Journal under "TRANSFORMED". (Please leave the hymnal.)

28) The Church: Prayer: "I showed you that by this kind of hard work we must help the weak, remembering the words the Lord Jesus himself said: 'It is more blessed to give than to receive'. When he had said this he knelt down with all of them and prayed". Acts 20:35, 36. Pray on our knees for sick people that you know and be grateful for your own good health.

29) Consummation: Are you ready to die? Choose hymns to be sung at your own funeral.

30) Prayer on your knees: Kneel in the sand as they did in Acts 21:5 to pray for your brother colleagues in your district, the workers, the local leaders in your district.
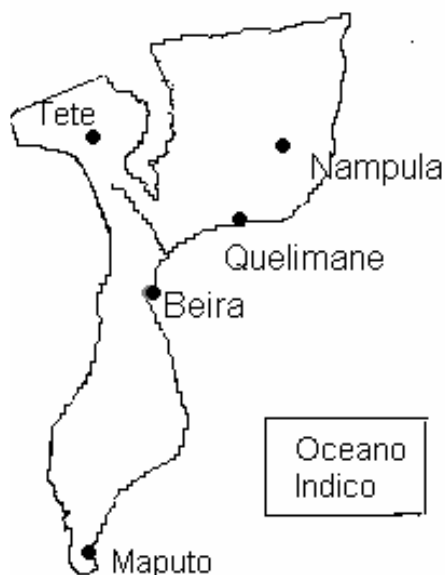
Map for possible use with #5

Photos for possible use with position #4 depending on the "Jerusalem" of the group

Appendix I Comprehensive Hybrid Survey Conducted April – Dec. 2005

THE BIOGRAPHIC FORM WHICH IS SEPARATE FROM THE OPINON SURVEY

The personal information you give on the following short form will be used for updating files on pastors and students the offices of the Lusophone Field, the Seminary and IBNAL. Please answer each question fully and carefully.

Full name _____ Date of Birth _____

Area _____ Church District _____ Cell phone Number _____

1. Full name of church where you are serving _____

2. What is/are your current position or responsibilities in the church? _____

3. Are you called by God to serve as a pastor? Yes/No   Or to serve as a layperson? Yes / No
4. Are you an Ordained elder? Yes/No
5. Do you have a preachers' license from your local church? Yes/No

6. Do you have a pastors' license from your district Yes/No
7. Are you a student of SNM? Yes/No
8**.** Are you a student of IBNAL? Yes/No
   A. If so, in what centre? _____
   B. If IBNAL, in which centre did you have your first class? _____

9. What is your first language _____

10. Do you prefer to read in this language or in Portuguese? _____

365

EDUCATIONAL SURVEY FOR ALL PASTORS, STUDENTS, PREVIOUS STUDENTS

This is not an exam! It is a written interview for you to give your own experiences and opinions. Your name is not on this survey, so please feel free to respond honestly and take your time. The information you give will help us to improve education across the Lusophone Field.

SECTION A: BIOGRAPHICAL INFORMATION
This will give me an accurate description of the population;

1. Where did you begin your preparation for ministry?   Please mark one with an "X" :

Tavane___   Furancungo___   Maputo between 1982-94___   SNM in Laulane___   IBNAL_____

2. When you started to prepare for ministry, what was your level of schooling? Put a circle around the level:

1ª 2ª 3ª 4ª 5ª 6ª 7ª 8ª 9ª 10ª 11ª 12ª Higher

3. Where did you end your preparation for ministry, or where do you plan to end it?

   Mark one with an "X" :   Tavane___   Furancungo___   Maputo between 1982-94___
                              SNM in Laulane___   IBNAL ____   Other _____

4. Your level of schooling now: put circle around the last grade level that you passed:

1ª 2ª 3ª 4ª 5ª 6ª 7ª 8ª 9ª 10ª 11ª 12ª Higher

5. Are you currently studying either as a student in regular classes or preparing for external exams this year (2005)? Yes/no

6. Are you male or female?_____   (Some have 6B. Area 1,2,3,4, or 5)

7.   Mark with an "x" **each** of your current relationships to IBNAL. Example: you may be both a "former student" of IBNAL and also an "active monitor" so you would mark two relationships).

---

superintendent ___ active monitor __ inactive monitor __ monitor-in-training ___

pastor____ IBNAL student ___ former IBNAL student ___

---

8. In your opinion, what is the greatest impact of IBNAL? Please read all five possibilities and choose two of the following, marking them with a "x":

   a. better relationships between colleagues and leaders on the district _____
   b. greater capacity to minister in the local church, especially in preaching_____
   c. more knowledge of the Bible_____
   d. opening of appetite to study and learn more_____
   e. personal spiritual and moral growth resulting in more dedication to God_____

9. Have you been active in a class of IBNAL since April of 2004? Yes / no

10. How many courses of IBNAL, more or less, have you have taught or studied? _____

11. GETTING CLOSER TO GOD. You may have answered questions like this on other surveys but the list of spiritual activities on this one is longer than the others. So, we ask you to please share again about the ways God uses to bless you and draw you closer to Him. There is a listing of 19 spiritual activities, longer than lists on other surveys. Please read all 19 of them carefully. Then choose FOUR of them which help you the most to get close to God. Put an "X" behind these four. Please mark only FOUR.

Attending church services____
Going to Sunday School____
Taking holy communion ____
Attending baptismal services ____
Attending weddings ____
Attending funerals ____
Singing or listening to music ____
Being involved in theological class sessions____
Being outside in nature ____
Studying the Bible ____
Evangelizing ____
Reading the Bible ____
Studying spiritual books at home ____
Studying books at home for IBNAL classes ____
Fasting ____
Meditation____
Practicing acts of mercy ____
Praying alone ____
Praying with others in group ____

SECTION B: GENERAL ASPECTS OF THE IBNAL PROGRAMME
FOR THOSE WHO HAVE HAD ONE OR MORE CLASS THROUGH EXTENSION

12. STRUCTURED ASPECTS OF IBNAL. Please give us your personal opinion of each of the aspects of IBNAL found in box 12. Please give a "grade" (1, 2, 3, 4 or 0) to each one:

"1" is low or poor
"2" is normal,
"3" is very good or very high
"4" is excellent or extremely high

a. the helpfulness of the goal of growing toward Christlikeness _____
b. the helpfulness of the student books in general is _____
c. the ability of the monitor(s) to conduct classes properly is _____
d. the value of group discussion of the material is _____
e. the value of memorizing Scripture is _____
f.   the value of applying the lessons to life problems is
g. the value of singing together is _____
h. the value of praying together with colleagues is _____
i.   the value of just being with others in a study group _____

12. IDENTIFYING PROBLEMS WITH IBNAL.

A. Please help us improve IBNAL by telling us the problems that you encountered with it. Again, please give each of the following a number according to these meanings:

"1" means "this caused me almost no trouble at all"
"2" means "this caused me a little bit of trouble"
"3" means "this caused me big trouble"
"4" means "this caused me so much trouble that I decided to look for another way to prepare for ministry"

having to pay for the textbooks _____
memorizing Scripture to pass the final exam _____
difficulties with the monitor _____
difficulties with other students in your group _____
finding time to fill in the books, to do the homework _____
having the book in Portuguese instead of the maternal language _____
mixing academic preparation of students in the same group _____
something other problem: _____

B. Please help us improve IBNAL by telling us the problems that you encounter with it. Mark an "X" to show the two (2) aspects of the extension programme which have been most difficult for you.

a. having to pay for the textbooks _____
b. memorizing Scripture to pass the final exam _____
c. difficulties with the monitor _____
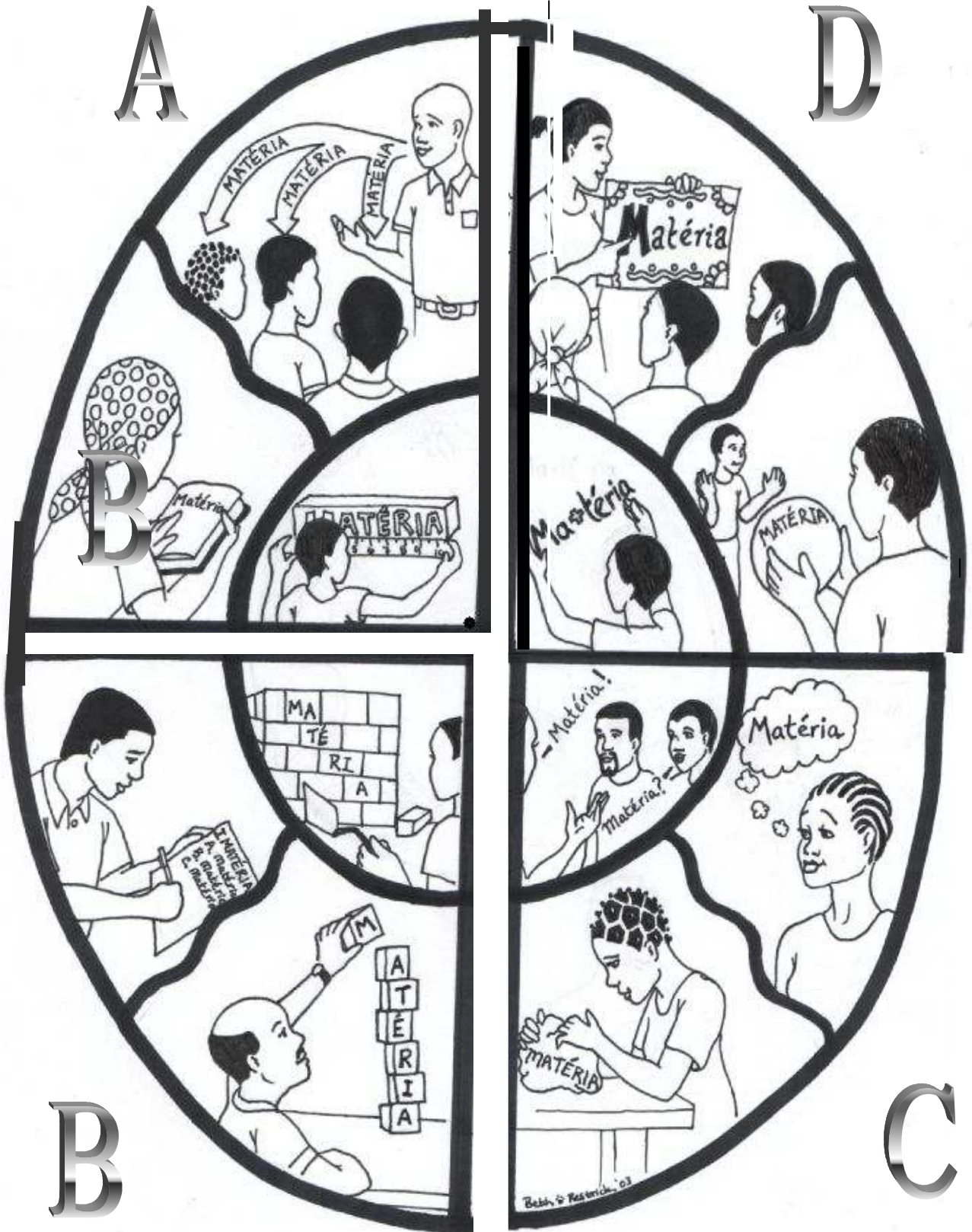d. difficulties with other students in your group _____
e. finding time to fill in the books, to do the homework _____
f. having the book in Portuguese instead of the maternal language _____
g. mixing academic preparation of students in the same group _____
h. some other problem: _____

Appendix J The Four Quadrants of the Brain – Africa Style

FIGURE 3.1: IDENTIFYING LEARNING STRATEGIES
Note: "Matéria" in Portuguese means "subject matter" which the learners are dealing with in 12 different ways, each of them representing a learning strategy.

In each quadrant there are three learning strategies illustrated. These are known to take place in that quadrant because research technologies allow neuroscientists to actually observe levels of brain activity as different learning methods were being experienced. The four strategies in the centre sections are key to the primary nature of each quadrant; those
are A. Analysis, B. Application, C. Group discussion and D. Synthesis. In a group session, try to name the other two strategies in each quadrant.*

A. Analysis, _____ and _____

B. Application, _____ and _____

C. Group discussion, _____ and _____

D. Synthesis, _____ and _____

In facilitating learning in our classes there are learners who better learn by means of strategies associated with each of the four quadrants. Logically, then, in order for real learning to take place for everyone, facilitators must deliberately vary methods in each class period, choosing activities from all four quadrants.

Another effective style of learning facilitation is to use in every class session methods known to impact all 4 quadrants. Because of its economy of effort and efficiency, this style is probably easiest to adopt. Learning strategies which impact all 4 quadrants are "critical singing", active group discussion, problem solving, rehearsing, role playing and role taking. These terms can be written in the spaces between the four quadrants.

* A: analysis, reading, listening, B: application, ordering, reorganization, C: group discussion, reflection, tactile experience (touching), D: synthesis, playing and seeing images.

Class notes
Margaret Scott
2003

Appendix K Opened-ended Responses by 2nd Certificate Learners to Explain Differences in their Lives from Learning in IBNAL, December 2005

Albano Serafim: Since I began studying there has been a change: I visit the sick and pray for them; I know how to preach the Gospel.

António Bernardo Manhiça: Before entering IBNAL, I knew very little about the Word of God. I preached poorly, but now that I know the Bible, I feel so much better. Studying has changed my family life as well as my preaching. I understand the value of marriage and living in harmony with my family. I not only understand the rules of preaching, but God has helped me with my pride, fear and self centeredness (see 1Timothy 3:1-6).   A colleague says of him, "my brother Antonio Manhiça has changed a lot. In the beginning he would hardly participate in the debates, now he even starts them at times. In the last lesson, as leader, he showed how much he had changed in the way he led the class".

Arlindo Julião Bazima: Before studying at IBNAL, I would only attend the church services. I listened to the Word of God, but hardly understood a thing. I didn't know how to seek in the Bible, even to satisfy my own needs….but the IBNAL books all together are very helpful, because they touch on all aspects of my Christian life. They are a good way to bring learning to life.

António Mário Manhique: I was an impatient man. One of the aspects that changed in my life is that I lacked the will to pray everyday and to offer myself for the work of the church. A colleague says, "He did not like the opinions of others but now he knows how to live – socially and spiritually.

Cacilda Culos Mondlane: Before I started with IBNAL, I preached, but hardly understood what I was saying. Now I can preach and teach the word with understanding.

Carlos Albino Plavi: Before beginning with IBNAL, I was a lay pastor, but didn't have the Gospels and couldn't speak with my colleagues. Now that I am a part of IBNAL, I have learned much more of the scriptures and I am not embarrassed like before. I am not afraid of speaking to the members of the church. I visit the sick and fear has left me. I am free in Christ Jesus in the Gospel. A colleague says of him: "now he speaks easily with his colleagues. He is dedicated in his way of life. He preaches and prays well. He really enjoys learning. "

Celeste Mazive Manhique: Before coming to IBNAL, my life was very different than it is now. I didn't understand prayer very well. I only prayed when I was really sad. Now I understand that prayer is what connects me to God in all situations. I am grateful to God that I was able to enter IBNAL to study. My life has changed from speaking evil. Before I enjoyed talking about others, but now I understand that gossip is wrong.

Celestino Gabriel Nampula Sul – Moma; Before IBNAL, I did not know how to preach, I did not dig into the Bible, my heart was not connected to the Bible. Now I know how to visit the sick, give ideas to my friends and I love my enemies.

Dias Artur: Before I became an IBNAL student I was very nervous and confused. Now I know how to speak very well in front of 100 or more people. I like to compare my past with the present, my present being such a better life. I console the sad and sick, hear the opinion of others and like the Bible.

Domingos Mussa Augusto: I was a pagan that knew nothing about God. Since I began to study I know how to talk to people without arguing with them. A colleague says: Domingos is spiritually changed because he repented from the bad habits he used to do. He is much better

371

Domingos Ozório: Before starting at IBNAL I was a pastor but when I preached the Word of God, many people did not understand. But now I preach well and follow the life that Jesus followed here on earth. Testimony of a colleague: "My friend is greatly changed in his behavior; now he is good to his friends and gives good ideas in our group; he visits the sick and helps us when we are sad, at church and outside of church.

Francisco Benjamim Mondlane: Before IBNAL I felt very empty, but now I feel complete, able to serve, ready to teach the Word of God. The changes in my life since I started studying are many: love for my family and for my neighbor. I have more patience and am more tolerant of others. A colleague says: "There is much to say about the changes verified in the life of this servant, but perhaps it would be enough to say that we see God in his life".

Inácio Mbiri: Before I started studying with IBNAL, I knew very little of the Bible, what I thought wrong. Now I am learning many new things and I know much better how to use the Word of God. My whole life has changed, because I was so closed, and now I am open to learn. I know how to choose between good and evil. A colleague says about him:" He has changed even in practical things like his finances. He now uses an outline when he preaches. He is active in spiritual things".

Joaquim Muzé. Before studying I was a lay pastor but I did not know how to preach the Word of the Lord. Now I know how to apply the Word. I now make visits and know how to encourage people. A colleague says, "I want to reinforce what my friend says — he no longer is up-tight about directing the activities of the church".

Júlio Nhipa: Before beginning extension classes I did not know how to read or to preach. I knew almost nothing, but now I know how to speak and how to do some things. Now my life is changed; I am sanctified; I know how to love others, to counsel and to help.   .

Juma Adamugi: I had no knowledge about preaching and I was very disobedient. But now that I am in IBNAL classes, I preach with knowledge of the Word of the Lord and without fear of others. A colleague of his said: "He is excellent because he has changed so much spiritually: he visits the sick, gives himself sacrificially for others, loves everyone and gives a lot of evidence that he really is a Christian".

Lourenço Sefo Chauque: Before IBNAL I really misinterpreted things about the Bible. With the teaching I am receiving, I am not only more knowledgeable and able to preach better, but I have also grown spiritually. I have changed several things in my personal conduct, my Christian life and how I share good news with the needy.

Martinho Vece Soda: I see a change in my preaching; before I stuttered while I preached. I also didn't know how to make or use an outline in preaching, but now I know how to make an introduction, I follow an outline and am able to preach my sermon without difficulties. One of the monitors says about him:" I see a great change in this student for the better. He is the best at following instructions".

Samuel Ketane Chidzuna: I have been changed so that I can bring others to know Jesus also. I have learned to respect my leaders, both of the church and others.

Samuel Moisés: Before I started studying with IBNAL, I didn't know that God could change people. Now I know that God can as He gives us power to know His Word. I have learned how to do weddings and visits in the hospitals. One colleague says "I see that my friend has changed much in his work for God. He is caring with others and especially his family. My counsel for those who haven't started yet. It is good to study with IBNAL , because the courses help in many things. After I finish my studies with IBNAL, I think I want to prepare to be a monitor and help others.

Selemane Domingos: I did not respect my colleagues but now I know how to love putting it into practice. The Spirit of God is using me in many transformations. A colleague of his says: This classmate did not love his friends, but now he has learned how to love".

Marcos Paulo Phiri: Before I started IBNAL, I had great difficulty understanding the Bible. Now I enjoy studying, I am getting better as a pastor. I know how to lead in the services and serve Holy Communion. One of his colleagues says about him" It is true that this brother was very backward in his spiritual life, because he understood so little of the Bible. Now because of IBNAL, both his spiritual life and his leadership skills have improved".

Vicente Sandreque Suqueia: Before I started with IBNAL, I had very little understanding. I was never well prepared for what I was doing. Now I am able to plan well a church service or lead the music or preach from the Bible on a number of topics. I feel well prepared. I didn't know that a pastor should be prepared, but now because of my training I can lead without difficulties.

Appendix L Articulation Policy Between IBNAL and Bible School in Maputo

ARTICULATION POLICY

In keeping with our conviction that ministerial learning does not end upon completion of a specific course of study or program, but that one program should lead into another, specific articulation procedures have been developed between the curricula of IBNAL and SNM to facilitate the transfer of students from the extension program to the diploma program, or to give credit in the diploma program for students who have completed one or more of the specified certificate programs through IBNAL. Credit will be given for the IBNAL courses, given that the student has a grade of 80 (B-) or better.

Specific articulation of courses follows the chart below:

SNM course equivalent:	*IBNAL courses taken:*
DTD111, Introduction to Christian Theology	Fn11, World Perspectives Fn15, Worship D11, Foundations of the Faith
DTB112, Hermeneutics	B11, Introduction to Holy Scripture Cc22, Methods of Biblical Study Cc23, Building a Message from the New Testament
DTP112, Christian Education	Fn12, Plan of God for Health & Peace Fn13, The Worker as Student Ig11, Mission & Manual of the Church of the Nazarene
DTP114, Church Growth & Evangelism	Cc11, Evangelizing & Planting Churches Cc12m, JESUS Film to Viable Church
DTB211, Sinoptic Gospels	B11, Introduction to Holy Scripture (as prerequisite) and Any three of the following: B12, Life of Jesus 1 B13, Life of Jesus 2 B21, New Testament 1 B22, New Testament 2
DTD211, Theology 1	D21, Holiness Day to Day, and any three other doctrine classes of the 1st and 2nd Certificate
DTB211, Old Testament 1	B31, Old Testament 1 B32, Old Testament 2
DTB212, Old Testament 2	B33, Old Testament 3 B34, Old Testament 4

DTP218, Homiletics	Fn14, The Worker as a Model of \
	     Communication
	Cc23, Building a Message from the New
	     Testament
	Pr21, Life & Work of the Pastor

Applicants who have completed all three certificates through IBNAL can apply for the Diploma in Theology and may be admitted to the third year of the program. Upon completion of the third year courses, and half of the night division classes on offer at the time, the candidate may be awarded a Diploma in Theology.