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**A STUDY OF TEACHERS' ASSESSMENT OF LEARNERS' WORK
AND ITS INFLUENCE ON THE CULTURE
OF LEARNING IN SCHOOLS**

BY

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PROMOTER : Professor W.J. Fraser

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**This study is dedicated to my only son:
Sisekelo Performance Vilakazi.**

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DEGREE : DOCTOR OF PHILOSOPHY IN EDUCATION

DEPARTMENT : TEACHING AND TRAINING STUDIES

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SUMMARY

Since the inception of the Outcomes-based-Education system in South Africa, great emphasis has been placed on assessment of learners' performance, as a strategy to ascertain that learners achieved the desired learning outcomes. However, OBE assessment strategies appear to be contrary to traditional evaluation methods, which are characterized as teacher-centred and authoritarian, which promote rote-learning and are obsessed with content, show a lack of integration between education and training, rigid divisions, and involve punitive formal examinations designed to yield high levels of failure. Given the rhetorical framework, OBE, as a paradigm shift, must represent the opposite of negative aspects often found in the education system.

The review of literature on which this research is based emphasized the importance of assessment in not only focusing on what learners can do, but also on developing learners holistically. In other words, assessment in this study required both teachers and learners to regard assessment as an integral part of teaching and learning activities. In this way

learners could demonstrate learned values, skills and knowledge for the promotion of the culture of learning. If assessment is viewed in this light it will not only enhance learning amongst learners, but it will also ensure that learners gain access to further learning.

The following hypotheses were tested in the study:

Hypothesis 1. An assessment system built upon the traditional evaluation methods has a detrimental effect on the development of the culture of learning in schools.

Hypothesis 2. Assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools.

The empirical investigation also tested the following Null hypothesis:

Hypothesis 3. No distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools.

The literature survey contributed to the drafting of 84 objective statements. These statements were based on the premise that assessment strategies built upon an Outcomes-based Education policy are more effective in contributing towards the development of a culture of learning than an assessment system built upon the traditional product-driven teaching strategies.

Teachers' opinions or perceptions were then assessed on these item statements by means of a structured questionnaire. The teachers' opinions or perceptions were then subjected to investigative factor analysis, and three prominent factors were revealed by the factor analysis. The first factor related to "Outcomes-based-Assessment strategies", and loaded an eigenvalue of 54.34000251. The second factor was related to "traditional evaluation" and loaded an eigenvalue of 10.8298612. The third factor was linked to "assessment and

its influence on the culture of learning” and loaded an eigenvalue of 7.5540027 from the results of the factor analysis.

The high Cronbach Alpha Reliability correlation coefficient of 0.97 implies that the questionnaire and items were reliable in terms of what they were supposed to measure.

The results of the empirical analysis supported Hypothesis 1 and Hypothesis 2, and rejected the null hypothesis, Hypothesis 3.

The limitations of the study are discussed, and a number of recommendations are made for further research. These concern aspects relating to teacher education, how practicing teachers can improve their understanding of assessment, the relationship between formative and summative assessment, and finally, how different assessment strategies should be applied to different learning areas.

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CHAPTER 1

ORIENTATION

1.1 INTRODUCTION

One of the traditional and current objectives in education has been to develop effective assessment strategies that can be implemented to determine how much learners have learnt at school. This is the essential nature of the problem of this study.

This introductory chapter highlights the factors that contributed to the investigation, and defines the aims and key objectives of the study. It explains the main concepts and terms used and applied in this report. In addition, a thorough description of the research design and plan of action is given.

1.2 GENERAL BACKGROUND TO THE STUDY

This research study investigates teachers' assessment of learners' work and its influence on the culture of learning in schools. Teachers used to assess the following: what has been learned, what can be remembered, what is understood, and whether the learner can apply the knowledge in a different context. However, the assessment in this study would be considered as a tool for teachers to motivate learners to learn successfully, and they promote the culture of learning¹ in schools.

Siebörger and Macintosh (2002:5) state that: "Assessment has become a popular word in education. Whenever new ideas about teaching or learning are mentioned nowadays, it seems that assessment is part of them." Hence this research study investigated teachers' opinions about assessment of learners' work as part of teaching and learning in a

¹ For the purpose of this report "culture of learning" has been defined as "a positive school climate where the atmosphere is conducive to teaching and learning, where everyone who has interest in the school expresses pride in it, where pupils are given maximum opportunities to learn and there is a high expectation for learners to achieve." (Page 18 of this report)

learning environment. This is the reason why Malcolm, quoted by Mays (2000:5), argues that teaching and learning need to provide a direction for education to proceed towards. Assessment needs to be applied by teachers to regularly monitor that learners are moving towards the required learning outcomes. This implies that teaching and learning practices are assessment driven, because it is obvious that assessment within an Outcomes-based frame of reference remains the most important activity that could enable learners to achieve the desired learning outcomes (Pretorius 1998:18).

Assessment has undergone major changes and a shift has taken place from what some call a “Culture of testing” to a “Culture of assessment”. The purpose of evaluation in schools has always been to continuously assess the extent to which learners are coping with increased learning demands. Also, to ensure that timely and effective pedagogic and didactic support is given to learners during teaching and learning time. Teachers are required to develop learning programs and consider criteria for assessment of pupil’s progress in an ongoing process, with the aim of building a culture of learning and teaching (Nolan 1997:2-3).

Phele (1997: 5-9) emphasizes the teacher’s role and commitment in reconstructing the culture of learning, by regarding assessment as an integral part of the teaching and learning process. This indicates that teachers always need to assess learner’s work in order to know what the learners have learned and obtain an idea of what learners are able to learn. When assessment becomes an integral part of the teaching – learning processes teachers will have more opportunities to monitor student learning and therefore ensure that the desired outcomes are achieved. Smit (1995:59) also emphasizes that the assessment of pupil’s work by teachers determines the role of teachers in creating a culture of learning, since it gives learners a much better idea of their performance in many areas, rather than simply setting tests at the end of the term.

In this study, assessment of learners is seen as part of the learning and teaching process that affords teachers an opportunity to monitor an individual learner’s ability and pace to learn the content, skills and concepts of specific school subjects on a daily basis. It also helps teachers to develop an increasing critical awareness of the needs of individuals in their classes, and how such needs could be met. It empowers teachers to provide

differentiated input that is tailored to the need of the individuals concerned (Independent Examination Board: 1997).

1.3 JUSTIFICATION FOR THE INVESTIGATION

What, then, is new about assessment? According to Berens (2001:112), “assessment describes a wide range of different ways which are now used to measure the achievements of learners”. This means that one is not just thinking of tests, examinations and written exercises, but also of many other ways of gaining information and giving feedback about the progress of learners. This involves a form of continuous assessment carried out on a day-to-day basis using a wide variety of methods (Siebörger and Macintosh 2002:11).

According to the Independent Examination Board (1997: 8), the reason for continuous assessment is to promote creative and critical thinking, problem solving skills and the ability of the learner to work individually and independently. Stiggins and Conklin (1992:57) believe that all learners should have full opportunities to show what they know and can do. Such opportunities can only be realized if their teachers take learners’ assessment into account. This remains an important activity of any classroom practice.

Paxton (1995: 189-195) note that assessment is a practice by which teachers try to identify one main area where improvement is necessary. Assessment also attempts to explain how performance could be improved, by identifying possible problem areas that could have a negative impact on future development. Jackson (1990a:105) remains convinced that planning for assessment to be used in a classroom practice is pedagogically justified, since it provides opportunities for learners of different levels to move forwards at their own pace.

Van Wyk (1995:14) asserts that in a country where development is currently a high priority, effective and efficient learning presents special imperatives for the culture of learning. In the changing society of the Republic of South Africa, teaching will require sensitivity to the variation in individual personalities, diversity and culture.

However, Schemeck (1998:5) argues that learners need to realize that they will have to assume a greater responsibility and accountability for their own learning. Knowledge of learning and study strategies as well as the application of these can contribute significantly to the accomplishment of an optimal culture of learning. Van Wyk (1995:18) concludes that the shift in emphasis from improved teaching to improved learning has resulted in a depiction of the learner as an active participant in the teaching-learning act.

Therefore this investigation will research in greater depth the teacher's assessment of learners' work and its influence on the culture of learning.

1.4 FACTORS THAT CONTRIBUTED TO THE INVESTIGATION

In the past, assessment presented a very different face as the means by which schools wittingly or unwittingly sorted out learners in terms of failure and success. Satterly (1989:5) points out that we are all familiar with the use of assessment data that classifies pupils as "dull", "disruptive", "lazy", etc, as against the more welcome classifications of "bright", "imaginative", or "budding genius". Such classifications contributed very little to the establishment of a culture of learning in schools, mainly because it did not motivate learners to sustain their attention and effort towards the achievement of learning outcomes.

The ultimate purpose of assessment is to gather information that can be used to give feedback to learners about their learning progress, help teachers evaluate the success or failure of their teaching methods, and show what it is that learners find hard to learn. These three aspects are crucial as they help the learning process (Berens 2001: 113). However, King and Van den Berg (1992:18) feel that the South African school-leaving examinations, accompanied by its teaching and learning processes, are extremely problematic with regard to continuous assessment. This is due to the secrecy and mystique embedded in the final examination, which makes teachers continually assess learners in a way that is narrowly focused on the type of external examination that will be written and the content they expect within.

King and Van den Berg (1992: 19) further state that the motivational influence of the examination could become a hurdle in the learning process. This is due to the reason that the diagnostic use of internal assessment only provides learners with coping strategies in the external examination. This shows that traditional assessment and evaluation are only concerned with ensuring that learners are successful in the final examinations through which learners are measured in comparison with one another. This has little value with regard to promoting the culture of learning in schools.

However, the school-leaving examination conducted at the end of the twelfth school year still remains highly authoritarian, yet extremely prominent. It vanguard three important factors: (a) learner competition, (b) learner memorization and (c) the recall of facts and information during the examination. Pretorius (1998:29) feels that it only has an influence on teachers' didactical methods and assessment. For example, teachers emphasize the recall of facts, they promote the uncritical acquisition of subject content by regurgitating subject content with learners, and disregard higher order activities such as the application and synthesis of knowledge and its evaluation. Consequently such learning-teaching processes and assessment provide very little information about the true potential and skills of learners.

The type of assessment that aims at achieving the goals of education in the traditional context is characterized by Freire through the "banking concept" (Freire 1972:45-46). He describes this as follows: "Narration (with the teacher as narrator) leads the students to memorize mechanically the narrated content. Worse still, it turns them into containers, into receptacles, to be filled by the teacher. The more completely he fills the receptacles, the better a teacher he is. The more meekly the receptacles permit themselves to be filled, the better students they are. Education thus becomes an act of depositing, in which the students are depositories and the teachers the depositors. Instead of communication the teacher issues communiqués and "makes deposits" which students patiently receive, memorize, and repeat. This is the "banking" concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits."



According to Birenbaum and Dochy (1996:5) the assessment approach that suits this teaching concept concentrates mainly on the testing of basic skills, supposedly acquired through tedious drill and practice, experiences, rehearsals and repetitions of what was taught in class or in the textbook. Under such circumstances, tests (mainly of the choice response format, such as multiple-choice, true/false or matching-items) became the common tools for assessment. An assessment system that develops in such an environment is usually of the paper and pencil type, which is administered in class under time constraints and forbids the use of helping material and tools. Such an assessment has little value, because teachers teach and learners patiently receive and memorize facts, which are then tested. This assessment system contributed very little to the establishment of a culture of learning in our schools.

Another prominent factor that contributed to this study is the recent emerging of the Outcomes-based Education system. According to Fraser (1998:194), this system has moved towards new assessment strategies that seek to demonstrate that a learner's performance or achievement in schools is not limited to cognitive or intellectual activities such as reasoning, mathematical and statistical calculations, decision-making strategies and powers, or the mere recall of factual information. It also embraces functions such as the physical manipulation of objects and material, as well as disposition, attitudes or beliefs. It further includes the effective utilization of the mental, emotional and physical capacities to such a level or standard that the outcome or performance meets the requirements defined in terms of the predetermined standards of expectation (Kruger and Adams 1998:195).

The difference between traditional evaluation approaches and Outcomes-based assessment approaches is the main contributory factor to this study. The former emphasizes test scores and examination results, while the latter emphasize strategies such as portfolios, direct observation, interviews, and peer-assessment and learners self-assessment. These differences are summarized in Table 1.1.

Table 1.1 Comparison of traditional evaluation methods and Outcomes-based assessment strategies

Traditional evaluation methods	Outcomes-based assessment approach
<ul style="list-style-type: none"> Passive learners 	<ul style="list-style-type: none"> Active learners
<ul style="list-style-type: none"> Exam-driven 	<ul style="list-style-type: none"> Learners are assessed on an on-going basis
<ul style="list-style-type: none"> Rote learning 	<ul style="list-style-type: none"> Critical thinking, reasoning, reflection and action
<ul style="list-style-type: none"> Syllabus is content-based and broken down in subjects 	<ul style="list-style-type: none"> Integration of knowledge; learning is relevant and connected to real-life situation
<ul style="list-style-type: none"> Textbook/worksheet-bound and teacher-centered 	<ul style="list-style-type: none"> Learner-centered; teacher is facilitator and constantly uses group and teamwork to consolidate the new approach
<ul style="list-style-type: none"> Syllabus is seen as rigid and non-negotiable 	<ul style="list-style-type: none"> Learning programmes are seen as guides that allow teachers to be innovative and creative
<ul style="list-style-type: none"> Teachers are responsible for learning; motivation depends on teacher's personality 	<ul style="list-style-type: none"> Learners take responsibility for their learning and are motivated by constant feedback and affirmation of their sense of self-worth
<ul style="list-style-type: none"> Emphasis is on what the teacher hopes to achieve 	<ul style="list-style-type: none"> Emphasis is on outcomes – what the learner becomes and understand
<ul style="list-style-type: none"> Content placed in rigid time-frames 	<ul style="list-style-type: none"> Flexible time-frames allow learners to work at their own pace
<ul style="list-style-type: none"> Curriculum development process not open to public comment 	<ul style="list-style-type: none"> Comment and input from the wider community is encouraged

(Source: SA National Department of Education 1997:6-7; Burker 1995:58-59)

These differences provide the theoretical information that is investigated in this study when data is collected regarding teachers' assessment of learners' work and its influence on the culture of learning. Furthermore, these differences feature very significantly in the formulation of the research problem in the following paragraphs.

1.5 THE FORMULATION OF THE RESEARCH PROBLEM

The Positivist paradigm of thinking has always emphasized the fact that fixed values or predetermined value-judgements underpin our assumptions and understanding of phenomena under discussion. We have often linked in education the “fact” that only intelligent learners are capable of performing well in tests and examinations where high level cognitive skills and abilities are tested and assessed. It is the reader’s personal opinion that teachers often interpret ability and performance against a single test or criterion. Often the outcomes of a single test are the only evidence used to group learners as competent or less competent.

However, the problem stretches beyond the interpretation of performance in terms of the outcomes of a single test or examination. It culminates in our understanding of performance and our classroom practices, with specific reference to assessment and evaluation. The teacher’s underpinning philosophy in relation to teaching and learning is often regarded as the driving force behind their daily practice. If we believe that the ability to do well in tests and examinations is fixed to a learner’s intellectual skills and abilities, then teaching and learning would have little influence on improving underperformance in different learning areas.

On the other hand, educational studies advocate Outcomes-based assessment approaches. Here teachers are encouraged to employ alternative strategies of assessment (see section 1.4) that challenge the learners’ skills in relation to their inquiry and problem-solving abilities. Learners are expected to be active, inventing and contributing original ideas. They also need to interact continually in a purposeful and active way with the subject matter. Teachers and learners also need to identify and solve problems by applying creative and critical thinking (Coetzer 2001:82). The principle of activity ensures that learners become active participant in the learning process and have to take more responsibility for their own learning (see Table 1.1). This suggests that the culture of learning in schools is likely to be influenced by learners’ active participation in the learning process.

1.5.1 Synthesis Of The Problem And Establishment Of The Research Rationale

The educational literature indicates that assessment is a powerful tool in education and training. Yet both teachers and learners have in the past underrated its influence. Assessment was also often regarded as synonymous with tests and examinations. These tests and examinations were largely content-based and comprised of closed questions, requiring learners to memorize information. These tests and examinations also took place at the end of a section of work or at the end of the year of study (Clarke 1996:23). According to Kotze (1999:32), the main function of assessment was inter-alia for decision-making, providing information on success and failure of learners, and also for selection and certification purposes. Seen in this light, assessment was never used to portray judgment and development of competencies or to inform on the quality and progress of learners. Instead, according to Clarke (1996:24), it was giving learners the following messages:

- You are clever if you can remember things off by heart.
- There is always one right answer.
- You are bright if you know facts.
- Tests and examinations are for judging how good I am.
- Failing means having to repeat a grade.

As a result these traditional approaches towards assessment did very little to promote a sound culture of learning in many schools. The problem is how to convince teachers to regard assessment as a powerful tool that could assist them in influencing the culture of learning. Corner (1991:9) suggests that assessments should not be seen as an isolated activity but rather as an essential element of teaching and learning that contributes towards the effectiveness of any school. Assessment is an ongoing process and an integral part of the educational experience of each learner. This leads to a situation whereby teachers should realize that assessment involves the careful selection of learning experiences and decisions about the most appropriate means of monitoring those experiences so that progress is maintained.

Ainscow and Corner (1998:74) indicate that assessment should be a continuous process of gathering and reviewing information in order to help learners succeed in their learning. This is in contrast to traditional tests and examinations that only gauge the assimilation of subject content.

One of the tasks of teachers is to establish a routine for considering how assessment can become a regular feature of their planning. This will allow them to contribute significantly to the learner's progress and also to improve the quality of the learning culture in the classroom.

This is the reason why Outcomes-based assessment promotes learner-centredness in the teaching and learning process. The emphasis is not on what the teacher wants to achieve, but rather on what the learner should know, understand, do and become. In such circumstances teachers relinquish the role of formal and prescriptive instructors and instead become initiators, observers and facilitators of pupils' activities. This suggests that, through assessment, teachers in schools can humanize education and foster positive attitudes towards learning in schools (Coetzer 2001:83).

It is from the above observations and awareness that the research rationale can be established. Teachers' perceptions of human performance, and the impact assessment and evaluation are supposed to play in the establishment and benchmarking of the achievement of the outcomes have a major influence on our assessment and evaluation practices. Our learning, facilitation and assessment practices are deeply rooted within the underpinning paradigms steering such practices. We have to accept that the traditional Positivist and Behavioural philosophies could still be playing major roles in demarcating our perceptions on classroom assessment. The present postmodern appreciation of the educational reality has also left a significant mark on our educational systems. We have to take note of Söhnge's and Arjun's (1996:90) comment that: "the scientific (modern) paradigm hinders the shift to postmodernism, which advocates an epistemology that is characterized by personal subjectifications and unpredictability, and is experiential, hermeneutic and interactive."

It is therefore important to determine how the perceptions of teachers with regard to assessment and evaluation practices relate to classroom practice. In addition, it is important to establish whether these perceptions could eventually impact on the performance of learners in learning situations. This can only be done by assessing the perceptions of teachers with regard to traditional and Outcomes-based assessment strategies, premises and practices. Such analyses could clarify why teachers regard classroom assessment as an important practice in the learning cycle, and why a specific underpinning philosophy might shape the future of learners in terms of our understanding of accountability and human performance.

1.5.2 Research Questions

The researcher believes that finding answers to the following questions will contribute towards a better understanding of the problems identified in this chapter:

1. What are the perceptions of teachers regarding the educative role of classroom assessment and how should assessment be adopted to contribute towards a culture of learning in schools?
2. What are teachers' perceptions about assessment as part of the learning and teaching process in achieving the expected outcomes of learning?
3. Why teachers regard assessment-results as a means of giving feedback to learners, parents and principals?
4. What are teachers' perceptions regarding traditional evaluation methods and their influence on the culture of learning in schools?

5. What are teachers' perceptions regarding Outcomes-based assessment strategies and their influence on the culture of learning in schools?

These questions will be addressed through both the analysis of the literature and the results of the empirical investigation.

1.6 AIMS AND OBJECTIVES

The aim of this investigation is to examine teachers' assessment of learners' work and its influence on the culture of learning in South African schools. Advocates of Outcomes-based education stress that assessment will have a positive strengthening effect on the curriculum applied in schools, in contrast to a traditional terminal assessment that only happens once at the end of the unit or section of work (Siebörger and Macintosh 2002: 25). In consideration of this, this study specifically considers teachers' perceptions about traditional product-driven evaluation methods and the new Outcomes-based assessment strategies in terms of their influence on the culture of learning in schools.

The focus would be on teachers' perceptions regarding the application of Outcomes-based assessment strategies, together with environment. Thus, the study would have the potential to provide new insight into teachers' perceptions of assessment in South African schools, impacting on the culture of learning.

Taking the above into account, the aim of the study can be stated fully as follows: **to investigate teachers' perceptions regarding the assessment of learners' work with specific reference to the traditional impact of evaluation on classroom practices versus the application of more contemporary Outcomes-based assessment strategies and the impact these alternate approaches have on the culture of learning in South African schools.**

The researcher hoped to achieve this aim through the realization of the following objectives:

1. To examine teachers' perceptions regarding assessment of learners' work in promoting the culture of learning in schools.
2. To examine teachers' perceptions of assessment as an integral part of teaching and learning processes.
3. To examine the opinion of teachers' with regard to the use of assessment to demonstrate educational achievements to teachers, learners, principals and parents.
4. To examine teachers' perceptions in terms how traditional evaluation practices influenced the culture of learning in schools, and finally
5. To consider teachers' perceptions in relation to the potential of Outcomes-Based assessment practices to influence the culture of learning in schools.

For the purpose of this work, these objectives are addressed through empirical investigations that are restricted to a consideration of teachers' opinions and perceptions; it does not involve school-based observation.

1.6.1 Analysis of the Objectives

Research has shown that learners are often regarded as passive, powerless and often oppressed and mystified by the assessment process (Birenbaum and Dochy 1996: 7). This study therefore attempts to advocate that teachers need to regard learners as active participants who share responsibilities in the process of assessment practices in schools. This suggests that teachers should have good qualities of assessment, which could improve the results of learning in schools. Such assessment could also promote a continued dialogue between teachers and learners regarding curriculum matters. If

teachers can view assessment in this light, it could promote engagement and involvement of learners in teaching and learning activities (Cullingford 1997: 114).

Teachers need not see assessment as a time-wasting appendage to classroom practice, but as an integral part of the planning for effective instruction. This will help learners to develop an interest in learning and so promote the culture of learning in schools. Astuto and Clark (1995: 245) are of the opinion that assessment of learners' work is not only aimed at checking the learners' performance, but also to promote a collaborative effort between teachers and learners to understand levels of current achievements and open possibilities for continued learners' growth. This implies that assessment is essential in order to evaluate the effectiveness of teaching and learning in schools.

This study attempts to establish that assessment can demonstrate educational achievements that may enhance co-operation, trust, confidence and support of teaching and learning practices by parents, principals and learners. This is because assessment results can be used by teachers to indicate what needs or problems are preventing learners from making the necessary progress that is expected of learners by parents and other stakeholders in education (Wiggins 1993: 140).

Another important aspect considered by this investigation is that of traditional evaluation practices, and how these influenced the culture of learning in schools. Van der Horst and McDonald (1999: 28) refer to this evaluation model as concentrating on evaluating learned facts by encouraging learners to memorize and recall subject content. Such evaluation methods appear to include or apply evaluation activities that are regarded as being separate from the instruction process, because they aim only to assess knowledge that was provided by the textbook.

Fraser (1998: 196) describes this evaluation approach as a "single occasion assessment", which uses the content-based model of assessment to control and emphasize the following issues:

- overemphasizing the importance of high marks;
- basing the assessment of performance and promotion of teachers on the achievement of their learners in tests and examinations;

- using tests and examinations as national criteria against which the general proficiency of learners can be assessed;
- convincing local communities and school boards/councils that the performance of learners at a given school is a reflection of the quality of schooling; and finally,
- believing that high scores are true reflections of the cognitive ability and possible future performance of learners.

Fraser (1998: 197) convincingly states that the results of this type of assessment were unfortunately not always reliable indicators of learners' abilities and performance, since it was a once-off occasion of assessment. Teachers' assessment of learners' work should not be regarded as the final step or phase of the learning and teaching process. Instead it should be incorporated systematically at all levels of teaching and learning processes.

This investigation also examines Outcomes-based education assessment strategies and their significance in contributing towards the culture of learning in schools. This is topical due to the mixed reaction by public school teachers and administrators to the Outcomes-based education initiatives (Willis and Kissane 1997:9). According to Spady (1994a:10), Outcomes-based education is a learner-centered results-orientated system founded on the belief that all individuals can learn. In this system multiple instructional and assessment strategies are available to meet the needs of each learner.

The latter argument indicates that assessment is an essential element of Outcomes-based education, mainly because assessment is aligned with the need to enable learners to achieve desirable learning outcomes. This shows that without valid and reliable assessment procedures, teachers will simply not know whether learners have achieved the learning outcomes, neither will the learner know whether they have learnt well (Van der Horst and McDonald 1999:167). It is therefore very important in Outcomes-based education that assessment procedures give a clear indication of what learners are learning and teachers are teaching.

On the basis of these aims and objectives, the researcher will investigate whether South African teachers do have an adequate understanding of the role of assessment in

education, and whether their intervention will have an impact on the development of a culture of learning in their classrooms.

1.7 CLARIFICATION OF TERMS

1.7.1 Introduction

A number of terms and key concepts are used repeatedly throughout this study, specifically: “teachers”, “learners”, “influence”, “culture of learning”, and “assessment”. This section explains their meaning and use in detail in order to remove any obscurity that might exist in the definition and meaning of these concepts, to obviate ambiguity and to give the reader a clear understanding of the research purpose

1.7.2 Teachers

Bondesio and Beckman (1989:52) argue that teachers are individuals who possess approved professional teacher’s qualifications. This qualification enables or allows them to execute their professional duties as teachers. This implies that teachers should have specialized knowledge of carrying out teaching duties.

Combs and Blume (1977: 8) state that becoming a teacher is not a matter of learning how to teach, but a question of personal discovery of learning how to use one’s self well, and to be committed to the teaching processes. This view about teachers can be associated with one of the seven roles of being a competent “educator” which further describe an “educator” as an “assessor”. It defines an “assessor” in an educational context as follows: “this is an educator who will understand that assessment is an essential feature of the teaching and learning process and know how to integrate it into this process. The educator will have an understanding of the purpose, methods and effects of assessment, and be able to provide helpful feedback to learners. The educator will design and manage both formative and summative assessment in ways that are appropriate to the level and purpose of the learning and meet the requirements of accredited bodies. The educator will keep detailed and diagnostic records of assessment.

The educator will understand how to interpret and use assessment results to feed into processes for the improvement of learning programmes” (Government Gazette 4 February 2000: 14).

The word “educator” was not used in this study although it is a more modern synonym of the word “teacher” in the educational context. The researcher decided to retain the use of “teacher” as it has a longer historical use, and is more specifically associated with schooling than the broader term “educator”. However, the role and functions of an educator as an “assessor”, as described in the latter paragraph, should also be applied to the teacher’s role and function regarding the assessment of learners’ work in this study.

1.7.3 Learners

Cockburn (1997:10) states that in a society where learning is valued, the learner is esteemed and the word “learner” is used to describe all those engaged in the learning process. According to the School Education Act of RSA of 1995, learner means any person receiving education at school.

The learner is someone who has a goal and an intention of achieving. According to Vrey (1992:225), the learner wants to realize this goal. However he or she is involved because he/she chooses to be involved and this involvement is defined in terms of the psychic vitality of the learner’s commitment. The learner must understand the goal of learning and rate it as important enough to want to realize it.

In this study the learner will be regarded as a partner in the progress of his or her own development whereby interest has to be maintained throughout the education cycle.

1.7.4 Influence

Hawkins (1989:4-21) describes the term “influence” as the power to produce an effect or the ability to affect a person’s character, beliefs or action.

In this study the teacher's assessment of the learner's work will be taken as an action that will influence or have an effect on learning so that learners will understand why they are learning. According to Bhengu (1997: 27), the constant feedback that they will receive during the learning process should keep them motivated and committed towards better learning.

This study will be used to indicate that assessment could motivate both learners and teachers to attach significance to what they are learning and teaching. Jackson (1991:13) emphasizes that it is difficult to motivate children to learn if they cannot attach meaning to the learning task. As a result assessment in this study will be investigated as an influential element or part of a teacher's role.

1.7.5 Culture Of Learning

"Culture of learning" is an emerging theory in South Africa that has become prominent in education since the Soweto student uprisings of 1976. According to Strydom and Norugwana (1993: 384), the climate in schools across South Africa has not been conducive to learning since this period of time. Hartshorne, in Smith and Pacheco (1996:160) writes that "As the period of protest and revolt continued and intensified, through 1976-80, 1984-1986 and finally from 1988 onwards, the learning environment in the high schools, first in the metropolitan urban areas, then in other urban areas and recently in some rural areas, slowly and surely began to crumble and disintegrate. Even when calls to return to school were accepted there was no guarantee that any learning was taking place. Pupils came to schools at different times, left when they felt like it, did not bring their books to school, refused to do homework or tests and generally, increasingly began to reject any kind of authority."

Nielsen (Masitsa 1995:27) defines a culture of learning as "a positive school climate where the atmosphere is conducive to teaching and learning, where everyone who has interest in the school expresses pride in it, where pupils are given maximum opportunities to learn and there is a high expectation for learners to achieve." It is therefore abundantly clear that the culture of learning not only stresses educational goals

and values, but it also clearly communicates the expectations, norms and beliefs that all learners can and will learn in order to achieve outcomes of learning.

Ex-Robben Islanders can justifiably claim to have preceded educational authorities in establishing a so-called “learning culture” on the island. Ramudzulli (1995:30) states that “learning was a 24 hour activity for prisoners on the island. While learning undoubtedly had value in improving the quality of prison life, ultimately the focus of learning extended to improve the life of the masses back on the mainland. This belief in a community or corporate value of learning is one that organizations would do well to address.”

As a result of making learning a life-long process in Robben Island, success rates across primary, secondary, undergraduate and post-graduate studies were outstanding. Unacceptable behaviour within the cell as well as in the broader prison community was diminished by the culture of learning that existed in Robben Island.

In 1990, the Congress of South African Students began to campaign and encourage students and teacher to adopt the “culture of learning”. It indicated that the behavior of students or teachers who deliberately disrupt schools was not acceptable. It called for school premises to be kept clean and neat, and it also took a swipe at teachers who tended to strike before exams. Punctuality was called for and students were not permitted to leave school unless granted permission to do so in advance. Prior to this time the situation was marked by an observable lack of interest and commitment to learning and teaching. There was a manifestation of anti-academic and destructive attitudes and behaviors amongst many African youths and teachers. The Congress of South African Students called upon the culture of learning in order to rebuild and create a learning society.

Nxumalo (1993:55-60) has defined culture of learning as “a social integration of bringing parents, teachers and students together to establish strict regulations for convenient and successful learning and teaching. These regulations will make parents feel responsible for their children and offer practical support to them at home. For

instance; they should make sure that their children prepare for school, check their schoolwork and attend school on time. The principal should have control over the students as well as teachers, and be accountable to parents and communities.” This definition indicates a binding agreement amongst learners, teachers and parents, in order to promote effective teaching and learning. It also emphasizes discipline and morale to be prevalent in all stakeholders who are involved with learning and teaching.

Smith and Pacheco (1996:162) discuss learning culture as “leerkultuur”, which can be described as the leerlingesteldheid en gees van hardwerkendeheid in ‘n skool wat moontlik gemaak word deur die wisselwerking tussen vier sisteme of kragte naamlik: die persoonskenmerke van leerlinge, gesinsfaktore, die skool-klimaat sowel as die invloed van die samelewingsisteme op die skool, die leerkragte en die leerlinge.” (English translation: Learner attitude and spirit/disposition of diligence in a school, which is enabled by the interaction between four systems of forces namely: the personality characteristics of learners, family factors, school climate, as well as the influence of society on the schools, the educators and the learners.)

The concept “learning culture” has become a household word in South Africa during the past four years. The way in which this concept is often used indicates that no consensus or uniformity exists about the actual meaning of the concept. However, Smith and Pacheco (1996:163) conclude that a culture of learning is determined by the following four systems or factors:

- The learner and his personal characteristics which include his attitude towards learning;
- Factors in the family and immediate living environment;
- School-related factors such as the management style of the principal, school and classroom atmosphere, and the professional competence of the teacher;
- Macro-societal factors such as political and economical factors.

All the above factors, through their interaction, contribute to creating a certain attitude in teachers and learners towards teaching and learning in a school. In view of the above, a culture of learning can be defined as “the general disposition and attitude of pupils towards learning. This includes the atmosphere of diligence or industry that develops in pupils in a school as a result of a combination of personal characteristics of pupils, commitment and involvement of parents, the leadership of the principal, the professional conduct of teachers and the attitude towards the school of people in the community” (Smith and Pacheco 1996:164).

Davidoff, Kaplan and Lazarus (1995:175) refer to the culture of learning as the general ethos at the school. This includes issues such as the extent to which teachers and students are motivated, the way in which students and parents are involved (or not involved, as the case may be) in the life of the school, the way in which people relate to each other, the approach to discipline, and the general attitude towards teaching and learning.

Again Van der Vyver (2001:123) describes the culture of learning in terms of both teachers’ and learners’ behavior at educational institutions. He suggests that the culture of learning is generally defined in terms of learners’ experiences at such institutions, but it needs to be recognized that most often learner behavior is determined by, or is a response to, teachers’ behavior. This indicates that the culture of learning has two distinct characteristics: what learners do in order to get by; and what teachers do in order to assist learners to get by in the teaching and learning situation (Van der Vyver *ibid.*).

This suggests that a certain culture of learning evolves in schools from what teachers do and the way teachers relate to learners,. Hence this study will also investigate how teachers are using assessment to promote the culture of learning in schools.

To summarize, in this study “culture of learning” will mean an atmosphere at school where everyone shares a sense of efficiency; where learners believe they can truly learn; where teachers believe they can truly teach; and parents as well as the community believe the school can and should be an exciting and productive place to learn.

1.7.6 Assessment

According to Satterly (1989:1) and Birenbaum and Dochy (1996:8), the word “assessment” originates from the Latin verb “assidere” meaning “sitting alongside someone”, or “to sit beside”. Sitting beside children suggests a close relationship and a sharing of experience (Satterly1989:1). It is ironic therefore to discover that educational assessment is generally associated in many people’s minds with ranking and evaluation of a learner’s learning progress.

However, in this study the term assessment will be used specifically in the context of appraising a learner’s work, in order to motivate learners to value and honor learning processes at school. In this type of assessment, teachers need to do something more than the traditional norm-referenced or criteria-referenced paper-and-pencil measurements requiring learners to respond (Fischer and King, 1995:2).

There are differences between the terms “assessment”, “test”, “measurement” and “evaluation”. Airasian (1994:5) makes a clear distinction between assessment and other terms that are generally associated with assessment. He states that assessment includes the full range of information teachers gather in the classroom - information that helps them understand their learners, monitor their instruction and establish a viable classroom culture.

This study looks at the variety of ways that teachers gather and synthesize information when assessing their learners. There are a number of different types of Outcomes-based assessment such as performance-based assessment, competence-based-assessment and Authentic-based assessment. These are discussed below.

Performance-based assessment

“Performance-based assessment assists learners to create an answer or a product that demonstrates their knowledge and skills. It also permits learners to show what they can do in a real situation” (Popham 1995:228). This indicates that this type of assessment can boost learner outcomes in terms of academic achievement and emotional well being.

Competency-based assessment

Towers and Towers (1996: 58) define competency-based-assessment “as an effort aimed at defining and evaluating learners’ performance, to establish what learners know, understand and can do in order that teachers can identify their pupils’ strengths and weaknesses, and plan the next steps in their instruction endeavors.” This definition indicates that assessment provides feedback both to the learner and teacher as to how the journey of learning is progressing. It also provides the starting point for future planning.

Authentic Assessment

The move towards Outcomes-based education has also changed the trends of assessment. In the traditional context assessment involved examination and tests (see section 1.4); these did not give learners appropriate opportunities to reveal their knowledge, skills, attitudes or values. Therefore Outcomes-based education has brought a move towards new assessment strategies, which looks for ways other than traditional methods of evaluating learning outcomes. One of the assessment techniques which has contributed to the reform movement is known as “Authentic Assessment”. Van der Horst and McDonald (1997:168) describe authentic assessment as a measurement of complex performance and higher order thinking skills in real-life contexts. They further argue that it provides a more direct measure of higher order learning outcomes than that of more traditional measures. Authentic assessment is thus based on what learners actually do, in a variety of contexts, at points throughout the learning times.

It would seem that such assessment is geared towards giving a clear indication of what learners are learning. It also appears to be flexible and equitable, and designed specifically to match the learning outcomes learners will strive to achieve. This implies that it will contribute to the interest of learning and so enhance the culture of learning. McCown, Driscoll and Roop (1996: 87) are of the opinion that it improves learning and provides a multidimensional picture of what students know and can do. It respects students’ diversity in ways of understanding. It also suggests actions teachers can take to improve the educational development of their students and the quality of educational programs. To accomplish these goals of assessment, teachers will have to equip themselves with a broader array of assessment techniques and strategies than ever before.

This research pursues assessment as one of the teachers' capabilities to empower learners to master skills, knowledge, attitudes and values; to demonstrate complex tasks rather than individual skills practiced in isolation. This study will highlight the importance of assessment in aligning teaching and learning processes. It will also link assessment as a pedagogical aspect to promote and enhance a culture of learning in all schools

1.8 RESEARCH DESIGN AND PLAN OF ACTION

This section discusses the research approach used by the researcher to meet the aims and objectives defined.

Both quantitative and qualitative research methods were applied in this study. Scott and Usher (1996:59) maintain that the two research methodologies do not belong to separate research paradigms; both can be used sensibly within a common investigation. Similarly, Verma and Mallick (1999:115) note that the process of using both qualitative and quantitative data ensures that the conclusions drawn are meaningful, precise and representative. Consequently, both research methodologies were employed in this study so that the results from one form of data source could help to inform and refine data from other sources.

A combination of qualitative research and quantitative research was used to address the aims and objectives of the study. Once the aims of the study were defined, the research sequence was as follows:

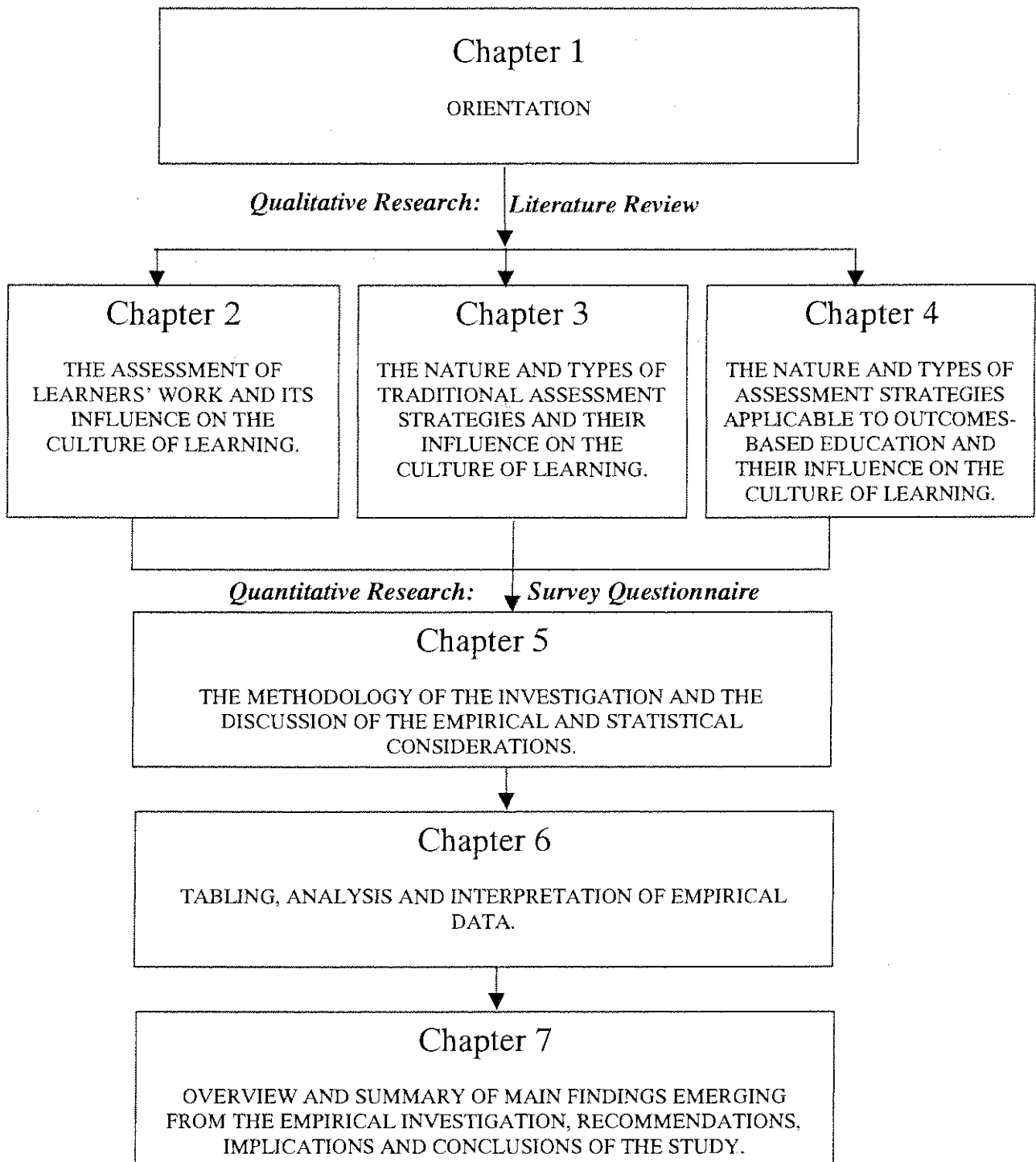
- Step 1: Qualitative research: detailed analysis of the literature



- Step 2: Quantitative research:
 - a) Development of the survey questionnaire based on the findings of the literature study;
 - b) Design and execution of the survey questionnaire;
 - c) Data analysis and interpretation.
- Step 3: Thesis construction

Figure 1.2 provides an outline of the structure of the thesis, indicating the formulation of the chapters in relation to the qualitative and quantitative parts of the study. The following sections discuss these in greater detail.

Figure 1.1. Thesis design and structure



1.8.1 Qualitative Research Applied in the Study

Qualitative research methodology is applied in this study in Chapters two, three and four (see Figure 1.2) in order to build an in-depth theoretical background for this study. Before discussing the detailed literature review conducted in this study, it is useful to provide an overview of the applications and benefits of qualitative research.

1.8.1.1 Applications and Benefits of Qualitative Research

Qualitative research is used to obtain a more holistic picture of what goes on in a particular situation or setting (Fraenkel and Wallen 1993:10). Qualitative methods are probably the best means for discovering educational problems; they enable researchers to better understand the total environment in which education takes place (Gall, Borg and Gall 1996:40). Hence in this study qualitative research was used to collect data in relation to the stated problems outlined in section 1.5. The qualitative data sources for this study included the formal literature, unpublished documents, press statements and radio and television media.

Killen (2002:1) notes that “much of the literature on assessment concentrates on methodology - providing advice about when to assess learners (formative versus summative assessment), what types of questions to ask (multiple choice, essays, etc.), how to mark answers (global impressions versus specific criteria) and how to allocate grades. All these are necessary considerations, but they are based on the assumption that the tester is clear about what exactly is being measured, and that what is being measured is appropriate. Unfortunately, these assumptions may not always be justified. This causes particular problems when the foundation of a curriculum changes - such as when attempts are made to introduce Outcomes-based education. In these circumstances it is inappropriate to continue to base assessment practices on tradition and on narrow experience, in the hope that this will suffice. Instead, it becomes necessary to question these assumptions and look at assessment from a different perspective”. Therefore the researcher in this study would consider texts with substantial body of knowledge on principles of sound assessment practices, of Outcomes-based assessment strategies and traditional evaluation methods. Hence the researcher should be able to give

interpretation of different meanings and intentions about assessment from the qualitative data sources of this study.

De Vos (2001:240) cites that, the most commonly used label for qualitative research is the term “interpretative”. This refers to the fact that the aim of qualitative research is not to explain human behavior in terms of universally valid laws or generalization, but rather to understand and interpret the meanings and intentions that underlie every human action. Mouton and Marais (1993:104) suggest that if qualitative research is interpretative it means it relates to the theory of hermeneutics. Palmer (1988:33) indicates that, from the beginning, the word hermeneutics has denoted the science of interpretation.

It is deduced from this that qualitative research and its hermeneutics methodology is probably the most appropriate research approach that could be used by the researcher in this study. Through interacting with the various literature, documents and press statements, the researcher will interpret and also get to understand the meanings people in educational circles attach to the key issues examined in this study. Specifically, the meanings they attach to the assessment of learners’ work and its influence on the culture of learning; traditional evaluation methods and their influence on the culture of learning; and Outcomes-based assessment strategies and their influence on the culture of learning (see Figure 1.2). Hence a hermeneutics approach, which is generally known as the science of interpretation (Palmer 1988:34), is thought to be appropriate to assist the researcher to correctly interpret the meaning and understanding that educational literature and documents attach to teachers’ assessment of learners’ work and its influence on the culture of learning.

1.8.1.2 The Literature Survey

The researcher reviewed the literature that was relevant to the problem under investigation. The literature review is discussed in detail in Chapters two, three and four. The main purpose of the literature survey was to synthesize the information pertinent to the aims and key objectives of the study (see section 1.6.1). For instance, Chapter two attempts to justify that the assessment of learners’ work by teachers does

have an influence on the culture of learning. The researcher assumed that the literature would reveal that not only teachers should be satisfied about the results of assessment of learners' work, but also that parents, learners, principals and school administrators should participate in and share the results of assessment. Chapter three discusses the nature and types of traditional assessment strategies and their influence on the culture of learning. The nature and types of assessment strategies applicable to Outcomes-based education and their influence on the culture of learning are discussed in Chapter four (see Figure 1.1).

Anderson, Herr and Nihlen (1994:78) indicate that literature study also assists researchers to select research strategies, procedures and instruments that will enable them to conduct the empirical analysis of their results. This constituted the secondary purpose of the literature review in this thesis.

1.8.2 Quantitative Empirical Investigation

The results of the quantitative research are presented in Chapters 5 and 6 (See Figure 1.1).

De Vos (2001:243) believes that qualitative research is inherently exploratory. As a result of this emphasis, the qualitative researcher embarks on a voyage of discovery rather than one of verification. The quantitative researcher can then use these discoveries as a basis for further research. Charles (1988:17) notes that quantitative research organizes data in non-experimental quantitative terms and expresses theses numerically. Items of questionnaires are constructed and analyzed in an objective and context-free manner in order to solicit responses or data from the sample population.

This study applied a quantitative approach through the use of survey questionnaires. These questionnaires were distributed to measure and evaluate the following issues:

- Teachers' perceptions or opinions regarding teachers' assessment of learners' work and its influence on the culture of learning,
- Teachers' perceptions regarding traditional evaluation methods and their influence on the culture of learning, and

- Teachers' perceptions regarding Outcomes-based assessment strategies and their influence on the culture of learning.

The results of the questionnaire survey were tested by means of a confirmatory factor analysis, as described by Robin, Fox and Belinda (2001:511). The approach, methodology and results of the analyses are presented in detail in Chapters five and six of this thesis.

The question items incorporated into the survey questionnaire were derived from the detailed study of the literature described in Chapters two, three and four. This lends support to the validity and reliability of this survey. In relation to this, Ary, Jacobs and Razavieh (1985:358) confirm that, to ensure the validity and reliability of the questionnaires, researchers should use the theoretical assumptions contained in the literature of the study under investigation. If this is done the questionnaires will have a higher content validity and reliability.

1.8.3 Research Hypotheses

Anderson, Herr and Nihlen (1994; 161) concur that an important element of quantitative research is that hypotheses should be formulated before the investigation is embarked upon, because the whole study should revolve around the research hypotheses. This is accentuated by Ary, Jacobs and Razavieh (1985; 75), who state that the hypothesis is a powerful tool in scientific inquiry, because it helps the researcher to be in the correct perspective regarding the phenomenon under investigation. Similarly, research hypotheses predict a direction for the results of a study (Cates 1985:17).

A hypothesis is a prediction or a statement of the specific results or outcomes that are expected to occur (Fraenkel and Wallen 1996:18, Vockell and Asher 1995:193). A hypothesis can also be defined as a tentative prediction of the results of the research findings (Gay and Airasian 2000:71). Hypotheses state the researchers' expectations with regard to the relationship between the variables of the research problem (Ary, Jacobs and Razavieh 1990:94; Gay 1992:66; Gay and Airasian 2000:71 and Van Dalen 1979:196-197).

The researcher formulated the following hypotheses to anticipate what the outcomes of this study might be. Firstly, the literature study intended to gather data for the following two hypotheses:

Hypothesis 1. An assessment system built upon the traditional evaluation methods has a detrimental effect on the development of the culture of learning in schools.

Hypothesis 2. Assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools.

Secondly, the empirical investigation tested the following Null hypothesis:

Hypothesis 3. No distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools.

The realization of the aims and objectives of this study in paragraph 1.6, through the literature study and empirical analysis of this study, would enable the researcher to verify, accept or reject the above stated hypotheses.



1.9 SUMMARY

In this chapter the following important aspects have been explained: general background of the study; factors that contributed to the investigation; the formulation of the research problem; the aims and objectives of the study; clarification of terms; research design and plan of action; and finally statement of the research hypotheses.

CHAPTER 2

THE ASSESSMENT OF LEARNERS' WORK AND ITS INFLUENCE ON THE CULTURE OF LEARNING

2.1 INTRODUCTION

This chapter examines the literature that discusses assessment of learners' work, and how the results of assessment affect learners, teachers, school administrators, principals and parents in relation to the development and improvement of the culture of learning in schools (see section 1.8.1).

Assessment, like instruction, needs to be meaningful and must address both processes and products. It also needs to pay attention to attitudes, confidence, interests, and experience as well as knowledge, understanding and strategies. Thomas (1993:257) suggests that, if assessment pays attention to all these factors, both teachers and learners would be motivated. This would help to stimulate a culture of learning.

McGee and Head (1994:280) believe that if the assessment of learner's work is characterized by co-operation and collaboration of teachers, learners, school administrators and parents, it will emphasize a process for partnership among all parties who need and expect productive learning. Similarly, Boschee and Baron (1993:2) argue that if teachers and learners share the responsibility of assessment for learning purposes, they will be equally motivated towards successful learning processes. It is important to understand that assessment in this study may either be a result of teacher's activities or may be triggered by learners, because assessment is regarded as an integral part of both teaching and learning processes (as indicated in paragraph 1.5.1.)

In this chapter the researcher specifically focuses on five aspects of the teacher-learner-assessment interface that may promote a culture of learning in schools:

- The role of assessment as a motivating factor for teachers and learners,
- The role of teachers' perceptions about assessment,
- The role of learners' perceptions about assessment,
- The role of the school administrators perceptions about assessment, and
- The role of parental involvement in the assessment process.

Each of these aspects is discussed in detail in the following sections.

2.2 THE ROLE OF ASSESSMENT IN THE MOTIVATION OF LEARNERS AND TEACHERS FOR THE DEVELOPMENT OF A CULTURE OF LEARNING.

Assessment has a great potential for motivating both teachers and learners. Through assessment teachers can motivate most learners and foster many of a learner's competencies. A great deal of research has indicated that assessment can assist teachers to understand how to motivate pupils. Teachers can also develop assessment skills that can improve a learner's understanding of the nature of the learning process (Weston 1991:45). According to Venter (1998:5), usually pupils set targets for each subject in collaboration with their teachers. These set targets will continuously direct the learner's assessment of his/her own achievement, using multiple strategies of assessment. A learner will thus be motivated to learn by rating himself/herself against his/her own potential. This could result in a positive impact with regard to the culture of learning.

Research shows that many teachers are beginning to realize that no single assessment, however improved, can take the place of the multidimensional, continuous, contextualized assessment necessary for the ongoing teaching and learning circles of particular classrooms. According to Thomas (1993:260), Rowland believes that whenever teachers really look closely at what learners are doing, the choices they are

making and the forms of expressions they are using, the teachers are able to develop an understanding of why learners worked in the way they did. This suggests that teachers need to approach their work with a questioning frame of mind. They must explore new possibilities and find ways of teaching that will motivate learners and promote critical thinking and problem solving skills (Thomas 1993:259).

There has long been widespread consensus among educational researchers, practitioners, and policymakers that curricula and instruction should ideally incorporate critical thinking and problem solving skills. This allows education to promote higher order cognitive skills and strategies for instruction (Bol and Strange, 1996:146). According to Aldridge, Scott and Kuby (1994:45), this suggests that teachers should begin to see their role as preparing all learners for life in a world of rapid scientific and technological change, rather than that of preparing a small minority of learners for a highly specialized career. In keeping up with this shift, the current reconceptualization of state curricular frameworks should reflect the goal of helping learners to integrate what they learn in the classroom into their lives. Bol and Strange (1996:147) believe that this can be achieved by firstly making the curriculum content more inquiry-based. Secondly, outcomes-based assessment measures should be adopted which tap the learner's ability to engage in guided discovery activities, rather than memory for content *per se*. An assessment which promotes critical-thinking, problem-solving and other kinds of higher order thinking strategies will motivate both teachers and learners to apply more sophisticated thinking skills. This would have a positive effect on the culture of learning (McCaslin and Good 1992:134).

Many education systems have emphasized that skills, knowledge and educational information can only be acquired by learners from teachers (Brandt 1994:8). As a result, these systems did not plan for appropriate learning experiences to motivate learners to achieve the necessary learning outcomes. These include, inter-alia, critical thinking, problem solving, application, appreciation, analyzing, synthesizing and evaluation of information (Olivier 1998:36). Such learning outcomes were not given the attention they deserved due to the fact that many education systems focused only on developing the basic levels of skills and knowledge of numeracy and literacy. This has the result that the future of many learners has been compromised because the outcomes held for them were low and unclear.

A major challenge facing any move to an Outcomes-based system is to redesign the assessment of learners. This will motivate the learners to acquire learning experiences, and enable them to think critically, be evaluators of information, problem solvers and finally, to apply the knowledge they have gained appropriately and successfully (Spady 1994b:21). This would undoubtedly have a positive effect on the culture of learning.

This is the reason why Spady and Marshall (1991:67-72) say that authentic assessment and performance-based assessment rather than standardized, multiple-choices are necessary to measure the learner's attainment of such learning outcomes. They further argue that many outcomes demand a type of assessment that is more performance-orientated, because most current tests fail to measure the applications of knowledge described in new Outcomes-based education. Performance-based assessment moves away from an emphasis on recall towards an emphasis on resourcefulness. This motivates teaching and learning to focus on analysis, synthesis, evaluation and other higher-order thinking skills.

According to Manges, Wigle and Wingett (1996:11), assessment is like a motion picture of a learner with multiple opportunities for practice and performance. Through assessment, teachers afford learners opportunities to demonstrate the learning outcomes that they have achieved. This implies that assessment is not routine in nature, but rather that learners should demonstrate the attainment of outcomes of learning by being motivated to inspect, reflect and evaluate their own work in order to promote a culture of learning.

Popham (1995:2) is of the opinion that assessment should also try to determine the status of learners regarding "Educational variables of interest." Variables are factors that influence or could be influenced by other factors. In education, for example, we find that learners vary in how much they know about a subject, how skilled they are in performing various operations (for example long division), and how positive their attitudes are towards school. Popham (1995:5) asserts that teachers should use assessment in a deliberate effort to determine such variables as the learner's knowledge, skills or attitudes. The assessment of these variables lifts the interest of the learner, because they involve more than a teacher's impression. Such assessment looks at the

way learners acquire knowledge, and how teachers enable learners to learn, because it follows a systematic approach to get a fix on a learner's status.

In truth, however, few classroom teachers give explicit attention to influencing their learner's attitudes and values. Even fewer classroom teachers actually try to assess the affective status of their learners. Research supports the fact that many teachers, particularly those who teach older learners, believe that their only educational mission is to increase a learner's knowledge and skills. (Van der Horst and McDonald 1999:53) Such teachers believe that affective variables do simply not fall within their proper sphere of influence. In the past few years, Boyd, Lugg and Zahorchak (1996:347) have shown that there has been an emergence of a vocal group of individuals who have taken strong positions against schools offering anything other than traditional academic (cognitive) education. These critics, usually representing religious or conservative constituencies, argue that it is the duty of the family and church to promote values in children, and that any attempt by the schools to systematically modify children's attitudes or values should cease.

Popham (1995:180), notwithstanding the aforementioned criticism, re-emphasizes that affective assessment of learners that promotes positive attitudes towards learning would be universally approved and also nurture learner's self-esteem. He regards affective variables as equally important as cognitive variables, arguing: "We have seen people who were not all that "gifted" intellectually still succeed because they were highly motivated and hard working. Conversely, how many times have we seen truly able people simply veer away from challenges because they did not consider themselves worthy." This shows that, to promote the culture of learning, assessment should be used to equip learners with independence and initiative in directing their own learning. They should be able to ask questions, evaluate evidence, defend their arguments and apply their knowledge to new situations (Taylor and Vinjevold 1999:109). In short this could promote positive attitudes, feelings and self-worthiness amongst learners.

Both Popham (1995) and Messick (1979:292) share that, in addition to serving as an end-of-instruction goal, affective assessment devices, if administered regularly, will help teachers determine if modifications in the instructional programme are warranted. A major part of a teacher's role involves planning learning experiences and activities.

Different activities encapsulate different learning experiences, hence teachers choose to offer a particular activity because of its potential in terms of learning outcomes, attitudes and the value of its content to learners (Mitchell and Koshy, 1993:49). However learners will learn certain things by engaging with the activity. As active participants in their own learning, learners will bring something of themselves to the activity. They may branch off in an equally valid and productive direction.

This is why Salvia and Ysseldyke (1995:217) warn of the danger of developing tunnel vision; being so busy looking for the possible outcomes during assessment that one misses the actual outcomes of learning. They maintain that assessment should be done to motivate teachers not only to concentrate on the specific learning outcomes, but also to review the range of activities engaged in. The aim should be to motivate learners to learn intellectually rather than just attaining specific outcomes of learning.

Rallis (1995:226) shows that assessment should be learner-centered, because a learner-centered approach offers each learner many opportunities to learn. Through assessment the school broadens to encompass those learners it finds dwelling within. The teachers learn who their learners are; they ask what talents and life experiences each learner brings and what each learner needs. If a learner does not meet a “standard” the learner is not dismissed as a failure; rather, the teacher considers remedial teaching to intervene and compensate for the learning difficulties of the learner. This motivates the child to learn, which should be an underpinning principle of the culture of learning.

In this study assessment is regarded as a motivation tool to promote the culture of learning. Rallis (1995:228) asserts that collaboration, caring and growth are the ruling ethics of a learner’s assessment. He further states that teachers and learners should collaborate; they will then realize that the whole product of assessment is equal to more than the sum of each person’s contribution.

The proponents of the alternative assessment movement prefer the use of formative data, which directly examines student performance on significant “real world” tasks, over that of the more traditional summative assessment characterized by scores on multiple-choice standardized achievement (Wiggins 1989:710). They argue that the formative nature of alternative assessment provides a framework for individualizing instruction.

This allows for student self-assessment, and becomes an ongoing aspect of instruction that facilitates opportunities for collaboration between teachers and students in ways that more traditional summative assessment do not. Finally, they argue that such assessments are more flexible and versatile than more traditional assessments. Specifically, such assessments can focus on student processes, products, and performances in ways that traditional multiple-choice, paper-and-pencil assessments cannot (Worthen, 1993: 444-454).

Astuto and Clark (1995:245) indicate that assessment motivates collaboration and caring between teachers and learners. The reason is that it presses both the individual and the group to achieve higher levels of understanding and expertise. It also fosters inquiry, discovery, and trial and error, and it builds on the strengths and talents of all participants. Through such collaboration and care, teachers become aware of the growth and development of their learners in more holistic and comprehensive ways. Learners become empowered to participate in the improvement of their own learning. Both teachers and learners become more engaged and committed to the teaching-learning process (Little, 1993:193).

2.3 TEACHERS' PERCEPTIONS ABOUT ASSESSMENT AND ITS INFLUENCE ON THE CULTURE OF LEARNING.

This study focuses on assessment as a continuous process of gathering and reviewing information in order to help learners succeed in their learning. Wittrock and Baker (1991:297) urge teachers to use assessment that is collaborative, rather than competitive assessment which separates those who “can” from those who “cannot”. Collaborative assessment can help teachers to develop a perception of encouraging learners to enquire, discover and build strengths and talents with regard to learning. Such assessment enables learners to participate in their own learning, thus promoting the culture of learning (Little 1993:192). Collaborative assessment also contributes to the professional and technical development of teachers. However, the primary purpose of assessment is to identify and specify strengths and weaknesses with respect to teaching and learning in order to improve teaching practices and learning outcomes (Greaney and Kellaghan,

1996:13).

Manges, Wigle and Wingett (1996:10) are of the opinion that teachers must adopt instructional roles which are more collaborative and facilitative in nature. The focus needs to be on how teachers should facilitate the learning process. Teachers need to interact continuously with learners to confirm progress and direction based on performance indicators. They must develop criteria to assess or judge the evidence, and reconcile learning styles with the context of learning. They should propagate creativity by promoting self-development, and encourage cross-curricular thinking and the development of higher order thinking, communication and decision-making skills (Olivier 1998:40-41).

Airasian (1994:62) proposes that the instructional process consists of three general steps. The first step involves planning the instruction; this includes identifying desired pupil behavior changes, selecting materials and organizing learning experiences into a coherent whole. The second step involves extensive interaction with the pupils; Finally, the third step determines whether the planned pupil changes have occurred, that is, whether pupils have learned.

The third step can be useful in assessing the appropriateness of the learning experiences. However, with regard to assessment, the first and second steps are as important as the third step. This is because what teachers do during didactic activities influences what learners will do when being assessed. It is important to note that while the focus here is upon assessment as carried out by classroom teachers, teacher-centered assessment is not the only type of assessment that goes on in classrooms (Airasian 1994:6). Just as teachers constantly assess their learners, so too do learners constantly assess their teachers. It is thus important for teachers to look beyond their written lesson plan and to take the classroom as a learning society, which prizes the culture of learning and teachers as leaders of that society (Messick 1979:297).

The knowledge and skill-base of what teachers need to know and be able to do in recent years has been broadened and deepened over that expected in the past. In the past teachers strongly believed that assessment was only used for grading and promoting pupils to the next level. The modern understanding is that assessment should guide and

give directions for the teacher's instruction, and also give additional information about pupils' learning (Airasian 1994:138).

To demonstrate that the teacher's role with regard to assessment has been broadened and deepened, Jackson (1990b:84) points out that assessment should meet three main requirements:

- The behaviors pupils are expected to exhibit must be related to the teacher's educational objectives and instructional emphases;
- The exercises or questions included must provide a representative sample of the objectives and instructional emphases; and
- The assessment exercises, question, directions and scoring procedures must be clear, unambiguous and appropriate for the pupils.

Jackson (1990b:85) concludes that if these three characteristics are reflected in assessment procedures, the information gathered will provide a valid and reliable foundation from which the teacher can make a decision about a pupil's learning. The decisions that teachers reach through assessment should bring comfort and pleasure, which in turn instills the enjoyment of learning, because decisions that result from assessment influence learner's lives both in and out of school (Brigance and Hargis 1993:25).

Imrie (1995:175-189) points out that changing assessment practices is the most effective way of influencing the quality of student learning. It is clear that teachers have to practice assessment differently from what they used to do. They must now understand and come to grips with new theories of teaching and learning, which include inter-alia cognitive loading theory, social reconstruction theory and didactic constructivism. They must also be able to create a powerful learning environment. These aspects are discussed in detail below.

2.3.1 Cognitive loading theory.

This theory is more complex than verbal learning and intellectual learning. Kirschner (2002:3) states that cognitive loading theory assumes a limited working memory connected to unlimited long term-memory. As a result of this, instruction should be designed such that working memory is capable of processing the instruction. This suggests that teachers should be aware that cognitive architecture such as memory enables learners to connect and transfer skills, attitude and knowledge over an unlimited time span, which is a lifelong learning process.

Sweller, van Merriënboer and Paas (1998:251) divide cognitive architecture memory for learning into two types. The first is known as the short-term or working memory. This is thought to be the memory that learners use to organize, contrast, or compare the information. Working memory is seen not as one monolithic structure, but rather a system embodying at least two mode-specific components: a visuo-spatial sketchpad and a phonological loop co-ordinated by a central executive. The second type of memory is the long-term-memory. This is the repository for more permanent knowledge and skills, and includes all things in memory that are not currently being used but which are needed to understand. Most cognitive scientists believe that the storage of long-term-memory is unlimited and that it is a permanent record of everything that has been learned. They believe that the functioning of its content is initiated by working memory or short-term-memory (Sweller, van Merriënboer and Paas 1998:253).

Kirschner (2002:4) believes that human cognition thus places its primary emphasis on the ability to store seemingly unlimited amounts of information, including large, complex interactions and procedures, in long-term-memory. Human intellect is a consequence of this stored knowledge. As a result teachers must consider how this information is stored and organized in long-term-memory so that it is accessible when and where it is needed.

Teachers should therefore attempt to embody cognitive loading theory in their instructional design, and when assessing learners work. They could translate the following cognitive strategies to learners for the promotion of the culture of learning:

- how to remember;
- how to learn;
- how to interpret;
- how to solve problems.

This could empower learners to adopt the most effective approach for learning in various contexts, with the result that the culture of learning could be promoted.

2.3.2 Social Reconstructionist View

Teachers need to develop a positive perception about their professional activities in the classroom situation. They should be mindful of the social reconstructionist view. Robinson (2001a:108) explains that a social-reconstructionist orientation to teachers development could become closely linked (even conceptually integrated) with an orientation that stresses on teachers the need for personal development. This could assist teachers to have a profound influence on the culture of learning amongst learners. In Outcomes-based education (OBE) policies, teachers are expected to take full responsibility for careful planning and management of their learners work through continuous assessment. Therefore, to promote the culture of learning, teachers would be expected to become more involved in motivating and facilitating learners to be eager to learn (Paterson and Fataar, 2001:150).

Van der Horst and McDonald (1997:6) assert that the new Outcomes-based curriculum in South Africa is aimed at developing a thinking, problem-solving citizen who would be empowered to participate in the development of the country in an active and productive way. This calls upon teachers to provide education that will assist learners to be equipped with the knowledge, skills, attitudes and values to help them become active, valuable participants in creating a better country. Robinson (2001a:104) believes that this is typical of a social-reconstructionist view of schooling, where schooling is

regarded as a way to change and improve society. As a result schools would be expected to produce successful learners, with high self-esteem, who are motivated and willing to strive for further successes. Positive and constructive ongoing assessment on the part of the teacher is essential in this regard, for the benefit of the culture of learning.

This clearly shows that the social-reconstructionist view is geared towards producing good citizens through the education process; citizens who will take responsible positions in a society. This is also noted in Turnbull (2002:124) when he asserts that: “Social-reconstructionists aim at no less than a change in education, both nationally and locally; for people to think of themselves as active citizens, willing, and able and equipped to have an influence in public life and with critical capacities to weigh evidences before speaking and acting; to make them individually confident in finding new forms of involvement and action among themselves.”

This view suggests that teachers should apply sound assessment practices in classrooms, that could result in producing active citizens who could participate in public life without fear and intimidation. Teachers and learners need to be involved at multiple levels, thinking together about significant and enduring solutions they might create, and helping those solutions to come about.

2.3.3 Didactic Constructivism

Von Glasersfeld (2002:171) asserts that the essential principles of didactic constructivism is that teaching should not begin with presentation of sacred truths, but rather by creating opportunities for making the students to think and learn. Furthermore, he states that the prerequisite of teaching is that teachers need to believe that students can think. He argues that assessment in teaching and learning situations should direct students' thinking in the didactic situation from time to time by neutral assessment questions. This is why Smith (2002:348) feels that it is not enough for teachers to be familiar with the program content, they must also have a range of didactic situations at their disposal in which the concept to be constructed can be implied.

This particular didactic method make it imperative to realize that, teaching is not only about presenting sacred knowledge to learners. Danner (1995) in Killen (2002:3) argues

that “learning is not only adding something to our knowledge”. Killen (2002:3) believe that “It is a process of integrating new subject-matter into the learners’ world of sense and meaning. In other words, learning is a process that leads to understanding”. Therefore, teachers need to have appropriate methods to describe whatever is that they want students to understand, and apply appropriate assessment tools to measure that teaching and learning has been successful.

Von Glasersfeld (2002:170) explicitly explains this didactic constructivism in the following figure:

Figure 2.1. The example of steel balls (from Leonard and Garace 1996)

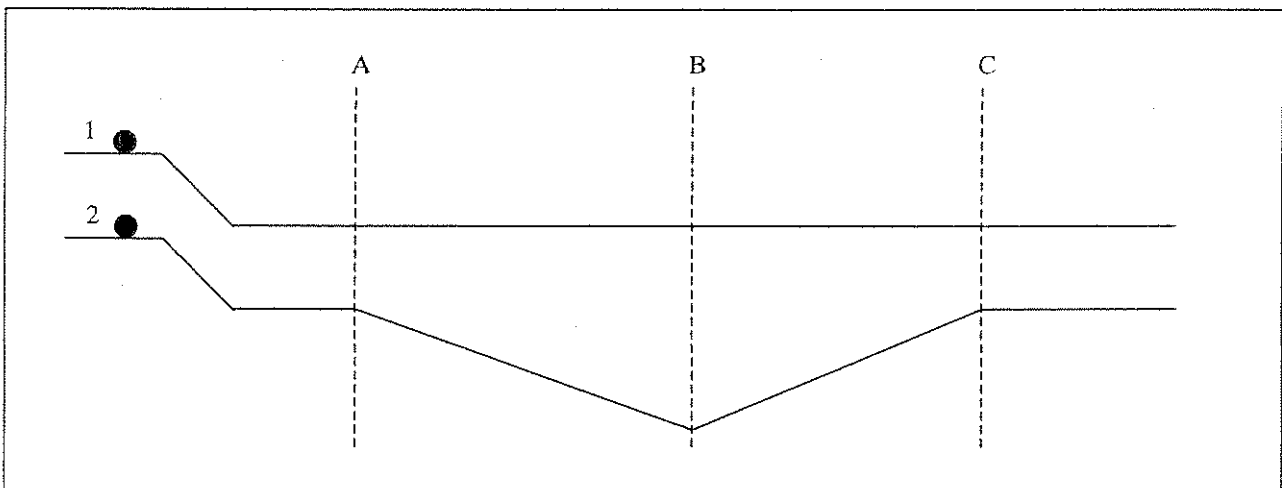


Figure 2.1 shows two tracks on which steel balls can roll almost without loss of energy through friction. The two tracks are not identical, but the starting point and the finish point are the same height in both cases. The question is, if two balls leave at the same time, which will reach the finish line first? Very seldom do learners answer that ball two will win the race. So there is a great surprise when the steel balls are rolled and, every time, ball two wins the race. Some students laugh and claim the apparatus has been rigged. They are assured that it has not, and are asked to describe as precisely as possible what happened.

At first it is not easy to get them to speak, but when they are told that it is not a test and that they should simply share their ideas with others, one or two of the students begin

the discussions and others gradually join in. Usually, they soon agree on the following description:

- Both balls arrive at point A at the same time at the same speed.
- The downhill slope from A to B enables ball two to accelerate and reach B before ball one.
- “Is ball 2 in the lead?” they are asked.
- “Yes at point B ball two is in the lead, but then it has to go uphill, which makes it lose its lead.” Then they are asked:
- “And when ball two reaches point C is it going faster or more slowly than ball one?”

Such time to time questions in the teaching and learning situation lead to a longer discussion, but eventually learners become involved. This sparks motivation and interest in learning amongst learners in the classroom situation. Usually this interaction between teachers and learners promotes collective teaching and learning, with the result that the culture of learning is promoted. Killen (2002:3) asserts that this style of teaching and learning makes it obvious that teachers “should be interested in issues of quality rather than quantity of student learning.

For example, it changes teachers’ focus from asking: “How many questions can a learner answer?” or “Which skill can a learner demonstrate?” to “How well does the learner answer questions?” and “How expertly can the learner demonstrate particular skills?” (See section 1.1). Imrie (1995:176) and Killen (2002:3) postulate the following regarding the implications of assessment in constructivism didactics;

- Understanding (rather than memorization)
- Creativity (rather than reproduction)
- Diversity (rather than conformity)
- Initiative (rather than compliance)

- Challenge (rather than blind acceptance)

Killen (2002a:4) feels that this is an attempt to provide a framework of assessment theory that will ensure that assessment is an effective link between pedagogy and the quality of learning and performance.

2.3.4 The Creation Of A Powerful Learning Environment

According to Van der Horst and McDonald (1997:7), teachers are responsible for creating a powerful learning environment. This means that teachers need to create and control the conditions under which learners can succeed. Hence teachers are charged, against all odds, with the responsibility of creating learning environments that are inviting, challenging and motivating to improve the quality of learning in schools (Christie 2001:47). Such a positive school atmosphere would promote the culture of learning.

Such an environment must be characterized by an emphasis on active learning, where each learner is involved in the teaching and learning processes. This could be achieved if teachers could appreciate that each learner is unique and has his or her own way of learning at their own pace. The teacher also needs to have good records of what has been achieved and what is still to be done (Siebörger and Macintosh 1998:58). In this regard assessment should be used to help the learner, rather than provide a set of marks for the teachers. This would again promote culture of learning in schools.

The establishment of a positive and powerful learning environment goes hand in hand with the issue of school culture. School culture has been identified in the literature as a key element of institutional development. As such, it incorporates the schools vision, mission, aims, tasks and policies as well as the values and norms operating at the school (Robinson 2001a:106).

It can be deduced that, in schools with a positive culture, assessment would be one of the valued elements. Airasian (2001:6) feels that teachers should conduct an initial assessment early in the school year. The purpose of this is to learn about their pupils'

social, academic and behavioral characteristics and needs in order to foster and enhance instruction, communication and cooperation in the classroom. These assessments are called sizing-up assessments, and allow teachers to set-up and maintain an effective classroom society. Other assessment strategies should follow, which assist teachers to establish a positive learning environment. Such assessments are used to deliver instruction and include decisions about what should be taught, what materials used, how a lesson is progressing, and what changes in planned activities are needed. Of all these many functions of assessment, Airasian (2001:4) believes that the one purpose of assessment which could not be overlooked is that of assisting teachers to establish and maintain a powerful learning environment for the promotion of the culture of learning.

This shows that assessment can promote interaction between teachers and learners in the learning environment. The learning environment is like the space described by Ayers (1993:2) as follows: “The space is a visible container of human action”. This quotation makes one think particularly about the space in which the teacher and learners interact in the course of performing learning activities in the classroom (Vakalisa 1998:179). Teachers in this situation are charged with the duty of managing these activities and the environment in which they occur. They are also particularly responsible for creating a climate of tolerance, respect and co-operation between themselves and learners, as well as among learners. These, according to Vakalisa (1998:180), are the typical responsibilities for signaling the creation of a positive learning environment by teachers.

Ornstein (1990:34) proposes the business-academic approach for teachers in order to keep a positive learning environment. He indicates that distraction and misbehavior of learners are the direct results of poorly planned lessons that are not presented with precision and proficiency. Therefore, he suggests that the main focus of teachers should be on keeping learners meaningfully engaged in the business of learning throughout class time. This can be done by orchestrating the classroom life as follows:

- Planning the curriculum
- Organizing procedures and resources
- Arranging the environment to maximize efficiency
- Monitoring students progress

- Anticipating problems

This shows that teachers need to have effective classroom management for effective teaching and maintenance of the powerful positive learning environment. To achieve this, Vakalisa (1998:180) is of the opinion that teachers will need more than the knowledge of the subject content and how to present it. Teachers will also need effective strategies to maintain order and keep alive the learners' motivation to learn. This could have a possible positive impact on the culture of learning in schools.

2.4 LEARNERS' PERCEPTIONS ABOUT ASSESSMENTS AND ITS INFLUENCE ON THE CULTURE OF LEARNING

The American National Commission on Excellence in Education (1993) proposes that: "teachers should bear in mind that assessing pupils should aim to provide pupils a fair opportunity to demonstrate what they have learned from the instruction provided" (Airasian, 1994:149). The purpose of assessment is not to trick learners into doing poorly, entertain them or ensure that most of them get "A" grades. It is also not only to determine how much total knowledge learners have accumulated as a result of all their learning experiences. It is simply a means of letting learners show what they have learned from the things they have been taught and experienced, so that each learner will be encouraged to seek a better means of learning.

Assessment thereof ensures that learners have been able to master the subject-content that they have learnt. Avenant (1990:246) emphasizes that the principle of mastery learning can be seen as comprising the steps a teacher should take to help his/her pupils to obtain a thorough understanding of the subject-matter, to be able to make deductions and value judgments about it, and remember it for a long time. Seen in this perspective, mastery learning will enable learners to know exactly what has been taught, and be able to memorize, apply convergent or divergent reasoning, generalize, extrapolate and make value judgments. Avenant (1990:247) again asserts that it may happen that a pupil understands the subject-matter, is very interested in it and finds it real and concrete, but

needs assistance in consolidating the work he/she has learnt. In such a case assessment, as a didactical practice, plays a vital role by indicating through its outcomes that the learner has mastered the subject-content. Consequently the learner's morale of learning will be boosted and the culture of learning will be positively influenced.

Assessment needs to be viewed by learners as a lever to promote the changes needed in their learning. Mitchell (1992:21) comments that learning does not mean memorizing facts or algorithms; it means the ability to use them appropriately by weighing conflicting values, arguing with reasoned propositions, selecting facts, using evidence, and thinking clearly. If learners are to increase their ability in these areas, both learners and teachers need constant feedback in the form of assessment. Thus assessment becomes part of both teaching and learning.

Most tests do not provide real help to learners, since they have the wrong focus of labeling and ranking. Brigrance and Hargis (1993:24) point out that we need authentic assessment, which concerns itself with what learners have actually learned. It should be a dynamic, substantive form of assessment that will be used to ensure that learners succeed. The success of learners is undoubtedly one major factor that contributes to the learning culture. According to Masitsa (1995:391), large amounts of instruction and high learner ability count little if learners are not successful. Regular assessment, followed by prompt feedback, motivates learners because it enables them to know how they are performing and to make time for improvement. It must be a form of assessment with an active ingredient, to enhance the learner's zeal and zest to learn successfully.

Learners need not perceive assessment as an instrument used by teachers to track them down, or as an instrument which perpetuates inequality in learning. Instead it should be seen as an acknowledgement of the totality of what learners have done in order to improve their learning culture and help teachers identify their needs more closely (Hargreaves, 1989:116). Recognition of a learner's achievement in any sphere at school has a tremendous influence on enhancing the culture of learning.

Assessment will also gives teachers an opportunity to allow learners who make mistakes ample chance to re-learn and correct errors, helping them to feel motivated and comfortable to take intellectual risks without fear of being criticized or reprimanded.

Salvia and Ysseldyke (1995:29) also believe that when learners have received appropriate instruction, but are still experiencing academic problems, teachers usually use assessment in order to document the nature of the problem (that is, identify specific strengths and weaknesses) and to generate hypotheses about the problem's likely cause.

Sutton (1992:53) points out that if assessment information and objectives are well shared between learners and teachers, the learners themselves can increasingly involve themselves in monitoring their own progress and assume responsibility for providing their own feedback. According to Angelo and Cross (1993:24) learners will learn independence from others (teachers) for knowledge of how well they are doing, and be encouraged to recognize and realize rules and strategies, whereby they may test the validity of their own responses. This would be a step towards self-assessment that will support and establish a culture of learning among learners.

2.5 SCHOOL ADMINISTRATORS' PERCEPTIONS ABOUT ASSESSMENT AND ITS INFLUENCE ON THE CULTURE OF LEARNING

The principal is responsible for the administration, organization and control of everything connected with the school. Owing to the vastness of the school and the comprehensiveness of the functions he/she has to perform, he/she is compelled to delegate certain tasks and responsibilities to Heads of Departments and teachers. He/she nevertheless bears full responsibility and accountability for everything that happens in his/her school (Masitsa 1995:29).

School as a teaching and learning organization should be conflict-free. Chisholm and Vally (1996:30-36) contend that a relationship of interdependency based on trust and respect should be encouraged between principals, Heads of Department, teachers and learners. Assessment of learners' work has an impact on the daily functioning of all these people, and it has a direct effect on the culture of learning in all schools.

School administrators need to view their position as the lever to foster staff collaboration. They should emphasize teamwork and promote co-operation,

cohesiveness, communication, commitment, loyalty, trust and identification with the school. Teachers can give their support by being on good terms with one another, supporting the principal and by being enthusiastic about their work. In this way teachers could concentrate more on their work and regard it as a priority and shared responsibility. This can also contribute towards a positive culture of learning.

Research (Stiggins and Conklin 1992:31) indicates that assessment involves shared decision making amongst teachers at school. Principals who share decisions with teachers enrich their own ideas about assessment, provide opportunities for teachers to develop assessment qualities and can easily count on the teachers' support. Masitsa (1995:386) maintains that teachers of such schools feel good about themselves and are often highly motivated to do their work. When decisions are shared, school learners are more likely to accept the results of assessment, and this could increase their co-operation towards the attainment of the culture of learning.

It has been found that the maintenance of high academic standards at school has a positive effect on the establishment of a learning culture. The school's prosperity depends on a spirit of high expectations and a focus on excellence. Consequently, the school should set and maintain high but realistic assessment standards if it is to foster a work ethic among its learners and teachers. Principals should explain the value of a high standard of assessment to learners. Teachers should show learners that they have confidence in their ability to achieve academically. Walter, Dlugosh, Anderson and Simmons (1995:179) urge principals to move away from the traditional time-based school system, where learners race the calendar to complete work in a variety of subjects. Rather, they should emphasize excellent levels of performance for all learners by providing multiple opportunities for learners to demonstrate competencies through assessment results.

The introduction of OBE in South Africa by means of curriculum 2005 is a more formidable undertaking than was originally envisaged (Green 2001:129). As a consequence of this, principals are expected to develop a culture of motivating teachers to develop professionally. This suggests that principals should take into account the individual lives and identities of the teachers who have to understand and implement

Curriculum 2005 and its assessment strategies, for the promotion of the culture of learning in schools.

In order to ensure the implementation of Curriculum 2005, principals have to understand the four basic principles underlying the management of the assessment processes (Educator Development Manual of the Department of Education of South Africa 2001:18). The first principle is that of design down. This principle dictates that the outcomes to be addressed through teaching and learning are first clearly stated before developing the teaching and learning activities the learner will be engaged in. The second principle is clarity of focus. This implies that teachers must ensure that learners are clear about the criteria against which they are to be assessed and therefore what they are expected to demonstrate. The third principle is high expectations, which implies that educators must assist learners to reach their full potential. The fourth and final principle is expanded opportunities. This means that educators must find multiple ways of exposing learners to learning opportunities that will help learners to demonstrate their full potential in terms of knowledge, skills, values and attitude (Spady 1994a:15-36).

Spady (1994a:6) also emphasizes that time in an Outcomes-based system is used as an alterable resource, depending on the needs of teachers and students. Within reasonable constraints, time is manipulated to the best advantage of all learners – some learners learn some parts of the curriculum sooner, while others accomplish those parts later.

Learners are likely to work better if taught and assessed in an environment of confidence that they can and will succeed. The school should have a well-structured and effective evaluation programme spanning the entire year so as to be able to assess the learner's performance.

To guarantee that assessment contributes to the culture of learning, principals need to apply these four principles very consistently, systematically and creatively in managing assessment processes. Working on these principles, principals could strengthen the conditions, enabling learners and teachers to be successful so the culture of learning would be promoted in schools. This is why Fullan (1995:232) points out that principals and teachers need time for reform as well as time to come to grips with the new

assessment system. Such assessment principals define the expected results of schooling based on current and future life-roles and requirements.

The creation of a positive school atmosphere has been found to have a tremendous effect on the establishment of a learning culture. This is so because in such an atmosphere teaching and learning enjoy maximum support (Masitsa, 1995:388). In this study, objective 2 states that assessment will be taken as an integral part of teaching and learning (see section 1.6). Hence principals and teachers will have to create such an atmosphere for assessment, which will ensure that learners honor and value assessment as a mechanism that evaluates adequately what they have learned.

Principals should watch out for things that can collectively erode assessment time. Walter, et al. (1995:183) assert that the effective management of time can greatly assist in minimizing distractions. Assessment is one of the major resources available to learners for improving their academic achievement. Consequently sufficient time must be allocated to assessment, so that learners and teachers spend enough time on assessing the work they have done. Teachers also need time to evaluate the performances of their learners. On the other hand, learners need more time to spend on their learning work in order to learn more. Again teachers need more time to give feedbacks to learners about their assessment. Parents too need time to discuss the academic performances of their children with teachers and principals. This indicates that the more time allocated to assessment, the more time will be allocated to the promotion of culture of learning.

2.6 PARENTAL INVOLVEMENT WITH ASSESSMENT AND ITS INFLUENCE ON THE CULTURE OF LEARNING

In this study assessment is regarded as a factor which can contribute to the establishment of the culture of learning in schools. The approach to learner's work assessment described so far may have given the impression that assessment is something done by teachers to learners only. However Ryna (1994:43-44) indicates that parents are now being invited to take part in assessing their child's growth and progress. If parents take

a more active role in assessment they will naturally become more involved in their child's schoolwork and in this way help to promote the culture of learning.

Mitchell and Koshy (1993:53) argue that it is sensible to focus upon teachers; it is their role and professional responsibility to develop the skills of assessment. However, involving parents completes the assessment circle, because parents, learners and teachers are all included in the education of the child. Therefore a positive relationship between teachers and parents needs to be created, to ensure that parents are informed about what happens at school, and they are made aware of the value of assessment towards attaining the culture of learning.

Johnson (1992:75) is of the opinion that records of assessment have to involve parents because this provides the opportunity for parents to become familiar with the kinds of activity and learning experiences offered to their children. Studies indicate that such recording of assessment need to be very concrete because it demystifies classroom life (Mitchell and Koshy, 1993:64). This enables parents to provide purposeful support to the teacher's work and helps to stimulate the psycho-social aspects of the child's academic development.

Researchers such as Hill and Ruptic (1994:67) agree that if teachers involve parents in assessment, parents can provide teachers with additional information as to what learners know, understand and can do. They could also provide support at home in the areas which have been identified as lacking or needing encouragement. Parents would encourage their children to do their best at school, making them aware of the value of education. They can support teachers in their efforts to promote the culture of learning through assessment. Parental support for the child is also good for his/her social and emotional development.

Ryna (1994:46) states that traditionally parents have been left out of the assessment process. This is unfortunate because parents are in a unique position to provide teachers with certain information that would otherwise be inaccessible. The key is to work along with the parents collaboratively in discussing progress and making future plans. Keel (1994:83) also advocates that parents, whatever their educational status, be brought on board the assessment process and acquire an understanding of the issues that underlie

assessment. Teachers are then able to ask the parents to monitor certain behaviors and attitudes at home that could be affecting school performance.

Educational literature (Seely 1994:3) has shown that, in recent years, one form of alternative assessment has come to the forefront in discussions addressing assessment practices. This is the concept of portfolios assessment; the same concept has expanded to the educational setting. In the classroom portfolios are constructed to represent a student's abilities in various areas. With a portfolio as evidence of the learning process, it is possible to understand the path of growth and development a learner has followed over a certain period of time. According to Seely (1994:26), the contents of a portfolio are more informative than a single abstract grade. This suggests that parents could be empowered to assess the portfolio performance of their children. The portfolio is a collection of the learner's performance and work; it therefore demonstrates to parents that the learning process has taken place.

Parents are interested in knowing how well their own children are performing. Through portfolios and jointly constructed conferences parents are able to understand their child's progress more completely. This will enhance learning and promote a learning culture.

The principle of clarity of focus, as discussed in Section 2.5 (par 7), is particularly relevant if parents are to be involved in the assessment process. As noted by Seely (1994:27), it is important to remember that parents may be unaccustomed to the new perspectives of learning and assessment practices. It is critical therefore that teachers need to invest some time explaining, modeling and sharing the outcomes with parents. As parents become comfortable with assessment practice, they will be able to offer their own perspectives and interpretations, thereby adding to the richness of the culture of learning.

Parents, however, may not be accustomed to assessment. It will be up to teachers to create an environment in which parents feel comfortable and non-threatened. Keel (1994:84) and Hill and Ruptic (1994:73) state that parents are children's first teachers, so if they are given the opportunity to assess their children's learning they will become more aware of what to observe and how their children learn. If parents are involved in their child's assessment on a continual basis, this will send a message to the child to take

assessment seriously. When children see that their parents regard assessment as important they will also regard it important. This will have a tremendous influence on the culture of learning, since parents will now be in a position to offer information about assessment, rather than just receive it (Anthony, Johnson, Mickelson and Preece, 1991: 38).

2.7 SYNTHESIS

This chapter has shed light on how assessment of learner's work can be used as mechanism to motivate teachers, parents and learners to promote the culture of learning in schools.

Section 2.2 dealt with motivational issues – how assessment could be used to motivate teachers and learners and by so doing contribute to the culture of learning. This section showed that when teachers collaborate with and care for their learners, they motivate them to build on their strengths and talents, to learn intellectually, and achieve multiple outcomes of assessment and learning. Motivation of learners is undoubtedly one of the major factors that contribute to the culture of learning.

Section 2.3 focused on how teachers' perceptions towards assessment can influence the culture of learning. This revealed that teachers should promote a learning society in the classroom by not perceiving assessment as an instrument for ranking learners into those who "can" and those who "cannot". Teachers should perceive assessment as a means to empower them to modify and determine effective future instructional techniques. If teachers could view assessment in this light, they would make a tremendous contribution towards a positive culture of learning.

Section 2.4 discussed how learners' perceptions to assessment impact on the culture of learning. This showed that learners need not regard assessment as a trick of letting them perform poorly nor as a means of entertaining them to get "A" grades. Rather, they should see assessment as a means to ensure that they can demonstrate what they have learned successfully. It will also help to identify learning areas that warrant re-learning

until they are mastered well. Assessment should therefore be viewed by learners as an educational endeavor which will brew success and so enhance the love of learning.

Section 2.5 focused on the role of the principal in relation to assessment and the culture of learning. It was found that although principals are responsible for delegating duties to other teaching personnel, they also have a professional responsibility of sharing decisions with regard to the assessment of learner's work. The reason for this is that the results of assessment demonstrate the multiple opportunities provided by the school and also define the expected results of schooling and teaching.

Section 2.6 examined the potential role of parents. It was shown that assessment need not only be a joint venture between teachers and learners; it must also include and involve parents. Teachers must therefore go beyond one-way distributing of assessment results to parents. Parents need to be more informed and involved in the assessment process so that they are able to discuss their children's progress with teachers. When children realize that their parents are more involved with their assessment they will regard it as important. This will help to maintain the culture of learning in schools.

In conclusion, it can be argued that authentic assessment will motivate learners to learn, teachers to teach, and school administrators or principals to create a trustworthy, decision-sharing atmosphere for assessment to be used as a tool for promoting a learning culture. Parents need to become actively involved with assessment processes so that they accept the results thereof as a true reflection of their children's performance in order to maintain a high culture of learning.

The following chapters investigate varieties of assessment strategies and approaches, and their sphere of influence on the culture of learning.

CHAPTER 3

THE NATURE AND TYPES OF TRADITIONAL ASSESSMENT AND THEIR INFLUENCE ON THE CULTURE OF LEARNING.

3.1 INTRODUCTION

The previous chapter highlighted the role that assessment could play in influencing the culture of learning in schools. It became clear that the nature and type of assessment had a major impact in this regard. This chapter and the next (chapter 4) examine this aspect in greater detail.

In terms of assessment a distinction can be made between the “traditional” assessments conducted in the past, and the “new” types of assessment that have developed in relation to the Outcomes-based Education approach. This chapter firstly contrasts the two approaches, and then presents a detailed discussion of the nature and types of “traditional” assessment methods and their influence on the culture of learning in schools. An attempt is made to explore various categories of traditional assessment methods, and their implications in improving and developing the culture of schools. An in-depth analysis of Outcomes-based assessment follows in Chapter 4.

3.2 AN OVERVIEW OF TRADITIONAL VERSUS OUTCOMES-BASED ASSESSMENT APPROACHES

Diagrams 3.1 and 3.2 illustrate and contrast the traditional education practices of evaluation and OBE assessment practices respectively. It should be noted however that



diagram 3.1 is not a true reflection of what has been accomplished in some South African schools in the past. For instance, Christie (2001:43) argues that many excellent teachers have employed methods purported to be typical of an Outcomes-based approach for years. These are teachers who have placed a higher priority on learners' participation and have encouraged learners to think and solve problems. Although the old curriculum was content-driven, such teachers managed to guide learners to a deep understanding and appreciation of their subjects in order to generate interest in learning.

The diagrams emphasize the differences in the two approaches. Traditional product-driven evaluation (Diagram 3.1) had a minimum influence on motivating learners to have a continuous and positive attitude toward learning. This approach did not consider developing traits of learning such as mastery learning, skills development, and appreciation of values and knowledge to be used for future learning. This approach was primarily a teacher-centered method of evaluation (Van der Horst and McDonald 1997:17).

In contrast, the OBE assessment approach (Diagram 3.2) applies a variety of assessment practices that are aimed at helping every learner to actualize his or her potential. This approach is thus both teacher-centered and learner-centered (Taylor and Vinjevold 1999:103).

Diagram 3.1. Traditional Evaluation Practices (Source: Report of the Review Committee on Curriculum 2005, 31 May 2000)

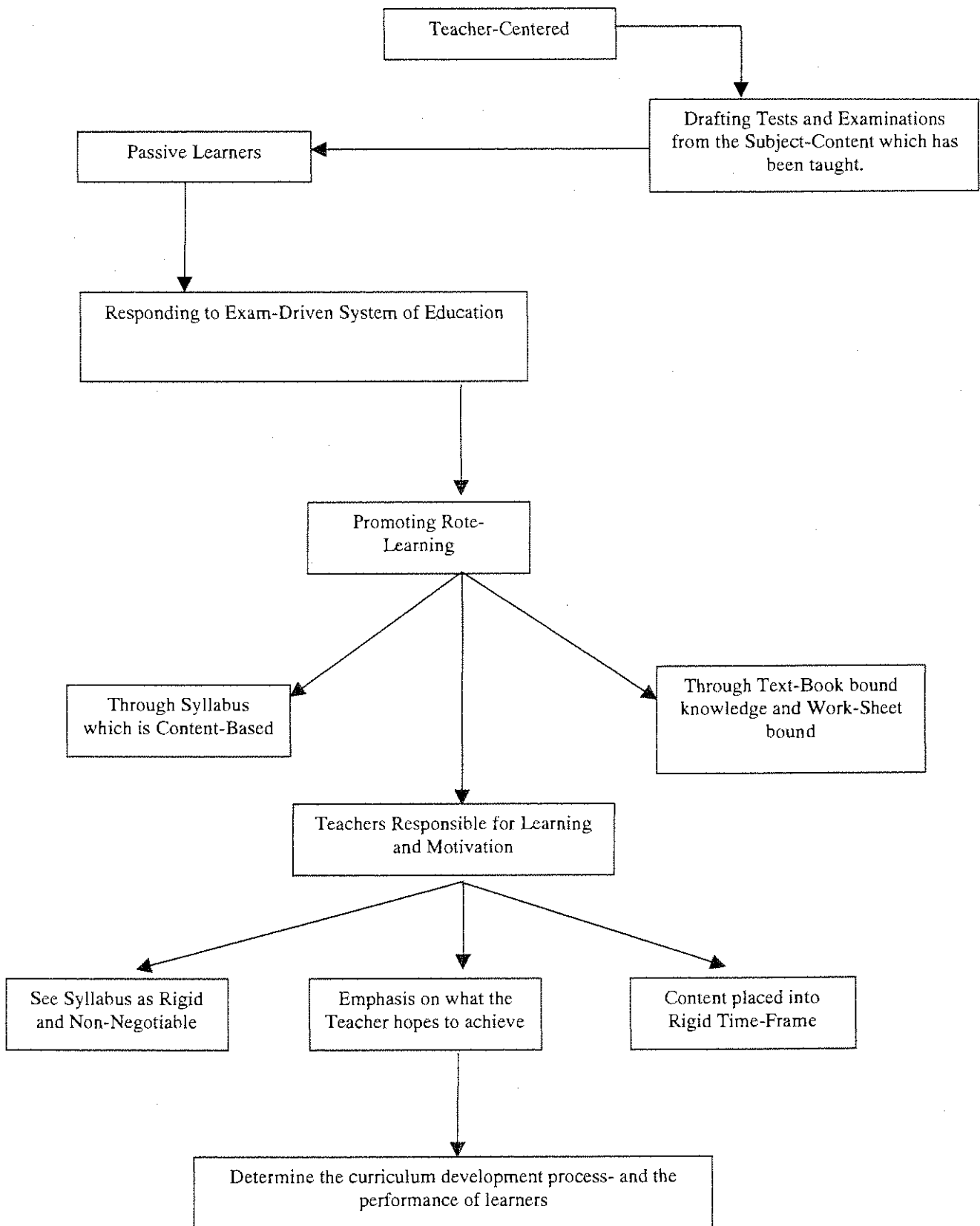
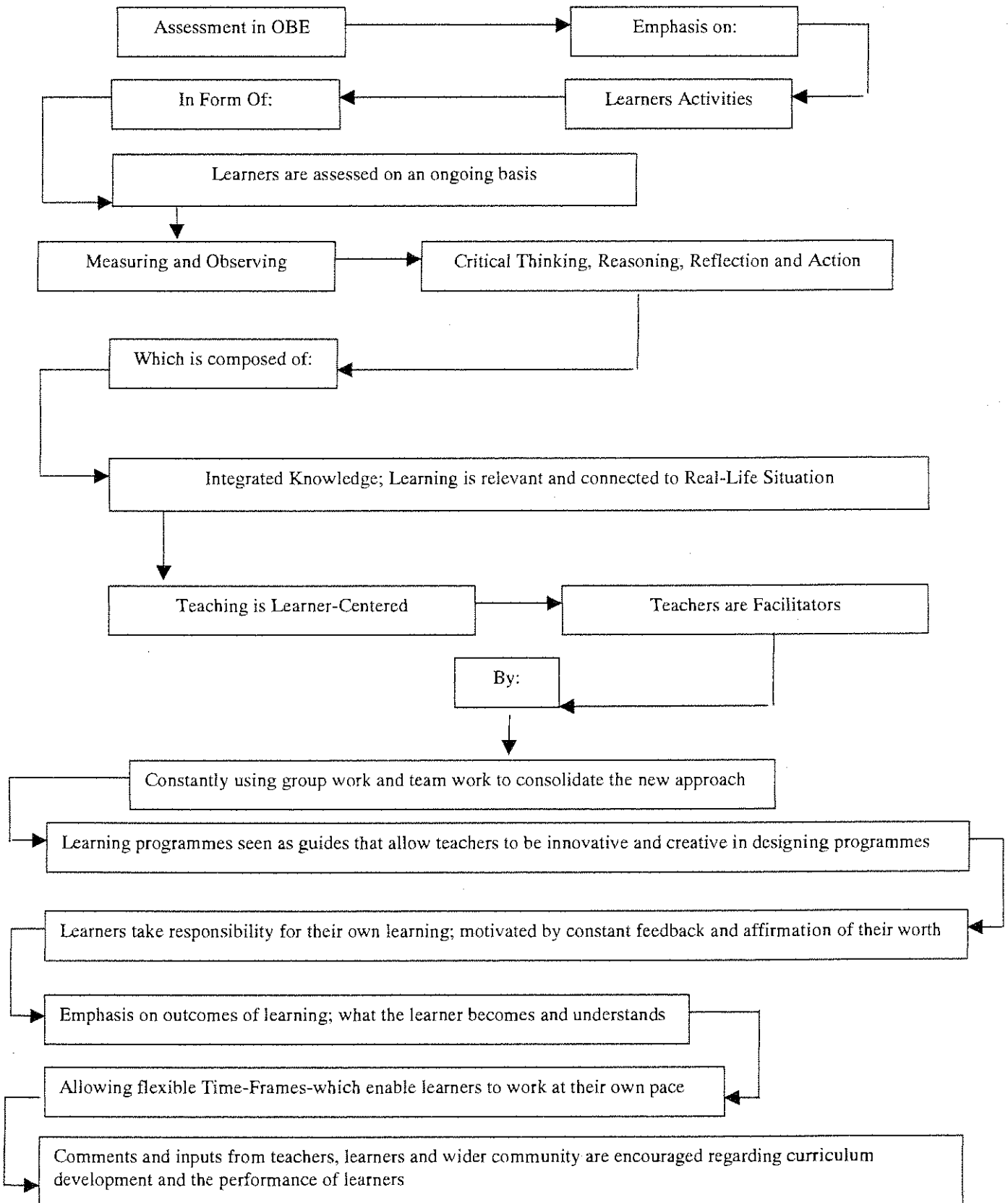


Diagram 3.2. Outcomes Based Assessment Practices (Source: Report of the Review Committee on Curriculum 2005, 31 May 2000)



Teachers have been involved in assessing and evaluating the work and progress of learners throughout history. A wide range of techniques and approaches has been used. These include homework exercises, class tests, formal examinations, assignments, talking to parents, and discussion in the staff room. Piek (1986: 66) argues that teachers were responsible for drafting tests and examinations questions in order to determine what pupils know. It was also necessary to distribute questions evenly over the subject matter (see diagram 3.1). Furthermore, approximately half of the questions were aimed at the average child, while there were some questions that could be answered by the less gifted and some that were aimed mainly at the more gifted. Such techniques and approaches of assessment were used with an aim to ensure that learners obtain scores or achieve a certain degree of success in relation to the content of the subjects they had been taught.

Taylor and Vinjevd (1999:108) are of the opinion that this type of assessment focused on specific learning content and texts. The mode of assessment was based on deficits, i.e. what learners do not possess in terms of specific knowledge and skills and well-defined criteria of right and wrong. Consequently the culture of learning was not well established, because of the specific prescribed path of achieving learning outcomes.

The traditional system of assessment thus only concentrated on evaluating learners mainly to control the end-of-year examinations. Rensberg (The Citizen, 4th November 1998) states that this old system was judgmental and did not cater adequately for the development of learners. This resulted in high repetition rates, low participation and a high dropout rate. This type of assessment mainly judged reading skills and comprehensive skill, as these played a role in allowing learners to interpret the questions effectively in order and yield the correct answers and examples. The memoranda did not allow for deviation from the set answers, so that there was very little room for flexibility or creativity. Thus learner's assessment evaluated writing skills, examination techniques and memory rather than the actual performance of a task that had been taught and learned. This resulted in a low morale regarding the culture of learning. Seemingly learners were assessed in order to be promoted to the next grade. If learners did not meet the requirements of tests or examinations, they were forced to repeat the whole year (Liebenberg, 1998:1).

Nevertheless, Willis and Kissane (1997:5) point out that over the recent decade a considerable number of education systems around the world have undertaken a new assessment approach. Student outcomes are described quite explicitly in terms of the actual learning the student should exhibit as a result of the planned learning experience in the school. Also, accountability mechanisms have been put in place that directly reflect student performance on those outcomes (see diagram 3.2). Such programs are often referred to as Outcomes-based education. Spady (1994a:1) defines Outcomes-based education as follows: “Outcomes-based education means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for learners to be able to do, then organizing curriculum, instruction and assessment to make sure that this learning ultimately happens”. The nature and types of assessment of the new Outcomes-based Education approach focuses on the achievement of clearly defined outcomes, rather than teachers and education practitioners input in terms of syllabus content. Inasmuch, it is not the same as, for example, their score or degree of success with respect to the content of the subject they have taken (Helsby and Saunders (1993) in Willis and Kissane (1997: 2)).

According to Spady (1994a:1), the key element of assessment in Outcomes-based Education is the development of a clear set of learning outcomes around all system components. This establishes the conditions and opportunities within the system that enable and encourage all learners to achieve the essential outcomes. Such an approach of assessment will have a powerful influence on the culture of learning.

The balance of this chapter focuses on traditional assessment practices. A detailed review of Outcomes-based assessment will be covered in the following chapter, chapter 4.

3.3 THE NATURE AND TYPES OF TRADITIONAL ASSESSMENTS AND THEIR INFLUENCE ON THE CULTURE OF LEARNING

Forster (1991, 34-35) comments as follows: “Historically and traditionally, all children were not expected to master the entire curriculum. Universal education means universal opportunity, not universal achievement. Schools were expected to sift and sort out the unmotivated and poor performing students in favour of those with some promise of academic excellence. In fact, the academic failure of a certain percentage of students was expected. An outcome different from that was often interpreted as indicating a lack of academic vigour”.

Traditional assessment had as its principal objective the sifting and sorting of learners for different status, as discussed in section 1.4. Assessment was basically used to assess knowledge as provided by the textbook. According to Van der Horst and McDonald (1997: 32), “traditional assessment required learners to master skills and competencies of verbal information; this enabled learners to communicate factual information even at the lowest levels of understanding of that information”. Another emphasis was on the simplest intellectual skills and competencies of discriminating or distinguishing between two or more things. Learners were therefore not assessed to become independent and self-directed. Such assessment did not allow them to develop cognitive strategies of learning;: how to learn, how to remember, how to interpret, how to solve problems and how to assess their own learning (Van der Horst and McDonald 1997: 35). The successful learners were those who demonstrated that they had acquired skills and competencies of recalling information and distinguishing between objects. Those who failed to demonstrate these skills and competencies were regarded as failures.

Williams, Lederman and Tancredo (in Bloom 1987:17) state that in traditional education, schools designed a curriculum and presented the information and facts in classes, which students must assimilate. When students completed the prescribed instruction in each subject, they took a test or examination to assess if they had mastered the knowledge of the particular subjects. Traditional assessment therefore appears only to have assessed the knowledge or content of a subject in isolation. Spady (1994a:55) is

of the opinion that knowledge or content by itself is not an outcome, but an enabling instructional objective. Hence he suggests that content, competence and confidence should be integrated so that learners can perform successfully when placed in a performance situation, both within and outside the classroom. Nonetheless, traditional education assessed content or knowledge, believing that this was the basis for a lifetime of learning, and that it provided the foundations to develop the skills necessary for a career (William, et al in Bloom 1987:18).

It was believed that assessment should motivate learners to learn through test scores, examination results, assignments, etc. Herman, Aschbacher and Winter (1992:95) assert that, traditionally, assessment provided information for decision-making about what students had learned, what grades they deserved, whether students should pass on to the next grade, what groups they should be assigned to, what help they needed, what areas of instruction needed revamping, where school curricula needed bolstering, and so forth. They also believe that good assessment enables teachers to accurately characterize a learner's functioning and performance, and helps the teachers to make sound decisions that will improve the standard of education.

The formal instruments of this assessment approach were therefore paper-and-pencil tests, examinations and assignments; these were scored by teachers who assigned grades to learners based on the learner's performance. Airasian (1989:5) believes that these helped teachers to understand their pupils, monitor their learning and establish a viable classroom culture of learning.

According to Tiley (1997:12) the following factors underpinned traditional assessment:

- The emphasis was on what the teacher teaches (content)
- To check and evaluate transmitted knowledge to learners by teachers
- To measure whether teachers take the responsibility for learning and teaching
- Assessment is done at the end of a section of work
- Tests and examinations are used to compare, place and grade learners
- Learning is divided into fixed subjects and fixed periods of time

- The emphasis is on competition and comparison of learners

The following sub-sections discuss different categories of traditional assessment and how these relate to the above-mentioned factors.

3.3.1 Evaluation And Measurement Of Learner's Work In Traditional Practice

In traditional education, assessment and measurement were used for the common goal of scoring or grading a learner's work. On the contrary, evaluation was used to interpret what had been measured and assessed. According to Malan (1997:60), when teachers design either assessment tasks, measurement tasks or evaluation tasks, they will think only of scores and grades. Van der Horst and McDonald (1997:169) also confirm that in most cases these concepts have been used interchangeably.

Although these concepts were used synonymously, they represented different processes. For example Cangelosi (1991:4) defines evaluation as: "a judgment about quality, value, effectiveness or impact of something." Malan (1997:27) defines measurement as "the determination of a norm (or standard) which candidates are expected to achieve in a test or examination. Candidate's marks are then measured against this norm to determine good, average, or poor. Van der Horst and McDonald (1997:170) argue that assessment is a strategy for measuring knowledge, behavior or performance, value, or attitude. It is a data-gathering strategy. Notwithstanding the contextual variations of these concepts, traditionalist were very much obsessed in believing that numerical scores should be used to evaluate learner's performance; these would be regarded a assessment results. It was believed that this would motivate learners to achieve more.

On the other hand, evaluation is the process of subjective appreciation with the specific aim of determining a person's worth in the light of evidence gathered by measuring and observation (Avenant 1990:217). The factor that comes into play in such assessment is that teachers want to ensure that what has been taught to their learners has been well transmitted, and that pupils had received all curriculum activities; this was for the benefit of the teacher's self-worth. When teachers discover through evaluations and

measurement that their learners have not yet acquired the specific knowledge, the teacher realizes that his/her teaching has failed. He/she will then look for reasons for his/her failure and plan a programme of re-learning. Therefore it can rightly be asserted that evaluation is the point of departure and not the ultimate goal of teaching.

This idea is supported by Cohen and Manion (1983:243) when they state that evaluation underpins (and precedes) the teacher's development of curriculum activities, his selection of specific objectives in his day-to-day lesson planning, and his choice of materials and methods by which to judge the progress of his pupils.

Measurement and evaluation will determine whether the teacher has succeeded in his/her goal - that all learners have understood the subject matter. It will show whether there are a few in the class who still do not understand the work, and if so, which section of the work must be re-explained. This indicates that such an assessment is meant only for teachers to reach the objectives that they have set when planning for teaching. It does not support and allow learners to develop a range of abilities and learning styles, so that they would be motivated to learn and quest for more knowledge.

Avenant (1990:219) asserts that evaluation and measurement helps teachers to determine if their methods and techniques of presentation and their general class organization have been successful. In this respect assessment through evaluation and measurement can be regarded as a teacher's compass that he/she constantly consults to determine whether he/she is going in the right direction of reaching and realizing his teaching objectives and goals. What matters most is to enable the learners to score better in the subjects that have been taught. Seemingly the use of evaluation and measurement by teachers never inculcated and promoted the spirit of continuing to achieve, which could result in extrapolation, generalization and to convergent or divergent reasoning (as stated in section 2.4). This would have undermined the culture of learning in schools.

3.3.2 The Classroom As An Assessment Environment In Traditional Practice

Traditionally the learning environment is a place where teachers are expected to teach and learners are expected to learn. Although, teachers are invested with greater responsibility of ensuring that the process of learning does take place in the learning

environment. Due to this, Taylor and Vinjevold (1999:186) indicate that assessment in the learning environment should enable teachers to monitor both the progress of student learning and also of their teaching. Hence the primary purpose of assessment should be diagnostic and formative; it should identify specific strengths and weaknesses with respect to the products and processes of teaching and learning. The focus would be to improve teaching practices and learning outcomes for the benefit of the culture of learning.

However, according to Taylor and Vinjevold (1999:134), assessment in the learning environment in the traditional paradigm is generally described in terms of teacher-centredness, pupil passivity and rote learning. Teachers ask questions to check whether pupils are listening to the lesson rather than to elicit more challenging responses from pupils. Such assessment tasks are generally oriented towards the acquisition of information rather than training high cognitive skills; these could influence learners to appreciate learning and so improve the culture of learning..

According to Everston and Randolph (in McCown, Driscoll and Roop 1996:72) this is an environment where teachers clearly demonstrate whether they value the production of their teaching or mastery of learning by learners. They suggest that in traditional classrooms, teachers tend to devalue learning - learners are regarded as “labourers” where they learn in exchange for marks, privileges or some other incentive. Teachers become “bosses” or “paymasters” who focus on work and not on what might be the outcomes of learning. This has resulted in a situation whereby teachers give direction to learning and teaching. The learning environment becomes an assessment of the teachers’ instruction – where learners need to follow directions closely. In this way teachers will complete the work efficiently (Arasian 1989:125). This is in contrast to allowing a free flow of teaching, learning and assessment processes, where learners are encouraged to question directions and to explore possibilities in order to instill an interest in learning for the benefit of the culture of learning.

It appears that teachers must constantly assess the progress and success of their instruction so that they can modify it if necessary. Doyle (1986:392) notes that, in most didactical situations, teachers assess the quality of pupil’s answer to questions in order to determine the extent to which the planned activities are succeeding. On this basis, the

teacher makes a decision about how instruction is going. If the teacher decides that the lesson is progressing satisfactorily, he/she continues teaching as planned. If the teacher senses a problem such as a lack of learner's understanding or uncertainty, then he/she will revise the planned instructional activity to alleviate the problem and initiate another teaching activity or strategy. This cycle is repeated many times in the course of a single lesson, so that the teacher should succeed in teaching the planned content. Such a classroom assessment shows that teachers strive to ensure that pupils attain their defined teaching objectives. Spady (1994a:33) points out that the teacher's role is to be sure that the content for each curriculum segment is covered or presented to each class within the calendar-defined constraints of the system. This pressure to cover an expanding body of content within the same time structure that existed a century ago leaves teachers in a no-win situation. Superficial coverage ensures superficial learning, while in-depth treatment leads to missing content. Learners lose out either way, and the culture of learning is negatively affected.

As discussed previously (section 2.2), the existence of collaboration between learners and teachers empowers learners to participate in the learning situation and teachers to build on the strengths and talents of their learners. In the situations of assessment described above such collaboration becomes defeated - as a result the culture of learning will also be defeated.

Whenever teachers use the classroom as an assessment environment for their teaching content, they inescapably develop a self-fulfilling mechanism by which the teacher comes to hold certain expectations about the students which the teachers had initially assumed (Rist in Kallaway 1986:292). According to Airasian (1989:131), it is natural in such circumstances for teachers to identify a smaller sub-group of pupils who are then used as a barometer of the interest and understanding of the class as a whole. It is obviously difficult to monitor a huge number of pupils simultaneously during instruction. As a result, the sub-group (though not necessarily the lowest pupils) serves to help the teacher gauge the comprehension of his/her expectations. If the sub-group keeps up and appears to comprehend what is going on in the lesson, the teacher is reassured about the pace and complexity of instruction. This approach will not help all learners to learn successfully, which will again have a negative impact on the culture of learning.

Spady (1994a:34) also criticized this approach of assessment. He alludes that well-meaning educators and policymakers decided a century ago that teachers should only have a limited supply of good grades to dispense because standards of excellence are inherently relative and comparative. This view is supported by Jansen (in Nkomo 1990:333) who feels that a central reason for this phenomenon is the fact that curricular and instructional decisions are entirely outside the control of the teacher, resting in the hands of departmental bureaucrats and government officials. This, by definition, forces teachers to dispense good grades to those learners who do relatively well, while those learners who are in need of intensive assessment are relegated to lower achievers. Seen in this light, the emphasis of assessment lies squarely on the competition and comparison of pupils (Tiley 1997:12). Subsequently these would have an undesirable effect on the culture of learning. In order for assessment to promote the culture of learning, it should give maximum opportunities to all learners so that all learners can and will learn in order to achieve the desired outcomes of learning.

Airasian (1989:125) indicates that the traditional classroom assessment approach placed a greater emphasis on teachers to succeed with their planned teaching instructions. Such an approach usually results in teaching without learning, because teachers in this situation assume that their learners are learning what they are trying to teach them. On the contrary, when tests (in the form of assessment) are conducted teachers generally obtain disappointing results; they often notice considerable gaps between what has been taught and what has been learned. By the time teachers notice these gaps in knowledge or understanding, it is frequently too late to remedy the problems. As a result both the culture of learning and teaching become adversely affected. It seems that assessment in traditional practice was an isolated activity from the teaching and learning processes. Wiggins (1998:73) feels that the ineffectiveness and inefficiencies in teaching and learning were issues that were usually considered long after the learning and teaching processes were completed.

3.3.3 Summative And Formative Assessment In Traditional Practice

It is generally held that one of the main purposes of assessment is to provide information to help people make decisions, as referred to in section 3.3. DesForges (1990:3) points out that pupils, teachers, parents, employers and local and national policy-makers all want educational judgment, which are the results of assessment. Pupils need to know what progress they are making and what their strengths, weaknesses or special abilities are. This information helps them to decide on where to concentrate their effort in, for example, revising for examinations or considering possible careers.

Teachers also need to know about which parts of the curriculum are generally going down well or proving difficult. Parents also have a keen interest in their children's progress - schools would thus be expected to show parents evidence of their success in this respect. This would help parents to motivate their children for the benefit of the culture of learning in schools.

Local and national education officers are responsible to ensure that their respective policies are enacted and that standards are being maintained or enhanced. They will therefore need information on learner's achievements to ensure that the system is working properly. This will again support the culture of learning in schools.

As a result of the above, teachers have a responsibility to regularly use formative and summative assessment to convince parents, pupils and policy-makers that the education system works properly. This will help them to support and motivate learners to learn, and to convince these co-partners of education that learning is taking place.

Satterly (1989:6) highlights the positive effects of formative assessment during lessons. Formative assessment involves the gathering of information through classroom observation, and is used mainly to guide the teacher's interactions with pupils during both instructional and non-instructional classroom encounters. Airasian (1994: 135) states that teachers use these observations to make moment-to-moment decisions about how to solve specific pupil's problems, how to control the class, what to do next in a

lesson, and how to gauge the pupils' reactions to instructions. In other words, everyday classroom work gives continuous clues to the teacher on ways to support a learner's learning. Such an assessment raises the quality of teaching and learning by guiding both the learners and teachers to the next step forward. This has a tremendous influence on the culture of learning.

Airasian (1994: 136) states that the results of such assessments were rarely recorded or saved in formal records, because these informal observations had to be supplemented by more formal kinds of evidence to improve their validity and reliability. This type of assessment, known as summative assessment, came at the end of a learning process, when it was difficult to alter or rectify what had already occurred. Satterly (1989: 7) describes this type of assessment as terminal, rather than continual during the stages of learning. This 'terminal' stage is when assessment becomes competitive, or at least comparative between pupils. Such assessment also supplies a sort of seal of approval and disapproval on children's efforts. It helps teachers to make decisions that the school bureaucracy requires of them. Its records are public records of a pupil's school accomplishments and are often the sole evidence that parents have of how their children are doing in school. This sounds unpedagogical, and as such has little to contribute to the culture of learning. DesForges (1990:3) feels that many teachers focus their summative assessment exclusively on the information gained during instruction. Seeing that this generally calls for nothing but memorized facts, such an assessment has a negative impact on the culture of learning.

Summative assessment results, which include official tests and formal examinations, are usually made public, appearing in report cards, school record folders and newspapers. These results are based on the progress of individual pupils, because they are about grading, promoting and placing honor on individuals. Summative assessment is formally and systematically conducted whereby pupils take the same test or examination, in the same amount of time, with the same scoring procedure used across pupils. The tests and examination results are recorded for future use. This is confirmed by Spady (1994a:33) who argues that everything students do, regardless of its substance or nature, is ultimately translated into numbers and percentages that are kept in a student's permanent record. These numeric symbols are then endlessly accumulated and averaged together, as if they represent equivalent things, which they clearly do not.



They also do not provide teachers and pupil's with specific directions to guide instruction or learning in order to promote learning as a life-long process. This type of assessment therefore has a low input with regard to the culture of learning.

The following subsections discuss homework, assignments, official tests, classwork, exercises, formal examinations and norm-referenced assessment as sub-categories of both summative and formative assessment.

3.3.3.1 Homework And Assignments As Assessment Practices

The option of using homework and assignments in schools serves various purposes, such as curriculum coverage and enforcement of instructional objectives. Piek (1986:54) indicates that limited time is available during the lesson-time for teaching the entire subject content. It is therefore necessary to give the pupils homework and assignments. Another aim of homework and assignments is to reinforce and enrich the work done in class, and also to assess teaching objectives. It also contributes to what the learners will be expected to do in an examination at the end of the term. According to Rowntree (1977:122), the teacher's comment on a student's homework and assignment would certainly imply some kind of teaching intention. However, this type of assessment appears not to be a form of assessment which motivates learners to have zeal to learn or to cultivate the spirit of the culture of learning.

Homework and assignments are supposed to be used as an effective tool of assessment, just like good teaching and learning. They should foster and encourage learners to take responsibility for their own learning, and develop confidence in working independently. This will help them to cope with the increasing challenges that learners face inside and outside the classroom. It will also enable them to reflect on their own abilities and progress and to be actively involved in improving themselves (Malan 1997:52). Homework and assignments should be used to point the way for a reconsideration of the work that is being done. This will encourage learners to revisit the task of learning on their own, and so develop good strategies of learning how to learn and assess themselves. Such activities will maximize chances of learning and inculcate the spirit of the culture of learning.

However, there are appropriate purposes of homework and assignments that could be used as assessment tools to promote the culture of learning. Lorber and Pierce (1983:102) suggest the following:

i) Helping students to acquire new information

Teachers often request the reading of a section of a textbook which will serve as a basis for further discussion, or ask students to review a particular tape-slide sequence. In this way the teacher will help learners to acquire new information, which will promote self-discovery.

ii) Providing practice in particular skills

Some skills, such as typing, solving mathematical problems and so forth can be polished by repeated practice. The teacher can use homework and assignments to engage learners in such practice out of class. This assists learners to be competent and gain skills on their own, as a result a culture of learning will be promoted.

iii) Providing for student creativity and particular student needs

In-class activities generally force students to be one of a group and leave little opportunity for them to demonstrate skills unique to them as individuals, or to engage in instructional activities they feel are of particular interest to them personally. By working with individuals in planning homework and assignments, teachers can do much to make school relevant and interesting to learners.

Self-instructional and self-paced procedures and techniques of doing homework and assignments can enhance the culture of learning. Here, the learner has to set a goal, and organize all the resources and information to achieve this goal. This involves pre-assessment. When the task is completed the learner will have to assess whether the task had been perfectly done - this implies self-assessment. When he/she feels that there are loop-holes, the learner will either seek guidance or assistance from his/her peers or his/her teacher, here he/she will be collaborating. All these activities enable a learner to be a pace-setter, which

contributes very strongly to the development of a culture of learning (Lorber and Pierce, 1983:105).

3.3.3.2 Classwork Exercises And Official Tests In The Assessment Process

Research has confirmed that tests and classwork exercises are means through which teachers can evaluate their teaching (Satterly 1989:113). Tests and classwork exercises also gauge the knowledge of the teaching that has taken place, and the level of ability of the learners for whom the test is intended. Hymes, Chafin and Gonder (1991:9) contend that test and classwork exercises are used to gather the clearest, most precise, consistent and meaningful data possible to answer questions about student performance to ensure that teaching plans, instructional programs and curricular changes have addressed real needs. Ideally, tests and classroom work exercises measure and judge the achievements of learners with regard to the work which has been done by teachers. This use of tests and classwork exercises indicates that teachers only assess learners in order to take from learners what they have been taught, and establish whether learners have attained all the instructional objectives. Also, to measure the amount of work which has been done. In this sense assessment was not necessarily a part of the teaching and learning processes because it did not challenge and stimulate learners to try harder, aim higher, and achieve better results (Malan 1997:25). Tests and classwork exercises are supposed to be functional, supportive and encourage learners to achieve more. If they can be empathetically used in this sense, they will definitely make assessment an integral part of teaching and learning processes. Hence a culture of learning will be promoted.

Cohen and Manion (1983:248) indicate that teachers, through tests and classwork exercises, aim to gather information about their pupils' understanding of new material or their retention of previously taught concepts. Generally, tests are composed of a number of items – for example, missing words, incomplete sentences, true/false statements, multiple-choice answers, matching pairs of statements and responses and essay type questions. These items are arranged in such a way that they progress from lower level intellectual abilities to the most complex. Thus tests might begin with simple recall as measured by the completion of statement or true/false type items, then progress through short answers or multiple choice items to the essay type items. According to Avenant (1990:225), advocates of essay-type tests are of the opinion that, apart from evaluating



knowledge of facts, they may also be used to evaluate pupil's abilities to make deductions, analysis, synthesis and applications. However, the standard use of essays is to evaluate the understanding of complex subject-matter. King and Van den Berg (1992:22) assert that traditional assessment uses official tests and classwork exercises to test only cognitive learning and to cover the wide range of content that has been taught. In no way does this assessment attempt to elicit the excitement and interest of learning that form the basis of the culture of learning.

Again Avenant (1990:223) points out that effective classwork exercises and testing give teachers an indication of the success of their teaching. In addition, they give pupils an indication of how they perform in comparison to the rest of their classmates, and give parents an idea of how their children are fairing at school. Finally, they also enable principals and heads of departments to determine the amount of work which has been covered by their teachers. Spady (1994a:32) views such an assessment as the only chance for students to prove that they have learned. This suggests that students should strive to obtain a passing grade in order to receive credits, with the only emphasis here being that of achieving the learned content. Any other learning activities that could reflect the students' standing in the system are ignored, consequently the culture of learning would also be ignored.

Rowntree (1977:22) asserts that "we must also recognize that tests and classwork exercises are "motivational" assessment. However they are usually used to benefit the teacher rather than the students. In effect, by structuring the student's allocation of time and effort and legitimizing certain kinds of activity and outlawing others, such assessment indicates what is to count as knowledge worth having and what is not". Tests and classwork exercises can be used to define the reality of academic life for pupils and give teachers control of pupils' perceptions and behaviors. To be blunt, assessment of this nature can also be used as an instrument of coercion, making pupils do something they might not otherwise be inclined to do. This could result in the decline of the culture of learning.

3.3.3.3 Formal Examinations As Part Of The Assessment Process

The culminating point of official testing and classwork exercises is when learners sit for a formal examination. This is a uniform mechanism for identifying talents and measuring achievements. Eckstein and Noah (1992:110) point out that the consequences of this formal examination is that teachers adjust their teaching to enable learners to score the highest marks. The result is that when learners are sitting for formal examinations, they will be expected to yield orthodox answers. This could deprive learners of the opportunity to make sense of the experience that they have gained during teaching and learning. It could also cause learners to fail to elaborate on their own experience and expose their prior knowledge of learning, which are the learners' most important existing ideas (Nkomo 1990:332).

Consequently, examinations tend to influence teachers' assessment of learners' work, focusing on what the examination will require. Hence teachers downplay the need for learners to develop their full range of competencies such as knowledge, concepts and skills, all of which students can use when entering the work force or continuing to the next level of higher education.

According to Van der Horst and McDonald (1997:5), the perspective of formal examinations in South Africa did not equip learners with the knowledge, skills, attitudes and values to help them become active and valuable participants in creating a better country, and a better future for all. Boschee and Baron (1993:41) also believe that formal examinations cause teachers to abandon the idea that learners have the potential to achieve success. This is because the onus of preparing for examination is on the teacher who must provide suitable conditions for effective learning and revision of work to occur. Generally teachers have to ensure that learners are granted opportunities to be successful in examinations, by providing an appropriate learning environment, materials and back-up guidance. This obviously means that the assessment of learner's work was not based on empowering learners to master skills, knowledge and good dispositions, or to build good confidence and competencies, which would have influenced the culture of learning. Such assessment thus focused on evaluating and identifying the competencies that were required of learners when sitting for their formal examinations.

Therefore the objective of testing and class work exercises was to train pupils how to approach the content of examinations. South African school-teachers continually assess learners' work with a narrow focus on the type of external examination that will be written and the content they expect to be covered in it. Indications are that examinations do not diagnose learning problems or learning progress, neither do they place students at different levels of ability or help teachers plan what to teach. Instead, according to Eckstein and Noah (1992:110), examinations are used to select students for secondary and higher education. This suggests that examination is mostly used as a selection instrument. Van Schalkwyk (1988:140) further emphasizes that every community needs a common and, as far as possible, objective means of testing its younger generation's level of ability and training. An objective testing method such as this is also useful for selecting learners for certain subjects and courses and placing them in suitable schools, classes and courses for promoting them. This only enhances the assessment of the knowledge tested on in the examination and what has been taught in the classrooms. This is why teachers teach the examination content, and assess learners' work with respect to examination expectations. This can have little contribution to the establishment of the culture of learning.

Thus, over time, teaching and learning were reduced to testing and remedial programmes for examination purposes. There was a lack of consideration for essential competencies, which could for example include any of the following: Survival or life skills, basic skills, psychomotor skills, professional and vocational skills, intellectual skills, interpersonal skills and personal skills (Van der Horst and McDonald, 1997:10). These authors further contend that, through examination, the education system was content and input driven - learners were not taught the actual skills that they would need in a working world. The idea of competency-based education, where assessment is used to determine whether learners have mastered the outcomes of learning, was abandoned. Seemingly more concentration was given to content, learners were expected to recall information, and to remember what was in their textbooks. Assessment was basically on drilling. Teachers had to regurgitate the learning content to learners, which discouraged creative thinking and higher-order-thinking skills in learners. Consequently teachers failed to instill an interest of learning in learners, and also had no effect with regard to the culture of learning.



It appears that examinations function to test what learners have grasped and reward the attainment of a certain level of proficiency as assessed by examination. They also provide a passport to future options. King and Van den Berg (1992:5) argue that examinations serve to select and monitor, and are also a powerful tool of inspection and control of the education process and the schooling bureaucracy. As a measuring instrument, examinations also perform two main functions: to assess the knowledge and skills the candidates have attained; and to give access to certain privileges and status in a form of certification to those who deemed to have succeeded. Van Schalkwyk (1988:140) asserts that certification is the formalized summary and validation of the examination performance. The shift of emphasis in this regard will therefore not be on learning to master learning content, but on passing the examinations in order to be certificated. Such educational endeavors are detrimental to the lifelong learning process, which underpins the culture of learning. This calls upon teachers to have a very firm grasp of their subject and high levels of assessment knowledge. Teachers' assessment should not only guarantee that learners are able to earn a certificate, but learners should also be assessed for knowledge that will make them competent in future life, in order to promote the culture of learning.

When examinations determine a child's advancement at school and their life's opportunities, parents understandably put pressure on teachers to ensure that their children succeed. They hold the school system and particularly teachers accountable for their child's results in examinations. To throw more light on this issue, Louw (in Beeld, 13 November 1991:1) wrote that "Ontstoke ouers, aangevuur deur die "skok en bitterheid" van hul matriek kinders, dreig nou om die Transvaalse Onderwys Departement hof toe te vat oor die vraestel. Ouers het nou genoeg gehad hiervan. Die TOD kan nie sulke belaglike vraestelle opstel en dink ons gaan dit net so aanvaar nie. As die slaagpersentasie of die onderskeiding syfer laer is as verlede jaar, gaan ons optree". (Angry parents, who was filled with shock because of their matric children, threaten to take the Transvaal Department of Education to court, because of the question papers. Parents said they had enough. The Department of Education can not set this type of question papers, and think that we are going to accept it. If the pass rate or distinction rate is less than last year, we are going to take action).

Eckstein and Noah (1992:109) point out that if parents judge their children's performance and academic abilities through examination results, teachers will in turn

teach and assess learners only to score better symbols in formal examination. As a result, skills that are often accountable in the work place, in social life and at higher institutions of learning are likely to be underrated. Such skills include critical skills, selective skills, creative, interpretive, reflective, analytical and transactional writing skills. As a result, interest in learning and the culture of learning is likely to be affected negatively (Ministerial Committee 1998:12).

King and Van den Berg (1992:9) point out that examination and certification are the visible signposts along the road of education from primary school through to tertiary levels. The consequences of examination to teachers is that teachers adjust their teaching to what the examination will cover, to ensure that their learners score the highest scores. They become less concerned about competencies of skills and knowledge. Even when teachers construct class work exercises or test questions they do not expend time and thought to them, since they use the item bank tests from previous examination question papers, in order to align their questions with the questions of the external examiners. Roos (in Roux 1983:32) and Van Schalkwyk (1988:141) share the idea that item bank tests provide an opportunity for teachers, who must use these test questions in their informal and formal assessment to improve the standard of examination results. This clearly shows that teachers are only assessing to give training to learners of how to approach and write examinations. They are making no attempt to instill in learners a burning desire to master what has been taught and so maintain the culture of learning.

3.3.3.4 Norm-Referenced Assessment In The Learning Process

The norm-referenced assessment has been used in education systems to compare a child's performance in relation to the group to which the child belongs, or in relation to other tests which claim to measure the same attributes (Satterly 1989:39). Furthermore Popham (1989:85) also asserts that, in education, norm-referenced assessment is most frequently encountered when reporting students' results on academic aptitude tests, such as the scholastic test. Generally, this assessment focuses on how a given students' performance stacks up in relation to the performance of other students. This implies that the results of this assessment are not measured strongly on the domain content

represented by the test, but merely on the students relative standing in relation to one another (Gipps, Stobart and Lawton 1989:79).

The culture of learning in schools could be better serviced by an assessment which provides evidence about particular students' skills and knowledge, rather than evidence about how these students compare with one another. Spady (1994a:39) suggests that the best operations of assessment are the ones that consistently and systematically enable all learners to succeed, rather than those which impose quotas on which or how many students can be successful, or limit what students are allowed to learn and how high they can aspire.

According to Malan (1997:26) norm-referenced assessment does not refer to the way in which tests, examinations or other assignment tasks are constructed, but to the purpose for which the results of the assessment are used. The results could, for example, be used to determine whether a learner's performance is average, below average, or above average; how academic performance differs according to gender, class or racial lines; whether two or more tests or examination papers are of the same standard. Teachers thus use norm-referenced assessment regularly in their classes to work out class averages and compare individual learner's achievements with those of other learners. This clearly indicates that norm-referenced assessment in schools or classes is not used to support teaching and learning, but is only practiced to rate learners according to a set standard or norm. This is linked to departmental requirements which specify for example that 40% in most subjects is the norm required for a pass and 80% the norm for gaining a distinction (Malan 1997:27). The determining factor for such an assessment is a norm or standard which learners are expected to achieve in the test or examination. It does not supply specific information about what an individual learner knows, understands or can do to further encourage learning. It totally precludes all attempts at educative teaching, which could bear good fruits in relation to the culture of learning.

However, according to Hymes, Chafin and Gonder (1991:11) the great majority of schools are successfully using norm-referenced tests to take a periodic look at their students' achievement levels in certain basic skills. They watch for data on trends to signal the need for changes in their instructional programs, and they also use it for the selection of pupils and classification. It can be used to identify learners for advanced

class enrolment and to place pupils for remedial programmes. The way the tests are constructed spread the students out on the scale, so that differences are easier to see and selection is facilitated. Such tests help to predict success by measuring the knowledge, ability and skills of learners by comparing their scores, rather than specifying what a student knows or does not know (William in Hymes et al 1991:11).

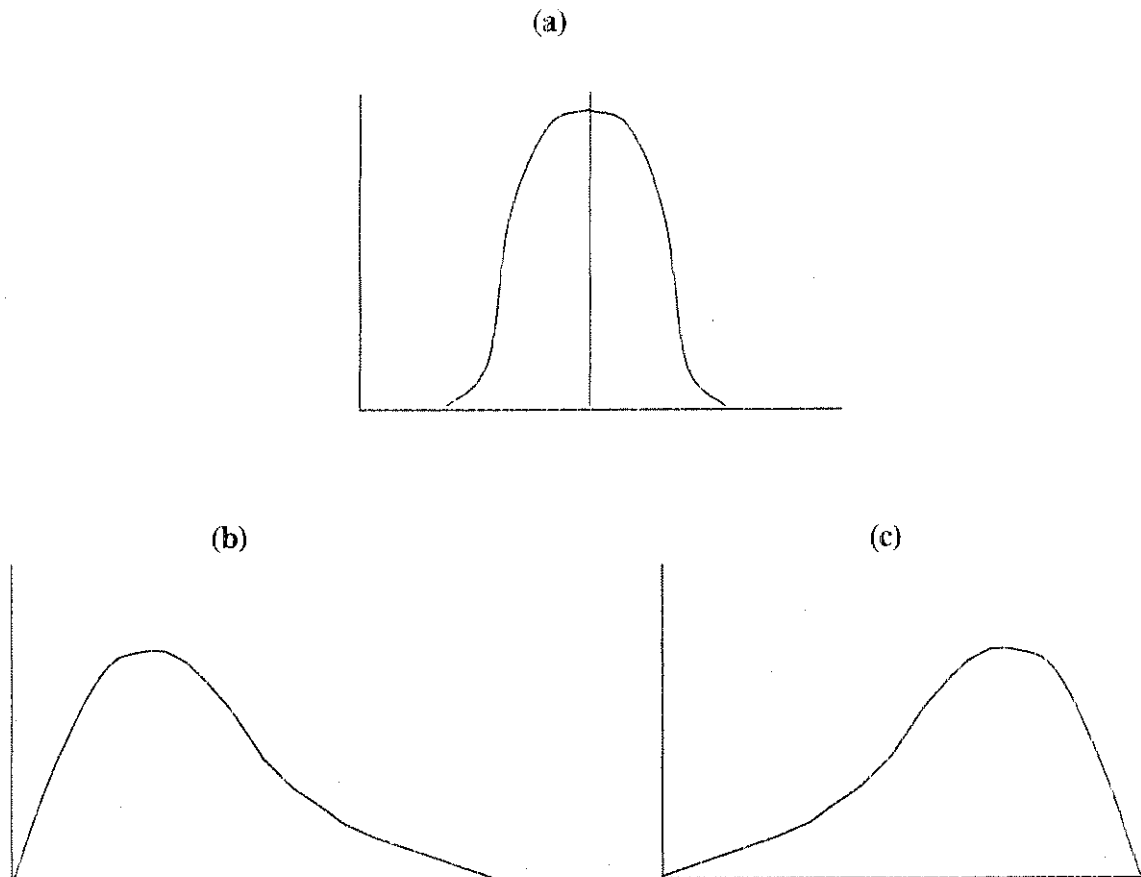
This indicates that the basic purpose of norm-referenced assessment is to discriminate among individuals and perpetuate grouping of learners by averaging them according to norm, scores and achievements. Such assessment does not improve learning and also does not provide a multidimensional picture of what learners know and can do. It also does not respect students' diversity in ways of understanding, or suggest actions teachers can take to improve the educational development of their students and the quality of their educational programs. It further does not allow teachers and learners to be together, engaged in a learning and teaching process, by solving problems, pupils interacting with ideas with one another and with teachers, pupils displaying their working minds and spirits in how they respond to problematic situations. If all these didactical activities are not catered for by norm-referenced assessment, then there is very little chance of engaging learners in a highly motivated learning situation. As a result the culture of learning will be badly affected.

This is why Satterly (1989:40) concludes that many teachers believe that drawing comparisons between individuals and providing scores which describe the child's standing in a group do not serve any pedagogical purpose. According to Malan (1997:30), in the norm-referenced paradigm the marks of other candidates could affect any individual candidate's final mark. Irrespective of whether candidates have done too well or too poorly, the marks can easily be amended to a perfect bell shape. Thus learners in the norm-referenced paradigm were expected to achieve according to the predetermined scale. Malan (1997:28) argues that if there was an imbalance, there was a standard procedure to adjust learners' marks (up or down) until the ideal bell shape was attained.

The first step in norm-referencing is the determination of a norm (or standard) which candidates are expected to achieve in a test or examination. Candidates' marks are then measured against this norm to determine whether their performance can be regarded as

good, average or poor (Stiggins 1994:123). If the majority of candidates have performed better than the norm, the test or examination may be regarded as having been too easy. If, on the other hand, too many candidates performed below the norm, the test or examination could be considered to have been too difficult (Malan 1997:26). This method of assessment did not cater for any individual learner's effort and input with regard to learning - the only significant aspect was a predetermined norm or standard, hence the culture of learning was defeated.

Malan (1997:27) states that if all the 'candidates' marks were plotted on a graph, the perfect distribution would look like graph 3.3(a). A test or examination which was too difficult would result in a graph corresponding to 3.3(b). A test or examination which was too easy would resemble graph 3.3(c).



Graph 3.3 Examples of bell-shaped curves showing a) normal distribution, b) left-skewed distribution and c) right-skewed distribution

These graphs are referred to as bell shapes, with graph 3.3(a) representing the ideal bell curve. Both graphs 3.3(b) and 3.3(c) would then represent an abnormal distribution of

marks. These imbalances would then be corrected until they meet the requirements of the bell shape. Spady (1994a:23), Spady and Marshall (1991:69) and Malan (1997:28) postulate that lately these procedures have been severely criticized. Some of the more common criticisms are that norm-referenced assessment:

- Perpetuates class, racial and gender distinctions;
- Does not supply specific information about what an individual learner knows, understands or can do;
- Engineers results to suit various devious purposes; and
- Is more concerned about statistics derived from assessment results than about the candidates or learners involved in the assessment

This is why many teachers know that there are learners who should not pass but have passed, and there are learners who could not fail but have failed. Such an assessment does not bring any reality with regard to teaching and learning, hence the culture of learning can deteriorate. Malan (1997:28) therefore concludes that it is criticisms like this which have given rise to alternate ways of assessment.

3.4 SUMMARY

In this chapter aspects of the nature and types of traditional assessment have been discussed. The following types of tradition assessment strategies were discussed: summative assessment, formative assessment and their sub-categories. Evaluation and measurement were also considered because of their use in traditional assessment synonymously with the assessment concept. The classroom was also discussed, because traditionally it would seem that teachers used the classroom as an environment for assessing their own instructional objectives.

It was shown that in the traditional approach, most assessment was not specifically used as an integral part of teaching and learning processes. This is despite the fact that there were numerous chances to use assessment as an integral part of teaching and learning, and so support learners for the promotion of the culture of learning. The emphasis of the traditionalist approach with regard to assessment was basically on measuring the learned content, and to gauge the vitality of the teacher's control with regard to teaching and learning activities. Assessment was also used to promote learners from one grade to another.

This chapter revealed that various education systems around the world are developing a system of not only using assessment results for purposes of promoting learners from one grade to another, or to indicate that academic performance differs on gender, class or racial lines, or to demonstrate that two or more test or examination papers are of the same standard. Instead, the new system of education intends to use assessment to describe student outcomes of learning quite explicitly in terms of the actual learning students should exhibit. For example, it emphasizes that learners, through assessment, should be able to demonstrate abilities and competencies such as specific knowledge, skills or understanding in order to develop self-confidence and self-reliance for the promotion of the culture of learning.

The following chapter discusses the alternative ways of assessment that have been developed, based on the Outcomes-based education system

CHAPTER 4

THE NATURE AND TYPES OF OUTCOMES-BASED ASSESSMENT STRATEGIES AND THEIR INFLUENCE ON THE CULTURE OF LEARNING

4.1 INTRODUCTION

In the past educators relied mainly on written tests and examinations at the end of the year to determine which learners should be promoted to the next grade. The emphasis of assessment here was more on content and knowledge. Too little value was placed on practical skills, such as the ability to work collaboratively as part of a team, conflict resolution, project management, organizational skills and life management skills. Yet these skills are required daily in the workplace and in the world of life. They also arouse an interest in learning which has a direct effect on the culture of learning.

According to Rensberg (1998:2) the new Outcomes-based approach in education focuses on the achievement of clearly defined outcomes rather than teachers and education practitioners' inputs in terms of syllabus content, as discussed in chapter 3. The approach of the old system was to use assessment to judge learners' performances only against the presented content knowledge; it did not cater adequately for the development of learners. It needs to be mentioned however, that although outcomes-based education assesses the performance of outcomes, it does still consider content knowledge. To this point, Siebörger and Macintosh (1998:42) stress that outcomes of learning do not exist without content knowledge, but the main emphasis with outcome-based education is that learners have to do something with the knowledge. They further state that content knowledge in the OBE curriculum has changed, but it is still very important in the following ways:



- it makes sense of subjects and disciplines in education;
- content will sometimes need to be studied in depth in order to achieve an outcome;
- range statements and descriptions of performance levels depend on content knowledge; and
- content will make it easier to achieve suitable outcomes.

All these factors come into play when assessment is done. Knowledge remains the foundation against which all the skills and competencies are performed. This indicates that Outcomes-based assessment has made a remarkable and radical departure from the previous traditional system, which evaluated learners mainly on the content knowledge (as shown in chapter 3). The assessment of content knowledge in OBE means that one is not just thinking of tests, examinations and written exercises, but of many other ways of gaining information and giving feedback about the progress of learners (Siebörger and Macintosh, 1998:5). These could have a tremendous influence on the culture of learning, since learners will be presented with a multi-dimensional practice of assessment.

This clearly shows that OBE uses assessment in the learner's best interest, because the outcomes of learning communicate to learners that they have achieved the expected outcomes, and these can be used by both learners and teachers to measure future progress (Wolfondale 1995:13). Assessment here does not only test and examine the knowledge content of that which has been taught, but it also tends to be diagnostic and prognostic in nature.

Therefore the purpose of this chapter is to signify that the Outcomes-Based Education approach intends to focus equally on knowledge, skills, attitudes and the process of learning which lead to the achievement of both specific outcomes and critical outcomes. It will also indicate how learning should empower learners to achieve the specific outcomes of learning, where assessment is used to guide and evaluate teaching and learning processes, leading to the improvement of the culture of learning. This view is also supported by Olivier (1998:21), who points out that the OBE approach deviates

from the conventional and traditional content-based education and training, in the sense that OBE focuses on the mastering of processes linked to intended outcomes, as well as on mastering the knowledge and skills needed to achieve the outcomes. The reason being that whenever learners achieve outcomes, it proves that they did participate in their own development. They do not simply just learn, remember and recall content in order to achieve a score or grade as indicated in chapter 3.

4.2 THE NATURE OF ASSESSMENT IN OUTCOMES-BASED EDUCATION

The outcomes-based approach to curriculum design is strongly linked to assessment and therefore demands the implementation of valid and reliable assessment procedures. Pretorius (1998:82) feels that unless assessment is properly aligned with curriculum reform and teaching processes, the desired changes in education will be extremely difficult, if not impossible, to implement. He further states that to give life to the outcomes-based approach to teaching and learning, assessment must move from the emphasis on summative assessment as a single event, to developmental assessment, which is an ongoing process. In this way, assessment will be a tool that assists the learner and teacher in ascertaining learning progress; this could contribute to the culture of learning.

According to Olivier (1998:37), the assessment approaches of OBE have moved their focus from being mainly judgmental to incorporate assessment of processes and other essential attributes. Such assessment does not concentrate on the outcomes of learning only, but it also considers supportive learning traits, as well as processes of teaching and learning. This encourages learners to achieve in order to promote the culture of learning.

This shows that the assessment approaches of OBE have the capability to assess not only knowledge, but also skills, attitudes and processes as well as the end-result thereof. This suggests that learners would be able to demonstrate improved knowledge, skills and attitudes, which implies that learners will also master an achievement of the processes followed by means of the learning and teaching processes. This is why Wiggins

(1998:3) refers to an assessment process that is often unobtrusive to students and teachers, and is virtually indistinguishable from what takes place during good teaching and learning.

This indicates that assessment of outcome-based education is an integral component of teaching and learning. It is a system that is designed to improve, and not just audit, a learner's performance. It aims primarily to educate and improve a learner's performance, and as a result will enhance the rate of learning. This will have good consequences for the culture of learning. This is in contrast to the traditional part of assessment, where silent examinees sit in rows, answering uniform questions with orthodox answers, following calendars that dictate that all learners must be examined simultaneously regardless of readiness (Airasian 1994:171).

Wiggins (1998:4) is of the opinion that assessment of OBE gives students the kinds of challenges, diversity and flexibility that makes assessment far more realistic. These include working together and critiquing one another's writing, hearing and debating points and even making presentations in group discussions. Teachers want to know not only what assumptions the students started with, and what decisions they made, but also why the students thought these assumptions were valid and how they justify their decisions. Such methods of assessment resemble the way learners will be expected to use their knowledge and skills in the real world. Such exercises will build a culture of learning, because learners will be aware that the knowledge and skills that they are acquiring will be of great use in their future lives.

This also shows that achievement of excellence by pupils depends not only on the quality of tasks that pupils undertake. It also depends on the quality of assessment that they receive. This is why Wiggins (1998:8) states that educationists have wrongly construed assessment as a problem of tinkering with testing techniques, rather than intellectual imperatives embedded in a new vision of the purpose of teaching. By contrast, the OBE assessment system actually works to teach learners to have a strong performance and gains overtime for all learners, unlike expecting only a few learners to achieve outstanding performance. This suggests that OBE, through assessment, has the intention of seeing all learners become successful. If learners see progress with their

learning, they are likely to develop an interest in learning which will promote the culture of learning.

This simply points out that OBE assessment does not rely on short answers or multiple-choice testing only. This has, according to Wiggins (1998:10), landed teachers in a world that could be described as “teach, test and hope for the best”. This suggests that teachers have developed a typical tendency to cover a great deal of material and then test on it believing that they have assessed, and then move on. Spady (1994a:50) argues that the outcomes of this assessment were only micro-skills and isolated bits of information that were of little consequence to students and their teacher once the learning experiences were completed, tested and recorded in teacher’s book. Often they represented small bits of information and parts of isolated segments of curriculum that students quickly forget once the particular curriculum segment was completed. This has little value to the culture of learning. Typical examples of information that is assessed in this context include names of the leading characters in novel or the names of the tributaries of a river.

Wiggins (1998:11) supports the view that the teacher’s task regarding assessment ought to be seen as maximizing learning on worthy tasks that require enduring knowledge and skills. This suggests that assessment should be even more central in a teacher’s task, because it has to support and motivate learners and enable them to attain learning outcomes which would be very important to their educational and life career future (Van der Horst and McDonald 1997:19). If assessment is viewed in this light it will impact positively on the culture of learning because it will be assessing things that really matter to learners. Seeing that it contributes to learning as a lifelong process, assessment in OBE needs to be well planned.

The following sub-sections explain certain concepts which are related and associated with the nature of assessment for outcome-based education and their influence on the culture of learning. Teachers will use these concepts when executing learning programmes in a learning environment, or when assessing learning activities in order to ascertain whether learners have achieved the desired learning outcomes (Pretorius 1998:36).

4.2.1 Learning Outcomes

Learning outcomes are clear results that teachers want learners to demonstrate at the end of a significant learning experience. Spady (1994b:2) argues that learning outcomes are what learners can actually do with what they know and have learned, they are a tangible application of what has been learned. This means that learning outcomes are actions and performances that embody and reflect learner competence in using content, information and ideas successfully. This also shows that learning outcomes are what learners can actually do with what they know and understand at the end of a significant learning experience. This suggests that demonstration of learning outcomes can elicit creativity and promote ownership of the learned content amongst learners in schools.

Advocates of OBE emphasize that learning should promote an ability to translate mental processing into forms and kinds of action that occur in real social settings. Hence outcomes of learning need to be forms of learning that teachers can see learners do, and that can be assessed directly.

However, this does not mean that teachers have to focus on the individual learner who must master the learning content. Eventually, when the content has been mastered, then learners are subjected to examination and are passed or failed. This indicates whether they have achieved the learning outcomes or not.

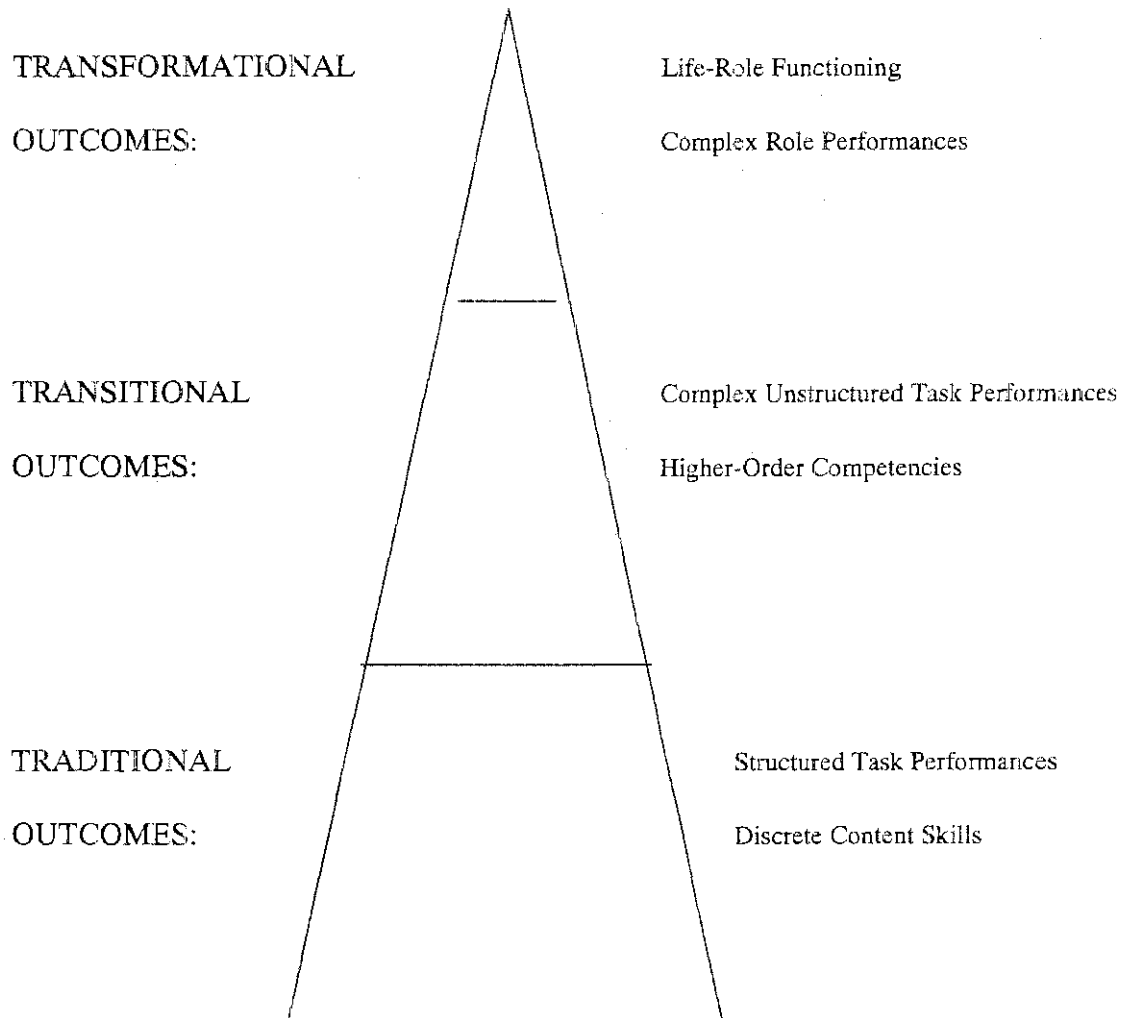
Malan (1997:10) maintains that outcomes of learning should form the basis of all educational activity. The reason being that in the OBE approach there is interdependence between learning outcomes and the processes of teaching and learning. These include supportive elements such as the acquiring of knowledge, skills and attitudes, as well as ways of executing performances. However it should be noted that the supportive elements are not outcomes, they are only instrumental in achieving the learning outcomes. This is why Malan (1997:16) concludes that an effective interaction of all these supportive elements, including teaching and learning processes, results in outcomes of learning.

Spady (1988) in Malan (1997:12) argues that the only legitimate basis for developing learning outcomes is to first derive the exit outcomes from the skills and knowledge

which learners will need to lead successful lives in a future world. The next step would be to develop specific outcomes for each school programme. These specific outcomes must show a direct correlation with, and contribute to, the original exit outcomes. Finally the teachers, as experts of teaching and training content, have to identify lesson outcomes which will act as criteria against which to assess the learners' learning progress and development (Malan 1997:13).

Van der Horst and McDonald (1997:30) caution that even though there is a lot wrong with traditional educational practices, we must be careful not to overlook the importance of learning content. Learning content assists teachers to identify lesson outcomes of learning, in order to help learners to achieve good social dispositions and life skills. Further they assert that without a sound foundation in the content of a subject, no higher order thinking skills or problem solving skills can be applied. All learners need to acquire a sound content or knowledge base in order to develop expertise in manipulating the content in other contexts. From this sound content base different learning outcomes can be derived, as illustrated in figure 4.1.

Figure 4.1: The Demonstration of Learning Outcomes



Source: Spady 1994: 19

This is why Spady (1994b:19) developed three basic categories of learning outcomes, each with its own characteristics in relation to the learning content and knowledge. The first category is constituted of discrete content skills. These are content-dependent, tightly structured by the teacher and linked to small, specific segments of curriculum content which makes their assessment inseparable from their content. However they serve as enabling outcomes for structured task performances which represent most day-to-day classroom activities, such as homework, assignments and work tasks. These activities and the learning results are known as traditional outcomes. Their assessment allows for the interaction between teachers and learners to debate the learned content, which will eventually boost the culture of learning.

The second category is transitional outcomes. Here, according to Spady (1994b:20), we encounter two learning demonstrations: higher-order competencies and complex unstructured task performances. These include analyzing concepts and their interrelations, proposing solutions to multi-faceted problems, using complex arrays of data and information to make decisions; and planning complex structures, processes or events. All these demonstrations can include many kinds of content. Although they are more generalizable across different kinds of subject areas and performance contexts than outcomes in traditional zones, they do rely on some content skills and structured tasks for both assessment and learning purposes.

The third category is transformational outcomes. Spady (1994b:21) feels that although this category seems to lie beyond the structures and frames of reference used most often in schools, they link the world of schooling to real life. They involve a high degree of generalizability across time and situation, and they demand a high degree of ownership, self-direction and self-assessment. They are formulated in terms of the roles which competent, well-adjusted adults might be expected to fulfill in the world outside school. This role often calls upon an adult to act as the problem solver, communicator, conflict negotiator, or information processor (Malan 1997:16). Transformational outcomes are not as narrow and specific as traditional outcomes. As such, they focus not only on the knowledge, skills and attitudes which school leavers should have acquired, but also on their ability to apply these in the world outside school (Malan 1997:10). Hence this outcome of learning is regarded as a philosophical contribution to the culture of learning.

The Report of the Ministerial Committee (1996:25) describes outcomes of learning as the end products of a learning process. They state that the word “outcomes” is used broadly as an inclusive term, referring to everything learnt, including social and personal skills, learning how to learn, concepts, knowledge, understanding, methodologies, values, attitudes and also including both intended and unintended outcomes. Consequently, in OBE there are programmes of learning designed to help the learners to achieve outcomes of learning. The South African Qualification Authority demarcates learning outcomes into two categories: specific outcomes and critical outcomes. These help to bring a clearly defined picture regarding the outcomes of learning (Department of Education 1997:10).

4.2.2 Specific Outcomes

According to the Draft Policy Document of the Department of Education (1997:12), specific outcomes refer to the specification of what learners are able to do at the end of a learning experience. They include skills, knowledge and values that inform the demonstration of the achievement of an outcome or a set of outcomes. Lubisi, Wedekind, Parker and Gultig, (1998:8) describe specific outcomes as context-specific. They believe that they are formulated within the context in which they are to be demonstrated, and describe the competence that learners should be able to demonstrate in a particular area of learning at certain levels. However, they are not terminal. The reason for this is that they form the basis for assessing the progress of learners. They are also building blocks which enable learners to reach a culminating stage of performance.

Hence assessment of specific outcomes in OBE does not necessarily mean that teachers test the mastery of content in a traditional system (Siebörger and Macintosh, 1998:44). The OBE assessment approaches ensure that specific outcomes are translated into the performance of competencies, so that learners can see the results of their learning. This should help motivate learners and so promote the culture of learning.

4.2.3 Critical Cross-Field Outcomes

According to the Discussion Document of the Report of the Ministerial Committee (1996:25-26) and Lubisi, Wedekind, Parker and Gultig (1998:9), critical cross-field outcomes are generic and cross-curricular. They underpin the learning process in all its facets. They are not restricted to any specific learning context, but they inform the formulation of specific outcomes across curricular or in individual areas of learning for all learners.

Spady (1994b:20) speaks about the realm of role performances, which operate with authentic life contexts as the backdrop for students to demonstrate what real people do to be successful on a continuing basis in their career, family and community. Spady further asserts that almost all real-life role performances require complex applications of many kinds of knowledge and competences as people confront the challenges surrounding them in their social systems. Therefore role performance could be linked to critical cross-field outcomes, because role performances link the world of schooling to real-life. Hence the critical cross-field outcomes can contribute to the culture of learning, because learners would be committed to carry out role performances in their future lives, rather than just perform isolated tasks on demand.

This suggests that critical outcomes are working principles. As such they should direct teaching, learning, assessment implementation and education practices, as well as the development of learning programmes and materials. In other words, all “learning-areas” and specific outcomes should originate from critical outcomes. In relation to this, Vermeulen (1997:47) states that critical outcomes assist learners to gain skills, knowledge and values that will allow them to contribute to their own success as well as to the success of their family, community and the nation as a whole.

It should therefore be noted that when learners are continually assessed by teachers for performance of specific outcomes, the achievements of learners with regard to these specific outcomes emulate the achievement of critical outcomes. This is because specific outcomes of different learning areas are informed by critical outcomes.



The critical outcomes have a great role to play with respect to the culture of learning, because they are concerned with the development of the fully fledged person. This is supported by Vermeulen (1997:46), who asserts that critical outcomes are used broadly to refer to everything learnt, including social and personal skills, learning how to learn concepts, knowledge, understanding methodologies, values, attitudes, as well as including both intended and unintended outcomes. Ultimately an assessment of specific outcomes does not only assess the understanding of the context within which specific outcomes are formulated. Rather this assessment has a far-reaching effect on the critical outcomes, which has informed the creation of specific outcome in its particular context.

According to the Draft Policy Document of the Department of Education (1997:13), General and Further Education and Training has a special contribution to make to learners regarding the development of the basic knowledge, skills, understanding, abilities and values necessary for functioning in the changing, modern society. Education and training must therefore aim to assist all learners to achieve critical outcomes irrespective of age, race, geographical location, or gender. This will effect changes in their social lives and enable learners to develop a lifelong attitude that will be appropriate for the promotion of the culture of learning. Consequent to this, SAQA proposed seven critical outcomes for South African Education as listed below:

- Learners will identify and solve problems and make decisions using critical and creative thinking;
- Learners will work effectively with others as members of a team, group, organization or community;
- Learners will organize and manage oneself and one's activities responsibly and effectively;
- Learners will collect, analyze, organize and critically evaluate information;
- Learners will communicate effectively using visual, mathematical and language skills in the mode of oral and/or written presentation;

- Learners will use science and technology effectively and critically, showing responsibility towards the environment and the health of others;
- Learners will demonstrate an understanding of the world as a set of related systems by recognizing that problem-solving contexts do not exist in isolation.

Five additional guidelines were added to these critical outcomes by SAQA, in order to contribute to the full personal development of each learner and the social and economic development of the society at large. These are:

- Reflecting on and exploring a variety of strategies to learn effectively;
- Participating as responsible citizens in the life of local, national and global communities;
- Being culturally and aesthetically sensitive across a range of social contexts;
- Exploring education and career opportunities;
- Developing entrepreneurial abilities.

On many occasions the teachers' assessment of learners' work will not directly assess the attainment of these critical outcomes in different levels of learning. These critical outcomes will be assessed indirectly because all learning areas and their various specific outcomes are informed by critical outcomes. When considering the proposed critical outcomes, it becomes obvious that the emphasis is mostly on what has been pointed out in chapter 1 and 2, i.e. that teaching, learning and assessment should not only concentrate on memory for content. Instead these three didactical components should pay attention to promoting critical-thinking, problem-solving and other kinds of higher order thinking strategies.

The nature of critical outcomes makes teachers facilitators of learning, because they are expected to design and implement learning environments that will be appropriate to the

needs of their particular learners. Therefore Smit (1995:58) is of the opinion that “teaching will include the cultivation of the educator’s own inner growth and creative awakening. The assumption here is that when educators are open to their own inner-being, they will invite co-learning and a co-creating process with the learner. What teaching will require, is an exquisite sensitivity to the challenges of human development, not a prepackaged kit of methods and materials”.

Smit (1995:59) further states that OBE is learner-centered. Therefore educators are expected to display a reverence and a respect for the individual, and awareness of and attentiveness to each learner’s needs, differences and abilities. Again educators are required to consider each individual in the context of family, school, society, the global community and the cosmos. This suggests that assessment will cover a wide spectrum, which will make teachers, facilitators and various co-learners encourage and assist pupils to gain a strong desire to learn for a life-long learning process. They will also help pupils to improve their learning abilities and resources, which will make a positive contribution to the culture of learning.

4.2.4 Unit Standards

A unit standard is a nationally registered statement of desired education and training outcomes and their associated performance criteria. It should give attention to critical cross-field outcomes, though it is not essential to address all of them within a single unit standard. The development of unit standards in the South African context involves the participation of SAQA, accredited National Standards Bodies (NSBS) and Standards Generating Bodies (SGBS). Unit standards are registered by SAQA at a defined NQF level (Department of Education 2000:21).

According to SAQA (1999:12), the achievement of the unit standard by learners in each level indicates that the learners has achieved the learning outcomes with respect to that level and can progress within that particular pathway. SAQA (1999:13) further states that each unit standard must reflect a qualitative improvement in terms of enhanced ability and enhanced learning. It must also succinctly capture what the learner should know and be able to do once the unit standard is achieved. Hence achievement of the

unit standard can have a positive contribution towards the culture of learning, since the learners' ability will be enhanced and the quality of learning will improve. Department of Education (1997:32) indicates that there will be unit standard documents for each learning area at each level, and all standards must be registered with the South African Qualifications Authority. Greaney and Kelleghan (1996:7) argue that in countries like Chile, France, Ireland, Thailand, the United Kingdom and the United States, it was the information on student achievement in key curriculum areas, collected on a regular basis, which helped to monitor changes in achievement over time. This also provides the evidence relevant to assertions made by policy-makers, curriculum designers and educational managers that educational standards are falling or improving.

Van der Wagen and Ridley (1997:7) postulate that a unit standard has a number of performance outcomes and these outcomes have performance criteria that describe the attainment of these performance outcomes in order to achieve a unit standard. The unit is then described in terms of a number of performance outcomes. Each of these outcomes would have performance criteria associated with it. These performance criteria describe what good performance should look like (Van der Wagen and Ridley, 1997:8-9).

This implies that in order to facilitate learning for the promotion of the culture of learning, teachers should continually assess whether learners are achieving the outcomes of learning. Furthermore teachers should critically and intelligently use assessment criteria and range statements when assessing learners' work in order to assist learners to achieve the unit standard. Since according to SAQA (2001a:45) assessment criteria and range statement needs to allow the candidates to reflect achievement of the Unit Standard which captures the critical cross-field outcomes as well as specific outcomes, in order for the candidate to apply knowledge, skills, ability and value to a range of contexts and circumstances. This shows that both assessment criteria and range statements could create validity and reliability of assessment strategies, for the development of the culture of learning, since learners can experience success with regard to learning outcomes.

Both critical cross-field outcomes and specific outcomes, as captured by the unit standard, are intended to enable learners to function effectively in everyday life and to

see themselves as lifelong learners who are able to apply their newly acquired knowledge, skills, values and attitudes in a variety of ways. Seen in this light, unit standards can develop the culture of learning amongst learners.

According to the Department of Education (2000:20), the purpose of a unit standard is to provide guidance as follows;

- to the learner on what outcomes are to be assessed;
- to the assessor on what criteria are to be used for assessment; and
- to the educator on the preparation of learning material to assist the learner to reach the outcomes.

These provisions indicate a positive aspect of promoting the culture of learning. They shows that unit standards are not about trapping learners, or embedding them with a mystique of secrecy, but rather that they should be transparent for both learners and educators.

This confirms the idea that OBE approaches intend that learners should have a clear picture of what is expected of them and what is important for them to be able to do during learning and after learning experiences as discussed in section 3.2. Teachers then need to utilize assessment as an integral part of the teaching and learning processes, so that learners can come to grips with performance outcomes in order to master unit standards.

According to the Department of Education (1997:5), unit standards are nationally agreed and internationally comparable statements of outcomes that are registered on the National Qualifications Framework. Pretorius (1998:41) suggests that when developing a unit standard it must comply with the following set of criteria:

- Whether there is a need for the unit standard.
- The significant achievement required from the learner.

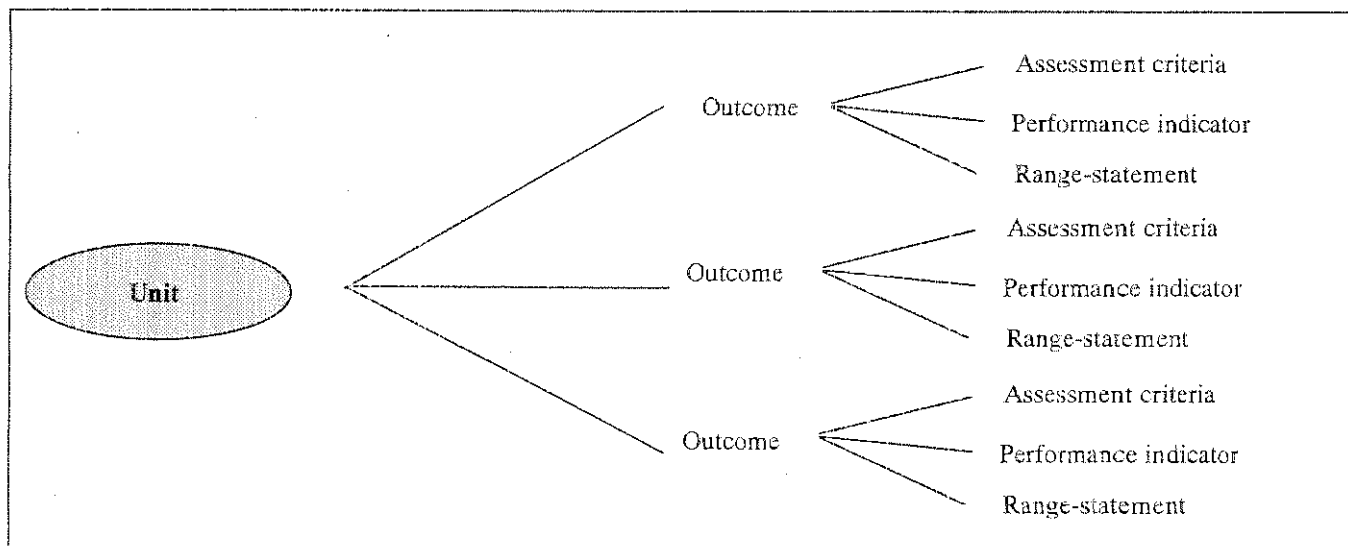
- The outcomes within the unit are consistent with each other, and with the overall competence outlines in the general competence for the unit.
- The unit does not create barriers to achievement.
- The unit conforms to the appropriate SAQA unit specification.

It therefore becomes necessary for teachers to bear in mind that concepts such as specific outcomes, critical cross-field outcomes, assessment criteria, performance indicators and range statements should be in unison with regard to the assessment of learners' work, because these concepts are necessary to support learners to master unit standards, for the benefit of the culture of learning. According to Department of Education (1997:23), credits are allocated to each unit standard. The learner will only receive a credit(s) when the learner has achieved the unit standard. Credits may be accumulated until conditions have been met for the award of a qualification.

For the learner to achieve a unit standard in any learning area, he/she needs to be assisted by the teacher through assessment to achieve that particular unit. However, each unit is associated with a number of outcomes, which according to Van Der Wagen and Ridley (1997:7) could be achieved by applying assessment criteria. These specify the evidence and quality of performance to be demonstrated in order to achieve the outcomes (See 4.2.5). Performance indicators should also be applied which provide the learner with more detailed information about what the learner must know and be able to do in order to show achievement (See 4.2.6). Lastly each unit needs to be associated with range-statements which describe the context in which the individual learner is expected to perform (See 4.2.7, and Guidelines for the Assessment of NQF Registered Unit Standards and Qualifications 2001b:27).

The association of unit standards, assessment criteria, performance indicators and range-statements can be expressed graphically as shown in figure 4.2.

Figure 4.2. Association of unit standards, assessment criteria, performance indicators and range-statements.



Source: Van Der Wagen and Ridley 1997:7)

From the above, it is clear that the new Outcomes-Based Education approach is a definite shift from a curriculum where content was a main component, to a curriculum where the achievement of critical cross-field outcomes and specific outcomes is the driving force (Boschee and Baron 1993:36 and Pretorius 1998:45). Such an approach could set a platform for a life-long learning process which has positive implications on the culture of learning in schools.

4.2.5 Assessment Criteria

Kotze (1999:31) explains that assessment criteria indicate the requirements of specific outcomes and are related to the subject of the learning area. Assessment criteria specify the evidence and quality of performance to be demonstrated in order to achieve the outcomes (Pretorius 1998:36). They indicate in broad terms the observable processes and products of learning that should serve to demonstrate the learners' achievements. In order to meet the requirements of assessment criteria, the assessment has to be appropriately designed in terms of form, use, level of difficulty, frequency, timing and

feedback. Learners need information on their performance as a check and balance on what they have or have not mastered and as a guide and stimulus to subsequent learning (Staatkoerant, 1998:23). This will make a positive contribution to learning culture

Assessment criteria play a very important role with regard to learning, teaching and assessment because they indicate to both learners and teachers that the learning outcomes have been achieved. Siebörger and Macintosh (1998:39) are of the view that such criteria form the authentic grounds on which assessment is dependent. They motivate learners to continue learning. Assessment criteria need to be broadly stated to provide sufficient details so that they are not hidden from learners. This approach assists learners to know exactly what path they have to follow in order to achieve the expected learning outcomes.

4.2.6 Performance Indicators

The assessment criteria give only broad indications of what evidence learners need to present before they are seen as having achieved the specific outcomes. OBE also asks that teachers be more specific about the evidence learners must provide to prove that they have achieved the learning outcomes (Lubisi, Wedekind, Parker and Gultig, 1998:13). There is therefore a need to provide much more detailed information about what learners should know and be able to do in order to show achievement. Vermeulen (1997:49) also states that we need to ensure that learners have formed opinions and assumed values through their learning. The outcome is the culmination of the learning process. There is thus a need to provide learners with indicators by which they can plan and measure their progress towards the achievement of the outcomes.

Performance indicators provide the details of the content and the processes that learners should master, as well as details of learning contexts in which the learners will be engaged. This provides learners with appropriate opportunities to organize their learning processes in order to understand the learning strategies that they must use in order to achieve learning outcomes. Vermeulen (1997:49) also asserts that performance indicators will provide teachers and learners with a breakdown of the essential stages to be reached in the process of achieving the outcome. They will help in the planning of the learning process, the tracking of progress and the diagnosing of problems.

Performance indicators will contribute to the culture of learning because they indicate to learners what to achieve and whether what must be achieved has been achieved, because they show the level of achievement that the learner finally achieves. Performance indicators also allow statements to be made about the quality of achievement, that is, whether the achievement is at the level required or whether the learner has surpassed this level (Bhengu 1997:18).

4.2.7 Range Statements

According to the Draft Policy of RSA Education (1997:3), range statements indicate the scope, depth and level of complexity, and parameters of the achievement. They indicate the critical areas of content, processes and context which the learner should be engaged with in order to reach an acceptable level of achievement. Vermeulen (1997:47) asserts that while the range statements indicate the areas of content, product and process, they do not restrict learning to specific lists of learning knowledge, items or activities which learners can work through mechanically. The range statements provide direction, but allow for multiple learning strategies, for flexibility in the choice of content and process, and also for a variety of assessment methods which will help learners to achieve learning outcomes successfully for the promotion of the culture of learning.

In fact, range statements demonstrate that learning outcomes are not scores or grades, but the end product of clearly defined processes that students carry out (Spady 1994b:18.) The range statements describe the level of complexity and the extent of deep insight that learners are expected to master. According to Vermeulen (1997:48), the National Qualifications Framework of South Africa differentiates the reading of range statements for different levels of learning categories. This is done in order to facilitate learning, teaching and assessment for these levels. For example a range statement for a foundation phase will be concrete and content-dependent. It will be tightly structured by the teacher and linked to small, specific segments of curriculum content. For an intermediate phase it will be a structured task performance requiring a multiple learning strategy, and flexibility in the choice of content. Whilst in the Senior phase it would be at the higher order competency level, requiring analysis of concepts and their interrelations, proposing solutions to multifaceted problems, using complex arrays of

data and information to make decisions, planning complex structures, processes, events ; and communicating effectively with public audiences (Spady, 1994b:20).

The range statements are geared towards helping learners to generalize across different kinds of subject areas, and to use different content knowledge and skills to manage different types of learning situations. They help learners to exercise personal ownership of what they have learned so that they should have self-direction and self-assessment. All these factors of learning build a high profile for the learning culture. The range statement has the additional function of ensuring that balance is maintained between the acquisition of both knowledge and skills and the development of values. It also provides broad indicators that guide the choice of teaching, learning and assessment (Olivier 1998:18).

4.3 OUTCOMES-BASED ASSESSMENT STRATEGIES AND THEIR INFLUENCE ON THE CULTURE OF LEARNING

The literature reviewed in chapter 3 revealed that the teaching and learning strategies currently operating in most of our schools are teacher-driven and are too text-book-bound. They do not lend themselves to progressive forms of assessment. The lack of transparency and accountability in the system of assessment has resulted in learners not being clear about what is required in the assessment, and who is accountable for their failure to fulfill the requirements. As a result, teachers did not let learners participate in their own learning, which occurs when learners are continually assessed and encouraged to think and solve problems. Van der Horst and McDonald (1997:27) believe that such teachers cannot manage to guide learners to a deep understanding and appreciation of their subjects, or manage to develop the skills required for research in subject areas and to motivate learners to become thoughtful and skilled people. This resulted in a low morale with regard to the culture of learning in schools.

According to the Staatkoerant (1998:17), it has become imperative that alternative strategies of assessing learners' achievements be implemented. These alternative strategies have to take into consideration the continuous/formative assessment in the

summative assessment. In this way the new approach of Outcomes-Based-Education was adopted, because of its principles that are: learner-centered, results-orientated, and what learners need to learn is clearly defined. Each learner's progress is based on demonstrating achievements, and each learner's needs are accommodated through multiple teaching and learning strategies and assessment approaches (Staatkoerant 1998:17). On this basis the new approaches of assessment were devised with a strong belief that they would help to anchor and pursue a culture of learning amongst learners.

Outcome-based education views it as the teacher's responsibility to focus on the actual learning outcomes rather than on covering a provided curriculum. In short, the classroom becomes an active, highly challenging learning environment and performance centre (Willis and Kissane 1997:9). Teachers have to focus on learning outcomes because proponents of OBE regard assessment as a tool to assist learning and teaching to enable learners to achieve the desired outcomes. Thus assessment is not only to be used in testing and examination for comparing the failure and success of learners in a judgmental way – this being the practice of assessment that has brought a low morale into the culture of learning.

Consequently OBE assessment focuses mainly on what learners know and can do. Bertrams (1997:9) argues that it should happen throughout the year, focus on applying skills, and involve a range of methods. It should be about understanding, co-operation and success of all learners. The paradigm of OBE with regard to assessment is the viewpoint of “what” and “whether” students learn successfully, in contrast to the traditional viewpoint of “when” and “how” they learn something, as described in section 3.2. According to Spady (1994b:8), this orientation to schooling entails a fundamental shift in how the system operates – a shift that makes accomplishing results more important than simply providing services. The OBE paradigm desires to have all learners emerge from the system as genuinely successful learners, who have a positive influence on the culture of learning.

The following subsections describe a range of OBE assessment approaches and techniques, considering their approaches to articulating and monitoring student outcomes of learning and performance standards, with a view of influencing a culture of learning in schools.



4.3.1 Performance-Based Assessment in Outcomes-Based Education

Airasian (1994:228) explains performance assessment as the gathering of appropriate evidence about a pupil's learning. The teacher has to judge and observe each pupil's actual performance in which pupils provide an answer or a product that demonstrates their knowledge and skills. Performance assessments are designed to engage pupils in solving problems and performing real tasks of importance in their own right, so that learners can attain the learning outcomes.

The performances that classroom teachers observe and judge should match or surpass those that pupils have been taught. First and foremost, teachers should provide good instruction on the content, behaviors and performances that the pupils will be expected to demonstrate (Airasian, 1994:269). This in turn will empower learners to plan and execute performances according to the good instruction their teachers have offered them when they are assessed.

Whenever teachers anchor performance assessment in the kind of work pupils really do know, rather than merely eliciting easy-to-score responses, or trapping learners to do badly, then a culture of learning will prosper. Recent educational research has indicated that performance assessment that is applied against this background ensures authentic assessment (Wiggins, 1998:21.), because performance assessment focuses on the learner's processes, products or performance, rather than on memory, information or behavior. Malan (1997:30) believes that during performance assessment, learners are engaged in activities that require them to demonstrate specific skills or develop specified products. The demonstrations can take place in a controlled environment, such as a laboratory or classroom, or in a real-life environment where the complexities faced by learners are much higher. In the latter case, the performance assessment is also called an authentic assessment, because of its real-life connotations.

Performance assessment should be based on authentic content knowledge that has been transmitted to learners. However this does not exempt teachers from observing or eliciting extrapolative demonstrations that should be inferred from learners during performance assessment. OBE accentuates teaching and learning that promote creativity

and high-order-thinking skills as shown in chapter 2. This is also supported by Fischer (1995:74), who asserts that pupils become motivated and creative when they are able to see and think of possibilities beyond the given information. This shows that teachers should be on the alert for divergent thinking that they might observe during performance assessment, which needs to be accepted as authentic demonstrations. In this way learners will be encouraged to think beyond the given information, which could have a positive influence on the culture of learning.

Herbert (1992:58-61) is of the opinion that in preparing pupils for performance assessment, teachers should inform them of the performance criteria on which they will be assessed. This helps learners to be aware of what they are expected to achieve. This motivates learners to have a sense of ownership over their learning, also to help them to understand what is expected. According to Airasian (1994:270), if what is expected in a formal performance assessment is not made clear to pupils, they may perform poorly - not because they are incapable, but due to the fact that they were not aware of the teacher's expectations and the criteria for good performance. This could have a detrimental effect on the culture of learning. When criteria of performance are explained to learners, this will show learners that assessment is meant to improve their learning, not to audit it. Wiggins (1998:43) strongly believes that assessment should be accompanied by quality feedback. This feedback should be based on performance criteria so that those learners who have performed well will be motivated to continue, and learners with specific learning weaknesses can be remediated.

According to Malan (1997:30), performance assessment displays the following pedagogical characteristics, all of which greatly promote the culture of learning: it asks learners to perform, produce, create or do something; it offers high-order thinking processes and problem-solving skills; learner's work is graded or scored with the use of assessment criteria as the basis for human judgment; it provides opportunities for learners to present and explain their work; lastly it involves learners in their own learning. It appears that this approach of assessment is representative of performances displayed by individuals in society and in real work places.

4.3.2 Portfolio Assessment In Outcomes-Based Education

The application of portfolio assessment in education has been a relatively recent phenomenon. However, it has been warmly embraced by those educators who regard traditional assessment with less enthusiasm (Popham 1995:163). Most advocates of portfolio assessment believe that it can be applied in all curricular subjects and need not necessarily be restricted to art, music and writing. Its application to other subjects will provide opportunities to experience the developmental nature of learning in all subjects. Popham (1995:164) believes that if OBE uses portfolio assessment, the following changes will be experienced with regard to assessment of learner's work: it will engage students in assessing their own progress and/or accomplishments and establishing ongoing learning goals; it will measure each student's achievement while allowing for individual differences between students; it has a goal of student self-assessment; it represents a collaborative approach of assessment; it addresses improvement, effort and achievement; and finally, it links assessment and teaching to learning. The pay-off of portfolio assessment is that instruction, learning and assessment become inextricable and strengthened. Due to the fact that appraisal of learner's work will be a central focus of instructional programs, this will encourage a renewed interest in learning (Seely 1994:57). Hence learners will have a positive attitude towards the culture of learning. According to Seely (1994:3), Paulson and Paulson offer a substantive definition of portfolio assessment in order to show its centrality to student's work. They define it as "a purposeful, integrated collection of students work showing student effort, progress or achievement in one or more areas. The collection is guided by performance standards and includes evidence of student's self-reflection and participation in setting the focus, selecting contents and judging merit."

In order to make sure that the portfolio is a systematic, purposeful and meaningful collection of a learner's work, learners should feel ownership of the portfolio. Such ownership is promoted by involving them to work accurately, for the maintenance of a higher level of learning. Popham (1995:167) also emphasizes that students must perceive the portfolio to be collections of their own and not merely temporary receptacles for products that the teacher ultimately grades. The portfolio should also not be seen as a peripheral activity whereby students occasionally gather up their work to

convince a teacher's supervisors or student's parents that good things have been going on in class. Learners should honor the portfolio as a learning process, monitor them and have control of the product since it will assist them to achieve the outcomes of learning. The learner's involvement with portfolio assessment will ultimately indicate a culture of learning in schools.

Since the primary owners of portfolio assessment are learners, they should be the ones to decide what items are to be placed in the portfolio. However, they must also base their decisions on some clearly formulated criteria. This calls for the first guiding principle - that it must be authentic in nature. Defina (1992:14) asserts that in order to ensure authenticity, teachers should help learners to identify criteria, provide models and encourage them to continually refine their criteria. In portfolio assessment learning is always perceived as evolving and changing, therefore learners should have the right to change their minds about pieces in their collections whereby new artifacts are included and old pieces lose their relevance (Lustig, 1996:33). Such activities with regard to portfolio assessment will improve learners' learning abilities and build confidence in taking decisions about their learning, hence this will cultivate a culture of learning in learners' lives.

Portfolio assessment practices are designed to evaluate student performance on an individual basis. These practices, according to Seely (1994:3), monitor and provide feedback on the educational progress of each student. The teacher's function is to interpret the gathered information according to the expected learning outcomes, and to ensure that learners have achieved the learning outcomes according to the set criteria. However, over and above these issues, portfolio assessment has an interest in the learning process of an individual learner, by considering the ways in which knowledge is represented, re-organized and new information is processed. From this perspective portfolio assessment intends to see learners achieving learning outcomes, applying assessment criteria and performance indicators independently. Such practices enhance the culture of learning.

According to Popham (1995:165), Roger (1994) contends that the real pay-off from portfolio assessment is that it enhances student self-evaluation capabilities. This is because during portfolio conferences teachers usually encourage students to come up

with a personal appraisal of their own work. Teachers are afforded opportunities of assessing learners on a multi-dimensional level. Seely (1994:4) contends that portfolio conferences provide opportunities for students and teachers to better understand the expansive nature of learning and assessment, as a result the interest in learning and instruction are expanded, which will have a positive effect on the culture of learning.

Assessment in an outcomes-based system facilitates transparency of process. Seely (1994:3) emphasizes that portfolio assessment is transparent because of its collaborative reflection wherein both teachers and learners are engaged in the evaluation process. Students evaluate their own strengths and weaknesses; the teacher examines his/her own teaching effectiveness. Together, as partners in the assessment process they are actively engaged in dialogue about learning and teaching. Seely (1994:4) feels that portfolio assessment practices are important aspects of the educational system and can play a critical role in the academic lives of learners and in the professional lives of teachers. Defina (1992:14) also feels that parents and school administrators also share in the creation of portfolio assessment. Parents share by giving comments and reviewing pieces. Principals are involved by being kept informed about the progress of learners, and by viewing the portfolio of learners in order to instill educational reform that will benefit learners.

4.3.3 Self-Assessment And Peer-Assessment

The approach of the OBE system is to support learning and teaching processes. In this respect teachers are not expected to use assessment as a measuring rod of the success and failure of learners. Instead OBE promotes assessment as a means of facilitating instructional programs on a day-to-day basis, in order to motivate learners to learn and enhance the culture of learning.

The researcher views self-assessment and peer-assessment as evidence gathering strategies, wherein learners become active partners in the assessment enterprise. Teachers serve as expert partners. Peer-assessment allows learners to share in and to contribute towards the efforts of their classmates (Van der Horst and McDonald 1997:188).

This indicates that both these strategies will meet and fulfill two important critical outcomes that have been set up by SAQA. Self-assessment will enable learners to organize and manage oneself and one's activities responsibly and effectively. On the other hand, peer-assessment will help learners to work effectively with others as members of a team, group, organization or community, as stated in section 4.2.3. According to Van der Horst and McDonald (1997:189), both self-assessment and peer-assessment deserve special attention in the South African educational context, because most South African learners have often been spoon-fed in the past and therefore have not learnt to think for themselves. Self assessment and peer assessment will empower learners to make judgments about the quality of their work, to construct plausible explanations when evaluating their work, and enable them to set future objectives. This would have a positive impact on the culture of learning. These strategies are not only relevant for school children, they also appear to be important for self-regulated learning at all ages (Naicker 1999:34).

Initially, it will be difficult for learners to assess themselves and their peers because they may not be used to evaluating their own work or that of their peers, simply because schools have traditionally not asked them to make decisions about what they or their peers have done (Defina 1992:27). Lustig (1996:27) argues that the best way to overcome this objection is to prepare students to be critical evaluators. This will not only mean that they become better critical evaluators of their peers, but also better analysts of their own work. Lustig (*ibid.*) further suggests that teachers will probably have to model self-evaluation techniques, demonstrate assessment criteria and also give guidelines on how students should internalize and apply standards of assessment to their work as well as to the work of others. This will uplift the learner's experience with regard to learning and assessment and the interest of learning will be promoted.

Outcomes-based education wants to ensure that assessment is an integral part of teaching and learning. This is why in the Draft Assessment Policy of the General Education and Training of RSA (1998:19) it is emphasized that teachers should use a variety of assessment strategies in order to provide a wide range of opportunities to enable learners to know how to assess their own work. Whenever learners are assessed by their peers or by himself or herself, they become involved in the assessment process because they are not threatened. They also begin to recognize the limitations and success

of their learning, with the result that they learn from this process. Satterley (1989:279) also argues that many educational researchers see both self-assessment and peer-assessment as encouraging more active interest on the part of children. The reason is that these approaches are more informative during learning than summative statements; they also help pupils to understand the reasons for their own educational performance. These approaches encourage an individualized approach to assessment, which in turn enhances motivation and supports the development of self-directed, self-monitoring young people who might not otherwise reach a realistic appraisal of their own skills and abilities. This has the effect of motivating pupils to have the desire to attain the outcomes of learning.

4.3.4 Continuous Assessment As An Outcomes-Based Assessment Strategy

Fraser (1999:34) maintains that many authors of educational literature see the practice of continuous assessment as a paradigm shift from promotion decisions based on the results of a single test or examinations, to the ongoing formative assessment of the learner, which is associated with feedback to monitor the strengths and weaknesses of learners' performance. Continuous assessment henceforth would promote the culture of learning, since the emphasis of such assessment is on the continuous diagnostic assessment of learners' work over a period of time, rather than on performance in a once-off examination or test. Pretorius (1998:83) feels that such an approach to teaching and learning aims at ensuring success through intervention. This will support the learner in the accomplishment of clearly stated outcomes of learning.

The most important value of continuous assessment is the fact that tasks or learning content can be broken down into different components and that each of these can then be assessed during teaching and learning. Hence continuous assessment has clear teaching and learning aims. It also motivates learners because it recognizes previous experiences and present abilities, since both learners and teachers will be actively involved in assessing performance in terms of the different facets of reality. This can have a positive impact on the culture of learning in schools.

Continuous assessment promotes the principle of conceptualization, because it stresses what learners know, how learners construct meaning, and how they articulate what they understand. Von Glaserfeld (1995:186) believes that continuous assessment has as its

essence that of assessing concept formulation. He bases his idea on the fact that concepts and conceptual relations are mental structures that are unique and cannot be carried over from one mind to another. He argues that concepts have to be built individually by each learner, yet teachers have the responsibility of orienting the learner's constructive process during assessment and specifically during continuous assessment. This indicates that continuous assessment is an integral part of teaching and learning processes as indicated in chapter 1.

Most educators would agree that continuous assessment can be an authentic assessment, and also that it has a sound educational assessment principle, since it draws its technicalities from a variety of assessment techniques. It does not give results of teaching and learning by merely interpreting "one-shot" evaluation as traditional test results do (Fraser, 1999:35). Advocates of continuous assessment believe that complex learning outcomes require several assessment tasks so that learners can demonstrate their understanding in a variety of contexts (Jacobs, 1999:32). This suggests that in order for teachers to apply continuous assessment effectively, they need to have highly skilled professional teaching abilities in order to understand and be able to apply these sound educational assessment principles, and so benefit the culture of learning.

Van der Horst and McDonald (1997:190) maintain that the purpose of continuous assessment is to support the learner developmentally and to supply feedback to both the teacher and the learner. To accentuate its authenticity, continuous assessment takes place while learners are actively involved in daily classroom activities. Kotze (1999:32) also points out that it has an essence of modeling and monitoring functions to inform on the quality and progress made by learners. It also helps teachers to infer from the learners' behavior what is going on in the learners' heads while they are actively involved with learning activities.

Fraser (1999:35) is of the opinion that continuous assessment could be a prominent component of assessing the three main categories that are set out in critical cross-field outcomes, namely skills, knowledge and attitudes. These are the outcomes that help learners, teachers and parents to celebrate an individual learner's accomplishments, regardless of how they compare to other children or grade-level expectations. Since these categories involve informal daily assessment of different aspects of curriculum,

this ensures that content is not the only focus. This enhances the learners potential to succeed.

Continuous assessment promotes interaction amongst three important aspects in the didactical situation, that is teacher, learner and learning content. When these aspects interact with one another, teachers appear not to be the sole authority of the source of knowledge, the content to be learned is not the only source of learning experience, and the learners are not be the only receivers of knowledge. Continuous assessment fosters reciprocal practice within this situation, wherein learners form concepts, teachers provide the skills for forming such concepts, and the learning content assists both teachers and learners to draw information from their variety of educational backgrounds. Killen (2002b:17), Mays (2000:14) and Masitsa (1995:75) agree with Von Glaserfeld (1995:186) that continuous assessment has an essence of assessing concept formulation in schools. While on the contrary is a positive learning experience for promotion the culture of learning in schools.

Olivier (1998:45) argues that OBE proponents strongly believe in a holistic approach with regard to educative teaching. They believe that teaching and learning processes should not only be about knowledge and content, but should aim to construct a well functioning being. Continuous assessment plays a very important role in meeting this educational demand. Its assessment techniques do not only concentrate on knowledge and content, they also measure skills, attitudes and the application or employment thereof. Kotze (1999:33) also asserts that continuous assessment as its secondary function relates to aspects such as motivation and discipline as well as the affective domain. This shows that it is a well-balanced educational assessment approach, which will produce a sound culture of learning.

Furthermore, continuous assessment is a challenging concept in education, especially as a means of achieving the high aspirations of OBE. Beyer (1995:7) feels that it evaluates a product while that product is in the process of being developed and created, to help shape it into its final form. To Melton (1996:420), it is essential as an agent of feedback to students on their performance, as well as a means of guiding students on what they need to do, to remedy apparent weaknesses. The general idea emerging from the aforementioned is that of repetition and development, more development, diagnosis or

gauging competence, making relevant changes and determining how learners can be helped. These steps will provide a fertile ground for developing a learning culture.

In essence the nature of continuous assessment is forward looking and pro-active. Kotze (1999:40) states that the framework for continuous assessment will depend on specific assessment criteria, and generally, its planning should include the following questions:

- What does a teacher want to achieve?
- In what context and when should continuous assessment be done?
- Who should obtain the information?
- How is the information obtained?
- What does a teacher want to find out at each stage or level of teaching and learning?

Answers to these questions will involve numerous assessment techniques, such as diagnostic assessment, achievement-based assessment, self-assessment, peer-assessment, performance assessment, teacher-made tests, observation sheets and portfolio assessment, and lastly, recognition of prior learning. These multiple assessment techniques will enable teachers to apply a sound pedagogical knowledge of each technique. This could improve the quality of teaching and learning processes, for learners to achieve qualitative learning outcomes for the benefit of the culture of learning.

4.3.5 Criterion-Referenced Assessment Within An Outcomes-Based Paradigm Of Thinking

Lorber and Pierce (1983:133) describe criterion-referenced assessment as follows: “Evaluating students to determine their abilities relative to objectives involved, comparing each students’ performance with certain present standards or criteria”. This kind of evaluation is known as criterion-referenced assessment and is an integral part of the use of precise instructional objectives. The purpose of this type of evaluation is to

determine who can demonstrate specific competencies. To achieve this, precise instructional objectives are stated which include the evaluation criteria. The evaluation becomes a matter of observing who can achieve the minimum acceptable standard.

According to King and Van den Berg (1992:20), this approach seeks to compare a learners' performance with that of other learners, but in terms of the requirements of the tasks itself. For this form of assessment therefore, the task has to be defined and a decision has to be taken about what constitutes achievement of that task. To obtain excellent marks learners should be able to demonstrate particular abilities and skills – that he/she has mastered the task at hand. This suggests that criterion-referencing gauges a student's performance by measuring whether a child has mastered specific learning objectives, rather than comparing one student with another. This could motivate learners because teachers judge the performance of the learners' work based on an agreed set of criteria.

Malan (1997:29) explains that in criterion-referenced assessment the norm that has to be attained is not a predetermined mark, but the demonstration of a particular ability or competence. The descriptions of the abilities that learners have to demonstrate are referred to as criteria - because learner performance is measured against these criteria this form of assessment is called criterion-referenced-assessment. Gipps, Stobart and Lawton (1989:75) are of the opinion that, teachers and pupils need to have a clear idea of what is required with regard to criteria so that they can measure themselves against the required criteria.

However this does not suggest that learners should chiefly achieve stated objectives only, as in the traditional way where objectives are organized hierarchically and learners are expected to follow the same sequence. This could be inimical to the culture of learning. Instead, criterion-referenced assessment in OBE attempts to ensure fair and equitable judgments by informing teachers to identify, formulate and make known the criteria which they intend using during the assessment process (Malan 1997:39). Fraser (1999:16) states that the idea is to move the focus of education and training practitioners and learners away from memorization of content as an end in itself, towards a more thematic approach by which learners work with content in pursuit of larger

understanding. Effectively learners will be expected to translate content into meaning and meaningful action. This could promote the culture of learning.

Pretorius (1998:83) asserts that the criterion-referenced approach means that the focus moves from comparison to the assessment of an individuals' performance against agreed criteria. This simply means that each learner becomes aware of what is required of him/her in order to achieve good results for any particular task, and that they are credited with exactly what he/she achieves independently of anyone else's achievement. The independent practice should have a positive effect on the culture of learning.

Spady (1994a:40) sees criterion-referencing as authentic assessment by virtue that it assesses criteria by letting the learners demonstrate the pertinent outcomes that the tasks require. The teacher then gathers the pertinent information on a learners' performance and determines whether that information or evidence matches, meets or exceeds the criteria that define the essential components of the performance. This could have prominence in the culture of learning, because teachers will generate evidence and make judgments of an individual's competence against specified descriptions of acceptable criteria. According to Fraser (1999:17), this type of assessment can only be effective when teaching has been designed in relation to criteria which are attainable, observable and measurable, and which arise directly from performance competencies.

Van der Wagen and Ridley (1997:48) point out that in criterion-referenced assessment the assessment evidence is compared with the requirements of the standard. This allows criterion-referenced assessment to accommodate a broad range of learner achievement by defining a range of learning quality. Therefore standard-referenced assessment is linked to criterion-reference assessment – the latter only prescribes the criteria a learner should meet in order to demonstrate that he/she has achieved a learning outcome.

Killen (2002b:6) feels that, unfortunately, criterion-referenced assessment may narrowly lead teachers to believe that there is a fine line between competency and lack of competence. He further states that in reality this line is very broad and blurred, and it becomes increasingly less distinct as the complexity of the outcome being demonstrated increases (Killen 2002b:7). For this reason, Van der Wagen and Ridley (1997:49), Kramer (1999:33) and Popham (1993:144) feel that, to overcome this problem,

standards-referenced assessment needs to be linked to criterion-referenced assessment, since it provides a meaningful description of a full (open-ended) range of learner achievements. Thus it preserves the notions of excellence that are embedded in traditional grading systems, but attaches clear, tangible meaning to the judgments and reports that teachers make about what learners can do with things they learn.

Killen (2002:6) and Van der Wagen and Ridley (1997:47) believe that, in standards-referenced assessment, performance criteria are spelt out in the standards, and all learners are assessed against these standards. The terminology used in OBE to report the learner's achievement is either the learner "achieved against the standards" or "has not yet achieved". The terms "pass" and "fail" are a thing of the past, and learners do not need to compete against one another for the perfect bell curve in their results (see 3.2.3.4).

Kramer (1999:34) indicates that an understanding of the differences between norm-referenced assessment and criterion-referenced assessment is that in the latter assessment an individual learners' performance is judged against the performance criteria, while norm-referenced assessment compares learners with one another. Criterion-referenced assessment, through the process of establishing standards, starts by describing the type of evidence that needs to be gathered in order to measure whether learners have "low achieved", "satisfactory achieved" or "high achieved". According to Killen (2002b:7) these dimensions provide a very useful framework for thinking about learner achievement and defining standards. They also enable teachers to change the key assessment question from "Have learners achieved the outcomes?" to "How well has each learner achieved the outcomes?" (See section 1.1). Such questions of assessment show the interest and enjoyment that teachers could have when assessing learners' work; as a result a culture of learning could be promoted in schools.

Hymes et al (1991:13) state that new alternative assessment methods are being developed from criterion-referenced assessment. It is believed that these will have a tremendous influence on the culture of learning, because of their reliance on measurement to decide when a learner is ready to move on. Virtually all the new alternative assessment techniques being developed around the nation are by definition criterion-referenced. It is unusual, however, to see such tests referred to as criterion-

referenced tests, because generally, that term is only reserved for the more traditional pencil-and-paper instruments.

4.4 SUMMARY

Section 4.1 illustrated that assessment approaches within OBE differ from traditional assessments that focused on measuring the **quantity** of learned knowledge. OBE assessment is geared towards empowering learners to acquire enduring knowledge. Even if curriculum episodes have long been ended, this would have a positive effect on the culture of learning.

This chapter has established that learning outcomes do not need to be memorized in order to be reproduced as indicated in section 4.2.1. Through OBE assessment, learners should be able to do what they have learned at the end of the learning experience. According to literature, the demonstration of outcomes is in two phases, firstly, learners should be able to demonstrate specific outcomes within a certain learning context, which will enable learners to demonstrate it across the curriculum phase.

The literature review has revealed that although OBE adheres to multi-dimensional assessment of learning in order to achieve learning outcomes, there are criteria that are used to give directions to learners in order to reach the culmination stage of performance. These include assessment criteria (discussed in section 4.2.4), performance indicators (4.2.5) and range statements (discussed in 4.2.6). All these criteria give the authentic directions that learners should follow in order to achieve the desirable learning outcomes.

The literature study has also shown that strategies of OBE assessment are not meant to trap learners, but are there to improve the level of higher learning and assist learners to perform brilliantly, in order to promote the culture of learning. Section 4.3.2 highlighted the collaborative aspects of working together amongst teachers, learners, school administrators and parents. This section indicated that assessment of OBE enables all partners who are involved with learning to understand the nature of assessment. This



enables learners to practice self-assessment, which will promote the culture of learning. Section 4.3.4 indicated that through continuous assessment OBE would support both teaching and learning so that learners should regard learning as a lifelong process, for the improvement of the culture of learning.

The next chapter discusses the methodology of the empirical investigation.

CHAPTER 5

THE METHODOLOGY OF INVESTIGATION AND THE DISCUSSION OF THE EMPIRICAL AND STATISTICAL CONSIDERATIONS

5.1 INTRODUCTION

The purpose of this chapter is to discuss the methodology of the empirical investigation and statistical data analysis. The data collection technique, the sample and the research design are described. The following chapter discusses the data analysis procedure.

The basic aim of this research was to investigate whether teachers' assessment of learners' work could have a profound influence on the culture of learning in schools. Several aspects of teachers' assessment of learners' work have been explored, and the contribution of these to the culture of learning. All the previous chapters probed this problem through the study of literature. This literature review has established a sound theoretical framework for the empirical investigation.

This chapter describes the quantitative research applied to confirm or reject empirically and statistically the following hypotheses:

Hypothesis 1. An assessment system built upon the traditional evaluation methods has a detrimental effect on the development of a culture of learning in schools.

Hypothesis 2. Assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools.

The empirical investigation also tests the following Null hypothesis:

Hypothesis 3. No distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools.

The quantitative approach used to address these hypotheses involved the following:

- Development of a survey questionnaire based on the findings of the literature study;
- Design and execution of the survey questionnaire;
- Data analysis and interpretation.

The development, design and execution of the survey questionnaire are described in detail in this chapter, chapter 5. Chapter 6 discusses data analysis and interpretation of the results of the survey.

Traditionally quantitative research attempts to collect data in a number of ways, but its collection typically involved structured interviews, postal questionnaires, standardized tests of performance or the use of attitude inventories (Scott and Usher, 1996:55). Seeing that this research investigates teachers' assessment of learners' work and its influence on the culture of learning, data were collected from Teachers, Heads of Departments in schools, Deputy Principals and Principals. These individuals were selected as they are responsible for carrying out assessment policy and practices at school level, and they practice assessment of learners' work throughout their professional careers.

The data were collected from these officials through postal questionnaires, which is one of the typical strategies of collecting data in quantitative research. These data were collected in order to compare the theory and data for the empirical investigation.

The following sections describe the research sample, and the procedures applied in the collection of data for the empirical investigation.

5.2 THE DESCRIPTION OF THE RESEARCH SAMPLE

The researcher probes the problem that assessment of learners' work has been taking place in an educational setting, but has yielded little positive influence on the culture of learning, mainly because it was too judgmental, as indicated in chapter one. Therefore the focus of this investigation was to establish the perceptions of teachers with regard to the association between assessment strategies and the promotion of a culture of learning amongst learners.

Merriam (1998:60) is of the opinion that, once the general problem has been identified, the task becomes to select the population from which the study could be conducted. In this study the researcher regarded Teachers, Heads of Departments, Deputy Principals and Principals as the target population. These individuals were selected as they have been using assessment of learners' work throughout their teaching careers.

Robinson and Levin (1997:23) indicate that it is usually not possible to deal with the whole of the target population, one must identify that portion of the population to which one can have access – called the accessible population. This is confirmed by Gall, Borg and Gall (1996:134), who reason that a researcher is generally not able to access all of the target population, particularly if it is a large population. So for practical reasons an accessible population needs to be identified. The identification of an accessible population is usually influenced by the time and resources of the researcher (Ary, Jacobs and Razavieh 1985:139). Due to such limitations, the researcher in this study only

included and identified Gauteng Department of Education teachers and Mpumalanga Department of Education teachers as the accessible population for this study.

The sample for this study was thus selected from these two provinces. According to Ary, et al (1985:139) sampling is indispensable to the researcher. Usually the time, money and effort required do not permit a researcher to study all possible subjects of a population. Furthermore, it is generally not necessary to study all possible cases to understand the phenomenon under consideration. Sampling comes to the researcher's aid by enabling researchers to study a portion of the population rather than the entire population.

5.3 RESEARCH SAMPLING PROCEDURES

Scott and Usher (1996:55) state that researchers usually draw a sample or samples from the accessible population. The accessible population represents the population from which the researcher would like to generalize the findings of investigation. It is therefore extremely important that the individuals included in the sample constitute a representative cross section of individuals in the population.

Rudduck and McIntyre (1998:47) also confirm that the research sample should reflect a true representation and reflection of the universum in which the researcher can infer, deduce and generalize the findings of the investigation. Since sampling is a critical component of research, it needs to be done very carefully, since the sample population needs to reflect the pertinent characteristics of the population a researcher may wish to speak about, in order to summarize quantitative research results (Thomas 1998:220).

The accessible population of this study is spread out in two provinces. As a result it would be very difficult, if not impossible, to list all the teachers of those provinces and select the sample among them. In addition, it would be a very expensive undertaking to study a sample that is scattered all around these two provinces. Ary, et al (1985:149) suggest that it is more convenient to study subjects in naturally occurring groups or clusters. As a result, the researcher selected one region from Gauteng Province - the

Northern Region, and selected five districts from that region, namely North 1, North II, North III, North IV and North VI. These five districts are close to each other and form a cluster, see map 5.1 on page 128. In Mpumalanga Province the researcher selected the Eastern Highveld Region, and took five districts namely Eerstehoek, Ermelo, Standerton, Witbank and Moretele. These five districts are close to each other and form a cluster, see map 5.2 on page 129. All these districts from both regions have urban and rural schools, which maintain the pertinent characteristics of teachers as the population for this study. This sample population has also used assessment of learners' work throughout their careers, and they have been trained by both Provincial and National Departments of Education with regard to Outcomes-based Education policies of assessment.

The data concerning teachers' perceptions about learners' assessment and its influence on the culture of learning drawn from this sample population will not be analyzed and described in order to get the results of these two provinces inputs only. Arkava and Lane (1983) in De Vos (2001:191) maintain that a sample population is the element of the population considered for inclusion in the study. Alternatively it can be viewed as a subset of measurements drawn from a population in which researchers are interested. Therefore the sample population from these two provinces will represent the entire population of this study. This shows that the researcher was interested in describing the sample not primarily as an end in itself, but rather as a means for explaining teachers' perceptions about assessment of learners' work in schools and its influence on the culture of learning.

5.1: For Gauteng Province

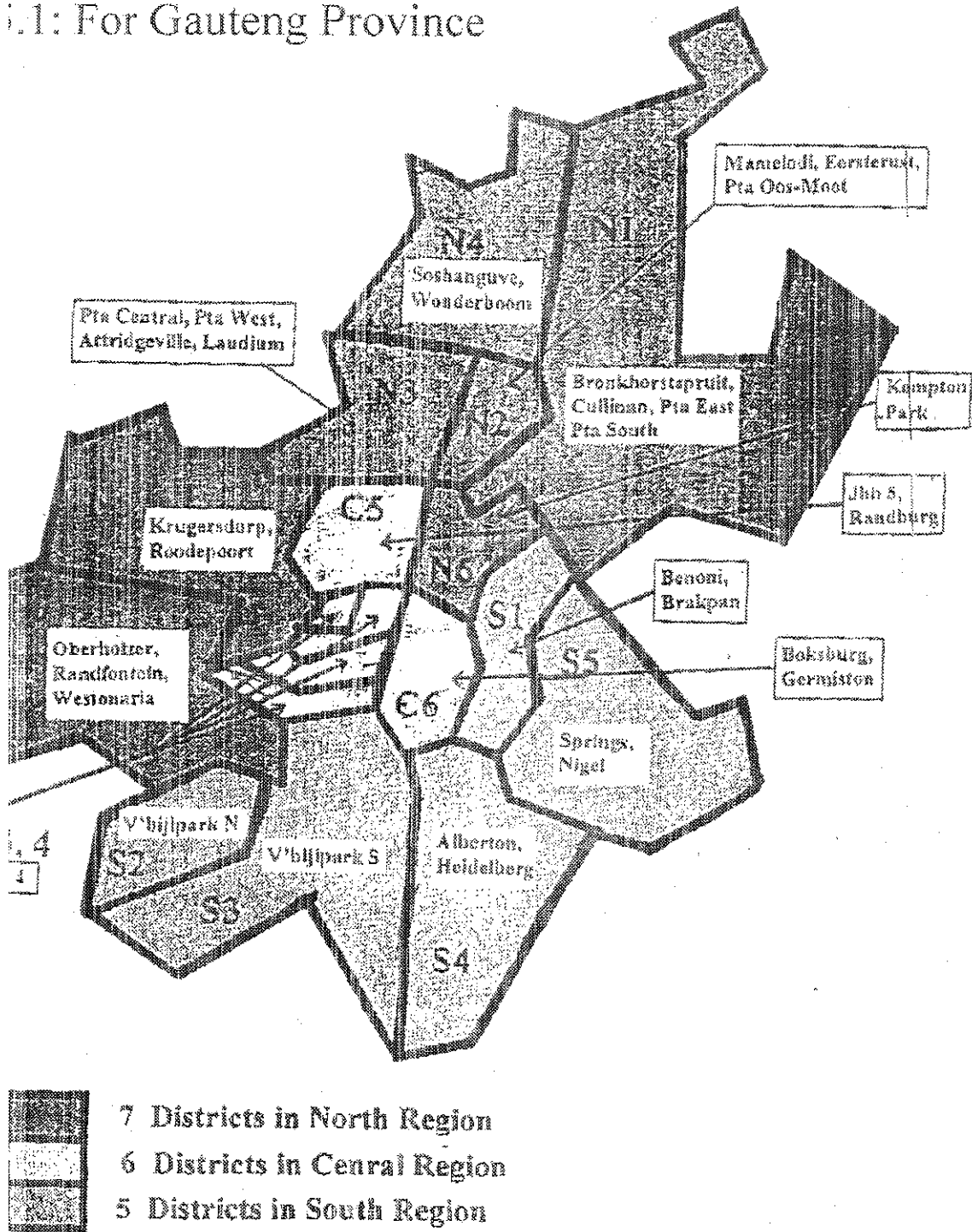


Figure 5.1 Map showing the regions within Gauteng Province

5.2

Mpumalanga Province

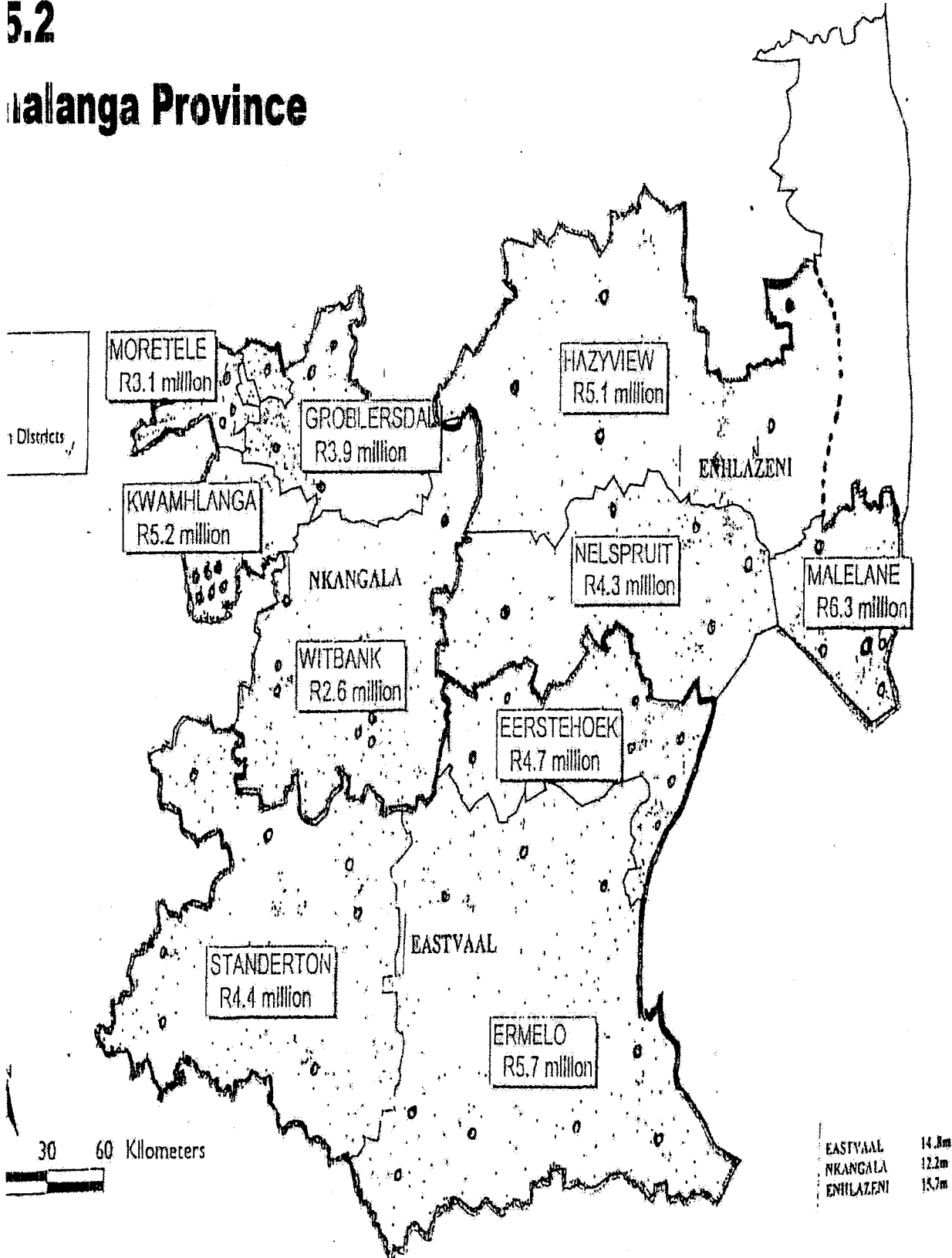


Figure 5.2 Map showing the regions within Mpumalanga Province

The researcher was provided with a list of schools and number of teachers from each district of these regions. The number of teachers was so large that the researcher could not list all its members for the purpose of drawing a sample. The researcher solved this problem by taking 20% of the teachers in each district and included all these teachers in the sample, see table 5.3 and 5.4. This kind of probability sampling is referred to as cluster sampling since the unit chosen is not an individual but a group of individuals who are naturally together. These individuals constitute a cluster in so far as they are alike with respect to characteristics relevant to the variables of the study (Ary, et al 1985:144).

Cates (1985:60) and Charles (1988:158) postulate that cluster sampling is the method preferred and employed by researchers when it is more feasible to select groups of individuals than individual subjects to be included in the sample. Furthermore Cates (1985:60) states that when such a group is included as a sample, it is often referred to as an intact group, since the research takes the group intact, exactly as it exists, with all its inherent patterns of characteristics and behaviors. In so far as they are alike with respect to characteristics relevant to the variables of the study, this will also validate the collected data and findings. Having selected the sample, the next step was to collect the data through questionnaires as the selected quantitative research strategy.

Table 5.3 Distribution Of Schools And Teachers In Gauteng Department Of Education. Northern Region

DISTRICTS	NUMBER OF PRIMARY SCHOOLS	NUMBER OF SECONDARY SCHOOLS	NUMBER OF COMBINED SCHOOLS	NUMBER OF TEACHERS	NUMBER OF TEACHERS INCLUDED IN THE SAMPLE
North One	102	19	7	1 656	330
North Two	64	22	13	1 158	230
North Three	95	50	25	3 248	648
North Four	79	36	7	2 799	558
North Six	72	25	16	2 201	440
Total	412	202	68	11 062	2 206

The number of teachers included in this research sample from the Gauteng Department of Education: Northern Region was 2 206.

Table 5.4. Distribution of Schools and Teachers in Mpumalanga Department of Education, Eastern Highveld Region

DISTRICTS	NUMBER OF PRIMARY SCHOOLS	NUMBER OF SECONDARY SCHOOLS	NUMBER OF COMBINED SCHOOLS	NUMBER OF TEACHERS	NUMBER OF TEACHERS INCLUDED IN THE SAMPLE
Eerstehoek District	100	32	25	2 133	426
Ermelo District	231	23	39	2 575	514
Moretele District	126	36	19	2 083	416
Standerton District	253	33	33	3 001	600
Witbank District	171	33	32	2 541	508
Total	881	157	148	12 333	2 464

The number of teachers included in the research sample for Mpumalanga Department of Education in the Eastern Highveld region was 2 464.

5.4 THE CONSTRUCTION AND CONTENT VALIDATION OF THE QUESTIONNAIRE.

In this study the content validity and reliability of the questionnaire was verified by presenting it to professors and lectures in the Faculty of Education for their evaluation regarding different identified aspects of learners' work and its influence on the culture of learning. They agreed that the items in the questionnaires were representative of the theory. They also agreed that the language used in the questionnaire was on the appropriate level of understanding of teachers who answered the questionnaires.

A questionnaire is an instrument that attempts to obtain comparable data from all members of a population or sample because the same questions are asked to all research participants (Gay and Airasian 2000:280). Again Gay and Airasian (2000:282) maintain

that a questionnaire should be attractive, brief, and easy to fill out. A researcher should carefully plan its content and format. A sloppy, crowded, misspelled, and lengthy questionnaire turns off respondents. Hence the research may yield few responses from the participants. The researcher should include items and questions that have been thought through properly and that directly relate to the topic and objectives of the study (Gay and Airasian 2000:282; McMillan and Schumacher 1997:253).

Masitsa (1995:258) refers to data as facts or information about something which is used in deciding or discussing something, or as a basis for inference. It is usually the form of facts or statistics that one can analyze or use for doing further calculations. It is information organized for analysis or used as basis for decision. Therefore it is imperative for quantitative research to collect data that will enable the researcher to statistically quantify the data in order to confirm a theoretical framework, which has been formulated. This is in agreement with Anderson, et al (1994:109) who state that the researcher seeks data to confirm theory.

The researcher has constructed a questionnaire as an instrument to draw data from the sample population. Keeves and Lakomski (1999:125) indicate that some attention must be given to the validity question – that is, whether the questionnaires do really measure what they are supposed to measure. This is why Ary, Jacobs and Razavieh (1985:357) argue that the most obvious type of ensuring validity of questionnaires is that the theoretical assumptions contained in the literature have to be contained in the questionnaires. If this is done the questionnaires will have a higher content validity. For this reason, the researcher thoroughly explored the hypotheses of this research study as referred to in section 5.1, and also explored the theoretical framework which has been supplied by literature in the preceding chapters. The question items therefore measure the precise variables under investigation and probe the crucial issues in depth (Hammersly 1993:20).

The first part of the questionnaire was designed to obtain personal information about the surveyed population. Respondents were requested to state their personal information by crossing next to the given and appropriate biographical information such as the province, gender, age, teaching experience, highest educational qualification, field of specialization, teaching phase, medium of teaching, type of school, post position, and

how and what information is obtained about assessment of learners' work in schools. This information was needed in order to ensure that all participants are professional teachers and also that they are involved in teaching and learning activities.

The researcher has built 84 questions evolving around 3 main subject areas, which were explored in the literature in the preceding chapters. The first subject area related to different aspects of assessment and the influence of these on the culture of learning. This subject area revealed the following key issues:

- Assessment as an integral part of teaching and learning;
- Teachers' understanding and conceptualization regarding assessment as an instrument to be used to promote the culture of learning in schools; and
- Learners, principals and parents involvement in assessment as a viable mean of improving and developing the culture of learning in schools (See chapter 2).

Consequently 19 question items were constructed. These items are listed in appendix 1, under Section B, and start from item V15 to V33. These items were designed specifically to elicit teachers' responses regarding the above major issues on assessment. Most of the content of these items emanated specifically from chapter 1 and 2 of this study, seeing that the literature revelations of these chapters assembled enormous data regarding assessment and its influence on the culture of learning.

The second subject area extracted from the literature in chapter 3 is traditional evaluation and its influence on the culture of learning. In terms of this subject area, the following issues emerged from the literature:

- Traditional evaluation was a teacher-centered method;
- Traditional evaluation was an examination-driven and product-oriented method;

- In traditional evaluation, teaching tools such as homework, classwork, assignments and tests were used to take judgmental decisions about learners' work;
- Traditional evaluation results separated well-doing learners from the poorly-doing learners; and
- Traditional evaluation methods were separable entities from teaching and learning activities

Twenty-six items were built from these data, corresponding to V34 to V59 under Category C, Appendix 1. The researcher believed that these questions could enable teachers to express their views or perceptions about traditional evaluation of learners work and its influence on the culture of learning.

The final subject area examined in the literature in chapter 4, relates to Outcomes-based Assessment strategies and their influence on the culture of learning. The following issues were highlighted:

- Assessment in OBE is regarded as an integral part of teaching and learning;
- Outcomes-based assessment is learner-centered;
- Outcomes-based assessment assess learners' knowledge, skills and values of the learnt content;
- Outcomes-based assessment use teaching tools such as portfolio, test and examinations to enable all learners to achieve learning outcomes;
- Outcomes-based assessment assist individual learner to perform according to his/her own pace and potential;
- Outcomes-based assessment use continuous assessment to enable learners to think constructively, critically to derive enjoyment in a learning environment;
- and

- Outcomes-based assessment use assessment criteria, performance indicator, range statement and learning outcomes, to enable learners to master standards of various learning areas.

Thirty -seven questions of the questionnaire evolve around these ideas and information, covering questions V60 to V98 under Section D, Appendix 1. These are questions that could help teachers to express their perceptions regarding OBE assessment strategies and their influence on the culture of learning.

Thomas (1998:162) asserts that questionnaires are designed to reveal peoples' attitudes through the opinions they express. Hence understanding, clarity of language and the use of simple concepts in questionnaire construction need to be given serious attention in order to enhance the reliability of responses. To maintain the reliability of these questionnaires, the researcher constructed questions around two variables: the assessment of learners' work, and the influence on the culture of learning. All respondents involved in this investigation answered questions based on these two variables, to help balance the consistency of questionnaires. This is supported by Ary, Jacobs and Razavieh (1985:163), who state that the consistency of the questionnaire is one procedure for assessing the reliability of questionnaires or interviews.

To further increase the reliability and validity of the data collection processes, the researcher consulted the Statistical Consultation Service of the University of Pretoria and other experts in Educational Research to improve the technical quality of the data collection process. To further support the foregoing, Vockell and Asher (1995:92) cite that it is always an advantage to have someone else look at the questionnaire or take the test before the questionnaire is taken to the target audience.

5.4.1 Types Of Questionnaires

The first section of the questionnaire covers the demographic characteristics of the respondents. Thomas (1998:162) is of the idea that biographical information is used on the assumption that its categories may be associated with the study's target variables. The researcher determined the relevant demographic characteristics based on the

purpose of the study. Houser (1998:99) notes that relevant demographic characteristics potentially influence the outcome or dependent variable. Hence demographic characteristics were chosen that were relevant for the purpose of this study.

The main objective of this investigation was to assess teachers' views about assessment of learners' work and its influence on the culture of learning. To examine this empirically, a questionnaire using a five point scale was drawn up, in order to solicit teachers' views with regard to this study. In order to secure the content validity of the questionnaire, the researcher reviewed numerous studies used this approach, and their findings were taken into consideration when constructing the research questionnaire. These aspects are discussed in more detail below.

In a research study of this nature, the questionnaire usually contains questions aimed at getting specific information on a variety of topics. There are two types of questions - either open-ended questions or structured format questions (Gall, et al, 1996:140). The focus of this research is on the quantitative data collection. Vockell and Asher (1995:122) cite that quantitative research studies generally design questions in a structured format, so that quantification and analysis of the results may be carried out efficiently. The quantitative researcher uses the strategy of structured questions when they have already identified target behaviors and in some way or other have assigned numeric values to them.

The structured format has been used in this research study because it has the advantage of requiring all the respondents to answer within the same framework. This means that the researcher always knows how each respondent felt about issues on the questionnaire. Another added advantage of structured questions is that they are easily adapted to computerizing scoring (Vockell and Asher, 1995:129-130).

However, since factor analysis was to be used as the statistical procedure applied in this empirical investigation, structured question items which belong to identified factors of variables would be more appropriate for this investigation, since factor analysis distinguishes common factor variance from unique variance (Kachigan 1991:238). The researcher therefore decided to class the structured items under four categories. This

would allow the factor analysis to reveal and investigate by identifying factors that could be defined reasonably well by the actual variables.

The questionnaire used in this study was therefore structured as follows to ensure content validity. The first twelve item statements probed the biographical information of respondents in order to ensure that only teachers respond to this questionnaire (see appendix 1, Section A). The second nineteen item statements looked at teachers' responses with regard to assessment of learners' work and its influence on the culture of learning (see appendix 1, Section B). The third category of twenty six item statements considered teachers' views regarding traditional evaluation of learners' work and their influence on the culture of learning (appendix 1, Section C). The fourth category of thirty seven item statement considered teachers' views about Outcomes-based Education policies of assessment and their influence on the culture of learning .The researcher used a funnel approach in patterning the question sequence, seeing that a funnel approach helps researchers to begin with a very broad query, then progressively narrows the scope of questions in order to address specific points (Thomas, 1998:172).

5.4.2 Scaling Of The Questionnaire

Houser (1998:15) cites that quantitative research is defined as research that is based on the measurement and quantification of data. Whatever the dependent variable of interest in quantitative research, there must be a way to transfer it into a numeric value. This is why the researcher in this study has used a five-point rating scale for each question, so that respondents would rate each question based on this five-point scale. This scale is known as the Likert scale - the essential component is not the five points on the scale but the continual ranging from "strongly agree" to "strongly disagree" (Vockell and Asher 1995:131). Andrich (1995:73) in Masters and Keeves (1999:48) is of the view that the five-point scale has enough categories to enable the respondents to have a large capacity to discriminate. It also has a neutral, undecided or uncertain category which people can select if they do not understand the question, or are genuinely undecided, neutral or uncertain. However this category usually does not attract respondents, unlike those categories found on either side of it, which are "strongly agree", "agree" and "disagree" and "strongly disagree" which are the categories used to obtain the measures (Masters and Keeves, 1999:120).

Respondents were requested to give the proportion of their total views with regard to teachers' assessment of learners' work and its contribution to the culture of learning on a five-point scale. Then they were expected to rate their views based on this scale. Rating on one would mean "strongly disagreed" with that aspect of assessment, rating on two would mean "disagreed" with that aspect of assessment, rating on three would mean "uncertain" with that particular aspect of assessment, rating on four would mean "agreed" with that aspect of assessment and rating on five would mean "strongly agreed" (see appendix 1). All respondents received the same questionnaire containing the same five-point rating scale. This was done in order to maintain the validity and reliability of the instrument.

The table below is an example of a five – point scale questionnaire.

Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

The advantages of using the Likert scale in this study were that it keeps the respondent on the subject, and it is relatively objective and easy to complete and to tabulate for statistical analysis (Best and Kahn, 1993:231).

5.5 STATISTICAL PROCEDURE APPLIED IN THE EMPIRICAL INVESTIGATION

The ultimate purpose of conducting a quantitative study is to test hypotheses, and this involves using statistical methods that allow the researcher to infer from data gleaned from the sample information that can be applied to the larger population. Inferential statistics are methods that allow the researcher to achieve this goal (Houser, 1998:173). Inferential statistics are important as statistics are used to make inferences concerning the sample population and the findings.

The researcher formed three constructs to cluster the variables which showed commonalities. These variables were clustered under the three respective constructs according to their commonalities and relevance. These constructs were:

- *Teachers' views about Outcomes-based education assessment strategies and its influence on the culture of learning;*
- *Teachers' views regarding traditional evaluation and its influence on the culture of learning; and*
- *Teachers' understanding regarding assessment of learners' work and its influence on the culture of learning.*

These constructs and their groupable variables were then subjected to confirmatory factor analysis, in order to confirm and identify that these variables belonged to these factors. Fraser and Van Staden (1996:218) reason that factor analysis assists in the grouping of variables that correlate highly with one another. The function of the factor analysis was to determine whether the identified variables influencing a given phenomenon could substantiate, verify, and support evidence through the use of sophisticated statistical techniques or, as Anastasi (1982:146) puts it, to analyze the interrelationships of behavior data.

With regard to statistical procedures for this study, the researcher used a computer to analyze the collected data and have access to precise data. Vockell and Asher (1995:398) note that computer analysis enables researchers to be confident of the results of calculations because universities employ computer consultants who are familiar with statistical programs.

5.5.1 The Principal Component Factor Analysis

Teachers' views were assessed in terms of existing evidence, that is, on contemporary trends revealed by educationists in the literature used in this study. Teachers in practice responded to the questionnaire, which was constructed from this literature background. Teachers' responses were subjected to a principal component factor analysis. Fraser and Van Staden (1996:218) believe that this statistical technique and empirical procedure is

used to validate the hypothetical assumptions made with regard to the study under investigation. This is why in this study different variables on assessment and its influence in culture of learning were analyzed and assessed in order to determine the possible influence of these variables on teachers' opinions on a variety of issues related to assessment in the first place. Factor analysis was executed on the teachers' responses in order to confirm the existence of different variables influencing assessment with regard to the culture of learning.

The researcher then subjected the teachers' responses to confirmatory factor analysis, with the intention of grouping variables that correlate highly with one another, which the researcher also presumed to be groupable variables. Kachigan (1991:238) regards factor analysis as a strategy to distinguish common factor variance from unique or specific variance. The main purpose of using factor analysis is to reveal, identify and confirm these factors that could be defined reasonably well by the actual variables (Ferguson 1987:488). The function of factor analysis is also to determine how many constructs the group of items are actually measuring (Dooley 1984:70). A principal component factor analysis with a varimax method of rotation known as the PROC FACTOR PROCEDURE (SAS/STAT USERS'GUIDE 1990:774-814) was applied to the data sets to extract possible factors.

The factor analysis was preceded by a principal component analysis (a method of extracting the initial factors), with the intention of producing principal components and common factor scores with variances equal to the corresponding eigenvalue (Kervin 1992:507). This procedure stops short of rotating the factors. The procedure is usually concluded by using a varimax method of rotation. The varimax method of rotation of factor analysis has proved to be very successful as an analysis to obtain an orthogonal rotation of factors (Nunnally 1967:333). The reason for a varimax method is to obtain as many high positive and near zero loadings as possible. These factor loadings reveal the extent to which each of the variables contribute to the meaning of each factor (Kachigan 1991:247).

5.5.2 The Extraction Of Factors

To determine the possible number of factors accounted for in the investigation, a number of techniques are usually applied. Kachigan (1991:246) cites the weighing and retaining of the eigenvalue to the point where additional factors account for less variance than a typical variable; that is, less than one eigenvalue. He also cites the technique of assessing the degree to which each of the variables correlated with each of the factors.

Researchers apply the scree plot of eigenvalues to indicate the number of extracted factors. Hair, Anderson, Tatham and Black (1998:128) maintain that this is a multivariable technique that groups variables into factors, based on the internal relationship as quantified by means of the correlation matrix. This study used the technique of assessing the degree to which of the variables correlate with each of the factors. The scree plot of the eigenvalues was used to indicate the number of extracted factors.

5.5.3 The Reliability Estimation Of The Items In The Questionnaire

Vockell (1993:22) states that reliability addresses the question of whether or not a measuring instrument is consistent. Sax (1974:172) also indicates that reliability describes the extent to which measurements can be depended on to provide consistent, unambiguous information. The reliability coefficients are not only an indication of the internal consistency of the different test items, but also an estimation of whether the same test questions would generate similar results when applied under similar circumstances on different occasions (Anastasi 1982:102).

In this study Cronbach's coefficient Alpha Formula was used to estimate the reliabilities of the items of the study questionnaire on which the factor analysis was based. Cronbach's coefficient Alpha Formula provides a reliability estimate for a set of two or more construct indicators (Hair, Anderson, Tatham and Black 1992:428). This reliability estimation instrument appeared to be more relevant for this study, since the research study has three sets or constructs that were extracted by the researcher for confirmatory factor analysis using the PROC FACTOR Procedure through rotated factor pattern.

Cronbach's coefficient alpha also provides a good estimate of reliability in most situations, since according to Nunnally (1967:211), the major source of measurement

error lies in the sampling of error, that is the sampling of items per se. Acceptable correlation was set at ± 0.3 or above. The correlation coefficients of the appropriate sets of questions in this study were subsequently interpreted according to this scales

5.6 THE APPLICATION OF THE QUESTIONNAIRE

The researcher wrote letters to Regional Directors of the two respective provinces, seeking permission to conduct the research (see appendixes 2 and 3). In the Northern Region of Gauteng Province, it was requested to conduct research in the following districts: North 1, North 2, North 3, North 4 and North 6. In the Eastern Highveld Region in Mpumalanga Province permission to conduct research in the following districts was requested: Moretele, Witbank, Eerstehoek, Standerton and Ermelo.

Upon receiving written permission from the Regional Directors (see appendix 4 and 5) the researcher then wrote letters to District Directors requesting their co-operation and assistance, and information on the addresses and telephones of their respective circuits and schools.

After receiving the necessary information from the District Directors, letters were written to the relevant Circuit Managers and Principals of different schools requesting their permission and assistance in distributing the questionnaires to teachers. The return date of questionnaires and the address to which to be returned was included in the letters which were received by each school. Each bundle of questionnaires was accompanied by a prepaid envelope.

5.7 SUMMARY

In this chapter the research instruments were discussed, and the procedures to be followed for the empirical analysis were given. Chapter six discusses data analysis and interpretation of the empirical research.

CHAPTER 6

TABLING ANALYSIS AND INTERPRETATION OF EMPIRICAL DATA

6.1 INTRODUCTION

In chapter five the research design was explained. The purpose of chapter five was to provide a clear description of the specific steps to be followed until the data could be analyzed. It showed how the researcher secured the internal validation of this study. Firstly; by consulting the literature very broadly to ensure that it covered all the variables of this study. Secondly; it showed the construction of the questionnaires according to the literature study, and finally the way in which empirical analysis would be conducted for this study. This chapter, chapter six, presents and analyses the responses of teachers to the questionnaire described in detail in chapter five.

6.2 INTERPRETATION OF THE BIOGRAPHICAL DATA OF THE RESPONDENTS

The researcher prepared approximately 5000 questionnaires for teachers represented by the sample. The total number of teachers included in the research sample was 4 670. It was expected that respondents should return the questionnaires on the 23 October 2000 to their respective principals, to allow for convenient collection by the researcher. The researcher received back 2 621 of the approximately 5000 questionnaires which were distributed, implying that just over half of the questionnaires were received for further investigation and computation.

When the usual questionnaires were further analyzed, it was found that 1 403 questionnaires were completed by teachers from Mpumalanga Province, which makes 53,63 percent of the sample, and 1 212 were completed by teachers from Gauteng Province, which makes 46,35 percent of the sample. It was also found that 844 male teachers completed the questionnaires which makes 32,30 percent of the sample, and 1 769 had been completed by female teachers which makes 67,70 percent of the sample for both provinces.

The teaching experiences of the respondents were also determined. It was found that teachers with less than five years experience consisted of 8,81 percent of the sample; 23,66 percent were teachers who have teaching experience between ten and fifteen years experience; 42,34 percent were teachers who have made more than fifteen years teaching experience.

Educational qualifications of the respondents were categorized into five groups. The first group comprised of teachers with std 10 or lower, this category made 5,54 percent. The second group were teachers with post school diplomas, this category made 58,03 percent of the sample; this group proved to be the biggest group. There were only 7,36 percent of teachers with B-degrees (the third group), and the fourth group of teachers with Degrees plus a Diploma made 19,59. The fifth group of teachers with Post-graduate qualifications made 9,49 percent of the sample.

The learning areas most widely taught were grouped into eight categories. The first group included Communication, Literacy and Language and comprised 35,61 percent of the respondents. In the second group Numeracy and Mathematics were included and this comprised 20,84 percent of the respondents. In the third group Human and Social Sciences were included incorporating 12,04 percent of the respondents. 12,74 percent of the respondent fell within the fourth group, which included Natural Sciences. The fifth group, Arts and Culture, included 3,82 percent of the respondents. In the sixth group, Economics and Management Science, 6,35 percent of the respondents were included. In the seventh group, Life Orientation, 5,30 percent of the respondents were included. The eighth group was Technology and included only 3,31 percent of the respondents.

The phases in which these respondents mostly teach was also investigated, and these were grouped into four phases. The first phase was the foundation phase, and included 27,35 percent of the respondents. The second phase was the intermediate phase and included 28,22 percent of the respondents. The third phase was the senior phase and included 40,53 percent of the respondents, this proved to be the biggest group. The fourth phase was further education and training phase and included 3,90 percent of the respondents, which proved to be the smallest group in this category.

In this research study it was found that respondents used mostly English and Afrikaans as a medium of instruction; 56,42 percent used English as a medium of instruction, and 19,79 percent use Afrikaans a medium of instruction. The remaining 23,79 percent of the respondents used an African language as a medium of instruction. However it is a well-known fact that Afrikaans and English are the two languages that are mostly used in South African Schools as mediums of instruction.

The teachers' post levels were also investigated, and were divided into four categories. The first group comprised of ordinary teachers and included 76,79 percent of the respondents, which was the largest group in this study, 14,19 percent were Heads of Departments; 4,67 percent were Deputy Principals, and 4,36 percent were Principals. All these respondents were included in the sample.

It was also necessary to investigate the type of schools where the respondents taught. The biggest proportion of teachers (92,90 percent) taught in public schools, while 7,10 percent taught in private schools.

The study also investigated how respondents became interested in assessment of learners' work. 47,54 percent of the respondents indicated that they had become interested in assessment as a result of information they have received through workshops. 18,58 percent indicated that they had become interested in assessment through formal courses or programs. 16,14 percent became interested in assessment through comprehensive reading. Lastly, 9,97 percent indicated that they have become interested in assessment through departmental circulars and media programs.

6.3 RESULTS OF THE FREQUENCY ANALYSIS

In the preceding paragraphs the biographical data responses of the respondents were discussed. This section discusses the subsequent 84 variables of the questionnaire which addressed the main issues relating to assessment and its influence on the culture of learning. Upon the receipt of the 2621 questionnaires the researcher took these to the statistician for computation. The statistical analysis produced frequency results.

The frequency results gives the number of respondents who reacted to each variable, and are presented in tables 6.1, 6.2 and 6.3. In these tables the reader will notice that each variable and its five-point-scale are listed, and the frequency results for each scale are expressed as absolute numbers and percentages. The number of respondents for each scale signifies the significance of that variable about teachers perception with regards to assessment and its influence on the culture of learning. If a great number of teachers match with scale 1 this indicates that they “strongly disagree” with that variable, when matched with scale 2 it indicates that they “disagree”, with scale 3 that they are “uncertain”, with scale 4 that they “agree”, and with scale 5 it will mean that they “strongly agree” (See appendix 1).

The percentage information shows what percentage of the sample selected the particular scale in question.

Hereunder follow the tables showing the results of the frequency analysis.

Table 6.1 *Frequency analysis of question items investigating Assessment of learners’ work and its influence on the culture of learning.*

VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.15. (Frequency Missing = 4) Good assessment of learners work contributes to the culture of learning.		
1	21	0.80
2	38	1.45
3	208	7.95
4	1413	53.99
5	937	35.80
Cumulative frequencies and percentage	2617	99.9



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.16. (Frequency Missing = 6) Teachers' assessment of learners' work enables learners to think critically and develop problem solving skills.		
1	35	1.34
2	97	3.71
3	253	9.67
4	1376	52.62
5	854	32.66
Cumulative frequencies and percentage	2615	100.00
V.17. (Frequency Missing = 7) Teachers' assessment of learners' work promotes a positive attitude towards learning among learners.		
1	15	0.57
2	47	1.80
3	206	7.88
4	1310	50.11
5	1036	39.63
Cumulative frequencies and percentage	2614	99.9
V.18. (Frequency Missing = 6) Frequent assessment of learners' work allows teachers to intervene with remedial teaching at an early stage.		
1	19	0.73
2	54	2.07
3	186	7.11
4	1107	42.33
5	1249	47.76
Cumulative frequencies and percentage	2615	100.00
V.19. (Frequency Missing = 8) Teachers' assessment of learners' work contributes to collaboration and caring between teachers and learners.		
1	15	0.57
2	46	1.76
3	260	9.95
4	1413	54.08
5	879	33.64
Cumulative frequencies and percentage	2613	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.20. (Frequency Missing = 4) Assessment assists teachers to review information taught to learners.		
1	13	0.50
2	48	1.83
3	135	5.16
4	1271	48.57
5	1150	43.94
Cumulative frequencies and percentage	2617	100.00
V.21. (Frequency Missing = 4) Assessment assists learners to review their own learning and look at better ways of improving learning.		
1	20	0.76
2	74	2.83
3	246	9.40
4	1284	49.06
5	993	37.94
Cumulative frequencies and percentage	2617	99.9
V.22. (Frequency Missing = 3) Teachers' assessment of learners' work allows learners' to see assessment as part of teaching and learning.		
1	19	0.73
2	50	1.91
3	276	10.54
4	1399	53.44
5	874	33.38
Cumulative frequencies and percentage	2618	100.00
V.23. (Frequency Missing = 5) Regular assessment of learners' work enhances learners' perception of success.		
1	10	0.38
2	68	2.60
3	347	13.26
4	1480	56.57
5	711	27.18
Cumulative frequencies and percentage	2616	99.9



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.24. (Frequency Missing = 6) Teachers' assessment of learners' work assists learners to see that teachers can identify learners' learning problems.		
1	22	0.84
2	69	2.64
3	248	9.48
4	1335	51.05
5	941	35.98
Cumulative frequencies and percentage	2615	99.9
V.25. (Frequency Missing = 5) Teachers' assessment of learners' work assists learners' to monitor progress of learning.		
1	21	0.80
2	76	2.91
3	327	12.50
4	1399	53.48
5	793	30.31
Cumulative frequencies and percentage	2616	100.00
V.26. (Frequency Missing = 9) Assessment of learners' work indicates to principal to share decision task with teachers regarding learners' work.		
1	37	1.42
2	113	4.33
3	424	16.23
4	1303	49.89
5	735	28.14
Cumulative frequencies and percentage	2612	100.00
V.27. (Frequency Missing = 6) Assessment of learners' work indicates to principals that teaching and learning are monitored in schools.		
1	29	1.11
2	108	4.13
3	275	10.52
4	1336	51.09
5	867	33.15
Cumulative frequencies and percentage	2615	100.00
V.28. (Frequency Missing = 7) Teachers' assessment of learners' work assists principal to see that assessment is an adequate evaluation mechanism.		
1	34	1.30
2	139	5.32
3	460	17.60
4	1340	51.26
5	641	24.52



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
Cumulative frequencies and percentage	2614	100.00
V.29. (Frequency Missing = 9) Assessment of learners' work ensure that principals will allocate enough time for assessment purpose.		
1	71	2.72
2	210	8.04
3	639	24.46
4	1139	43.61
5	553	21.17
Cumulative frequencies and percentage	2612	100.00
V.30. (Frequency Missing = 4) Feedback of assessment of learners' work to parents, enables parents to play an active role in the education of children.		
1	34	1.30
2	94	3.59
3	234	8.94
4	1115	42.61
5	1140	43.56
Cumulative frequencies and percentage	2617	100.00
V.31. (Frequency Missing = 5) Teachers' assessment of learners' work and feedback to parents create a positive relationship between parents, learners and teachers.		
1	19	0.73
2	81	3.10
3	230	8.79
4	1124	42.97
5	1162	44.42
Cumulative frequencies and percentage	2616	100.00
V.32. (Frequency Missing = 6) Teachers' assessment of learners' work enhance learning contact between parents and children.		
1	28	1.07
2	96	3.67
3	357	13.65
4	1409	53.88
5	725	27.72
Cumulative frequencies and percentage	2615	99.9
V.33. (Frequency Missing = 7) Assessment of learners' work involves parental decision with regard to information of assessment.		
1	56	2.14
2	214	8.19
3	583	22.30
4	1178	45.07
5	538	22.30

VARIABLE / SCALES	FREQUENCY	PERCENTAGE
Cumulative frequencies and percentage	2614	100.00

Table 6.1 reveals that respondents understand that assessment is a powerful tool which could assist learners to learn for the promotion of the culture of learning. This indicates that teachers are becoming aware that teaching and learning practices need to be assessment driven. Paxton (1995:189-195) indicates that assessment is a practice by which teachers try to identify areas where improvement is necessary and how performance could be improved. Most respondents in this table reacted between the four point scale and the five point scale with regard to their total proportional input, concerning assessment of learners' work and its influence on the culture of learning.

The cumulative percentage in almost all variables in table 6.1 regarding agreed or strongly agreed scales is above 60%. This indicates that teachers regard assessment in teaching and learning as an important activity in promoting the culture of learning in schools. The researcher also took note of the fact that teachers realize that assessment is not an activity that needs to be performed by learners and teachers only. This is substantiated by the fact the following variables have accumulated more the 60% in the 'agree' and 'strongly agree' classes from teachers' responses: V28 - teachers assessment of learners' work assists principal to see that assessment is an adequate evaluation mechanism; V29 - assessment of learner's work ensures that principals will allocate enough time for assessment purpose; and V33 - assessment of learner's work involves parental decision with regard to information of assessment. These variables investigated teachers' perceptions regarding principals and parental involvement in terms of the influence of assessment on the culture of learning.

The teachers' perceptions confirm that assessment is an important activity in teaching and learning processes. They also confirm that the involvement of parents and principals is an important element in assessment of learners' work for the promotion of a culture of learning. It can be concluded therefore that this aspect of the empirical analysis has enabled the researcher to achieve objectives 1 and 3 (see section 1.6.1)



Table 6.2 Results of the frequency analysis of the question items relating to traditional evaluation of learners' work and its influence on the culture of learning.

VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.34. (Frequency Missing = 4) Traditional evaluation of learners' work is seen as a separate activity from teaching and learning processes.		
1	309	11.81
2	606	23.16
3	484	18.49
4	870	33.24
5	348	13.30
Cumulative frequencies and percentage	2617	100.00
V.35. (Frequency Missing = 5) Traditional evaluation of learners' work is based on the idea of well-defined criteria of right and wrong.		
1	73	2.79
2	290	11.09
3	383	14.64
4	1339	51.19
5	531	20.30
Cumulative frequencies and percentage	2616	100.00
V.36. (Frequency Missing = 6) Traditional evaluation of learners' work used reproductive evaluation strategies to assess knowledge as provided by textbook.		
1	74	2.83
2	280	10.71
3	355	13.58
4	1303	49.83
5	603	23.06
Cumulative frequencies and percentage	2615	100.00
V.37. (Frequency Missing = 5) In traditional evaluation of learners' work teachers were given opportunity to make decisions about learners' performance.		
1	93	3.56
2	225	8.60
3	316	12.08
4	1399	53.48
5	583	22.29
Cumulative frequencies and percentage	2616	100.00



V.38. (Frequency Missing = 5) In traditional evaluation of learners' work both evaluation and measurement were used as instruments to score and grade learners.		
1	33	1.26
2	148	5.66
3	339	12.96
4	1500	57.34
5	596	22.78
Cumulative frequencies and percentage	2616	100.00
V.39. (Frequency Missing = 3) Teachers' assessment of learners' work in traditional evaluation used measurement and evaluation to ensure that teaching objectives have been well transmitted to learners.		
1	37	1.41
2	125	4.77
3	343	13.10
4	1611	61.54
5	502	19.17
Cumulative frequencies and percentage	2618	99.9
V.40. (Frequency Missing = 3) In traditional evaluation of learners' work teachers were expected to identify specific strengths and weaknesses of learners in the learning environment.		
1	166	6.34
2	205	7.83
3	342	13.06
4	1399	53.44
5	506	19.33
Cumulative frequencies and percentage	2618	100.00
V.41. (Frequency Missing = 3) In traditional evaluation teachers were expected to ask questions checking whether pupils were listening to teachers in the learning environment.		
1	37	1.41
2	115	4.39
3	229	8.75
4	1483	56.65
5	754	28.80
Cumulative frequencies and percentage	2618	100.00



V.42. (Frequency Missing = 5) In traditional evaluation teachers were given opportunity to evaluate their instruction, by assessing the quality of learners' performance.		
1	67	2.56
2	199	7.61
3	320	12.23
4	1517	57.99
5	513	19.61
Cumulative frequencies and percentage	2616	100.00
V.43. (Frequency Missing = 10) Teachers' assessment of learners' work in traditional setting forced teachers to award good grades.		
1	276	10.57
2	452	17.31
3	477	18.27
4	1022	39.14
5	384	14.71
Cumulative frequencies and percentage	2611	100.00
V.44. (Frequency Missing = 4) In traditional evaluation teachers' assessment of learners' work had to ensure higher authorities that standard policies of education are maintained.		
1	178	2.56
2	274	7.57
3	577	17.31
4	1215	50.36
5	373	22.20
Cumulative frequencies and percentage	2617	100.00
V.45. (Frequency Missing = 4) In traditional evaluation teachers used formative assessment in order to make moment-to-moment decisions about pupils' learning.		
1	178	6.80
2	274	10.47
3	577	22.05
4	1215	46.43
5	373	14.25
Cumulative frequencies and percentage	2617	100.00
V.46. (Frequency Missing = 7) In traditional evaluation teachers used summative assessment to indicate their approval and disapproval on learners' work.		
1	65	2.49
2	245	9.37
3	567	21.69
4	1308	50.04
5	429	16.41



Cumulative frequencies and percentage	2614	100.00
V.47. (Frequency Missing = 5) In traditional evaluation teachers used summative assessment results to show parents how their children were doing in schools.		
1	55	2.10
2	148	5.66
3	362	13.84
4	1547	59.14
5	504	19.27
Cumulative frequencies and percentage	2616	100.00
V.48. (Frequency Missing = 2) Homework and assignments in traditional evaluation were used by teachers as an assessment tool to prepare learners to do well in the final examination.		
1	70	2.67
2	255	9.74
3	213	8.13
4	1424	54.37
5	657	25.09
Cumulative frequencies and percentage	2619	100.00
V.49. (Frequency Missing = 3) In traditional evaluation teachers used homework and assignments to monitor instructional work in classes.		
1	48	1.83
2	184	7.03
3	263	10.05
4	1562	59.66
5	561	21.43
Cumulative frequencies and percentage	2618	100.00
V.50. (Frequency Missing = 5) In traditional evaluation teachers used classwork and official tests to check and balance work which had been done by them.		
1	38	1.45
2	119	4.55
3	213	8.14
4	1525	58.30
5	721	27.56
Cumulative frequencies and percentage	2616	100.00



V.51. (Frequency Missing = 5) In traditional evaluation teachers used classwork and official tests to support and encourage learners to perform better.		
1	8	1.07
2	115	4.40
3	219	8.37
4	1444	55.20
5	810	30.96
Cumulative frequencies and percentage	2616	100.00
V.52. (Frequency Missing = 4) In traditional evaluation teachers expected formal examination to be a mechanism of identifying talents and measuring learners' performance.		
1	45	1.72
2	170	6.50
3	252	9.63
4	1369	52.31
5	781	29.84
Cumulative frequencies and percentage	2617	100.00
V.53. (Frequency Missing = 3) Teachers in traditional evaluation believed that formal examination was an assessment tool of developing knowledge, skills and attitudes that learners would use when entering either the work-force of higher education.		
1	83	3.17
2	196	7.49
3	293	11.19
4	1336	51.03
5	710	27.12
Cumulative frequencies and percentage	2618	100.00
V.54. (Frequency Missing = 4) In traditional evaluation teachers were expected to be more active in preparation of the formal examination of learners.		
1	49	1.87
2	107	4.09
3	201	7.68
4	1386	52.96
5	874	33.40
Cumulative frequencies and percentage	2617	100.00



V.55. (Frequency Missing = 9) Formal examination results in traditional evaluation were used to judge the pass and failure of learners.		
1	43	1.65
2	84	3.22
3	154	5.90
4	1343	51.42
5	988	37.83
Cumulative frequencies and percentage	2612	100.00
V.56. (Frequency Missing = 6) Formal examination in traditional evaluation assisted teachers and departmental officials to select learners for secondary education and higher education.		
1	46	1.76
2	112	4.28
3	242	9.25
4	1399	53.50
5	816	31.20
Cumulative frequencies and percentage	2615	99.9
V.57. (Frequency Missing = 7) Teachers' evaluation of learners' work in traditional settings was examination driven.		
1	42	1.61
2	182	6.96
3	298	11.40
4	1277	48.48
5	815	31.18
Cumulative frequencies and percentage	2614	99.63
V.58. (Frequency Missing = 8) In traditional evaluation norm-referenced-assessment was used to compare learners' performance with one another.		
1	59	2.26
2	192	7.35
3	409	15.65
4	1316	50.36
5	637	24.38
Cumulative frequencies and percentage	2613	100.00
V.59. (Frequency Missing = 9) In traditional education teachers used norm-referenced assessment to group and place learners according to norms, scores and achievements.		
1	74	2.83
2	186	7.12
3	348	13.32
4	1333	51.03
5	631	25.69
Cumulative frequencies and percentage	2612	99.9

The reader will notice that the term frequently used in table 6.2 is traditional evaluation. This has been done because 'traditional evaluation' refers to the classical practices, where the summative nature of the assessment process was often regarded as the final and only measure against which performance was judged.

Table 6.2 reveals that a great number of respondents reacted between the 4 point scale and the 5 point scale. This indicates that the teachers are rapidly becoming aware that traditional evaluation is a product driven process. The emphasis was on what teachers teach, hence evaluation was applied to check transmitted knowledge to learners by teachers and to measure whether teachers took responsibility for learning and teaching (Tiley 1997:12). As a result Taylor and Vinjevold (1999:108) are of the opinion that the traditional system of evaluation only concentrated on evaluating learners mainly to produce good results at the end-of-year examination. Hence this evaluation system was judgmental and did not cater adequately for development of learners in order to improve the culture of learning (see section 3.1).

This is supported by the fact that almost all variables of this table that discuss traditional evaluation concentrate on teachers as the only people who assess in schools. Respondents reacted high on scales which agreed or strongly agreed with this idea. Hence respondents have the perception that traditional evaluation methods emphasised only the main role of teachers, as the people who should be actively involved regarding assessment in all teaching and learning activities.

However, there are two variables in table 6.2 where respondents did not react over 60% in this regard. These are the following: V34 - traditional evaluation of learners work is seen as a separate activity from teaching and learning processes; and V43 - teachers' assessment of learners' work in traditional setting forced teachers to award good grades.

This suggests that teachers are aware that the traditional evaluation policy which promoted these activities was not acceptable. Hence the teachers' perception is that treating assessment of learners' work exclusively from teaching and learning processes negated the good part that assessment can play in the teaching and learning situation. It also shows that teachers are aware that in traditional evaluation, teachers were forced to play an active role regarding assessment, so that learners could receive good grades at

the end of the examination. This is regardless of whether learners gainfully achieved knowledge, skills, values and good attitudes about what they have learned. These reasons deducted from the empirical analysis indicate that the traditional evaluation method had a minimum contribution towards the culture of learning in schools (see objective 4 in section 1.6.1).

Table 6.3 Results of the frequency analysis of question items relating to Outcomes-Based Assessment and its influence on the culture of learning.

VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.60. (Frequency Missing = 58) Assessment of learners' work in Outcomes-based Education is regarded as an integral part of the teaching and learning processes.		
1	32	1.25
2	59	2.30
3	270	10.53
4	1397	54.51
5	805	31.41
Cumulative frequencies and percentage	2563	100.00
V.61. (Frequency Missing = 3) Assessment of learners' knowledge in Outcomes-based Education aims towards assisting learners to apply such knowledge in life processes.		
1	29	1.11
2	60	2.29
3	238	9.09
4	1336	51.03
5	955	36.48
Cumulative frequencies and percentage	2618	100.00
V.62. (Frequency Missing = 3) Outcomes-based Assessment strategies assist both teachers and learners to measure progress of learning and teaching.		
1	33	1.26
2	105	4.01
3	313	11.96
4	1342	51.26
5	825	31.51
Cumulative frequencies and percentage	2618	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.63. (Frequency Missing = 4) Outcomes-based Assessment allows teachers to determine whether learners have achieved outcomes of learning.		
1	32	1.22
2	90	3.44
3	288	11.00
4	1308	49.98
5	899	34.35
Cumulative frequencies and percentage	2617	100.00
V.64. (Frequency Missing = 5) Teachers' assessment of learners' work in Outcomes-based Education is meant to improve skills, attitudes and value of learners.		
1	31	1.15
2	83	3.17
3	303	11.59
4	1328	52.85
5	817	31.24
Cumulative frequencies and percentage	2616	100.00
V.65. (Frequency Missing = 6) Teachers' assessment of learners' work in Outcomes-based Education assesses learners' progress and development.		
1	30	1.15
2	83	3.17
3	303	11.59
4	1382	52.85
5	817	31.24
Cumulative frequencies and percentage	2615	100.00
V.66. (Frequency Missing = 7) Outcomes-based Education expects assessment to assist learners to understand the content of a subject in order to demonstrate the learning outcomes.		
1	37	1.42
2	122	4.67
3	424	16.22
4	1339	51.22
5	629	26.47
Cumulative frequencies and percentage	2614	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.67. (Frequency Missing = 6) In Outcomes-based Assessment teachers assess specific learning outcomes such as social and personal skills, values and good dispositions of learning.		
1	41	1.57
2	87	3.33
3	388	14.84
4	1367	52.28
5	732	27.99
Cumulative frequencies and percentage	2615	100.01
V.68. (Frequency Missing = 5) Outcomes-based Assessment is expected to assist learners to make use of specific outcomes at the end of their learning experiences.		
1	38	1.45
2	80	3.06
3	349	13.34
4	1303	49.81
5	846	32.34
Cumulative frequencies and percentage	2616	100.00
V.69. (Frequency Missing = 8) Teachers' continual assessment of specific outcomes promotes the achievements of critical cross-field outcomes in Outcomes-based Education.		
1	34	1.30
2	86	3.29
3	678	25.95
4	1298	49.67
5	517	19.79
Cumulative frequencies and percentage	2613	100.00
V.70. (Frequency Missing = 9) Teachers' assessment of critical cross-field outcomes in Outcomes-based Education enhances the interest of learning to learners.		
1	40	1.53
2	110	4.21
3	641	24.54
4	1266	48.47
5	555	21.25
Cumulative frequencies and percentage	2612	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.71. (Frequency Missing = 11) Assessment criteria are applied by teachers during assessment to indicate to learners what has to be achieved.		
1	29	1.11
2	87	3.33
3	458	17.55
4	1374	52.64
5	662	25.36
Cumulative frequencies and percentage	2610	99.9
V.72. (Frequency Missing = 8) Performance indicators assist both teachers and learners to assess the quality and quantity of what learners have achieved in Outcomes-based Education.		
1	27	1.03
2	91	3.48
3	452	17.30
4	1347	51.55
5	696	26.64
Cumulative frequencies and percentage	2613	100.00
V.73. (Frequency Missing = 11) Teachers use assessment criteria to help learners to demonstrate what is expected from them.		
1	26	1.00
2	69	2.63
3	455	17.43
4	1401	53.68
5	659	25.25
Cumulative frequencies and percentage	2610	99.99
V.74. (Frequency Missing = 10) Teachers use performance indicators to assess whether learners have mastered both the process as well as the contents of learning.		
1	22	0.84
2	76	2.91
3	425	17.31
4	1382	52.93
5	679	26.01
Cumulative frequencies and percentage	2611	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.75. (Frequency Missing = 9) Range statements assist teachers to provide valuable quality of learning when assessing learners' work in Outcomes-based Education.		
1	35	1.34
2	88	3.37
3	648	24.81
4	1310	50.15
5	531	20.33
Cumulative frequencies and percentage	2612	100.00
V.76. (Frequency Missing = 9) Teachers' assessment of learners' work allows learners to master unit standards that are regarded as national and international statements.		
1	45	1.72
2	128	4.90
3	880	33.69
4	1120	42.88
5	439	16.81
Cumulative frequencies and percentage	2612	100.00
V.77. (Frequency Missing = 32) Teachers' assessment of learners' work assists learners to know units standard for each learning area of that particular level of learning.		
1	34	1.31
2	130	5.02
3	722	27.89
4	1275	49.25
5	428	16.53
Cumulative frequencies and percentage	2589	100.00
V.80. (Frequency Missing = 6) In Outcomes-based-Education teachers use performance-based assessment approaches to engage learners in performing substantial tasks of importance in their own right.		
1	20	0.76
2	99	3.79
3	549	20.99
4	1507	57.63
5	440	16.83
Cumulative frequencies and percentage	2615	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.81. (Frequency Missing = 6) Teachers use performance-based assessment to assist learners to apply skills and knowledge that learners have learned.		
1	28	1.07
2	69	2.64
3	367	14.03
4	1566	59.89
5	585	22.37
Cumulative frequencies and percentage	2615	100.00
V.82. (Frequency Missing = 9) Performance-based assessment empowers learners to perform beyond the information which has been taught by teachers.		
1	37	1.42
2	134	5.13
3	510	19.53
4	1305	49.96
5	626	23.97
Cumulative frequencies and percentage	2612	100.00
V.83. (Frequency Missing = 6) In performance-based approach teachers use performance criteria so that learners could be aware of the performance results during assessment.		
1	21	0.80
2	88	3.37
3	521	19.92
4	1467	56.10
5	518	19.81
Cumulative frequencies and percentage	2615	100.00
V.84. (Frequency Missing = 10) Teachers in Outcomes-based Education use portfolio assessment strategies to assist learners to monitor their own progress.		
1	24	0.92
2	79	3.03
3	479	18.35
4	1397	53.50
5	632	24.21
Cumulative frequencies and percentage	2611	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.85. (Frequency Missing = 10) Teachers' assessment of learners' work through portfolio strategies allow learners to be actively involved in assessment.		
1	35	1.34
2	86	3.29
3	482	18.46
4	1464	56.07
5	544	20.83
Cumulative frequencies and percentage	2611	99.99
V.86. (Frequency Missing = 8) Portfolio assessment strategies enable teachers to evaluate learners' performance on an individual basis.		
1	29	1.11
2	83	3.18
3	449	17.18
4	1408	53.88
5	644	24.65
Cumulative frequencies and percentage	2613	100.00
V.87. (Frequency Missing = 11) Portfolio assessment allows learners to apply assessment criteria performance indicators and range statements in their own right.		
1	30	1.15
2	124	4.75
3	650	24.90
4	1259	48.24
5	547	20.96
Cumulative frequencies and percentage	2610	100.00
V.88. (Frequency Missing = 12) Portfolio assessment strategies promotes communication between teachers and learners in teaching situation.		
1	26	1.00
2	78	2.99
3	456	17.48
4	1401	53.70
5	648	24.84
Cumulative frequencies and percentage	2609	100.00



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.89. (Frequency Missing = 10) In Outcomes-based Education teachers use self-assessment to allow learners to be active in the assessment practices.		
1	29	1.11
2	107	4.10
3	400	15.32
4	1444	55.30
5	631	24.17
Cumulative frequencies and percentage	2611	100.00
V.90. (Frequency Missing = 10) In Outcomes-based Education teachers use peer-assessment so that learners could share and contribute to the work of their classmates.		
1	32	1.23
2	89	3.41
3	378	14.48
4	1323	50.67
5	789	30.22
Cumulative frequencies and percentage	2611	100.00
V.91. (Frequency Missing = 9) Teachers use self-assessment to promote self-thinking and self-development amongst learners.		
1	34	1.30
2	81	3.10
3	381	14.59
4	1377	52.72
5	739	28.29
Cumulative frequencies and percentage	2612	100.00
V.92. (Frequency Missing = 9) In Outcomes-based assessment teachers can break-down teaching and learning tasks into different components through continuous assessment strategies.		
1	28	1.07
2	86	3.29
3	458	17.53
4	1383	52.95
5	657	25.15
Cumulative frequencies and percentage	2612	99.99



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
V.93. (Frequency Missing = 9) In Outcomes-based Education teachers use continuous assessment to support learners and to give feedback into teaching and learning processes.		
1	32	1.23
2	53	2.03
3	321	12.29
4	1452	55.59
5	754	28.87
Cumulative frequencies and percentage	2612	100.00
V.94. (Frequency Missing = 9) Continuous assessment takes place while learners are actively involved in daily classroom activities.		
1	30	1.15
2	58	2.22
3	256	9.80
4	1306	50.00
5	962	36.83
Cumulative frequencies and percentage	2612	100.00
V.95. (Frequency Missing = 13) Continuous assessment assists learners to be able to construct meaning and concepts about the learning task.		
1	23	0.88
2	70	2.68
3	373	14.30
4	1353	51.88
5	789	30.25
Cumulative frequencies and percentage	2608	99.99
V.96. (Frequency Missing = 9) Continuous assessment allows teachers to use varieties of assessment strategies.		
1	26	1.00
2	52	1.99
3	295	11.29
4	1295	49.58
5	944	36.14
Cumulative frequencies and percentage	2612	100.00
V.97. (Frequency Missing = 9) In Outcomes-based Education criterion-referenced assessment is used by teachers to assess learners' work against set standards or criteria.		
1	28	1.07
2	121	4.63
3	506	19.37
4	1317	50.42
5	640	24.50



VARIABLE / SCALES	FREQUENCY	PERCENTAGE
Cumulative frequencies and percentage	2612	99.99
V.98. (Frequency Missing = 10) In Outcomes-based Education teachers use criterion-referenced assessment to assist learners to achieve learning outcomes according to the agreed learning criteria.		
1	34	1.30
2	83	3.18
3	458	18.58
4	1327	50.82
5	628	26.12
Cumulative frequencies and percentage	2611	100.00

Table 6.3 reveals that 60% and above of the respondents of this study indicated that the Outcomes- Based Assessment approach intends to focus equally on knowledge, skills, attitudes and the process of learning which results in the achievement of both the specific outcomes and critical cross-field outcomes (see section 4.1). Outcomes- Based Assessment also stresses that learning should empower learners to achieve learning outcomes by using assessment as part of guiding and evaluating teaching and learning processes, for the improvement of culture of learning. Such an approach deviates from the conventional and traditional content-based education and training, which according to Wiggins (1998:4) has an assessment strategy which leads to silent examinees sitting in rows, answering uniform questions with orthodox answers, following calendars that dictate that all learners must be examined simultaneously regardless of readiness. Much of the literature of this study has pointed this out as an assessment approach which could have a little contribution to the culture of learning.

Again when considering the cumulative percentage in respect of agreed and strongly agreed scales of table 6.3, indications are that both scales have accumulated above 60%. This shows that teachers perceive the outcomes-based assessment approach to have a positive impact upon the culture of learning in schools. Hence this indicates that OBE assessment practices have the potential to contribute to the culture of learning in schools (see objective 5 in section 1.6.1).

The researcher also noticed that the cumulative percentage of agreed and strongly agreed scales of table 6.3 were in fact almost all above 80%. Consequently, it can be concluded

that teachers are aware that OBE assessment strategies can enable all learners to experience assessment in terms of learners' learning and competence, rather than as grading or competition between learners. It also links assessment closely to the desired learning outcomes, by systematically incorporating assessment as an integral part of teaching and learning processes (see objective 2 in section 1.6.1).

6.4 THE EXTRACTION OF FACTORS

The results of the Principal Component factor analysis performed on the variables of this study, extracted three different factors. The varimax method of rotation was applied to selected data sets in order to identify and extract possible commonalities or factors underlying assessment of learners' work and its influence on the culture of learning.

In the analysis of extracted factors, the factor analysis also grouped the variables into three different constructs which are similar to the three constructs that the researcher grouped the variables into for further investigative factor analysis (see section 5.5). However the chronology of the variables under these constructs has been changed by the varimax method rotation in all three factors. It was therefore concluded that the chronological change was also due to the factor analysis techniques of grouping variables based on the internal relationship between variables (Hair et al 1998: 123). See table 6.4 which shows the correlation matrix of the Rotated Factor Pattern.

Table 6.4 *Correlation Matrix Of The Rotated Factor Pattern Of Items Assessing The Opinions Of Teachers Regarding Assessment Of Learners' Work And Its Influence On The Culture Of Learning. The variables are ranked from highest correlation with Factor 1, then Factor 2, then Factor 3.*

VARIABLE NUMBER AND DESCRIPTION	FACTOR 1	FACTOR 2	FACTOR 3
V72. Performance indicators assist both teachers and learners to assess the quality and quantity of what learners have achieved in Outcomes-based Education.	0.73219	0.11952	0.14535
V88. Portfolio assessment strategies promotes communication between teachers and learners in teaching learning situation.	0.72303	0.10016	0.12646



V86. Portfolio assessment strategies enables teachers to evaluate learners' performance on an individual basis.	0.70926	0.08819	0.12597
V85. In Outcomes-based Education teachers use self-assessment so that learners could share and contribute to the work of their classmates.	0.70640	0.13122	0.16195
V73. Teachers use assessment criteria to help learners to demonstrate what is expected from them.	0.70613	0.12497	0.14923
V74. Teachers use performance indicators to assess whether learners have mastered both the process as well as the contents of learning.	0.70410	0.09632	0.13263
V84. Teachers in Outcomes-based Education use portfolio assessment strategies to assist learners to monitor their own progress.	0.69323	0.10031	0.14643
V85. Teachers' assessment of learners' work through portfolio strategies allow learners to be actively involved in assessment exercise.	0.69279	0.10196	0.16349
V65. Teachers' assessment of learners' work in Outcomes-based Education assesses learners' progress and development.	0.69242	0.16798	0.18862
V70. Teachers' assessment of critical cross-field outcomes in Outcomes-based Education enhances the interest of learning to learners.	0.68743	0.16102	0.15449
V75. Range statements assist teachers to provide valuable quality of learning when assessing learners' work in Outcomes-based Education.	0.68461	0.12883	0.13572
V90. In Outcomes-based Education teachers use peer-assessment so that learners could share and contribute to the work of their classmates.	0.68289	0.08891	0.11740
V91. Teachers use self-assessment to promote self-thinking and self-development among learners.	0.67873	0.12943	0.17147
V93. In Outcomes-based Education teachers use continuous assessment to support learners and to give feedback into teaching and learning process.	0.67637	0.14532	0.19473
V69. Teachers' continual assessment of specific outcomes promotes the achievements of critical cross-field outcomes in Outcomes-based Education.	0.67470	0.10459	0.14329
V64. Teachers' assessment of learners' work in Outcomes-based Education is meant to improve skills, attitude and value of learners.	0.66712	0.16899	0.22760
V96. Continuous assessment allows teachers to use varieties of assessment.	0.66612	0.14522	0.20504
V62. Outcomes-based Assessment strategies assist both teachers and learners to measure progress of learning and teaching.	0.66617	0.13632	0.19155
V81. Teachers use performance-based assessment to assist learners to apply skills and knowledge that learners have learned.	0.66537	0.11244	0.16981
V92. In Outcomes-based assessment teachers and learners can break-down teaching and learning tasks into different components through continuous assessment strategies.	0.66490	0.14392	0.21977
V71. Assessment criteria are applied by teachers during assessment to indicate to learners what has to be achieved.	0.65890	0.12203	0.14458
V95. Continuous assessment assists learners to be able to construct meaning and concepts about the learning task.	0.65686	0.18940	0.24014



V94. Continuous assessment takes place while learners are actively involved in daily classroom activities.	0.65676	0.15763	0.16519
V63. Outcomes-based Assessment allows teachers to determine whether learners have achieved outcomes of learning.	0.65631	0.16072	0.19591
V68. Outcomes-based Assessment is expected to assist learners to make use of specific outcomes at the end of their learning experience.	0.65420	0.14265	0.18237
V80. In Outcomes-based-Education teachers use performance-based assessment approaches to engage learners in performing substantial tasks of importance in their own right.	0.65185	0.12777	0.16369
V87. Portfolio assessment allows learners to apply assessment criteria performance indicators and range statements in their own right.	0.65019	0.13337	0.16938
V98. In Outcomes-based Education teachers use criterion-referenced assessment to assist learners to achieve learning outcomes according to the agreed learning criteria.	0.64079	0.16434	0.24032
V67. In Outcomes-based Assessment teachers assess specific learning outcomes such as social and personal skills, values and good dispositions of learning.	0.62933	0.14989	0.17534
V61. Assessment of learners' knowledge in Outcomes-based Education aims towards assisting learners to apply such knowledge in life processes.	0.62281	0.13044	0.17860
V66. Outcomes-based Education expects assessment to assist learners to understand the content of a subject in order to demonstrate the learning outcomes.	0.62266	0.16522	0.23455
V83. In performance-based approach teachers use performance criteria so that learners could be aware of the performance results during assessment.	0.61578	0.12570	0.20283
V97. In Outcomes-based Education criterion-referenced assessment is used by teachers to assess learners' work against set standards of criteria.	0.60784	0.14852	0.21678
V82. Performance-based assessment empowers learners to perform beyond the information which has been taught by teachers.	0.59265	0.15216	0.17431
V60. Assessment of learners' work in Outcomes-based Education is regarded as an integral part of the teaching and learning processes.	0.54245	0.13347	0.20319
V52. In traditional evaluation teachers expected formal examination to be a mechanism of identifying talents and measure learners' performance.	0.09947	0.14978	0.13162
V50. In traditional evaluation teachers used classwork and official tests to support and encourage learners to perform better.	0.09106	0.16438	0.12462
V54. In traditional evaluation teachers were expected to be more active in preparation of the formal examination of learners.	0.14791	0.19526	0.07807
V49. In traditional evaluation teachers used homework and assignments to monitor instructional work in classes.	0.03968	0.17618	0.11830
V57. Teachers' evaluation of learners' work in traditional settings was examination driven.	0.24221	0.17306	0.10520



V51. In traditional evaluation teachers classwork and official tests to support and encourage learners to perform better.	0. 02746	0. 56381	0. 13288
V47. In traditional evaluation teachers used summative assessment results to show parents how their children were doing in schools.	0. 12069	0. 56810	0. 05900
V59. In traditional education teachers used norm-referenced assessment to group and place learners according to norms, scores and achievements.	0. 16979	0. 56287	0. 12937
V58. In traditional evaluation norm-referenced-assessment was used to compare learners' performance with one another.	0. 21059	0. 55302	0. 14147
V46. In traditional evaluation teachers used summative assessment to indicate their approval and disapproval on learners' work.	0. 17508	0. 55269	0. 04230
V41. In traditional evaluation teachers were expected to ask questions checking whether pupils were listening to teachers in the learning environment.	0. 08793	0. 55128	0. 07202
V48. Homework and assignments in traditional evaluation were used by teachers as an assessment tool to prepare learners to do well in the final examination.	0. 05814	0. 54996	0. 07467
V44. In traditional evaluation teachers' assessment of learners' work had to ensure higher authorities that standard policies of education are maintained.	0. 14105	0. 54138	0. 11802
V55. Formal examination results in traditional evaluation were used to judge the pass and failure of learners.	0. 17236	0. 52554	0. 05581
V53. Teachers in traditional evaluation believed that formal examination was an assessment tool of developing knowledge, skills and attitudes that learners would use when entering either the work-force education.	0. 09040	0. 52447	0. 10928
V56. Formal examination in traditional evaluation assisted teachers and departmental officials to select learners for secondary education and higher education.	0. 11724	0. 51834	0. 12267
V38. In traditional evaluation of learners' work both evaluation and measurement were used as instruments to score and grade learners.	0. 08980	0. 51640	0. 14545
V42. In traditional evaluation teachers were given opportunity to evaluate their instruction, by assessing the quality of learners' performance.	0. 01527	0. 50373	0. 07965
V39. Teachers' assessment of learners' work in traditional evaluation used measurement and evaluation to ensure that teaching objectives have been well transmitted to learners.	0. 03180	0. 46544	0. 11523
V36. Traditional evaluation of learners' work used reproductive evaluation strategies to assess knowledge as provided by textbooks.	0. 21376	0. 46396	0. 05651
V35. Traditional evaluation of learners' work was based on the idea of well-defined criteria of right and wrong.	0. 11860	0. 45026	0. 04514
V37. In traditional evaluation of learners' work teachers were given opportunity to make decisions about learners' performance.	0. 05817	0. 44854	0. 09233



V45. In traditional evaluation teachers used formative assessment in order to make moment-to-moment decisions about pupil's learning.	0. 12055	0. 13061	0. 00593
V43. Teachers' assessment of learners' work in traditional setting forced teachers to award good grades.	0. 16619	0. 40163	0. 07563
V34. Traditional evaluation of learners' work is seen as a separate activity from teaching and learning processes.	0. 14022	0. 33437	0. 00897
V40. In traditional evaluation of learners' work teachers were expected to identify specific strengths and weaknesses of learners in the learning environment.	0. 01002	0. 17811	0. 01678
V28. Teachers' assessment of learners' work assists principal to see that assessment is an adequate evaluation mechanism.	0. 15180	0. 15460	0. 62532
V25. Teachers' assessment of learners' work assists learners to monitor progress of learning.	0. 14527	0. 11891	0. 63043
V27. assessment of learners' work indicates to principals that teaching and learning are monitored in schools.	0. 19789	0. 12768	0. 52302
V22. Teachers' assessment of learners' work allows to see assessment as part of teaching and learning.	0. 20942	0. 09213	0. 53977
V24. Teachers' assessment of learners' work assists learners to see that teachers can identify learners learning problems.	0. 16472	0. 09906	0. 53938
V26. Assessment of learners' work assists principals to share decisions task with teachers regarding learners' work.	0. 15510	0. 13664	0. 53543
V32. Teachers' assessment of learners' work enhances learning contact between parents and children.	0. 22950	0. 14402	0. 57831
V30. Feedback of assessment learners' work to parents, enables parents to play an active role in the education of children.	0. 20098	0. 05819	0. 57704
V21. Assessment assists learners to review their own learning and look at better ways of improving learning.	0. 19756	0. 04585	0. 57031
V31. Teachers' assessment of learners' work and feedback to parents create a positive relationship between parents, learners and teachers.	0. 23239	0. 11428	0. 55834
V23. Regular assessment of learners' work enhances learners' perception of success.	0.13827	0. 08886	0. 55036
V19. Teachers' assessment of learners' work contributes to collaboration and caring between teachers and learners.	0. 19073	0. 09425	0. 54946
V29. Assessment of learners' work ensure that principals will allocate enough time for assessment purpose.	0. 11707	0. 15484	0. 54275
V33. Assessment of learners' work involves parental decision with regard to information of assessment.	0. 18102	0. 14844	0. 53691
V20. Assessment assists teachers to review information taught to learners.	0. 17261	0. 04150	0. 52309
V17. Good assessment of learners' work promotes a positive attitude towards learning among learners.	0. 21367	0. 08762	0. 51343
V18. Frequent assessment of learners' work allows teachers to intervene with remedial teaching at an early stage.	0. 15319	0. 01669	0. 47741
V16. Teachers' assessment of learners' work enables learners to think critically and develop problem solving skills.	0. 21299	0. 07311	0. 47654
V15. Good assessment of learners' work contributes to the culture of learning.	0. 20102	0. 05608	0. 41637

Variance explained by each factor	17.3423595	7.8793196	7.2559232
Eigenvalues	54.34000251	10.8298612	7.5540027
Final communality estimates	32.477602		
Total variance explained by factors	79.40%		
Cronbach alpha reliability coefficient.	0.965598		

A variety of techniques can be applied to determine the possible number of factors that can be accounted for in an investigation. These are: the weighing of eigenvalues, interpretation of the scree plot in terms of the percentage of total variances accounted for by each of the successfully extracted factors, consideration of the total variance accounted for or explained by the factor (Kachigan 1991:246-247), and possibly also the degree to which each of the variables correlates with each of the factors.

Table 6.4 demonstrates the extraction of the variables for three factors based on the weighing of eigenvalues and the degree to which each of the variables correlates with each of the factors. As it has been indicated in section 5.5.1 in chapter 5, only variables loaded more than 0.30 extracted by the Proc Factor Procedure through rotated factor pattern will be regarded as substantial variables for that factor. In table 6.4 all variables which loaded more than 0.3.0 eigenvalues have been clustered as items belonging to that factor. Hence a logical analysis of these variables revealed that this study has extracted three factors and also confirmed that these factors dealt with the following issues:

Factor 1: Teachers' views about Outcomes-based Education assessment strategies and its influence on the culture of learning.

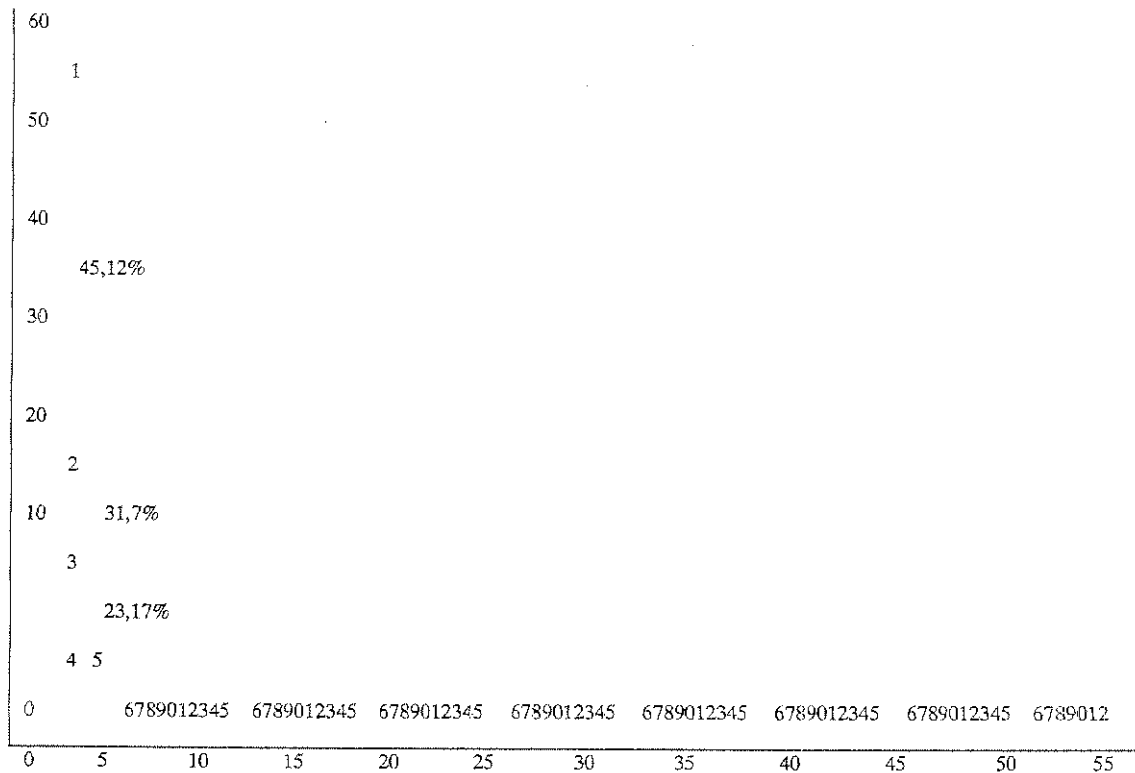
Factor 2: Teachers' views regarding traditional evaluation and its influence on the culture of learning.

Factor 3: Teachers' understanding regarding assessment of learners' work and its influence on the culture of learning.

The researcher applied the scree plot of eigenvalues to indicate and confirm the number of factors extracted. Hair, Anderson, Tatham and Black (1998:128) maintain that this is a multivariable technique that groups variables into factors, based on the internal

relationships quantified by means of the correlation matrix. See graph 6.5, which illustrate the percentage of variance explained by each extracted factor.

Figure 6.5 *Graph scree plot of eigenvalues. The maximum likelihood factor procedure was used.*



Cattell’s Scree Plot (Cattell 1966:245-276), and adapted versions thereof, are often used to show the presence of the number of factors accounted for by a measuring instrument, or questionnaire as in this specific case. Graph 6.5 indicates that 45,12 percent of variables have been grouped in factor one, this represents slightly more than half of the total number of the dependent variables of this study. This could possibly indicate that, many respondents reacted similarly to the variables of this factor. 31,7 percent of the variables have been grouped in factor two; and 23,17 percent of the variables have been grouped in factor three. All the dependent variables of this study appearing on the horizontal line of the graph have been grouped in these three extracted factors. This shows that the researcher had only three extracted factors for this study.

The reader will notice that in table 6.4 variables listed under three different factors having an eigenvalue greater than 0.30 have been shaded. These are the variables which belong to the three factors as extracted by the Principal Component Factor Analysis. The following sections analyse these in relation to the hypotheses of this research study.

6.5 STATEMENT OF HYPOTHESES

The empirical investigations and statistical techniques applied in this study intended to support or refute the hypothetical theory of this research study. The statement hypotheses of this study are:

Hypothesis 1. An assessment system built upon the traditional evaluation methods has a detrimental effect on the development of a culture of learning in schools.

Hypothesis 2. Assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools.

The empirical investigation also tests the following Null hypothesis:

Hypothesis 3. No distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools.

In the first chapter of this study, the aims of this study were discussed and the researcher stated the hypotheses. The early stating of hypotheses is justifiable because Vockell and Asher (1995:419) contend that the scientific method depends on first stating a prediction and then following this by conducting research to verify or refute the prediction. In the

following paragraphs and tables, statistical techniques and logical empirical explanations are applied in order to refute or support the above hypotheses.

6.6 RESULTS OF THE FACTOR ANALYSIS

6.6.1 Results Of Rotated Factor Pattern Of Items Assessing Teachers' Views About Outcomes-based Education Assessment Strategies And Their Influence On The Culture Of Learning.

All variables under factor one which loaded more than 0.30 eigenvalues relate to Outcomes-based Education assessment strategies and their influence on the culture of learning. This factor and its respective variables are illustrated in table 6.6.

Table 6.6. Variables Represented By Factor One

ITEM NUMBER AND DESCRIPTION		EIGENVALUE OF ITEMS FOR FACTOR 1
V.72	Performance indicators assist both teachers and learners to assess the quality and quantity of what learners have achieved in OBE	0,73 219
V.88	Portfolio assessment strategies promotes communication between teachers and learners in teaching-learning situation	0,72 303
V.86	Portfolio assessment strategies enable teachers to evaluate learners' performance on an individual basis.	0,70 926
V.89	In OBE teachers use self-assessment to allow learners to be active in the assessment practices.	0,70 640
V.73	Teachers use assessment criteria to help learners to be active in the assessment practices.	0,70 613
V.74	Teachers use performance indicators to assess whether learners have mastered both the process as well as the content of learning.	0,70 430
V.84	Teachers in OBE use portfolio assessment strategies to assist learners to monitor their own progress.	0,69 523
V.85	Teachers' assessment of learners' work through portfolio strategies allow learners to be actively involved in assessment exercises.	0,69 279
V.65	Teachers' assessment of learners' work in OBE assesses learners' progress and development.	0,69 242
V.70	Teachers' assessment of critical cross-field outcomes in OBE enhances the interest of learning to learners.	0,68 745



ITEM NUMBER AND DESCRIPTION		EIGENVALUE OF ITEMS FOR FACTOR 1
V.75	Range statement assists teachers to provide valuable quality of learning when assessing learners' work in OBE.	0,68 461
V.90	In OBE teachers use peer-assessment so that learners could share and contribute to the work of their classmates.	0,68 289
V.91	Teachers use self-assessment to promote self-thinking and self-development among learners.	0,67 875
V.93	In OBE teachers use continuous assessment to support learners and give feedback into teaching and learning processes.	0,67 637
V.69	Teachers continual assessment of specific outcomes promotes the achievements of critical cross-field outcomes in OBE	0,67 470
V.64	Teachers assessment of learners' work in OBE is meant to improve skills, attitude and value of learners.	0,66 732
V.96	Continuous assessment allows teachers to use varieties of assessment strategies.	0,66 682
V.62	OBE assessment strategies assist both teachers and learners to measure progress of learning and teaching.	0,66 617
V.81	Teachers use performance-based assessment to assist learners to apply skills and knowledge that learners have learned.	0,66 557
V.92	In Outcomes-based Assessment teachers and learners can break-down teaching and learning tasks into different components through continuous assessment strategies.	0,66 490
V.71	Assessment Criteria are applied by teachers during assessment to indicate to learners what has to be achieved	0,65 860
V.95	Continuous assessment assists learners to be able to construct meaning and concepts about the learning task.	0,65 686
V.94	Continuous assessment takes place while learners are actively involved in daily classroom activities.	0,65 676
V.63	Outcomes-based Assessment allows teachers to determine whether learners have achieved outcomes of learning.	0,65 631
V.68	Outcomes-based Assessment is expected to assist learners to make use of specific outcomes of the end of their learning experiences.	0,65 420
V.80	In OBE teachers use performance-based assessment approaches to engage learners in performing substantial tasks of importance in their own right.	0,65 186
V.87	Portfolio assessment allows learners to apply assessment criteria, performance indicators and range statements in their own right.	0,65 032
V.98	In OBE teachers use criteria referenced assessment to assist learners to achieve learning outcomes according to the agreed learning criteria.	0,64 079
V.67	In Outcomes-based Assessment teachers assess specific learning outcomes such as social and personal skills, values and good dispositions of learning.	0,62 541



ITEM NUMBER AND DESCRIPTION		EIGENVALUE OF ITEMS FOR FACTOR 1
V.77	Teachers assessment of learners' work assists learners to know units standards for each learning area of that particular level of learning.	0,62 325
V.76	Teachers' assessment of learners' work allows learners to master unit standards which are regarded as material and international statements.	0,62 303
V.61	Assessment of learners' knowledge in OBE aims towards assisting learners to apply such knowledge in life processes.	0,62 281
V.66	OBE expect assessment to assist learners to understand the content of a subject in order to demonstrate the learning outcomes.	0,62 266
V.83	In performance-based approach teachers use performance criteria so that learners could be aware of the performance results.	0,61 578
V.97	In OBE criterion-referenced assessment is used by teachers to assess learners' work against set standards or criteria.	0,60 784
V.82	Performance-based assessment empowers learners to perform beyond the information which has been taught by teachers	0,59 706
V.60	Assessment of learners' work in OBE is regarded as an integral part of the teaching and learning processes.	0,54 246

<i>VARIANCE EXPLANATION OF THIS FACTOR</i>	17,34
<i>EIGENVALUE FOR THIS FACTOR</i>	54,34
<i>FINAL COMMONALITY ESTIMATES</i>	32,47
<i>TOTAL VARIANCE EXPLAINED BY FACTORS</i>	79,40%
<i>CRONBACH ALPHA RELIABILITY CO-EFFICIENT</i>	0,965 598

The first factor identified and illustrated in table 6.6 links to teachers' views about OBE-assessment strategies and their influence on the culture of learning. All item statements grouped under this factor are quantified by eigenvalue scores. In this study a variable eigenvalue larger than 0,30 was classed as meaningful to the analysis of this study. In this factor all variables identified were larger than 0,30.

The first six variables have eigenvalues equal to or greater than 0.70 - these variables need to be considered very seriously. These variables correspond to V72 - performance Indicators assist both teachers and learners to assess the quality and quantity of what

learners have achieved in OBE; V88 – portfolio assessment strategies promotes communication between teachers and learners in teaching-learning situation; V86 - portfolio assessment strategies enable teachers to evaluate learners' performance on an individual basis; ; V89 - in OBE teachers use self-assessment to allow learners to be active in the assessment practices; V73 – Teachers use assessment criteria to help learners to be active in the assessment practices; to help learners to demonstrate what is expected from them; and V74 - teachers use performance indicators to assess whether learners have mastered both the processes as well as the content of learning.

This indicates that these variables received high responses from the respondents. This could be due to the reason that, in OBE, teachers and learners are expected to take an active role with regard to assessment activities, considering all the instances of variables in which both learners and teachers are taking an active role. This is supported by literature such as Boschee and Baron (1993:2), who argue that teachers and learners should share the responsibility of assessment for learning purposes. The literature review in chapter four further supports this idea by stating that, in Outcomes-based assessment, learners are given a chance to evaluate their strengths and weaknesses in learning, and teachers to examine their teaching effectiveness. Together, as partners in the assessment process, they are actively engaged in dialogue about learning and teaching. Seely (1994:4) feels that such assessment exercises can play a critical role in the academic lives of learners and in the professional lives of teachers.

Nevertheless the subsequent variables in this factor also have high loadings of eigenvalues of 0,60, and above. This also indicates that these variables received greater inputs from respondents. This is supported by the literature review, which revealed that, according to Willis and Kissane (1997:5), in the recent decade a considerable number of education systems around the world have undertaken processes of describing student outcomes quite explicitly in terms of the actual learning student should exhibit. This system is known as OBE and uses assessment strategies that enable students to demonstrate learning outcomes; hence the South African Education system is not excluded in this new system.

The literature study also indicated that OBE requires teachers to use assessment in the learners' best interest, so that assessment outcomes can communicate to learners

whether they have achieved the learning outcomes, allowing both teachers and learners to measure future progress (Wolfondale 1995:13). This idea must have attracted the attention of teachers in those variables of OBE.

Based on the high positive factor loadings, the fact that the question items have high eigenvalues ranging between 0,50 and 0.74, and the supporting literature, the following hypothesis of this study is supported:

Hypothesis 2. Assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools.

6.6.2 Results Of Rotated Factor Pattern Of Items Assessing Teachers' Views Regarding Traditional Evaluation Of Learners' Work And Its Influence On The Culture Of Learning.

All variables under factor two that loaded more than 0.30 eigenvalue relate to teachers' views regarding traditional evaluation of learners' work and its influence on the culture of learning. This factor and its variables are illustrated in table 6.7.

Table 6.7. Variables Represented By Factor Two

ITEM NUMBER AND DESCRIPTION		EIGENVAL UES OF ITEMS FOR FACTOR 2
V.52	In traditional evaluation teachers expected formal examination to be a mechanism of identifying talents and measure learners' performance.	0,60 782
V.50	In traditional evaluation teachers used classwork and official tests to check and balance work which had been done by them.	0,60 438
V.54	In traditional evaluation teachers were expected to be more active in preparation of the formal examination of learners.	0,59 526
V.49	In traditional evaluation teachers used homework and assignments to monitor instructional work in classes.	0,57 818
V.57	Teachers' evaluation of learners' work in traditional setting was examination driven.	0,57 306
V.51	In traditional evaluation teachers used classwork and official tests to support and encourage learners to perform better.	0,56 881



V.47	In traditional evaluation teachers used summative assessment results to show parents how their children were doing in schools.	0,56 810
V.59	In traditional education teachers used norm-referenced assessment to group and place learners according to norms, scores and achievements.	0,55 302
V.58	In traditional evaluation norm-referenced assessment was used to compare learners' performance with one another.	0,55 302
V.46	In traditional evaluation teachers used summative assessment to indicate their approval and disapproval on learners' work.	0,55 269
V.41	In traditional evaluation teachers were expected to ask questions checking whether pupils were listening to teachers in the learning environment.	0,55 128
V.48	In traditional evaluation teachers used formative assessment in order to make moment-to-moment decisions about pupils' learning.	0,54 996
V.44	In traditional evaluation teachers' assessment of learners' work had to ensure higher authorities so that standard policies of education are maintained.	0,54 138
V.55	Formal examination results in traditional evaluation were used to judge the pass and failure of learners.	0,52 554
V.53	Teachers in traditional evaluation believed that formal examination was an assessment tool of developing knowledge, skills and attitudes that learners would use when entering workforce or higher education.	0,52 447
V.56	Formal examination in traditional evaluation assisted teachers and departmental officials to select learners for secondary education and higher education.	0,51 834
V.38	In traditional evaluation of learners' work both evaluation and measurement were used as instruments to score and grade learners.	0,51 640
V.42	In traditional evaluation teachers were given opportunity to evaluate their instruction, by assessing the quality of learners' performance.	0,50 373
V.39	Teachers' assessment of learners' work in traditional evaluation used measurement and evaluation to ensure that teaching objectives have been transmitted well to learners.	0,46 544
V.36	Traditional evaluation of learners' work used reproductive evaluation strategies to assess knowledge as provided by text books.	0,46 396
V.35	Traditional evaluation of learners' work was based on the idea of well-defined criteria of right or wrong.	0,44 854
V.37	In traditional evaluation of learners' work teachers were given opportunity to make decisions about learners' performance.	0,44 854
V.45	In traditional evaluation teachers used formative assessment in order to make moment-to-moment decisions about pupils' learning.	0,43 061
V.43	Teachers' assessment of learners' work in traditional setting forced teachers to award good grades.	0,40 163
V.34	Traditional evaluation of learners' work is seen as a separate activity from teaching and learning processes.	0,33 437
V.40	In traditional evaluation of learners' work teachers were expected to identify specific strengths and weaknesses of learners in the learning environment.	0,32 811

<i>VARIANCE EXPLANATION OF THIS FACTOR</i>	7.88
<i>EIGENVALUE FOR THIS FACTOR</i>	10.83
<i>FINAL COMMONALITY ESTIMATES</i>	32.47
<i>TOTAL VARIANCE EXPLAINED BY FACTORS</i>	79,40%

<i>CRONBACH ALPHA RELIABILITY CO-EFFICIENT</i>	0,965598
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Table 6.7 summarizes the rotated factor pattern of item statements that assessed teachers' views regarding traditional evaluation of learners' work and its influence on the culture of learning. This table reveals that this factor is most strongly correlated to two variables: V52 - In traditional evaluation teachers expected formal examination to be a mechanism of identifying talents and measure learners' performance – has an eigenvalue; and V50 - in traditional evaluation teachers used classwork and official tests to check and balance work which had been done by teachers. These two variables have eigenvalues of 0.60 782 and 0.60 438 respectively .

However the eigenvalue of these variables also correlate highly with one eigenvalue variable in factor one. This variable in factor one is V97, which is 'in OBE criterion-referenced assessment is used by teachers to assess learners' work against set standards or criteria'. This variable carries an eigenvalue of 0,60 784 (see table 6.7 – item V.97).

These two variables' eigenvalues from factor two are not only highly correlated to the eigenvalue variable linked to factor one (V.97), but also showed closed homogeneity. All three variables stress that teachers assess learners against certain criteria. For example in factor one, teachers assess learners' work against set standards, and in factor two teachers expect classwork, tests and examinations to measure learners' performance. Therefore an assumption could be made that this might have influenced the respondents, as a result these variables accumulated more eigenvalue.

Nonetheless there is much evidences in the literature which shows that in traditional evaluation, teachers used certain techniques to measure the successes and failures of learners. Generally teachers used classwork and tests as preparatory exercises, which teachers believed would help learners to perform well when the official tests and public examinations are conducted. King and Van den Berg (1992:22) also assert that teachers only used tests and classwork to measure whether learners will meet the criteria of final examination, consequently tests and classwork were used as an assessment criteria to judge whether learners would be successful or fail in the final examination. This is why

Taylor and Vinjevoid (1999:108) argue that in no means does this assessment attempt to elicit excitement and interest of learning which form the basis of the culture of learning.

Factor two has an eigenvalue variable of 0,59 526, that is V54 which describes that in traditional evaluation teachers were expected to be more active in preparation of the formal examination of learners. In factor one another variable has accumulated 0,59 706 eigenvalue, (see table 6.7 – V82). These two eigenvalues are more or less the same, however the factor one variable describes that performance-based assessment empowers learners to perform beyond the information that has been taught by teachers. The researcher therefore considered why respondents reacted similarly to these variables. It was assumed that the respondents might have been influenced by the fact that in traditional evaluation teachers take on an active role in preparation for the formal examination. In contrast, in performance-based assessment learners can perform more than what the teacher has prepared him or her for. As a result respondents could have taken it for granted that what learners do is due to the active role played by teachers.

However, there is substantial evidence in the literature to show that teachers in traditional evaluation adjusted teaching to enable learners to perform very well in examinations, in order to score the highest marks. As a result memorization as an assessment method was used in order to help learners to yield orthodox answers in a reproductive way (Wiggins 1998:4). Nkomo (1990:332) believes that this deprived learners of the opportunity to make sense of the experiences that they gained during teaching and learning, hence it has a minimal contribution to the culture of learning, since learners were only expected to demonstrate higher performance only in the final examination.

Another variable in factor two had an eigenvalue of 0,54 138 (see table 6.7 – V.44). This variable explains that in traditional evaluation teachers' assessment of learners' work had to ensure higher authorities that standard policies of education are maintained. In factor one another variable had an eigenvalue of 0,54 246, (see table 6.6 – V.60). It explains assessment of learners' work in OBE as an integral part of teaching and learning processes. These two eigenvalues are highly correlated, which means respondents reacted similarly to these variables. Hence the researcher analyzed the similar reaction of the respondents to these variables. The assumption was made that,

respondents had been influenced by the use of assessment of learners' work in both V44 and V60, (see both table 6.7 and 6.6 – V44 and V60). In both item statements, assessment of learners' work has been used, although in different contexts, but this might have influenced the respondent to react similarly.

However, there is again ample evidence in the literature to support the idea that assessment of learners' work both in the OBE system and in traditional settings differs to a very greater extent. According to Wiggins (1998:3), Outcomes-based assessment is often unobtrusive to students and teachers, and is visually indistinguishable from what takes place during good teaching and learning. This indicates that assessment in OBE is an integral component of teaching and learning. On the contrary, literature in chapter one of this study revealed that, in traditional evaluation, teachers continued assessing learners' work at the end of learning experiences, which was very narrowly focused on the type of external examination. This is why Chisholm (1999:8) and Jansen (1999:37) assert that such a reason for assessment only encouraged rote learning, recall of information, and teachers regurgitating learning content to learners for the purpose of final examination. These assessment methods discouraged teachers to instill an interest of learning amongst learners, hence they were of little effect on the culture of learning.

The eigenvalue variables of factor two are less loaded in comparison to the eigenvalue variables of factor one (compare tables 6.6 and 6.7). This shows that the varimax method of rotation applied in this study obtained as many high positive loadings for factor one. However, there are four variables which have highly correlated eigenvalues for both factors, (see V.54 in table 6.7 and V.60 in table 6.8 and see V.44 in table 6.7 and V.60 in table 6.8)). Nevertheless factor one still has more highly loaded eigenvalue variables, which indicates that factor one variables obtained high responses from the respondents.

In the four highly correlated eigenvalue variables for both factor one and two, indications in the literature give reasons that OBE assessment strategies contribute more effectively to the culture of learning than traditional evaluation of learners' work. As a result the following hypothesis of this study has been supported:

Hypothesis 1. An assessment system built upon the traditional evaluation methods has a detrimental effect on the development of a culture of learning in schools.

6.6.3 Results of Rotated Factor Pattern Of Items Assessing Teachers' Understanding Regarding Assessment And Its Influence On The Culture Of Learning

All variables under factor three which loaded more than 0.30 eigenvalue relate to items concerning teachers' understanding about assessment of learners' work and its influence on the culture of learning. This factor and its respective variables are illustrated in table 6.8.

Table 6.8. Variables Represented By Factor Three

ITEM NUMBER AND DESCRIPTION	EIGENVALUE OF ITEMS FOR FACTOR 3	
V.28	Teachers' assessment of learners' work assist principals to see that assessment is an adequate evaluation mechanism.	0,62 852
V.25	Teachers' assessment of learners' work assists learners to monitor progress of learning.	0,60 042
V.27	Assessment of learners' work indicated to principals that teaching and learning are monitored in schools.	0,59 302
V.22	Teachers' assessment of learners' work allows learners to see assessment as part of teaching and learning.	0,58 997
V.24	Teachers' assessment of learners' work assists learners to see that teachers can identify learners' learning problems.	0,58 968
V.26	Assessment of learners' work assists principals to share decision task with teachers regarding learners' work.	0,58 543
V.32	Teachers' assessment of learners' work enhances learning contact between parents and children.	0,57 803
V.30	Feedback of assessment of learners' work to parents, enables parents to play an active role in the education of children.	0,57 704
V.21	Assessment assists learners to review their own learning and look at better ways of improving learning.	0,57 081
V.31	Teachers' assessment of learners' work and feedback to parents create a positive relationship between parents, learners and teachers.	0,56 834
V.23	Regular assessment of learners' work enhances learners' perception of success.	0,56 060
V.19	Teachers' assessment of learners' work contributes to collaboration and caring between teachers and learners.	0,54 940



V.29	Assessment of learners' work ensures that principals will allocate enough time for assessment purposes.	0,54 275
V.33	Assessment of learners' work involves parental decision with regard to information of assessment.	0,53 691
V.20	Assessment assists teachers to review information taught to learners.	0,52 309
V.17	Good assessment of learners' work promotes a positive attitude towards learning amongst learners.	0,51 343
V.18	Frequent assessment of learners' work allows teachers to intervene with remedial teaching at an early stage.	0,47 741
V.16	Teachers' assessment of learners' work enables learners to think critically and develop problem-solving skills.	0,47 654
V.15	Good assessment of learners' work contributes to the culture of learning.	0,41 637

<i>VARIANCE EXPLANATION OF THIS FACTOR</i>	7.25
<i>EIGENVALUE FOR THIS FACTOR</i>	7.55
<i>FINAL COMMUNALITY ESTIMATES</i>	32.47
<i>TOTAL VARIANCE EXPLAINED BY FACTORS</i>	79,40%
<i>CRONBACH ALPHA RELIABILITY CO-EFFICIENT</i>	0,965598

This table 6.8 illustrates item statements about teachers' understanding regarding assessment and its influence on the culture of learning. This forms the third factor of this study that has been extracted by factor analysis applied in this study.

The first two variables of this factor show a loading of high eigenvalue. This indicates that respondents gave serious consideration to these variables. The first variable V.28 has a high eigenvalue of 0,62 852: teachers' assessment of learners' work assists principals to see that assessment is an adequate evaluation mechanism. This variable received high positive responses from respondents.

Based on this, it was assumed that teachers gave this variable high input as many teachers believe that assessment results give principals a reflection that effective teaching and learning does take place in their schools. However there is a paradigm shift in this study with regard to assessment. Teachers in the OBE system are expected to use assessment strategies to indicate that effective teaching and learning is taking place for the improvement of the culture of learning (Siebörger and Macintosh 1998:21). Hence principals would also be expected to promote assessment as an adequate evaluation mechanism to ensure that learners achieve outcomes of learning for the benefits of the culture of learning.

In the literature study numerous data revealed that principals would be expected to ensure that desired outcomes of learning are achieved by learners (Pretorius 1998:102). However, principals in isolation cannot use assessment to assist learners to achieve the desired learning outcomes. It is suggested that an ideal management style for OBE is to regard teachers as a management team, which should be involved with regular assessment of learners' work, and where principals provide ample opportunities for teachers to develop high quality assessment strategies. Principals could therefore share in the assessment decisions taken by teachers and learners. This could promote co-operation between learners, teachers and principals, and possibly the culture of learning could be attained.

The second variable is V.25 with a high loading eigenvalue of 0,60 042, (see table 6.8 V.25). This item is 'teachers' assessment of learners' work assists learners to monitor progress of learning'. In the analysis of this variable, the researcher assumed that the reason which could have influenced respondents to give high responses to this variable is that teachers assist learners through assessment in order for learners to monitor progress of learning.

On numerous occasions in the literature review, educationalists have persistently and consistently argued that teachers become thrilled in any didactic situation where learners consciously monitor their own learning in order to tap progress of learning, (Airasian 1994:149). Hence teachers' assessment promotes self-assessment that motivates learners to know how they are performing, and to make time for improvement. This results in a form of assessment which carries an active ingredient on the part of the learner, which could possibly enhance the culture of learning.

The subsequent variables in this factor also shows a loading of high eigenvalue of 0,50, and above, and of 0,30, and above, which indicates that they have received a large proportion of responses from the respondents. This suggests that a varimax method of rotation obtained many high positive loadings for this factor. Hence the high positive loadings of factor three variables and the substantiated evidence from literature lead to the rejection of the null hypothesis of the study:

Null Hypothesis No distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools.

6.7 SUMMARY

The biographical data of the respondents of this research study was given and explained in this chapter. This was followed by the interpretation of the responses of the data of the research questionnaire, whereby a principal factor analysis with a varimax method was applied to extract the possible factors of this study.

The three principal component factors extracted were:

- Items assessing teachers' views about Outcomes-based education assessment strategies and their influence on the culture of learning
- Items assessing teachers views regarding traditional evaluation of learners' work and its influence on the culture of learning"; and
- Items assessing teachers' understanding regarding assessment and its influence on the culture of learning.

Each factor was extracted with its own eigenvalue. Then the statistical procedure was applied to ensure that all eigenvalue variables are above 0,30 eigenvalue, since this was a deciding means for the eigenvalue variables. This was followed by the analyses of the statistic of the eigenvalue of variables of the respective three factors, in order to determine how they contribute to the significance of this study. Then empirical explanations were given to support the statistical results. The three extracted factors and their eigenvalues and the empirical explanations supported both the statistical results of this study, and also the hypotheses of this study.

A summary of findings and recommendations as a result of the survey will be given in chapter seven, as well as a critical view of this study.

CHAPTER 7

OVERVIEW AND SUMMARY OF THE MAIN FINDINGS EMERGING FROM THE EMPIRICAL INVESTIGATION, RECOMMENDATIONS, IMPLICATIONS AND CONCLUSIONS OF THE STUDY

7.1 INTRODUCTION

In chapter 1 the problem was stated that the traditional and current problem in education has been to develop effective strategies of evaluation and assessment of learners' work in schools, due to the reason that assessment is a powerful tool in education and training (Pretorius 1998:2; Nolan 1997:12; Phele 1997:8 and Smit 1995:57). However, in the past its influence has been underrated by both teachers and learners. Assessment was always regarded as judgmental with tests and examinations. These tests and examinations were largely content-based and comprised of closed questions which required learners to memorize information, and they also took place at the end of a section of work or at the end of the term (Clarke 1996:23). As a result these traditional strategies of assessment did very little to promote a sound culture of learning in many schools.

On the other hand there has been an advent of new assessment strategies which will lead teachers at all levels to question their past assessment practices, and start learning about new ways of assessing which are compatible with the principles of Outcomes-based education (Killen 2002a:1). One of these principles is that assessment practices are the most effective way of influencing the quality of student learning (Coetzer 2001:81).

In order to obtain more information on this problem, a literature survey was conducted to glean as much possible information about teachers' assessment of learners' work and

its influence on the culture of learning. The literature survey is presented in chapters two, three and four.

The research design was explained in chapter five. The empirical data, analysis and interpretation of information were given in chapter six. Factor analysis was applied, the main purpose of which was for the factorization of the items of the questionnaire to assess the construct validity, and clustering of the variables. The principal component factor analysis verified the existence of the number of variables influencing teachers' assessment of learners' work and its influence on the culture of learning (see chapter 6).

In this chapter the main findings are summarized, recommendations and implications of the research are given, and conclusions are drawn.

7.2 OVERVIEW OF THE RESEARCH STUDY

The following variables in the literature survey were studied in order to investigate whether teachers' assessment of learners' work has the potential of promoting the culture of learning in schools.

7.2.1 Teachers', Learners', Parents' and Principals' Understanding Regarding Assessment And Its Influence On The Culture Of Learning

In chapter two literature revelations distinctively showed that teachers need not perceive assessment as an instrument of ranking or for judging learners as to whether they "can do" or "cannot do" (Satterly 1989:5). Rather, teachers should perceive assessment as a collaborative and caring pedagogical instrument that will enable and motivate learners to build on their strengths and weaknesses in order to achieve the desired learning outcomes. If teachers can view assessment in this light, Popham (1995:19) believes that learners cannot regard assessment as a gauging instrument for the amount of content of work that has been taught by their teachers. Seen in this light, assessment could

possibly motivate learners to continue with learning, and develop a positive attitude towards the culture of learning.

Although teachers are regarded as regular assessors, the literature study did indicate that assessment involves shared decision-making amongst principals and teachers in schools (Stiggins and Conklin, 1992:31). Principals who share assessment decisions with teachers enrich their own ideas about assessment. In addition, when assessment decisions are shared at schools, learners are more likely to accept the results of assessment. This could increase learners' co-operation towards the achievement of the culture of learning.

Generally assessment of learners' work is described as something that is done by teachers to learners only. However Ryna (1994:43) indicates that parents are now being invited to take part in assessing their children's growth and progress in schools. Mashile and Mellet (1996:223) also concur that parental involvement with regard to assessment probably lessens the pedagogical deprivation and promotes intrinsic motivation. When learners realize that their parents are involved with assessment and take it seriously, learners will also regard assessment to be important, hence the culture of learning could be promoted.

7.2.2 The Nature And Types Of Traditional Evaluation Strategies And Its Influence On The Culture Of Learning

In numerous literature studies discussed in chapter three, indications are that throughout the history of education teachers have been involved with assessing and evaluating the work and progress of learners. However King and Van den Berg (1992:18) argue that, in the South African education system, assessment was never used to motivate and diagnose learners' problems. It was narrowly focused on the type of final examination that will be written, consequently such an assessment presented a very different face, whereby teachers willingly or unwillingly sort out learners for the preparation of final examination.

According to Rensburg (the Citizen, 4th November 1998), this was the traditional system of assessment, which only concentrated on evaluating learners mainly to control the end-of-year examinations (see chapter three). Again this type of assessment only encouraged learners to be in competition with one another, by creating a buffer zone between inferior learners and superior learners; the superior ones would be learners who uncritically recalled and regurgitated subject-content and strongly believed that success depended more on memorization and recall of facts than any other thing (King and Van den Berg 1992:21).

Basically this shows that traditional assessment used reproductive evaluation strategies to assess knowledge as provided by textbooks. This indicates that paper-and-pencil, tests, examinations and assignments, which teachers scored and assigned grades to learners' performance, were the only formal instruments of assessment. Airasian (1989:5) believes that it helped teachers to understand their pupils, monitor learners' learning and establish a viable classroom culture of learning.

Such nature of assessment indicates that examination was put forward as a huge hurdle with secrecy and mystique, Teachers were forced to continuously use assessment measures entirely to provide learners with coping strategies for the external examination (King and Van den Berg 1992:19). Such assessment methods did not cater adequately for the development of learners, and also had little contribution towards the culture of learning (see chapter one).

This suggests that teachers were frequently applying assessment instruments which would only help learners to master learning content and specific knowledge in a reproductive way. Avenant (1990:219) indicates that teachers use measurement and evaluation as compasses to determine whether teachers were going in the right direction of assisting learners to master learning content and knowledge as would be expected in the final examination. Teachers were geared toward using assessment in the learning environment to measure and evaluate teachers' instructional objectives, and whether they were still aligned well with the prescribed content syllabus. By doing so, teachers would complete the work efficiently, and learners thereof could yield back orthodox answers in a perfect reproductive way (Airasian 1989:125).

The evidence in the literature further indicates that, although formative assessment was used by teachers in a traditional setting, it did not correctly serve the purpose of giving teachers clues about the specific pupils' problems of learning in order to devise ways of supporting learners (Airasian, 1994:135). Instead formative assessment was used as an evidence-gathering strategy to convince the bureaucrats of education departments and parents that learners are taught and well prepared to sit for final examinations. These were mostly summative assessment that, according to Satterly (1989:7), supplies a sort of seal of approval or disapproval on learners' performances (see chapter three).

This is why many researchers feel that home-work, assignments, classwork exercises and official tests were used by teachers to reinforce and enrich their teaching objectives. This was so that learners could perform well in the public examination, and achieve the set standards or norms in order to be compared well with their peer group (see chapter three). Such an assessment approach contributed very little to the culture of learning.

In numerous literature surveys, indications are that most assessment work in the traditional approach was not specifically used as an integral part of teaching and learning processes. The system of traditional assessment forced teachers to continually assess learners focused on the outcomes of final examination (Malan 1997:33).

Nevertheless Van der Horst and MacDonald (1997:27) strongly believe that many excellent teachers in traditional education have employed methods purported to assist learners to use knowledge, skills, attitudes and values. These helped learners to be active and valuable participants in creating a better future for themselves and created a better country for all the citizens. These are teachers who have placed a high priority on learner participation and who have encouraged learners to think and solve problems. Although the old curriculum was content-driven, those teachers managed to guide learners to a deep understanding and appreciation of their subjects. They managed to develop the skills required for research in subject areas and motivated learners to become thoughtful and skilled people. However, they were few in number, hence very few learners benefited.

7.2.3 The Nature And Types Of Outcomes-based Assessment Strategies And Their Influence On The Culture Of Learning

Literature on Outcomes-based Assessment revealed a variety of variables which normally contribute to the success and achievement of the culture of learning. According to Olivier (1998:37) assessment approaches in OBE has moved its focus from being mainly judgmental, and also not only concentrating on the achievement of learning outcomes, but Outcomes-based Assessment also considers supportive traits of promoting learning and teaching activities. This shows that Outcomes-based Assessment is a process which is often unobtrusive to students and teachers, and is visually indistinguishable from what takes place during teaching and learning (Wiggins 1998:3).

This shows that it is a system of assessment that is destined to improve learners' performance in learning. It is primarily meant to educate and improve learners' performances; this indicates that it has good features of promoting the culture of learning. Wiggins (1998:4) further supports this idea by citing that "Outcomes-based Assessment gives students the kind of challenges, diversity and flexibility that makes assessment more realistic, by enabling learners working together with their teachers critiquing one another's opinion or writing, hearing debates and even making presentations in group discussion." Such methods of assessment resemble the way learners will be expected to use their knowledge and skills in the real world (see chapter four). It therefore can build the culture of learning amongst learners.

This simply points out that Outcomes-based Assessment does not expect only a few learners to achieve outstanding performance, but its intention is to see all learners become successful in accordance with their varying potentialities. Its intention as Wiggins (1998:11) puts it is to "maximize learning on worth tasks that require enduring knowledge and skills." This approach of assessment is against assessing micro-skills and isolated bits of information, which promotes reproductive learning. Spady (1994a:50) believes that such assessment gains are usually quickly forgotten by learners once assessment is completed.

This suggests that assessment would be ever more central to the teachers' task. The literature has introduced new operational terms for implementing assessment as a central task for teachers. This was part of South Africa's "brave new world" (report of Review Committee on C2005, 2000:33). These new concepts are explained as follows in relation to assessment: that learners will be expected to achieve critical-cross-field outcomes to ensure that learners gain skills, knowledge and value; learners will attain specific outcomes which are derived from the different learning areas – which inform the demonstration of assessment of an outcome. All outcomes will be associated with assessment criteria which will indicate in broad terms the observable processes and products of learning, which serve as culminating demonstrations of the learners' achievements. The assessment criteria do not themselves provide sufficient details of exactly what and how much learning marks an acceptable level of achievement of the outcome. For this reason the assessment criteria are explained and detailed in the performance indicators and range statements (report of Review Committee on C2005, 2000:36). Through all these concepts and approaches of Outcomes-based Assessment, it is believed that it can enable learners to achieve unit standards that are nationally and internationally registered (Van der Wagen and Ridley 1997:13).

In view of the nature of OBE, new assessment strategies and approaches have emerged in the last few decades. These alternative assessment strategies have been taken into consideration, that assessment needs to move away from the emphasis of summative assessment as a single event, to developmental assessment which is an ongoing process. This will help learners to develop an ability of identifying learning problems and monitor progress of their own learning (Staatkoerant 1998:17).

Such an assessment would be an inseparable entity in teaching-learning activities. The literature survey has pointed out the following assessment strategies and approaches, as forming the categories of Outcomes-based Assessment namely: Performance Assessment; Portfolio Assessment; Self-Assessment; Peer Assessment; Continuous Assessment; and Criterion-Referenced Assessment (see chapter four). In several instances the literature survey indicated that the pay offs of these assessment strategies are that teaching, learning and assessment are inextricable in any learning-teaching situation. The result is that appraisal of learners' work becomes a central focus of the instructional program (Seely 1994:57). This indicates that such assessment strategies

have both the pedagogical positive persuasions, which underpin the vitality of the culture of learning.

7.3 MAIN FINDINGS EMERGING FROM THE EMPIRICAL INVESTIGATION

Following the main findings from the literature survey, the researcher will now discuss the findings emerging from the empirical investigation.

The empirical data of this study was subjected to factor analysis. The researcher did not only allow for the extraction and identification of important variables regarding teachers' assessment and its influence on the culture of learning. Through factor analysis three sets of factors and their respective variables were established in order to construct significance and interpret teachers' perceptions concerning the assessment of learners' work and its influence on the culture of learning. The following three factors were identified, namely:

- Teachers views about OBE assessment strategies and their influence on the culture of learning;
- Teachers' views regarding traditional evaluation of learners' work and its influence on the culture of learning; and
- Teachers' understanding regarding assessment and its influence on the culture of learning.

The first factor regarding Outcomes-based Assessment strategies accumulated the highest eigenvalue of 54.34 and its variables loaded eigenvalues of between 0.73 and 0.50 (see table 6.6). These were the highest loadings of eigenvalue in this study. The higher factor loadings therefore supported the assumption that teachers conceptualized the underpinning phenomena addressing OBE. They could therefore draw a clear distinction between Outcomes-based assessment policy and the traditional phenomena underpinning traditional product driven assessment practices. It was therefore assumed

that teachers are aware that Outcomes-based Assessment strategies could play a vital role in promoting the culture of learning.

This assumption is supported by various literature on numerous occasions. For example, Wolfondale (1995:13) argues that OBE uses assessment in the learners' best interest, because the outcomes of learning communicate to learners whether they have achieved expected outcomes. Assessment results are used by both teachers and learners to measure future progress. Assessment here does not only test and examine the knowledge content that has been taught, but it also tends to be diagnostic and prognostic in nature. This could motivate learners to learn and in this way the culture of learning is likely to be promoted.

The results of the empirical analysis indicated that teachers reacted very positively to the question items that supported OBE assessment strategies (see table 6.3). Teachers also agreed positively to statements indicating that traditional evaluation considered teachers to be the only people responsible for assessment and evaluation in schools. Assessment in this context appears to have been applied by teachers to confirm their instructional objectives, and disregarded possible benefits to learners from teaching and learning experiences.

The results of the highest accumulated eigenvalue of 54.34 (See 6.3.5.1) for factor one is due to the reason that teachers held strong views about the OBE assessment approach. This is supported by the fact that a greater proportion of respondents in the sample indicated that they became interested in assessment through the information they received from departmental workshops (see section 6.6). These data indicate that **Hypothesis 2** is supported which states that assessment strategies built upon an Outcomes-based assessment policy are more effective in contributing toward the development of a culture of learning in schools

The second factor relates to teachers' views regarding traditional evaluation and its influence on the culture of learning. This factor had accumulated an eigenvalue of 10.83. This is far lower than the eigenvalue of the first factor, and its variables only accumulated eigenvalues of between 0.60 and 0.32 (see table 6.7). For statistical purposes, it was accepted that respondents gave enough inputs in this factor.

It was assumed that respondents did not give high inputs in comparison with the first factor. The reason for this is thought to be that teachers are beginning to realize that traditional evaluation practices are generally associated with non-transparent governance structures, teacher-centered teaching, authoritarianism, rote-learning, an obsession with content, lack of integration between education and training, rigid divisions, and punitive formal examinations designed to yield high levels of failure. It would be clear to teachers, if given a framework of OBE assessment strategies, that the traditional product-driven assessment strategies represent unpedagogical practices. The literature survey also indicated that traditional assessment basically used reproductive evaluation strategies to assess knowledge as provided by. Again teachers were continually and narrowly assessing learners only for the benefit of the end-of-year examinations, not to motivate learners to master skills and develop positive attitudes towards learning. As a result this type of evaluation minimized opportunities for promoting the culture of learning.

The results of the empirical analysis indicate that teachers have a perception that assessment in the traditional setting was a tool narrowly used by teachers to prepare learners to succeed in final examinations. This is based on the high positive responses from respondents to question items that consider traditional evaluation to be a preparatory educational instrument applied by teachers to ensure that learners become successful in examinations (Table 6.7). As a result this indicates that assessment was not applied as part of teaching and learning processes, it was used only to determine whether learners have memorized the subject content, in order to yield orthodox answers in the final examinations. Hence the culture of learning in such situations was not effective.

The results of the lower accumulated eigenvalue of 10.83 (See 6.3.5.2) for factor two when compared with the highest accumulated eigenvalue of 54.34 for factor one support **Hypothesis 1** which states that an assessment system built upon the traditional evaluation methods has a detrimental effect on the development of the culture of learning in schools.

The lesser loading on factor two is possible due to the reason that many item statements in the questionnaire probed that assessment in the traditional setting was based on the

idea that assessment was used by teachers in order to rank and judge learners as extracted from the literature. It appears as though teachers received the same information from workshops, which were departmental attempts to introduce OBE assessment policy in schools. Respondents might also have been influenced by the media, which was also a mouthpiece used by the department to propagate that OBE assessment is more effective than traditional evaluation.

The different results of the accumulated eigenvalues for factor one and two, through factor analysis, enables the researcher to reject the Null hypothesis (**Hypothesis 3**) of this study, which stated that no distinction can be drawn between teachers' perceptions regarding the impact or influence of traditional evaluation methods and teachers' perceptions regarding the impact or influence of Outcomes-based assessment strategies on the culture of learning in schools

The results of the empirical analysis show that teachers are beginning to have strong views about the differences between traditional evaluation methods and OBE assessment tools. This is supported by table 6.6 accumulating a higher eigenvalue than table 6.7. Another strong reason could be that teachers are now trained about old evaluation methods, that are believed to be teacher-centered, and also about the new styles of OBE assessment, that are believed to learner-centred. Hence teachers are now holding strong convictions about the distinction between traditional evaluation methods and OBE assessment strategies.

The third factor relates to teachers' understanding regarding assessment and its influence on the culture of learning. This factor has a loading eigenvalue of 7.55, which is lower than that of the other two factors. Nevertheless, for the statistical analysis purpose of this study this factor was accepted. However an assumption was made that respondents did not give sufficient responses in this factor, because it is generally known that teachers do not understand the operational meaning of the word "assessment" in an educational context (see chapter one). Satterly (1989:1) supports this idea when he argues that teachers generally associate educational assessment with ranking and evaluation of learners' work. Further support for the supposition that teachers always link assessment with evaluation, is that respondents gave higher inputs in V.28 in the questionnaire. This variable loaded an eigenvalue of 0.63, which was the highest

eigenvalue variable for factor three. This variable explains that teachers' assessment of learners' work assists principals to see that assessment is an adequate evaluation mechanism (see table 6.8 – V.28).

Furthermore Russell and Willinsky (1997:188) argue that teachers base evaluation on the framework of vocational or educational placement, and use formal assessment of learners to account to various audiences in appropriate fashion concerning the programs of the school. The key reason was that teachers have traditionally been considered accountable for a curriculum for which the content was prescribed, and assessment patterns were established to determine the extent to which students had achieved the objectives of the prescribed programs. This is the reason why teachers have given a higher proportion input regarding teachers' assessment of learners' work to assist principals to see that assessment is an adequate evaluation tool. However House (1973), as quoted by Russell and Willinsky (1997:188), points out that the implementation of a tight managerial model of evaluation is unlikely to result in improving teaching and learning.

Assessment is a vital component within didactic situations. However, in the results of the empirical analysis of this study, the factor relating to assessment received the lowest eigenvalue compared to the other two extracted factors (see tables 6.6, 6.7 and 6.8). In table 6.8, which discussed all variables related to assessment, the variable that directly and openly probed the idea that assessment of learners' work contributes to the culture of learning accumulated the lowest eigenvalue in comparison to all other variables in table 6.8. Literature studies have indicated that for curricula to be well implemented in schools, assessment needs to be aligned with all curriculum activities. This is needed to assist both teachers and learners to know the direction that they are heading in the teaching and learning environment.

This implies that teachers do not recognize the inextricable linkage between teaching-learning processes and assessment. Clearly much needs to be done in order for teachers to understand the pedagogical meaning of the concept of assessment within the didactical situation.

7.4 RECOMMENDATIONS AND IMPLICATIONS

It is evident from the empirical investigation that teachers perceive assessment of learners' work to have greater potential in contributing to the culture of learning. In order to increase teachers' assessment effectiveness with regard to learners' work for the promotion of the culture of learning in schools, the following recommendations are made:

7.4.1 Classroom Assessment Practices

Assessment in a teaching and learning situation need not be a single event performed by teachers only at the end of learning experiences, in order to ascertain that learners can only remember and recall the factual information which has been taught. This only assists teachers to gauge whether they have achieved instructional objectives, and allows learners to reflect on the content which has been taught. Such assessment or evaluation is only geared to determining to what extent learners are able to master, remember and recall the learning content (Olivier 1998:20). Such a system of assessment does not prepare students for real life and for lifelong learning, because learners are scored according to their ability to reflect, remember and recall, and then passed or failed according to set procedures and criteria.

Assessment needs to be viewed by both teachers and learners as an inseparable activity in teaching and learning processes. Teachers need to regard assessment as a curriculating process, which determines how learning should empower learners through the achievement of learning outcomes. They should also regard assessment as part of guiding and evaluating the learning processes. Assessment needs to focus on knowledge and skills in the learning process that will enable learners to achieve the final results. Learners exposed to this approach of assessment have the benefit of mastering methods, techniques and procedures which relate to real-life work and which can be repeated in new contexts.

The factor analysis of this study also revealed the respondents' homogeneity of responses regarding certain issues related to OBE assessment strategies and traditional



evaluation methods. The assessment practices which were traditionally used for the knowledge and input-based education and training system are still useful in OBE assessment. Siebörger and Macintosh (1998:42) stress that outcomes of learning do not exist without traditional content knowledge. However, the main emphasis with OBE is that learners would also have to do something with the knowledge. This suggests that exit level summative assessment (examinations), and norm-referenced assessment (grading and averaging) will still be used as part of a more integrative assessment

Therefore, it is recommended that the teachers' assessment practices should acknowledge and extend the substantial body of knowledge on principles of sound assessment practices that can be found in any recognized texts on various subjects. Consequently, teachers would possibly apply fair assessment practices, or practices that could produce reliable evidence which may be interpreted in valid ways, thus having more chances of contribute to the culture of learning in schools. The sound assessment practices revealed the learners have learned, teachers have presented their lessons well, and they have adequately used the appropriate methods and the relevant materials.

Osman and Kirk (2001:179) point out that assessment is a continuous process of shaping and reshaping, hence an appropriate blending of old and new methods of assessment is recommended in a learning environment. OBE makes use of formative and summative assessment methods, just like traditional evaluation, however these methods in OBE have been reshaped and redesigned. For example in Outcomes-based assessment results collected initially for formative assessment, can be used for summative assessment with the agreement of the learner. This will prevent having to assess outcomes twice.

Therefore the notion of summative assessment in OBE does not confine this assessment method to a written examination that can only assess a sample of learning within a limited time (SAQA, Quality Assurance And Development, Unit Standard And Qualification, 2001a:33). Instead it allows for the use of a range of assessment methods including inter-alia: observation, product evaluation, written and oral questioning. It also allows a range of assessment instruments such as practical role plays, written assignments, texts, examinations, demonstrations, projects, case studies, and simulations. These assessment methods and instruments are administered when learners are involved with teaching-learning processes, and also when learners have gone

through the learning programmes and are ready to be assessed. These assessment strategies are applicable to both formative and summative assessment with the proviso that the assessment methods and instruments match what is being assessed, so that appropriate and sufficient evidence is collected for declaration of competence, so that credit can be given to the learner.

The implications of classroom assessment are the promotion of learners' participation in the practices of learning and teaching activities. According to Morrow (2001:103), to learn a practice is to become a participant, or a more competent participant in the practice. Then through classroom assessment practice, teachers will show the extent to which the learner is satisfactorily engaged in the learning practice. It is therefore recommended that teachers, through assessment, should make learners participants in the learning environment, for the promotion of the culture of learning.

7.4.2 National And Provincial Management Of The Assessment System In Schools

Departmental officials and other related educational assessors need to perceive themselves as learning facilitators who administer assessment in order to facilitate learning. Consequently, learners could regard assessment as part and parcel of learning and teaching activities. Robinson (2001b:156) clearly states that assessors need to acquire certain skills and expertise in order to be competent. These skills and expertise involve inter-alia good interpersonal skills, subject matter expertise and assessment expertise. Good interpersonal skills are recommended for teachers and other assessors in didactic situations. The reason for this is that assessors will have to communicate information and objectives for assessment. Learners will also need to share in this communication, hence interpersonal relationships need to be well developed in both parties. Teachers and departmental assessors need to conduct assessment fairly and with great integrity, to earn the trust of learners that they have the learners' interest of learning at heart, for the promotion of a culture of learning in schools.

It is again recommended that teachers and departmental assessors must be proficient in the subject matter of the learning areas which they are assessing. They should possess



unquestionable assessment expertise, which could allow them to follow the correct assessment process, i.e. plan and agree on the assessment with the learner, guide the learner in the collection of evidence, conduct the assessment, and finally, provide feedback to the learner about the assessment decision. Such skills and knowledge will be evident especially when teachers apply portfolio assessment techniques.

These recommendations clearly demonstrate that assessment is no longer something that is “done” to the learner, but something that the learner is actively involved in. As such, the role of the teacher and departmental assessor has changed: From being “Gate Keepers”, who use assessment to prevent learners from developing further, to a supportive guide who has the success of the learner at heart – so that the learner can gain access to further learning (SAQA Guidelines for the assessment of NQF Registered Unit Standards and Qualifications, 2001b:57).

This implies that departmental officials both at provincial and national level need to redouble their efforts to help teachers understand the fundamental transformation of assessment in schools. They need to understand that learners should no longer be assessed in order to reproduce the learned content or to ascertain that learning and teaching objectives have been achieved. Learners in the OBE system are assessed by the content that they have learned, which is central to skills, capacities and dispositions. Therefore the processes of learning and teaching need to consider all these valuable pedagogical structures in any didactic situation.

This calls upon teachers to be aware that distinguishing between presentation of content and assessment is only relevant in an analytic mode. In practice, presentation of content and assessment are intertwined, because they both relate to the process of learning. It is this type of teaching and learning which could possibly indicate to learners the skills, knowledge, values and capacities within the presented content. Hence such assessment strategies could enable learners to become practitioners in their own learning.

Departmental officials and other related Educational assessors have to decide on what part to take regarding this fundamental transformational assessment approach. Morrow (2001:89) states that “to gather the living flower of this new educational system, which is underpinned by assessment strategies for the promotion of the culture of learning.

Both national and provincial officers of education, need not to work in ivory towers instead they need to understand that they are not legislators but interpreters, who need to devote their intellectual energies to provide workable interpretations of OBE, and those who work in educational administrations must take on board the responsibility to implement OBE effectively- to make it work.” This means that departmental structures must consult appropriately with relevant stakeholders in order to develop immeasurable capacity regarding Outcomes-based Assessment policy.

7.4.3 Teachers’ Education And Assessment Systems In Schools

Maistry (2001:159) states “for many years South African schooling including teachers education has been driven by a terminal external examination system that is largely context insensitive”. This assessment system has had a profound influence on teachers - so much so that many have adopted a ‘teach-to-test’ pedagogy. The nature of the external assessment has, however, dictated a different set of expectations amongst teachers. This together with the repressive teaching context under which many teachers teach, has manifested itself in the development of unique coping strategies by many teachers, as a result the culture of learning and teaching has been hampered.

Research indicates that teachers’ education is based on subject-curriculum design. The culture of learning of the subject-based curriculum is to ensure that students not only acquire the knowledge of the particular sets of subjects, but that they also become proficient in the methodology by which such knowledge is generated, structured and evaluated. Each subject has its own particular value construct that informs it. Hopefully, students seeking to construct their own knowledge will do so using the preferred methodology and within the value parameters of the discipline. Student teachers had to be assessed formally in order to obtain a particular qualification. Consequently, student teachers had to memorize large blocks of information in textbooks in order to pass examinations. Thus teachers’ education in itself is also from an examination-orientated background.

The aforementioned evidence of teachers’ education shows the extent to which the doctrine of fundamental pedagogics has been internalized in teachers, and how it has manifested itself in an archaic notion of teaching, learning and assessment that prevails

amongst experienced teachers. Mainstry (2001:160) believes that fundamental pedagogics is based on the tenets of authority and control (with teachers as a dispenser of uncontested knowledge), and a centrally determined curriculum that emphasized rote learning of subject matter in teachers' education.

However in this research study it is recommended that the task of the teacher with regard to assessment centers on the creation and organization of a stimulating and rewarding learning environment for learners. This should seek to ensure learners' active and willing participation in their learning experiences (see chapter one). Teachers need to use assessment to enable learners to encounter theory and issues in the most practical way possible (see chapter two). Lastly, teachers need to apply assessment strategies and activities that will enable learners to analyze and interpret their learning content, in order to make value judgements and develop positive attitudes towards learning

This implies that teachers need to use assessment strategies to facilitate the process by which learners develop an appreciation and ability to participate in their respective environments of learning. This further emphasizes that what is crucial with assessment is that pupils are expected to analyze and discuss problems; this entails an understanding and appreciation of the purpose, procedures and rules of assessment discourse. This indicates that assessment knowledge is more a matter of "knowing how" as opposed to simply "knowing that". This suggests that no amount of listening to the teacher can ensure the internalization by the learner of the "knowing how". Good assessment involves learner-centered learning activities such as case studies, data-analysis, theoretical exercises and industrial visits. Brain storming, debate, investigations, decision-taking exercises, group work and presentations also have a valuable part to play in assessment, teaching and learning for the promotion of the culture of learning (see chapter four).

This system of assessment strategies clearly demonstrates that assessment is an inseparable entity from teaching and learning processes. This is why Airasian (2001:6) argues that it would take some skill and experience to use these sometimes time-consuming approaches. Nevertheless, literature study and the results of the empirical investigation of this study show that teachers' assessment of learners' work could possibly create a learning environment that is conducive to autonomous and co-

operative learning, which would facilitate a free flow of ideas, and encourage ongoing learning.

Teachers will have to plan and deliver instruction, and include decisions about what will be taught, how and when it will be taught, what materials will be used, how a lesson is progressing and what changes in planned activities must be made. These recommendations and implications on teachers' education and assessment systems in schools indicate that a lot more needs to be done in changing the old mindset of the teachers' education curriculum.

7.5 LIMITATIONS OF THE STUDY

The purposive sampling procedure and the structured question items in the questionnaire decreases the generalisability of findings. This study attempted not to generalise to all areas of assessment in schools. There are a number of areas that need to be assessed in schools. For example, Airasian (2001:6) cites that a first kind of assessment is used by teachers early in the school year to learn about their pupils' social, academic, and behavioral characteristics and needs in order to foster and enhance instruction, communication and co-operation in the classrooms. This assessment is called sizing-up assessment. Another kind of assessment is used by teachers when carrying out their official responsibilities as members of the school bureaucracy. Tasks such as grading, grouping, assessing progress, interpreting test results, conferencing with parents, identifying pupils for special needs placement and making promotion recommendations, are all part of the official responsibilities a teacher assumes as an employee in a school system. Such assessments are known as official assessment.

There are a number of challenges for teachers regarding assessment. Consider the situation in which a stakeholder, perhaps a national and state policy-maker, wants to set state and national standards, develop policies based on assessment, track the progress of national and state achievements, provide resources to improve learning and provide rewards or sanctions for pupils, schools and state achievements. They will look to what has transpired from the results of assessment in all these activities in school.

This is the reason why this research study confined itself to teachers' assessment of learners' work as an inseparable activity from teaching and learning processes in order to promote the culture of learning in schools. The researcher only gathered the theoretical data that considered the role of assessment regarding teaching and learning activities in the learning environment. Likewise the researcher also restricted his research methodology to questionnaires that only probed teachers' perceptions about assessment in the learning environment. Hence the field of study was demarcated to study assessment as an activity that manifested itself in the learning environment practiced by teachers and learners for the promotion of a culture of learning in schools.

7.6 SUGGESTIONS FOR FUTURE RESEARCH

In the recommendations and implications of this study in section 7.4.3, it is mentioned that there is a sharp contradiction between teachers' education and assessment of learners' work by teachers to improve the culture of learning. Teachers education is still driven by external examinations, which makes the teacher's position more difficult and challenging in an environment where teachers are expected to apply assessment as a strategy for promoting learning in a learning environment, so that learners will experience success in their learning situations.

Van der Vyver (2001:128) states that the examination driven education system of teachers encouraged student teachers to read the particular examination question and then dump memorized sets of information as their responses to obtain a particular qualification. Since teachers have been exposed to this type of context throughout their careers, they have tended to develop the same strategies in their respective teaching and learning situations. As a result they subvert assessment strategies that could assist learners to develop a positive attitude towards learning. They know that ultimately their learners will be measured by their ability to competently answer the external examination. The teacher's primary concern is therefore how best to prepare their learners for terminal examination. Consequently the teacher's main obligation to pupils

is to get them through the syllabus and to prepare them for the final examinations (see chapter three).

There must be a critical dialogue between teacher education institutions and education departments about the values or implications of these new OBE assessment strategies and approaches. Green (2001:129) believes that any change initiative in education has to engage with who teachers are, where they come from and where they perceive themselves to be going, since the emotional and cognitive well-being of learners depends on the emotional and cognitive well-being of teachers.

In chapter one in section 1.7.5 it was mentioned that the term ‘culture of learning’ is generally defined in terms of learners’ behavior at such institutions, but it needs to be recognized that most often learner behavior is determined by or is a response to teacher behavior. Therefore this research study postulates that there is a need for further research investigating the role of teachers’ colleges regarding Outcomes-based Assessment approaches and their influence in improving the quality of learning and teaching in schools.

Secondly, further research needs to be conducted into the problem of practising teachers who seem not to understand assessment functions with the didactical context. This problem was revealed in the empirical analysis, which showed that many teachers appear to lack a deep understanding about this concept. A particular gap was how assessment needs to be applied in the teaching and learning situation.

Thirdly, further research needs to be done regarding the relationship between formative assessment and summative assessment. Outcomes-based assessment policy appears to regard both formative and summative assessment as authentic assessment. On the contrary, the traditional evaluation school of thought only accepts summative assessment as authentic assessment. This has been revealed by literature studies on a number of occasion in this study.

Lastly, different assessment strategies have been studied in this research. However the study did not look at different assessment strategies for different learning areas. There is a need for future research to evaluate the application of different assessment strategies

for different learning areas. Seeing that the nature, content and scope of different learning areas vary, consequently their assessment strategies may not be the same.

7.7 CONCLUSIONS

The aims of this study were to determine in what ways did traditional assessment influence the culture of learning, and whether outcomes-based assessment practices have the potential to contribute to the establishment of the culture of learning in schools. These two aims were investigated initially through a literature review, and then through an empirical investigation. For the purpose of this study, the empirical investigation was restricted to a consideration of teacher's opinions/perceptions, it did not involve scenario based observations.

Literature studies revealed that teachers used traditional evaluation methods to ascertain whether instructional objectives were achieved in the didactic situation. It has been revealed that these methods always applied techniques that would allow learners to pass the end-of-year examination, and that would prepare learners to be ready for summative assessment. Hence these techniques were content-driven, only prescribing the pathway to be followed by learners in order to achieve good results at the end of the year. The teachers' responsibility was to drill subject-content in preparing learners for the writing of examinations. Any deviations either by teachers or learners suggested failure.

The results of the empirical analysis showed that traditional evaluation methods were teacher-centred. This was mainly because teachers were expected to 'deposit' the prescribed learning content 'into' learners, and learners were expected to be open receptacles ready to receive information from their respective teachers. Then if teachers felt that learners had well received the prescribed information they were passed; on the contrary whenever teachers felt that learners did not receive the information very well they were failed. This made teachers judge learners irrespective of the reasons that may have caused learners not to perform well. This approach appears to have discarded remediation and continuous assessment in the learning situation that could have signaled to teachers problems that learners were experiencing about the content to be learnt.

Both literature review and empirical results indicated that the OBE assessment policy attempts to apply assessment as part of teaching and learning processes. Several citations from the literature were made to indicate that assessment should not only be performed by teachers in the didactic situation. Instead, it should promote dialogue between teachers and learners about the subject-content, and enable learners to master skills, values, knowledge and good attitudes towards learning for the benefit of the culture of learning in schools.

The results of the empirical analysis revealed assessment in the OBE approach to be an element that makes teaching learner-centred. Assessment in OBE promotes interaction between teachers and learners, where teachers assist, guide and help learners to become inquiring participants, develop confidence, become open-minded, resourceful and task-committed individuals in the learning environment. The interaction between the teachers and learners develops the attitude for effective and productive thinking in the teaching and learning situation. The empirical results also indicated that assessment needs to promote interaction, which ensures that learners are active in the learning and teaching processes, not merely recipients of knowledge and information.

Such assessment advocates that teachers need to use assessment strategies that are clear and transparent in order to allow responsiveness and active participation of learners for the promotion of the culture of learning in schools.

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APPENDIX 1

1 Erika Avenue
Netherland Park
ERMELO
2351

Dear Colleague

I am currently investigating, teachers' assessment of learners' work and its influence on the culture of learning. The Mpumalanga Education and the Gauteng Education Department have granted permission to have the questionnaires circulated amongst teachers. The responses will be dealt with in strict confidentiality. Professor William Fraser, head of the Department of Teaching and Training Studies, University of Pretoria, is the research supervisor.

Would you kindly assist me in this endeavour. Since I believe that this research is of great importance to teaching and learning, it could possibly bring more clarity of learning through better assessment practices.

Approximately 25 – 30 minutes of your time is needed to complete the questionnaire. Thank you once more again for your friendly assistance.

- **PLEASE NOTE:**

This questionnaire should be returned to the address of the researcher, although in some districts and circuits, the researcher will collect the questionnaire, as arrangements will be made with colleagues in those offices.

Kind regards

Mr Lesson Ndiyase Vilakazi

Cell no: 082 954 7860

Work no: 017 – 819 – 3302/017 883 – 0474/6

Submission date: 23 October 2000



SECTION A: BIOGRAPHICAL INFORMATION

Kindly complete the following personal particulars by crossing the number in the appropriate book.

1. Respondent number
2. Card number 1

Office Use:

V1

V2

Province	<input type="checkbox"/>	
	<input type="checkbox"/>	
Mpumalanga		V3 6
Gauteng		
Gender		V4 7
Male		
Female		
Age		
20 – 24		
25 – 29		
30 – 34		
35 – 39		
40 – 44		V5 8
45 – 49		
50 – 54		
55 – 59		
60+		



Teaching experience	
Less than 5 years	
Between 5 and 10 years	V6 9
Between 10 and 15 years	
More than 15 years	
Your highest educational qualification	
Std 10 (Grade 12) or lower	
Post school diploma	
B-degree	V7 10
Degree plus a diploma	
Post graduate qualification	
In which of the following learning areas/fields of specialization do you mostly teach?	
Communication, literacy and language	
Numeracy and mathematics	
Human and social science	V8 11
Natural science	
Arts and culture	
Economic and management science	
Life orientation	
Technology	



Which of the following phases do you <input type="checkbox"/> mostly teach?			
	<input type="checkbox"/>		
Foundation phase			
Intermediate phase			
Senior phase		V9	12
Further education and training phase			
In which language do you mostly teach?			
Afrikaans			
English			
Afrikaans and English		V10	13
Ndebele			
Northern Sotho			
Southern Sotho			
Swati			
Tsonga			
Tswana			
Venda			
Xhosa			
Zulu			
Other (specify)			
Type of the school in which you are teaching			
Public School		V11	14
Private School			



Currently you are teaching at a	<input type="checkbox"/>
<input type="checkbox"/>	
Primary School	V12 15
Combined School	
Secondary School	
Currently level of your post	
Teacher/Senior Teacher	V13 16
Head of Department	
Deputy Principal	
Principal	
How did you become interested in assessment?	
Mark only one option	
Comprehensive reading	V14 17
Workshops	
Formal courses/programme	
Department circulars	
Media, e.g. TV. programmes	
Other (specify)	

SECTION B

In this section and the following sections you are required to cross ONLY ONE appropriate number on the scale provided for each question.

- PLEASE NOTE:

Read each of the following statements very carefully and indicate to what extent the statement applies to your understanding regarding assessment and its influence on the culture of learning.

Please respond to each statement by expressing your opinion with regard to the assessment of learner's work and its influence on the culture of learning. Mark ONE OPTION ONLY.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

V15 Good assessment of learners' work contributes to the culture of learning.	1	2	3	4	5
V16 Teachers' assessment of learners' work enables learners to think critically and develop problem solving skills.	1	2	3	4	5
V17 Teachers' assessment of learners' work promotes a positive attitude towards learning among learners.	1	2	3	4	5
V18 Frequent assessment of learners' work allows teachers to intervene with remedial teaching at an early stage.	1	2	3	4	5



V19	Teachers' assessment of learners' work contributes to collaboration and caring between teachers and learners.	1	2	3	4	5
V20	Assessment assists teachers to review information taught to learners	1	2	3	4	5
V21	Assessment assists learners to review their own learning and look at a better ways of improving learning.	1	2	3	4	5
V22	Teachers' assessment of learners' work allows learners to see assessment as part of teaching and learning.	1	2	3	4	5
V23	Regular assessment of learners' work enhances learners' perception of success.	1	2	3	4	5
V24	Teachers' assessment of learners' work assists learners to see that teachers can identify learners learning problems.	1	2	3	4	5
V25	Teachers' assessment of learners' work assists learners to monitor progress of learning.	1	2	3	4	5
V26	Assessment of learners' work assists principals to share decision task with teachers regarding learners' work.	1	2	3	4	5
V27	Assessment of learners' work indicates to principals that teaching and learning are monitored in schools.	1	2	3	4	5
V28	Teachers' assessment of learners' work assists principals to see that assessment is an adequate evaluation mechanism.	1	2	3	4	5



V29 Assessment of learners' work ensures that principals will allocate enough time for assessment purposes.	1	2	3	4	5
V30 Feedback of assessment of learners' work to parents enables parents to play an active role in the education of children.	1	2	3	4	5
V31 Teachers' assessment of learners' work and feedback to parents create a positive relationship between parents, learners and teachers.	1	2	3	4	5
V32 Teacher's assessment of learners' work enhances learning contact between parents and children.	1	2	3	4	5
V33 Assessment of learners' work involves parental decision with regard to information assessment.	1	2	3	4	5

SECTION C:

Please respond to each statement by crossing the number on the scale provided in order to express your view regarding to traditional evaluation of learner's work and its influence on the culture of learning.

Mark ONE option only.

Strongly Disagree	Disagree	Uncertain	Agree	Strong Agree
1	2	3	4	5

V34 Traditional evaluation of learners' work is seen as a separate activity from teaching and learning processes.	1	2	3	4	5
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V35	Traditional evaluation of learners' work is based on the idea of well-defined criteria of right and wrong.	1	2	3	4	5
V36	Traditional evaluation of learners' work used reproductive evaluation strategies to assess knowledge as provided by textbooks.	1	2	3	4	5
V37	In traditional evaluation of learners' work teachers were given opportunity to make decisions about learners' performance.	1	2	3	4	5
V38	In traditional evaluation of learners' work both evaluation and measurement were used as instruments to score and grade learners.	1	2	3	4	5
V39	Teachers' assessment of learners' work in traditional evaluation used measurement and evaluation to ensure that teaching objectives have been well transmitted to learners.	1	2	3	4	5
V40	In traditional evaluation of learners' work teachers were expected to identify specific strengths and weaknesses of learners in the learning environment	1	2	3	4	5
V41	In traditional evaluation teachers were expected to ask questions checking whether pupils were listening to teachers in the learning environment.	1	2	3	4	5
V42	In traditional evaluation teachers were given opportunity to evaluate their instruction, by assessing the quality of learners' performance.	1	2	3	4	5
V43	Teacher's assessment of learner's work in traditional setting forced teachers to award good grades.	1	2	3	4	5



V44					
In traditional evaluation teachers' assessment of learners' work had to ensure higher authorities that standard policies of education are maintained.	1	2	3	4	5
V45					
In traditional evaluation teachers used formative assessment in order to make moment-to-moment decisions about pupils' learning.	1	2	3	4	5
V46					
In traditional evaluation teachers used summative assessment to indicate their approval and disapproval on learners' work.	1	2	3	4	5
V47					
In traditional evaluation teachers used summative assessment results to show parents how their children were doing in schools.	1	2	3	4	5
V48					
Homework and assignments in traditional evaluation was used by teachers as an assessment tool to prepare learners to do well in the final examination.	1	2	3	4	5
V49					
In traditional evaluation teachers used homework and assignments to monitor instructional work in classes.	1	2	3	4	5
V50					
In traditional evaluation teachers used classwork and official tests to check and balance work which had been done by them.	1	2	3	4	5
V51					
In traditional evaluation teachers used classwork and official tests to support and encourage learners to perform better.	1	2	3	4	5
V52					
In traditional evaluation teachers expected formal examination to be a mechanism of identifying talents and measure learners' performance.	1	2	3	4	5



V53					
Teachers in traditional evaluation believed that formal examination was an assessment tool of developing knowledge, skills and attitudes that learners would use when entering either the work-force or higher education.	1	2	3	4	5
V54					
In traditional evaluation teachers were expected to be more active in preparation of the formal examination of learners.	1	2	3	4	5
V55					
Formal examination results in traditional evaluation were used to judge the pass and failure of learners.	1	2	3	4	5
V56					
Formal examination in traditional evaluation assisted teachers and departmental officials to select learners for secondary education and higher education.	1	2	3	4	5
V57					
Teachers' evaluation of learners' work in traditional settings was examination driven.	1	2	3	4	5
V58					
In traditional evaluation norm-referenced-assessment was used to compare learners' performance with one another.	1	2	3	4	5
V59					
In traditional education teachers used norm-referenced assessment to group and place learners according to norms, scores and achievements.	1	2	3	4	5

SECTION D:

Please respond to each statement by crossing the number on the scale provided, in order to express your views about Outcomes Based Education Policies of Assessment and its influence on the culture of learning. Mark ONE option only.

KEY

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

V60 Assessment of learners' work in Outcomes-based-Education is regarded as an integral part of the teaching and learning processes.	1	2	3	4	5
V61 Assessment of learner's knowledge in Outcomes – Based Education aims towards assisting learners to apply such knowledge in life processes.	1	2	3	4	5
V62 Outcomes-based Assessment strategies assist both teachers and learners to measure progress of learning and teaching.	1	2	3	4	5
V63 Outcomes-based Assessment allows teachers to determine whether learners have achieved outcomes of learning.	1	2	3	4	5
V64 Teachers' assessment of learners' work in Outcomes-based Education is meant to improve skills, attitudes and value of learners.	1	2	3	4	5
V65 Teachers' assessment of learners' work in Outcomes – Based Education assesses learners' progress and development	1	2	3	4	5



V66	1	2	3	4	5
Outcomes-based Education expects assessment to assist learners to understand the content of a subject in order to demonstrate the learning outcomes.					
V67	1	2	3	4	5
In Outcomes-based Assessment teachers assess specific learning outcomes such as social and personal skills, values and good disposition of learning.					
V68	1	2	3	4	5
Outcomes-based Assessment is expected to assist learners to make use of specific outcomes at the end of their learning experiences.					
V69	1	2	3	4	5
Teachers' continual assessment of specific outcomes promotes the achievements of critical cross-field outcomes in Outcomes-based Education.					
V70	1	2	3	4	5
Teachers' assessment of critical cross-field outcomes in Outcomes-based Education enhances the interest of learning to learners.					
V71	1	2	3	4	5
Assessment criteria are applied by teachers during assessment to indicate to learners what has to be achieved.					
V72	1	2	3	4	5
Performance indicators assist both teachers and learners to assess the quality and quantity of what learners have achieved in Outcomes-based Education.					
V73	1	2	3	4	5
Teachers use assessment criteria to help learners to demonstrate what is expected from them.					
V74	1	2	3	4	5
Teachers use performance indicators to assess whether learners have mastered both the process as well as the contents of learning.					



V75 Range statements assist teachers to provide valuable quality of learning when assessing learners' work in Outcomes-based Education.	1	2	3	4	5
V76 Teachers' assessment of learners' work allows learners to master unit standards are regarded as national and international statements.	1	2	3	4	5
V77 Teachers' assessment of learners' work assists learners to know units standard for each learning area of that particular level of learning.	1	2	3	4	5

3. Respondent number V78

4. Card number 2 V79

KEY

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

V80 In Outcomes-based-Education teachers use performance-based assessment approaches to engage learners in performing substantial tasks of importance in their own right .	1	2	3	4	5
V81 Teachers use performance-based assessment to assist learners to apply skills and knowledge that learners have learned.	1	2	3	4	5
V82 Performance-based assessment empowers learners to perform beyond the information which has been taught by teachers.	1	2	3	4	5



V83	In performance-based approach teachers use performance criteria so that learners could be aware of the performance results during assessment.	1	2	3	4	5
V84	Teachers in Outcomes-based Education use portfolio assessment strategies to assist learners to monitor their own progress	1	2	3	4	5
V85	Teachers' assessment of learners' work through portfolio strategies allow learners to be actively involved in assessment exercises.	1	2	3	4	5
V86	Portfolio assessment strategies enable teachers to evaluate learner's performance on an individual basis.	1	2	3	4	5
V87	Portfolio assessment allows learners to apply assessment criteria performance indicators and range statements in their own right.	1	2	3	4	5
V88	Portfolio assessment strategies promote communication between teachers and learners in teaching learning situation.	1	2	3	4	5
V89	In Outcomes-based Education teachers use self-assessment to allow learners to be active in the assessment practices.	1	2	3	4	5
V90	In Outcomes-based Education teachers use peer-assessment so that learners could share and contribute to the work of their classmates.	1	2	3	4	5
V91	Teachers use self-assessment to promote self-thinking and self-development among learners.	1	2	3	4	5



V92 In Outcomes-based assessment teachers and learners can break-down teaching and learning tasks into different components through continuous assessment strategies.	1	2	3	4	5
V93 In Outcomes-based Education teachers use continuous assessment to support learners and to give feedback into teaching and learning processes.	1	2	3	4	5
V94 Continuous assessment takes place while learners are actively involved in daily classroom activities.	1	2	3	4	5
V95 Continuous assessment assists learners to be able to construct meaning and concepts about the learning task	1	2	3	4	5
V96 Continuous assessment allows teachers to use varieties of assessment strategies.	1	2	3	4	5
V97 In Outcomes-based Education criterion-referenced assessment is used by teachers to assess learners' work against set standard or criteria.	1	2	3	4	5
V98 In Outcomes-based Education teachers use criterion-referenced assessment to assist learners to achieve learning outcomes according to the agreed learning criteria	1	2	3	4	5

THANK YOU FOR YOUR INPUT BY RESPONDING TO THIS QUESTIONNAIRE



APPENDIX 2

Enquiries: L.N. Vilakazi
Cell No.: 082 954 7860 Work
Phone: 017-8193302/3

ERMELO

1st Ericalaan
Nederlandpark

2351

15 September 2000

The Deputy Director-General Mpumalanga
Department of Education Private Bag X251863
MIDDELBURG

RE: CONDUCTING EDUCATIONAL RESEARCH IN YOUR PROVINCE

I am currently towards the completion of PhD research study with Pretoria University. I am investigating on "Teachers' opinion of classroom assessment and its influence on the culture of learning".

Basically I am looking at the type of assessments which could form the benchmarks for the promotion of the learning culture, either from traditional product driven assessment or from Outcomes-based-Educational assessment policies.

I started to glean the theoretical background of this study in 1998. At this juncture my theoretical assumptions have been approved by Professor W.J. Fraser of Pretoria University. Hence I would appreciate if you could give me permission to collect data from teachers of the following Districts, viz. Eerstehoek District, Ermelo, Standerton, Witbank and Moretele, with regard to this research.

I am looking forward to receive your permission in order to support the completion of my PhD study.

Yours faithfully

MR. LESSON N. VILAKAZI



APPENDIX 3

Enquiries: L.N. Vilakazi
Cell No.: 082 954 7860
Work Phone: 017-8193302/3

1st Ericalaan
Nederlandpark
ERMELO
2351

15 September 2000

The Deputy Director-General Gauteng
Department of Education P.O. Box 7710,
Johannesburg, 2000

RE: CONDUCTING EDUCATIONAL RESEARCH IN YOUR PROVINCE

I am currently towards the completion of PhD research study with Pretoria University. I am investigating on "Teachers' opinion of classroom assessment and its influence on the culture of learning".

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I started to glean the theoretical background of this study in 1998. At this juncture my theoretical assumptions have been approved by Professor W.J. Fraser of Pretoria University. Hence I would appreciate if you could give me permission to collect data from teachers of the following Districts, viz. N1, N2, N3, N4 and N6 with regard to this research.

I am looking forward to receive your permission in order to support the completion of my PhD study.

Yours faithfully

MR. LESSON N. VILAKAZI



APPENDIX 4

Appendix 4

MPUMALANGA PROVINCIAL GOVERNMENT

Private Bag 9, 2010

WENTREBURG 1000

Road 357, The Galleries,

Corner van der Byl and

Verdoorn Streets

WENTREBURG 1000 S.A.



Tel: (013) 249 7035

Int: (013) 249 7633

Fax: (013) 243 2598

Int: (013) 243 2516

E-mail: mpum-ed@net.mpu.gov.za

Office of the Deputy Director-General DEPARTMENT OF EDUCATION

Litiko leTefundvo

umNyango wefundo

Departement van Onderwys

URGENT MEMO

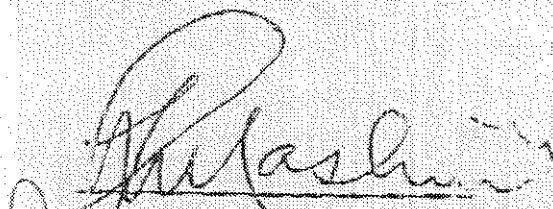
TO WHOM IT MAY CONCERN

This is to confirm that Mr Lesson N Vilakazi has permission to do research in the following districts:

Eerstehoek, Witbank, Ermelo, Standerton and Moretele.

Mr Vilakazi is at present completing his Ph D with regard to

"Teachers assessment of learners work and its influence on the culture of learning"


DR MT MASHININI
HEAD OF DEPARTMENT

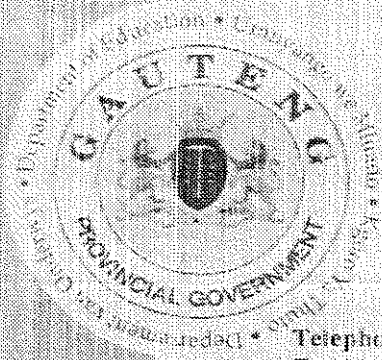
22 February 2001



APPENDIX 5

Gauteng Department of Education

*OFFICE OF THE
DEPUTY DIRECTOR-GENERAL*



Telephone No.: (011) 355 1513
Fax No.: (011) 333 5545

111 Commissioner Str.
P O Box 7710, Johannesburg, 2000

27 September, 2000

Mr Lesson N Vilakazi
1st Erica Avenue
ERMELO
2350

Fax No 017 819 1808

**CONDUCTING EDUCATIONAL RESEARCH IN THE
PROVINCE**

Your letter dated 14 September 2000 regarding the above is hereby acknowledged.

Permission is hereby granted for you to conduct a PhD study in the Province and to collect data from the Teachers of Districts N1, N2, N3, N4 and N5.

Kind regards


RON SWARTZ
DEPUTY DIRECTOR-GENERAL

