The impact of the hidden curriculum on the South African school leaving examination in the Northern Province

by

Modiba Mack Phaswana

Submitted in partial fulfilment of the requirements for the degree

Philosophiae Doctor

in the

Department Education Management

Faculty of Education

University of Pretoria

Supervisor: Professor Dr. S.J. Berkhout

2002

DECLARATION

I declare that

The impact of the hidden curriculum on the South African school leaving examination in the Northern Province

is my own work, and that all sources referred to or quoted have been indicated and acknowledged by means of complete references. This thesis has not been submitted in candidature for a degree at another university.

.....

MODIBA MACK PHASWANA

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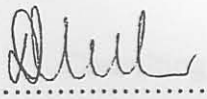

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JOHANN F MULLER

April 2002

ACKNOWLEDGEMENTS

The author wishes to express his sincere gratitude to the following:

- His creator, God Almighty for the life, good health and strength enjoyed during the project;
- Northern Province Department of Education, Culture and Sports for allowing me to conduct research in its schools;
- Schools which participated in completing the questionnaires;
- Supervisor, Prof. Dr S.J. Berkhout;
- Consulting statistician, Dr H. Borrain;
- Research consultant, Dr M.J. van der Linde;
- Language editing, Mr J F Muller;
- Final typing, Mrs D Muller;
- Wife Mutshekwane Margaret and children; Tshepiso, Nthabisheng, Kgotsofatso and Phetho for their encouragement and support.

SUMMARY

Candidate : Modiba Mack Phaswana
Supervisor : Prof S.J. Berkhout
Department : Education Management
Degree : PhD

While it is acknowledged that poor performance of learners in the South African school leaving examination is a problem faced by all the provinces of South Africa, the intensity of this problem is not the same in all the provinces. Using the South African school leaving examination results as an indicator, it seems that education in the Northern Province is failing to comply with the high expectations of the public. Whereas prior to 1994 the poor performance of learners in the South African school leaving examination was mainly associated with the apartheid policies of the former government, the advent of the democratic government with its emphasis on transformation, restructuring and a better life for all, raised new public expectations which included better performance by learners.

Throughout the early years of the democratic government, viz. from 1994 to 2001, the performance of learners in the South African school leaving examination in the Northern Province has been very poor compared to other provinces.

This study asserts that apart from the well known resource and social context related factors that have been shown to relate to the poor performance of learners in the Northern Province, there are unintended outcomes related to the patterns of the delivery of the curriculum. Questionnaires to explore the opinion of principals, educators and learners with regard to some dimensions of the hidden curriculum were distributed to a representative sample of schools in three categories of performance in the Soutpansberg district. An analysis of the data using the Spearman's rank order correlation coefficient and a stepwise logistic regression revealed that expectations of poor results by all three groups, principals seemingly not accepting responsibility for their schools' performance, punctuality and absence of learners and educators, parental support, school discipline and completion of the syllabi correlated with the schools' performance. An interpretation of the data revealed that differential school performance can be linked to the role schools play in the stratification process as seen in the learning patterns supported by the unintended or hidden curriculum.

KEYWORDS

Hidden curriculum

Formal curriculum

School leaving examination

Functionalist theory

Reproduction theory

Correlation coefficient

Stepwise logistic regression

Intended effects

Unintended effects

Redundancy principle

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CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT, HYPOTHESIS AND METHODOLOGY

1.1 INTRODUCTION

This chapter intends to introduce the thesis titled "The impact of the hidden curriculum on the South African school leaving examination in the Northern Province." As an introductory chapter, it intends to discuss the relevance of the topic as well as the problem statement, hypothesis, aims and objectives of the research and research methodology.

This chapter focuses on the performance of Northern Province learners in the South African school leaving examination from 1994 up to 2001. It compares the performance of Northern Province learners in the South African school leaving examination with the performance of learners of other provinces and argues that the ongoing poor performance of learners of the Northern Province might result from the impact of the hidden curriculum.

This chapter argues that the performance of learners of the Northern Province as indicated by the South African school leaving examination results, needs to be viewed and interpreted against the background of both the formal curriculum and the hidden curriculum and that the neglect of either of the two curricula will result in unfounded conclusions.

1.2 RELEVANCE OF THE TOPIC

While most countries rely on the school leaving examination for multipurpose functions, the value and the importance of the school leaving examination differ from country to country and community to community. South Africa is one of the countries which attaches high value to the school leaving examination results. The Northern Province Education, Arts, Culture and Sport (2000:2) asserts that:

> "…. the grade 12 examination results have become a yardstick for measuring the credibility of our education system … [and] are also used as a yardstick to gauge the quality of our learners and the capability to further their studies at tertiary institutions."

While it is acknowledged that poor learner performance in the South African school leaving examination is a problem faced by all the provinces of South Africa, the intensity of this problem is not the same in all the provinces. Using the South African school leaving examination results as an indicator, one can argue that education in the Northern Province is failing to comply with the expectations of the public. The education situation in the Northern Province is clearly depicted by the Northern Province Education, Arts, Culture and Sport (1996:4):

> "Your province, your government and your people are calling on you to come forward to help rid us of the shame that has befallen our education system. It is your participation in the process of democratic school governance that will turn our schools into .... institutions that will earn our communities pride of highest pass rates."

The appalling situation in the Northern Province was asserted by the former Northern Province MEC for Education (Motsoaledi 1996:3) who defined it as "a disaster in human development".

Throughout the early years of the democratic government, viz. from 1994 to 1999, the Northern Province obtained the poorest and the lowest pass rate of all the provinces (see Tables 3.6 - 3.11). It was only in the years 2000 and 2001 that the Northern Province managed to obtain the last but one and the last but four positions as compared to other provinces.

In view of the fact that from 1994 to 1999 the Northern Province had the largest number of candidates while in 2000 and 2001 it had the second largest number of candidates who entered for the South African school leaving examination as compared to other provinces, its high failure rate is a matter of grave concern (see Tables 3.6 - 3.14). Taking into account that during the above-mentioned period the Northern Province had never obtained a percentage pass rate of more than the South African percentage pass rate, the impact of its failure rate on the whole of South Africa cannot be ignored as is revealed by the following table (Department of Education 1997, 1999, 2001).

Table 1.1 The percentage pass rate of the Republic of South Africa and Northern Province between 1994 and 2001

Year	Pass rate (%)	
	South Africa	Northern Province
1994	58,0	44,4
1995	53,4	37,8
1996	54,4	38,8
1997	47,4	31,9
1998	49,3	35,2
1999	48,9	37,5
2000	57,9	51,4
2001	61,7	59,5

Despite the gloomy picture of the school leaving examination in the Northern Province, there are some schools which are worth commending as remarked on by the former Northern Province MEC for Education (Motsoaledi 1996:2) that not all is bleak in the province as there are silver linings accompanying these results.

The Northern Province is characterised by various extremes and dramatic contrasts. Using the school leaving examination to evaluate education in the Northern Province, a clear demarcating line can be drawn between three main groups of schools.

The first group consists of those schools which have a culture of producing very good results in the school leaving examination. Though such schools are very few in number, they have managed to produce very good results throughout the closing years of the apartheid education system and the early years of democratic education. Such schools are known to produce very good results in the school leaving examination and they have managed to retain and maintain that culture.

The second group consists of those schools which have a tradition of being average with regard to the school leaving examination results.

The third group consists of the schools which have a culture of producing very poor results in the

school leaving examination. Such schools have managed to maintain that culture for many years. These are the schools which are mainly responsible for the Northern Province's (and the whole country's) poor learner performance in the South African school leaving examination.

Though the above three groups of schools follow almost the same formal curriculum, they annually produce results, the quality of which differ greatly.

In an attempt to find a solution for poor learner performance in the South African school leaving examination, numerous studies have been conducted from various perspectives. Mathonsi (1986) attributed poor learner performance to socio-economic and political factors, while Mbingeleli (1997) viewed the same problem in the Kathorus district from the dimension of the universal aspects of schooling. Sheppard (1998) focussed on a school-based indicator model for improving the quality of education in South Africa. Motsoaledi (1996) attributed poor learner performance in the Northern Province to historical racial disparities in allocating resources. Molepo (1999) attributed poor learner performance to poor parental empowerment while Thulare (1992) attributed poor learner performance to poor managerial skills of the principals.

In an attempt to find a solution for poor learner performance in the South African school leaving examination, various reports and surveys were conducted by the National Department of Education and by the Northern Province Education, Arts, Culture and Sport, which include the following:

- Department of Education (2001), Report on the Senior Certificate Examination
- Department of Education (2000), Report on the Senior Certificate Examination
- Department of Education (1999), Report on the 1999 Senior Certificate Examination
- Department of Education (1999), Preliminary report of the 1998 Senior Certificate examination results
- Department of Education (1998), Preliminary report on the 1997 Senior Certificate examination results
- Department of Education (1997), 1996 Examination Results

While the above reports of the Department of Education focus mainly on the performance of learners in the South African school leaving examination, they provide information with

regard to the whole examination, *inter alia*, the administration of the examination, problems encountered during the marking of the scripts, monitoring of the examination, continuous assessment, reasons for poor performance, SAFCERT and its moderation role, initiatives to improve the performance of learners, international benchmarking, etc.

- The Department of Education (1997) School Register of Needs Survey focuses on physical facilities, the condition of buildings, services provided, equipment and resources available, etc. This report affirms the poor resources of the Northern Province schools as compared to other provinces. According to this report, the Northern Province tops all other provinces with regard to a lack of school buildings, power (electricity), a lack of water in schools, etc. The report reveals that the Northern Province is amongst the worst off provinces in terms of a lack of telephones, toilets, laboratories, workshops, cookery centres, media centres and libraries.

- The Department of Education (1995), Report of the Committee to review the organisation, governance and funding of schools focuses on the inherited models of school ownership and funding, constitutional issues relevant to ownership, governance and the funding of schools, the framework of the proposed system, norms and standards for the financing of schools' implementation of the framework, capacity building, etc.

- Northern Province Education, Arts, Culture and Sport (2001), Official announcement of the 2001 grade 12 examination results

- Northern Province Education, Arts, Culture and Sport (2000), Official announcement of the 2000 grade 12 examination results

- Northern Province Education, Arts, Culture and Sport (1999), Official announcement of the 1999 grade 12 examination results

- Northern Province Education, Arts, Culture and Sport (1998), Official announcement of the 1998 grade 12 examination results.

While the above reports of the Northern Province Education Arts, Culture and Sport focus mainly on the performance of the Northern Province learners in the South African

school leaving examination, they include, *inter alia*, strategies and initiatives to improve the performance of learners, winter enrichment classes, preparatory examinations, continuous assessment, etc.

- The Northern Province Education Arts, Culture and Sport (1998), Culture of learning, teaching and service (COLTS) which gives guidelines on the punctuality of learners and educators, observance of full school hours, absenteeism, attendance of lessons, sufficient work and regular assessment, the role of governing bodies, crime in schools, etc.

Notwithstanding the good intentions of the above-mentioned surveys, reports and related research which have been conducted in this area, and notwithstanding the slight improvement in the pass rates in 2000 and 2001, learner performance in the South African school leaving examination in the Northern Province remains poor (refer to Tables 3.6 -3.14).

While most of the intervening strategies, programmes and related research focussed mainly on searching for the solution from the formal curriculum viewpoint, the intention of this study is to investigate the ongoing problem of poor learner performance in the Northern Province in the South African school leaving examination from the dimension of the hidden curriculum. While the hidden curriculum is used as one of the lenses of viewing and interpreting this ongoing problem, this study wishes to acknowledge various dimensions which impact on learner performance in the South African school leaving examination in the Northern Province. The study contends that continuous poor learner performance in the South African school leaving examination in the Northern Province may probably be attributed to, *inter alia*, the continuous neglect of the impact of the hidden curriculum.

1.3 PROBLEM STATEMENT

In an attempt to define the research problem, Ary, Jacobs and Razavieh (1990:62) argue that a research problem is a question or statement about the relationship between variables.

In this study, the research problem focuses on the relationship or correlation that exists between two variables, viz. the South African school leaving examination results and the hidden curriculum. Though the research problem consists of questions or statements about the

relationship, it has to comply with certain criteria in order to ensure its significance. Ary *et al.* (1990:51-53) assert that:

> "Ideally the problem should be one whose solution will make a contribution to the body of organized knowledge in education. The problem should be one that will lead to new problems and so to further research. The problem must be one that is researchable. The problem must be suitable for the particular researcher."

In selecting the problem, I have checked the above-mentioned criteria and found fit to carry the study through to completion as I have some interest and experience in this area. Bailey (1994:37) asserts that:

> "There are several factors affecting problem selection, including the research paradigm a researcher identifies with, the researcher's values, the researcher's methodology, unit of analysis chosen, and whether the study is to be conducted over time or at a single point in time."

The problem statement of this study is based on the following questions:

- Can the differences in the South African school leaving examination results of various schools in the Northern Province be partly attributed to the impact of the hidden curriculum?
- How does the hidden curriculum impact on the South African school leaving examination in the Northern Province?

While the above questions remain at the core of the problem statement, further related sub-questions are developed for further substantiation and explanation, viz.:

Can the differences in the South African school leaving examination results of various schools in the Northern Province be partly attributed to the impact of the hidden curriculum through:

- attitudes as argued by, *inter alia,* Willis (1977) and Jackson (1990);
- punctuality and attendance as argued by, *inter alia,* Dreeben (1968), Bowles and Gintis (1976) and Apple (1995);

- attendance of afternoon studies as argued by, *inter alia,* Jackson (1990);
- timetabling, written work, or syllabi as argued by, *inter alia,* Lynch (1939) and Cusick (1973);
- the mediation of discipline and school policies as argued by, *inter alia,* Gatto (1992), Snyder (1971), Bowles and Gintis (1976) and Dreeben (1968);
- support services and staff development as argued by, *inter alia,* Gatto (1992), Lynch (1989), Bowles and Gintis (1976);
- motivation as argued by, *inter alia,* Jackson (1990), Dreeben (1968) and Lynch (1989); and
- variables like gender, age, experience, qualifications, subject group, etc. as argued by, *inter alia,* Willis (1977) and Lynch (1989)?

1.4 HYPOTHESIS

This study postulates that a relationship or correlation exists between the South African school leaving examination results and the hidden curriculum in the Northern Province. In defining the hypothesis, Babbie and Mouton (2001:643) argue:

> "It is a statement of something that ought to be observed in the real world if the theory is correct. A hypothesis is essentially a statement that postulates that certain relationships (correlation or causality) exists between two or more variables."

As the hypothesis postulates that a certain relationship exists between two or more variables, the hypothesis of this thesis has been formulated as follows:

The differences in the South African school leaving examination results of various schools in the Northern Province can be partly attributed to the impact of the hidden curriculum.

In this study the above-mentioned statement, similar to a hypothesis, will be used to direct the investigation. Although the concept chosen to formulate the hypothesis is complex and multidimensional, it serves as a statement to guide the research. Ary *et al.* (1990:111) argue:

> "The hypothesis provides direction to the researcher's efforts because it determines the research method and type of data relevant to the solution of the problem."

This study intends to test whether the expectations that the above hypothesis represents are found to exist in the Northern Province or not. In attempting to show the multipurpose functions of the hypothesis, Ary *et al.* (1990:111) argue:

> "A good hypothesis ... must have explanatory power; it must be testable; it must be in agreement with the preponderance of existing data; it must be stated as clearly and concisely as possible and it must state the expected relationship between the variables."

Although the above-mentioned hypothesis cannot be judged prior to its empirical testing, based on experience and perusal of literature, I view it as having explanatory power to direct the intended research.

Based on the hypothesis and the problem statement of this thesis, I intended to investigate whether there is a relationship between the South African school leaving examination results of various schools in the Northern Province and the hidden curriculum as it manifests itself through variables like attitudes, punctuality, attendance of afternoon studies, timetabling, written work and syllabi, discipline and school policies, support services and staff development, motivation, acceptance of responsibility for the final results, gender, age, experience, qualification, subject group, etc.

1.5 AIMS AND OBJECTIVES OF THE RESEARCH

The formulation of the research objectives has been basically determined by two factors, viz. the type of research goal and the researcher's cognitive interest. In defining the function of the research objectives, Mouton (1996:101) argues that the research objective or purpose gives a broad indication of what researchers wish to achieve in their research.

Babbie (1998:90) mentions three types of research objectives, viz. exploratory, descriptive and explanatory. While recognising their close relationship, I view the objectives of this research project as being more explanatory in nature. Although Mouton and Marais (1990:45) assert that

the major aim of explanatory studies is to indicate causality between variables or events, this study intends to determine the relationship between the South African school leaving examination results and the hidden curriculum without any claim of causality.

My cognitive interests include both the individual interest like obtaining a post-graduate degree and the institutional interests which include my present occupation and experience as a secondary school principal. Mouton (1996:104) asserts that cognitive interests are those factors that motivate or drive the researcher to undertake a particular study. The following cognitive institutional factors motivated me to embark on this type of study:

- **Promoting mutual understanding between learners and educators with regard to learner performance**

  Instead of viewing the performance of learners solely from being a function of formal instruction whereby some learners are labelled as being lazy, delinquents, arrogant, over-politicised, unintelligent, and stubborn (Snyder 1971; Willis 1977), this study aims at informing educators to view performance of learners from both dimensions of formal instruction and the learners' mastery of the hidden curriculum. By viewing and understanding performance of learners from both the formal curriculum and the hidden curriculum, conflicts and disruptions are eliminated as both educators and learners are equally involved in creating and shaping their own social environment.

- **Promoting mutual understanding between educators, parents and education authorities with regard to performance of learners**

  Instead of viewing the school leaving examination results solely as a function of formal instruction whereby parents and education authorities make some hasty and unfounded conclusions (Northern Province Education, Arts, Culture and Sport 1999) which are usually accompanied by derogatory labels attached to the school (educators, learners and all the stakeholders), this study emphasises the need to consider both formal instruction and the learners' mastery of the hidden curriculum in interpreting the results of various schools. Although educators have greater responsibility in the performance of learners, this study aims at informing parents and authorities that the school leaving examination results cannot be used as a function of formal instruction without considering all other

factors.

- **Improvement of learning, teaching and performance of learners in the South African school leaving examination**

  By acknowledging the possible impact of the hidden curriculum on the school leaving examination results, both learners and educators will seek ways of counteracting its negative impact. This study aims at exposing the negative effects of the hidden curriculum without denying all other possibilities. Since it is not possible to root out all forms of negative effects of the hidden curriculum and since the hidden curriculum is closely interwoven with the formal curriculum, the aim of this study is to expose the negative effects of the hidden curriculum to its possible recipients, viz., learners and educators. Learners and educators can hardly resist or counteract what they do not know. Martin (1976:12) asserts that:

  "Having knowledge and skill concerning hidden curricula can be a form of self-defense against the onslaught of unasked-for learning states."

  The negative effects of the hidden curriculum can only be effectively counteracted if both educators and learners can be made aware of the possibility of their existence.

- **Contributing to the existing body of scientific knowledge**

  While this study aims at improving the performance of learners, like any other study, its ultimate aim is to contribute to the existing body of scientific knowledge (Mouton 1996:104) by reflecting on what I regard as the commonly neglected dimension of the school curriculum, viz., the hidden curriculum. This study aims at contributing to the optimalisation of human potential and national development through critical interpretation of the concept *hidden curriculum* and its possible impact on the school leaving examination results of various schools in the Northern Province and possibly in South Africa as a whole.

While acknowledging that much has been said about the notion *hidden curriculum*, very little is done to recognise its existence and impact. Berkhout and Bergh (1994:49) assert that:

> "... without a critical interpretation of the hidden curriculum, policy proposals and changes which are currently under discussion cannot contribute to the optimalisation of human potential and national development ... a wrong filter effect through the hidden curriculum could lead to the failure of the good intentions of educational reform."

The ultimate aim of this study is to determine whether the differences in the South African school leaving examination results in the Northern Province can partly be attributed to the impact of the hidden curriculum.

The study aims further at helping learners, educators and other stakeholders to counteract the impact of the hidden curriculum through the identification of the relations and patterns of behaviour that could be contributing to poor learner performance in the South African school leaving examination.

1.6 RESEARCH METHODOLOGY

In an attempt to explain research methodology, Babbie and Mouton (2001:647) view methodology as:

> "The methods, techniques, and procedures that are employed in the process of implementing the research design or research plan, as well as the underlying principles and assumptions that underlie their use."

In this study, research methodology reflects on the procedures that are employed in order to investigate whether the hidden curriculum impacts on the South African school leaving examination results of various schools in the Northern Province.

Babbie (2001:18) asserts:

> "Methodology (a subfield of epistemology) might be called the science of finding out ... how social scientists find out about human social life."

In order to "find out", three major aspects of social, scientific enterprise are necessary, viz. theory,

data collection and data analysis.

In implementing the research design, the study is structured as follows: An analysis of the concepts *the hidden curriculum* and *the school leaving examination* as viewed nationally and internationally will be conducted. An analysis of the concept *hidden curriculum* shall be explained mainly from two broad theoretical approaches, viz., the functionalist and the neo-Marxist perspectives. The analysis will be supported by the relevant critical literature review in Chapter 2. Chapter 3 focuses on a brief history of the school leaving examination in South Africa and in the Northern Province as impacted by the hidden curriculum.

While acknowledging that the Northern Province Department of Education has numerous district offices, due to the time and cost factor, the survey will be conducted only in one district office, viz. the Soutpansberg district (see Chapter 4). On the basis of the survey which will be conducted in the Soutpansberg district, on the basis of the universal characteristics of the Soutpansberg with other Northern Province district offices, *inter alia,* numerous former departments of education, former advantaged and disadvantaged schools, racially and ethically divided schools, etc. and without ignoring its particularistic characteristics, the study postulates that what shall be found in the Soutpansberg district can also be found in the other Northern Province districts.

In order to ensure representativeness and unbiasedness in selecting schools, I requested the assistance of a research consultant (University of Pretoria, Department of Information Technology) in performing a random selection of schools (see Appendix E). A merit list which indicates the top, middle and bottom performing schools of all Soutpansberg district secondary schools which sat for the 1999 South African school leaving examination, was supplied to the research consultant (see Appendix D). Subsequently thirty secondary schools from a population of 65 schools were randomly selected by the research consultant. The randomly selected schools consisted of 10 top, 10 middle and 10 bottom performing schools (see Appendix E).

Due to the lack of the necessary computer skills, I sought the assistance of a research consultant in checking and correcting the draft questionnaires in order to ensure that they comply with the requirements of computer data capturing. The research consultant performed the final data processing (refer to Chapter 4).

For analysis and initial interpretation of the collected data, two methods were applied, viz., Spearman's rank order correlation and stepwise logistic regression (see Chapter 5).

Chapter 6 focuses on the findings, interpretation of data, recommendations and the conclusion.

1.7 CONCLUSION

While acknowledging various factors from several dimensions which impact on the grade 12 learner performance, the intention of this study is to investigate the ongoing problem of poor learner performance in the Northern Province in the South African school leaving examination from the dimension of the hidden curriculum.

In conducting this study, I am aware of the interrelatedness of the hidden curriculum and the formal curriculum and that neither of them can be studied in isolation.

Although I am aware of the ongoing impact of socio-economic factors, resource allocation and utilization disparities in the school leaving examination in the Northern Province, this study does not intend to give a report on the latter factors as that has been extensively done, which include, *inter alia*, a school register of needs (Department of Education 1997), Report of the Committee to review the organisation, governance and funding of schools (Department of Education 1995), etc. Although the hidden curriculum is used as an additional lens for viewing and analysing this ongoing problem, the field of this study does not claim to be the only factor which impacts on the performance of learners in the school leaving examination.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

The purpose of this chapter is to explore the concepts *hidden curriculum* and *the school leaving examination* as they are viewed worldwide, including in South Africa and in the Northern Province in particular. The concept *hidden curriculum* will be discussed against the background of and in contrast to the formal curriculum. While acknowledging the inter-relatedness of these two concepts, for the purpose of this study they will be discussed separately.

While acknowledging various contributions from several educationists, the concept *hidden curriculum* will be explained mainly from two broad theoretical approaches, viz., the functionalist and the neo-Marxist. The neo-Marxist perspective of the notion *hidden curriculum* will include both the reproductive theory and the reproduction resistance theory.

As the concept *school leaving examination* is one of the important aspects of the formal curriculum, it will be discussed on the basis of its common intended and unintended functions and effects and its practical importance as viewed nationally and internationally.

2.2 EXPLORING THE CONCEPT *FORMAL CURRICULUM*

An analysis of the concept *curriculum* reveals some profound changes which the concept has undergone throughout the ages, particularly during the twentieth century. It further indicates changes in the role of the school and the nature of knowledge among the communities. Originating from a Latin root *currere* (Brubaker 1982), meaning a race course of subject matters to be mastered, the concept *curriculum*, as interpreted by various curricularists, reveals many and diverse definitions.

Brubaker (1982:2) explains curriculum as that which persons experience in a setting. His

explanation includes the interactions among persons as well as the interactions between persons and their physical environment. Brubaker's explanation of *curriculum* is not only confined to a school as he explains a setting as any instance where two or more people come together in new and sustained relationships to achieve certain goals.

In an attempt to explain *curriculum*, Zais (1976:7-10) uses the notion to include curriculum as the programme of studies, course content, planned learning experiences, experiences under the auspices of the school, a structured series of intended learning outcomes and curriculum as a written plan for action.

The diverse definitions of the concept *curriculum* have been asserted by Hass and Parkay (1993:2) who used the notion to include a school's written courses of study and other curriculum materials; the subject matter taught to students, the courses offered in a school, and the planned experiences of learners under the guidance of the school. Hass and Parkay (1993:3) argue that:

> "The curriculum is all of the experiences that individual learners have in a program of education whose purpose is to achieve broad goals and related specific objectives, which is planned in terms of a framework of theory and research or past and present professional practice."

In an attempt to explain and interpret the concept *formal curriculum,* several expressions are used by various educationists depending on their different points of departure, which include the manifest curriculum (Bloom 1972), official curriculum (Sambell & McDowell 1998), curriculum proper (Martin 1976), didactic curriculum (Wren 1999), explicit curriculum (Bigelow 1990) and the mandated curriculum (Portelli 1993).

While acknowledging the diverse expressions of the concept *formal curriculum*, this concept can be better understood and interpreted if it is contrasted with the *hidden curriculum* as they both form the school curriculum. In an attempt to explain the formal curriculum, Portelli (1993:343) argues that:

> "The formal curriculum is that curriculum which is officially recognized. It is public, available to all who ask for it and it is meant to be explicit."

Wren (1999:594) explains the formal curriculum by contrasting it with the hidden curriculum as he argues:

> "Usually, when educators refer to school curriculum, they have explicit, consciously planned course objectives in mind."

Lynch (1989) explains the formal curriculum in terms of the universalistic and particularistic functions of the school. Lynch (1989:29) argues that knowledge systems in all schools are compartmentalized, taught by subject specialists and distributed to pupils in batches. According to her, the universalistic nature of the formal curriculum is based on the manner in which knowledge is selected, organized and evaluated while the particularistic practices are based on the manner in which knowledge is distributed or transmitted, i.e. its mediation.

Kelly (1989:12) explains the formal curriculum in terms of the formal activities for which the timetable of the school allocates specific periods of teaching time:

> ".... those activities that are planned or are the results of some intentionality on the part of teachers and planners..."

While acknowledging some definitional shifts and the absence of the universally agreed-upon definition of the concept *formal curriculum*, this study regards the above-mentioned definitions sufficient for being a basis of analysing the concept *hidden curriculum*.

2.3 EXPLORING THE CONCEPT *HIDDEN CURRICULUM*

While the concept *hidden curriculum* is widely-known and commonly used by various educationists throughout the ages, it has never been used to refer to exactly the same thing. Being a multidimensional concept which encompasses a broad range of definitions, several expressions were used by various educationists throughout different years to denote it, which include, *inter alia*, the unnoticed curriculum (Portelli 1993), the unwritten curriculum (Dreeben 1976), the unintended curriculum (Martin 1976), the implicit curriculum (Wren 1999), the unstudied curriculum (Cornbleth 1984), the latent curriculum (Bloom 1972), the invisible curriculum (Zais 1976), and the informal curriculum (Kelly 1989).

Most of the expressions which are used to refer to the hidden curriculum reflect the different points of departure of various educationists which result in different interpretations and meanings. Notwithstanding the diverse interpretations and meanings, the concept *hidden curriculum* can be analysed from the two broad theoretical approaches, viz., the functionalist and the neo-Marxist.

2.3.1 The functionalist theories

The functionalist theories are based on the consensualist school of thought which focuses on the consensual understanding of both society and the school's role in relation to it. Lynch (1989:2) asserts that the functionalist theories focus on the structural relationship between the school and the institutions of public life. While acknowledging the valuable contributions of various functionalists as they explain the hidden curriculum in terms of the social complexity of the classroom (Jackson 1990), structural relationships between the school and other public institutions (Dreeben 1968) and the school as maintenance subsystem of society (Cusick 1973), etc., I intend to focus mainly on the contributions of the above three functionalists, viz. Jackson, Dreeben and Cusick towards the understanding of the concept *hidden curriculum.*

It is generally acknowledged that the educational psychologist Phillip W . Jackson is the one who originally coined the concept *hidden curriculum* in the 1960s. As a pioneer, he defined the hidden curriculum in terms of what he termed the three facts of life. Jackson (1990:22-34) argues:

> ".... the crowds, the praise, and the power that combine to give a distinctive flavour to classroom life collectively form a hidden curriculum which each student (and teacher) must master if he is to make his way satisfactorily through the school."

Jackson viewed classroom life in terms of crowds, praise and power. He argued that the crowded nature of classrooms expects learners to learn to live in crowds which involve unavoidable delays, denial of their desires, social distractions and interruptions. Praise involves the evaluative character of the school which might result in contradictory judgements from educators and peers while the unequal power relation allows the educators to command the learners' attention.

Although Jackson acknowledged the existence of a close relationship between the formal curriculum and the hidden curriculum, he attributed most of the failure of learners at school to failure to comply with the institutional expectations, i.e. failure of mastering the hidden

curriculum. Jackson (1990:35) asserts:

> "Even when we consider the more serious difficulties that clearly entail academic failure, the demand of the hidden curriculum lurks in the background."

While he defined the curriculum of the school in terms of the social requirements of the learning situation, he attributed the learning of the hidden curriculum to the redundancy principle, i.e. the frequency of occurrences. Jackson (1990:6) argues:

> "The fact of prolonged exposure in either setting increases in its meaning as we begin to consider the elements of repetition, redundancy, and ritualistic action that are experienced there."

Dreeben (1976:12) highlighted the definitional problems and the vagueness of the concept and defined the hidden curriculum in terms of the school's social structure:

> "... the prevailing social arrangements in which schooling takes place and the implication that children infer modes of thinking, social norms, and principles of conduct from their prolonged involvement in these arrangements."

Dreeben argued further that schools are traditionally viewed in terms of intended learning outcomes which are acquired by pupils through instruction and through their engagement in various activities. Apart from intended learning outcomes, school programmes produce other relevant outcomes which were never anticipated and for which no curricular provision was made. While acknowledging the existence of both curricula in schools, he asserts that children learn from their daily experiences and also from school instruction. Dreeben (1976:122) argues:

> "In all likelihood, any set of social arrangements and any instructional programme will have unanticipated consequences, observed and unobserved by those who work in schools."

In his description of the hidden curriculum, Dreeben focussed on the existence of the structural relationship between the school and the society *per se*. He compared schools with factories and concluded that both were capable of producing changes in people that they were not designed to

produce. While he accepted that the social arrangements or environments of the school could be deliberately designed to produce some desired effects by changing methods and materials of instruction, there could be no prior guarantee that such a particular set of social arrangements or methods and materials of instruction would produce the intended effects.

In his participant observation study of an American senior class of Horatio Gates high school, Cusick (1973) attempts to explain the relationship between society and the school environment. Although he does not use the concept *hidden curriculum*, his work explains the hidden curriculum from the learners' perspective while acknowledging the existence of other perspectives which include educators' perspectives and administrators' perspectives (Cusick 1973:211-214). He explains the hidden curriculum in terms of the unintended effects of the socio-cultural characteristics of the school, viz. poor learner involvement in formal activities, poor learner-educator interaction, fragmentation of educational experience, minimal compliance on the part of the learner, and learner concern for the maintenance subsystem.

2.3.2 The Neo-Marxist perspective

The neo-Marxist perspective is based on the reproduction theories which are premised on the correspondence principle which states that structural correspondence exists between the social relations of school life and the social relations of production, i.e. schools as being socially reproductive. While acknowledging the valuable contributions of various reproduction theorists as they explain the hidden curriculum in terms of the structural correspondence between the social relations of the labour process and those of the school (Bowles & Gintis 1976; Apple 1979, 1982, 1986, 1990, 1995; Anyon 1979, 1981; McLaren 1993, 1986; Gatto 1992; Gordon 1980, 1982, 1983; Willis 1977; Giroux 1983, 1988; Bowles 1977, etc.), I intend to focus mainly on the contributions of Bowles and Gintis (1976), Apple (1979, 1995) and reproduction resistance theories, viz. Willis (1977), Giroux (1983, 1988), Gatto (1992) and McLaren (1986, 1997) towards the understanding of the concept *hidden curriculum.*

Without any mention of the concept *hidden curriculum* Bowles and Gintis contributed to the development of a theory of the hidden curriculum. They implicitly ascribed the hidden curriculum

to the existence of the structural correspondence between the social relations of school life and that of production. Bowles and Gintis (1976:131) argue:

> "The structure of social relations in education not only inures the student to the discipline of the workplace, but develops the type of personal demeanor, modes of self-presentation, self-image, and social class identifications which are the crucial ingredients of job adequacy."

Bowles and Gintis view schools as functional for the maintenance of the capitalist economy. The hierarchical division of labour between educators and learners, constant fragmentation and evaluation of learners through streaming and testing were deemed important in fostering docility, compliance, status divisions and institutionalised competition which are all essential for the capitalist. Bowles and Gintis (1976:131) assert that:

> "Hierarchical relations are reflected in the vertical authority lines from administrators to teachers to students. Alienated labor is reflected in ... the alienation of the student from the curriculum content, and the motivation of school work through a system of grades and other external rewards..."

The structural correspondence between the social relations of the labour process and those of the school has further been argued by Bowles (1977:137):

> "An ideal preparation for factory work was found in the social relations of the school: specifically, in its emphasis on discipline, punctuality, acceptance of authority outside the family, and individual accountability for one's work."

Bowles argues that the social relations of the school replicate the social relations of the workplace by helping learners to adapt to the social division of labour. Since learners are not exposed to a similar normative climate in schools, Bowles and Gintis stress the importance of the socially differentiated character of the learners' hidden curricular experience which may be ascribed to social class, race or gender. They view schools as the integral part of the larger social systems and argue that the hidden curriculum could be understood by taking cognizance of the structural forces outside of schools.

Apple (1995:41) supports the reproduction theory as he claims that schools are socially reproductive as they are distributors and producers of culture:

> "... any position that wants to understand fully the school's place in the reproduction of inequality, must be complemented by a concomitant focus on the school as a productive, not only distributive, institution."

Apple views the role of the school as producing agents for positions in the economic sectors and producing the cultural forms which are directly or indirectly required by the economic sector (1995:41). He further regards the school's role as producing the ideological needs of capital (1982:23). Apple (1995:39) further argues:

> "Schools are not there to stimulate widespread class mobility. Rather they basically act as sorting devices. They allocate individuals to their proper places within the hierarchical division of labor..."

He regards the manner in which schools distribute knowledge to the learners as being class-biased since certain groups, particularly the poor and the minorities, are excluded. Apple (1990:33) argues:

> "... schools therefore, processes both knowledge and people ... the formal and informal knowledge is used as complex filter to process people, often by class..."

Apple (1990:38) explains the reproduction function of the school in terms of the legitimation role of the state in education. He argues:

> "... since schools are state apparatuses, we should expect them to be under intense pressure to act in certain ways, especially in times of both fiscal and ideological crises."

While espousing the reproduction theory in interpreting the hidden curriculum, Giroux (1983) focuses on problems in resistance theory by analysing the historically and culturally mediated factors that produce a range of oppositional behaviour. Giroux (1983:285) stresses that resistance behaviour in schools may not be behaviour which is trying to challenge the dominant school ideology as it may be fuelled by ideological imperatives that signify issues and concerns that have

very little to do with the school directly. He further points out that while some learners may seem to challenge the dominant school ideology, some may accommodate it by deciding to remain silent in order to succeed within the system (Giroux 1983:285).

In an attempt to explain the hidden curriculum, Willis (1977) argues in terms of learners' oppositional behaviour at school which results in the working class learners preparing themselves for the working class jobs while the middle class learners prepare themselves for the middle class jobs. Willis (1977:1) argues that:

> "The difficult thing to explain about how middle class kids get middle class jobs is why others let them. The difficult thing to explain about how working class kids get working class jobs is why they let themselves."

Willis explains the class reproduction in terms of job reproduction, i.e. middle class jobs belong to middle class learners while working class jobs belong to working class learners.

McLaren (1986, 1993) explains the hidden curriculum from a resistance theory perspective. Although he does not use the concept *hidden curriculum*, his work explains the hidden curriculum in terms of the reproduction and resistance theories. His ethnographic study is rooted in the notion that schools perform the reproductive functions of preparing the working-class learners for the lower rungs of the occupational ladder. His work sheds some light in the way ideologies which are embedded in various rituals inform most aspects of school life and how power works through the use of performative and regulatory rituals.

Gatto (1992) attempts to explain the notion *hidden curriculum* in terms of the seven lessons he teaches and which he regards to be universally taught and for which educators are paid, viz. confusion, class position indifference, emotional dependancy, intellectual dependancy, provisional self-esteem and surveillance.

2.3.3 Other approaches to the concept *hidden curriculum*

Although it is generally accepted that functionalist theories and reproduction theories serve as the basis for explaining and interpreting the concept *hidden curriculum*, there are other approaches

which have extended the above-mentioned theories either through criticism or affirmation and which provide a better understanding of the concept. While acknowledging the valuable contributions made by many other educationists in explaining and interpreting the concept *hidden curriculum*, I intend to focus on a selected few which include, Snyder (1971), Lynch (1989), Assor and Gordon (1987), Bloom (1972), Martin (1976), Berkhout and Berg (1994), Portelli (1993), Christie (1991), Cornbleth (1984) and Gordon (1982).

After experiencing rapid and unpredictable changes in higher education which were characterised by increasing upheaval, disruptions and conflicts, the psychologist Snyder (1971) defended the notion of the hidden curriculum. In an attempt to define the hidden curriculum, he contrasted the expectations of students with the expectations stated by teachers. Snyder (1971:6) argues that three-hour exams, a ten-page paper, a reading list of four books, etc., become the task to be mastered for the professor's approval. Such tasks then lead students to a set of tactics or manoeuvres.

According to Snyder, students view the expectations of teachers in terms of courses which are regarded as mere hurdles placed by teachers and which demand the students to learn the style, form and tactics of jumping in order to earn the approval of teachers.

Snyder attributes the hidden curriculum to poor communication between teachers and students which makes the students unwilling to discuss their problems with the teacher. Due to the mistrust between teachers and students, most of the problems are often shared with roommates rather than with teachers. He accused the school of playing a duplicitous game because often it tends to work against what it claims to be its ideal goals and objectives. Snyder (1971:18) asserts that:

> "Professors and students, presumably, are interested in learning, growth and certain intellectual excitement. But instead they find themselves unexpectedly trapped by grades, competition for success and rewards..."

Snyder further explains the hidden curriculum in terms of a network of school rules and regulations which govern the students' social conduct and which make institutions to function in a parental role. He stresses the inter-relatedness of the formal curriculum and the hidden

curriculum. Snyder (1971:6) argues:

> "If one treats the two curricula as separate, with little or no influence on each other, ... a very simple, trivial model of education may emerge."

In an attempt to develop the concept *hidden curriculum*, Lynch (1989) focussed on the reproduction theories of the functionalists and the Neo-Marxists who interpreted the hidden curriculum in terms of the social complexity of classroom activities, structural relationships between school and other institutions, the school as maintenance subsystem of society and the structural correspondence between the social relations of school life and that of production. She interprets the concept *hidden curriculum* in terms of the mediation of the universalistic and particularistic dimensions of schools. Lynch (1989:30) argues:

> "Certain aspects of school organisation and practice are primarily universalistic while others take particularistic forms. The mediators of educational services ... play a key role in determining the particularistic universalistic balance in a given area."

Christie (1991:138) defines the hidden curriculum in terms of authority, rules, discipline, friendship, individual working habits, etc. as she argues:

> "These other things which aren't written down in any syllabus document are called the hidden curriculum. These are the less obvious aspects of what we learn at school."

The above-mentioned definition of the hidden curriculum links up with Berkhout and Bergh's (1997:50) definition:

> "... the socialisation effects that do not necessarily form part of the explicit or planned purpose of the school or of teaching."

While acknowledging the various expressions used by different educationists in defining the hidden curriculum, Berkhout and Bergh attribute that to the different points of departure which result in various interpretations and descriptions. They discuss the hidden curriculum by focussing on the school timetable and public discourse. Berkhout and Bergh (1994:49) assert that:

> "... without a critical interpretation of the hidden curriculum, policy proposals and changes which are currently under discussion cannot contribute to the optimalisation of human potential and national development."

In an attempt to define the hidden curriculum, Gordon (1982) identified three common ways of explaining and characterising it. He called the first approach the outcomes definition as it defines the hidden curriculum in terms of non-academic learning, viz. attitudes, values, dispositions and social skills. As the second definition focuses on the physical and social environment of the school, he named it the environmental definition. The third approach focuses on the unconscious, unplanned influence of the school on the learners, giving rise to the term *latent influence*. In contrasting the three definitions, he proposed a criterion which he called the pervasiveness test. Gordon (1982:190) maintains:

> "Any definition of the hidden curriculum ... should in fact differentiate between the two curricula on the basis of consistency and pervasiveness."

According to the pervasiveness test, the hidden curriculum is likely to be more effective than the formal curriculum because it is more pervasive and consistent. According to Gordon (1982:190) the main weakness of the outcomes definition is that it gives no good reason for supposing that the teaching of skills, norms, values and attitudes is more consistent than the teaching of academic matters. Although the environmental definition tries to give reasons for supposing that the content of the hidden curriculum is more consistent and more pervasive than that of the formal curriculum, it does not effectively separate the pervasive and consistent influences from the limited and fleeting ones. Gordon argues that the latent influence definition clearly differentiates between the two curricula on the basis of consistency and pervasiveness and further suggests that as the hidden curriculum is transmitted unconsciously, its decoding is likely to be resisted. Gordon (1982:192) argues:

> "... the school's hidden curriculum is made up of the potential learning outcomes that derive from two different sources: (1) the secondary consequences of the school staff's action; (2) the school's physical environment."

He asserts that during actual teaching the teacher is aware of the primary consequences of his teaching, hence schools and their personnel can be held responsible for only some of the consequences.

In contrasting the hidden curriculum with the formal curriculum, Bloom (1972:343) defined the hidden curriculum in terms of the redundancy principle. Without any claim that the redundancy principle alone provides an adequate explanation of the learning of the hidden curriculum, Bloom attributed the easy learning of the hidden curricula to the high frequency and redundancy of the material learnt. Bloom (1972:343) argues:

> "The latent curriculum is in many respects likely to be more effective than the manifest curriculum. The lessons it teaches are long remembered because it is so pervasive and consistent over the many years in which our students attend school. Its lessons are experienced daily and learned firmly."

As learners experience the daily lessons of the hidden curriculum, they are unaware of having been taught or having learnt. Bloom argues that there is a very high possibility of the hidden curriculum thriving better than the formal curriculum.

Commenting on the redundancy principle, Assor and Gordon (1987:331) argue that it is inadequate to explain the learning of the hidden curriculum because it ignores two factors which often modify or even cancel the effects of redundancy on learning, viz. the internal cognitive structures and the organizational capacities of the learner and the reward value of the material learnt. They call for a revision of a one-factor theory, viz. the redundancy principle so that it could include the above-mentioned two additional factors. According to them, an exclusive emphasis on the redundancy theory leads to an overestimation of the massive impact of the hidden curriculum and an undifferentiated view of its contents. In what they regarded to be a more cautious view of the impact of the hidden curriculum they suggest a distinction between two types of hidden curriculum, viz. a hot curriculum which includes items with high hedonic relevance and a cold curriculum which includes items with low hedonic relevance. Assor and Gordon (1987:337) argue that:

> "The learning of the hot curriculum is largely based on the reward principle, whereas the learning of the cold curriculum is based mainly on the redundancy principle."

While acknowledging the broad range of definitions of the concept *hidden curriculum*, Sambell and McDowell define it in terms of the macro-level and the micro-level. Sambell and McDowell (1998:392) argue:

> "At the macro-level, social theorists describe a hidden curriculum largely in terms of its detrimental effects on the ideals of liberal educational philosophy and the process of schooling as a coercive societal mechanism. At a micro-level ... [it] is expressed in terms of the distinction between what is meant to happen ... and what teachers and learners actually do and experience..."

At micro-level, Sambell and McDowell define the hidden curriculum through contrasting the officially stated curriculum and the *de facto* curriculum.

In contrasting the hidden curriculum and what she termed the "curriculum proper" Martin (1976:137) argues:

> "A hidden curriculum consists of some of the outcomes or by-products of schools or of no-school settings, particularly those states which are learned yet are not openly intended."

Martin contrasts the hidden curriculum with the formal curriculum in terms of what is openly intended for learners and what learners learn, although not openly intended. She argues that the hidden curriculum is always and everywhere tied to learning and that there is no special subject matter which always and everywhere characterizes it as not limited to either one sort of object or one sort of state.

In her amended definition of the hidden curriculum, Martin (1976:144) argues:

> "A hidden curriculum consists of those learning states of a setting which are either unintended or intended but not openly acknowledged to the learners in the setting unless the learners are aware of them."

While her first definition characterizes the hidden curriculum in terms of unintended learning states, her amended definition refers to either unintended or intended learning states that are not openly acknowledged. She distinguishes between unconscious influences from the student's viewpoint and from the teacher's viewpoint and further suggests that the hidden curriculum can only occur provided the students are unaware of the influence. Until learning states are acknowledged or the learners are aware of them, they remain hidden and are regarded as a hidden curriculum, though the teachers may be aware of them.

In contrasting the hidden curriculum and the formal curriculum, Casey and Tucker define the hidden curriculum in terms of the ability to acquire problem-solving skills. Casey and Tucker (1994:4) assert that:

> "It consists of the knowledge and skills that students acquire, in subtle and indirect ways, from sources other than the actual lessons prepared by the teacher. It has a major impact on the formation of a student's role as a learner."

In order to create lifelong learners, Casey and Tucker argue that learners should be made aware that they have to handle their own problems by becoming effective, creative problem-solvers.

Portelli (1993:344) identifies four major meanings of the hidden curriculum in the curriculum discourse, viz. the hidden curriculum as the unofficial expectations, or implicit but expected messages; the hidden curriculum as unintended learning outcomes or messages, the hidden curriculum as implicit messages arising from the structure of schooling; and the hidden curriculum as created by the students. He argues that most of the definitions of the hidden curriculum link up with one of the above-mentioned four meanings as they tend to overemphasise certain aspects and give interpretations thereof.

While it is generally acknowledged that functionalist theories and reproduction theories serve as the foundation for analysing and interpreting the concept *hidden curriculum* in this study, an analysis of this concept has revealed some diverse definitions. This diversity is due to some profound changes in the role of the school in various societies throughout the centuries and the various points of departure of educationists.

2.4 THE SCHOOL LEAVING EXAMINATION

In this dissertation the school leaving examination refers to the external end of secondary school examination or the secondary school completion examination. Being one of the public examinations, it is related to the concepts *evaluation, testing* or *assessment*. While the primary purposes of most classroom-level assessments, tests or evaluations are diagnostic and formative, the school leaving examination is summative in its intent. Taylor (1999:186) asserts that:

> "The primary function ... is to assess the capabilities of individual students for the purposes of certification and selection into the job market or more advanced educational programmes."

The school leaving examination, being a public examination, is written by learners at the end of the senior secondary phase. Although countries differ on how important the school leaving examination results are for a candidate, the community or the country itself, most of the countries rely on the school leaving examination results for multi-purpose functions.

The school leaving examination in South Africa is commonly known as the matriculation examination. It is similar to the Japan school leaving examination, viz. the Joint First Stage Achievement Test (JFSAT), the French Baccalaureat examination, the Abitur examination of the Federal Republic of Germany, the Attestat Zrelosti of Russia, etc. (Republic of South Africa 1994). The school leaving examination results of various countries have different implications for each country and their effect on the students, school and the nation differ markedly. Eckstein and Noah (1993:75) assert that:

> "Nations may thus be arranged on a scale ranging from those where the external examination systems are highly determining to those that are much more open ... They may also be arranged according to those where the impending examinations dominate secondary school practices and the lives of students, and those where they are less central."

In some countries the school leaving examinations exert relatively little control over the lives of students, the school activities and the entire country while in other countries they influence and direct almost all the school activities and the country at large. In the following paragraphs various functions of the school leaving examination, intended and unintended, shall be discussed against the background of the selected countries.

2.4.1 Functions of the school leaving examination

The school leaving examination can be better explained and understood if it is viewed against the background of its functions in the education system. The following selected functions will assist

to give a clear and comprehensive view of the school leaving examination.

2.4.1.1 Allocating scarce places in post-secondary education

In most countries, the results of the school leaving examination are used to allocate scarce places in post-secondary institutions. The results are therefore used to control access to institutions of higher learning and as a result the examinations tend to be very competitive.

In most countries, including South Africa, the demand for places in post-secondary education far exceeds the supply. The results of the school leaving examinations are generally accepted as a device of allocating scarce places. The Northern Province Education, Arts, Culture and Sport (2000:2) asserts:

> "... the grade 12 examination results have become a yardstick for measuring the credibility of our education system ... are also used as a yardstick to gauge the quality of our learners and the capability to further their studies at tertiary institutions."

The opportunities for higher education expanded very slowly while the number of secondary school graduates increased rapidly. Therefore, the school leaving examination could no longer be the only device of allocating scarce places in higher education. In addition to the school leaving examination, most institutions of higher education introduced other forms of tests as admission selection devices. This resulted in the school leaving examination being a necessity but not a condition for admission. Japan is one of the countries which places extraordinary emphasis on the school leaving examination as a device of regulating admission to post-secondary education. Commenting on the admission policy in Japan's post-secondary education, Noah and Eckstein (1992:6-7) argue:

> "In 12th grade, at the end of upper secondary school, comes the second stage of the selection process, the university entrance examination. Performance in the examination is once again absolutely critical to a young person's subsequent chances for education..."

In preparing pupils for the fiercely competitive set of school leaving examinations at the end of lower secondary school, examinations are taken in order to regulate admission to upper secondary

schools of high prestige. In Japan examinations dominate and control the lives and school activities of pupils. As universities and other institutions of higher education are classified by society according to their prestige and reputation, pupils compete for admission to highly prestigious national public institutions like universities. Eckstein and Noah (1993:73) argue:

> "Good results mean entry to a top national university, where fees are low, quality of staff, facilities and education are superior, prestige is high, and career opportunities are outstanding."

In order to be admitted to the national public university in Japan, pupils are expected to write two examinations, viz. the Joint First Stage Achievement Test (JFSAT) and the common test. The JFSAT is a nationwide, centrally administered examination and the common test was initially introduced and set by public universities and it was later adopted by the Ministry of Education who instituted a new Common Test in 1990. The school leaving examination, viz. the JFSAT, is a necessity but not sufficient condition for university admission. Noah and Eckstein (1992:7) remark that these examinations are very highly competitive. In a typical year there are four candidates for each public university place.

The high competitiveness of examinations is promoted by the Japanese culture which is characterized by status and hierarchical consciousness and academic politics. Pupils who fail to get admission to national public universities, local public universities or private universities as well as pupils who would like to improve the quality of the school leaving examination results, often repeat the school leaving examination in the private cram schools.

2.4.1.2 Measuring and improving the effectiveness of teachers and the school

The school leaving examination results are usually accepted by parents, the government, pupils and other stake-holders as the less complicated and clear indicators of school quality and the effectiveness of teachers. Although the examination is written by pupils, it is usually used by the public to evaluate the school and the quality of the teachers. This is clearly indicated by Noah and Eckstein (1992:6):

> "Examination results can be used to evaluate (with greater or lesser validity) the quality of a teacher or a school."

The success or failure of pupils in the school leaving examination is usually associated with the success or failure of the teachers and the school as a whole. Lynch (1989:32) asserts that:

> "Teachers (especially in second level) must be seen to get results if they are to have professional credibility - the most visible results are the grade levels attained in public examinations."

The school leaving examination results are used in most countries by parents and the government to establish a preferential scale. In almost all countries, e.g. Japan, parents want their children to be admitted to the right school or school of high prestige. Parents usually view the right school or the prestigious school in terms of the school leaving examination results. The school leaving examination serves as a guide to the allocation of public funds among schools and for promotion of and increments for the teacher depending on the need to do so.

Commenting on the value of the South African school leaving examination results, the Northern Province Education, Arts, Culture and Sport (2000:2) argues:

> "Grade 12 examination results ... enable the public to assess the impact of government initiatives and the investment made in education. They also alert the government in general and the Department in particular to those areas that need improvement. And above all, grade 12 examination results determine the ratio of input and throughputs."

While the results of the school leaving examination measure the quality of the school and teachers, they also help to improve the quality of the school and teachers if used correctly. The results of the school leaving examination can be a good source of motivation for teachers and pupils. Schools, pupils and teachers can compare their achievement with the achievement of other schools.

Tamir (1988:43) argues on the following functions of the school leaving examination with regard to the improvement of the effectiveness of the teachers:

> "[to] motivate teachers in in-service education activities; providing essential feedback; provide a potential framework for rewards for teaching efforts."

The quality of the school, which includes the availability of resources, influences the achievement of pupils which influences the quality of the school.

2.4.1.3 Checking patronage and corruption

The school leaving examination is accepted in most countries as a politically and ethically defensible way of deciding on who should get the job and who should be denied. The examination is usually used by most countries as a device of checking nepotism and open corruption in government service. It is also used as a device to assist employers in the non-governmental sector in hiring potential employees.

During the nineteenth century, examinations were used by the British government to eliminate the pervasive practices of jobbery and patronage which were rife in the government service. In the United States examinations were used to place a check on politicians who favoured their supporters with government jobs. In the People's Republic of China the school leaving examination was used to select and appoint people in high public office. The political correctness and political activism certificates which were later used to replace the school leaving examination as a device of checking patronage and corruption failed to yield the expected results and the Chinese government was forced to backtrack by re-introducing the school leaving examination (Noah & Eckstein 1992:15).

2.4.1.4 Raising educational standards, levels of knowledge and skills

The school leaving examination helps in raising educational standards, levels of knowledge and skills. It helps to raise the level of school achievement. The school leaving examination, being a criterion of curriculum, reflects the strong points and the weak points of the curriculum and provides specific guidelines for teaching. It ascertains the coverage of the intended curriculum by both pupils and teachers.

Tamir (1988:43) stresses the following functions of the school leaving examination:

> "Communicating desired emphasis of different education aims. Defining the knowledge and skills which may be expected from matriculants ... ascertaining that

certain instructional standards are maintained ... Providing a means for control and accountability regarding instruction and the achievement of educational aims .... :Providing essential feedback."

The school leaving certificate serves as a secondary school completion credential or completion of a course of study, viz. the upper secondary level of schooling and it ensures that its bearer possesses certain knowledge and skills.

2.4.1.5 Limiting curricular differentiation

The school leaving examination serves as a major device for limiting curricular diversity in various countries, particularly in highly decentralised school systems in order to control the curriculum. Countries which have instituted the decentralised school system usually face the problem of having very little control over the school curriculum and school activities. Such countries usually use the school leaving examination to control the school and the curriculum.

Since the school leaving examination demands clear-set objectives in the form of subject syllabi in both centralized and decentralized school systems, both teachers and pupils are compelled to work towards the examination, albeit directly or indirectly.

2.4.2 The unintended effects of the school leaving examination

The importance of the school leaving examination in various countries cannot be refuted nor doubted. The school leaving examinations are used in various countries as the levers of change, improvement and the development of the education system and the country at large. While acknowledging the intended effects of the school leaving examination, it is equally important to acknowledge its unintended effects.

Since the school leaving examinations exert a powerful influence on school activities, including the curriculum, the extent of such influence differs from one country to another as examination systems fulfil their functions differently. The school leaving examinations need to be controlled lest they destroy their good motives. Noah and Eckstein (1992:6) comment:

> "In consequence, examination requirements can lead to undue concentration on the material to be examined, to the exclusion of other elements in the school curriculum."

This is usually found in countries where the pressure exerted by the school leaving examination is extraordinarily high. In such countries examinations dominate and control pupils' lives, teachers' lives, and all the school activities to the extent that anything which is not examined is less valued and less important. Eckstein and Noah (1993:23) further argue:

> "Indeed, examined subjects can drive unexamined subjects out of the school timetable entirely. Above all, examinations can serve as a way of legitimizing knowledge, signalling the acceptance of a new school subject."

In his paper, *Making the best use of matriculation examination*, Tamir (1988:44) mentions the following unintended effects of the school leaving examination:

> "Discouraging school-based curriculum development, forcing specific and rigid subject matter content, decreasing in-depth learning in favour of superficial covering of material."

Although the school leaving examination aims at being the fairest device of rewarding the hardworking pupils, it can easily be manipulated by those families that can afford the best schools, the best tutors and the best examination aids. This ultimately results in high quality institutions being attended mainly by pupils from wealthier families while pupils from the poor families mainly attend institutions of poor quality.

The school leaving examination, if not well controlled, can hamper authentic teaching and learning. The creativity of pupils and teachers may be discouraged in favour of the memorization of facts and events. Teachers may be tempted to teach the examination rather than the syllabi. Both teachers and pupils may collaborate to cheat in order to achieve good examination results.

2.4.3 The practical importance of the school leaving examination

Despite severe criticism levelled against the school leaving examinations, their primary functions

or motives have proved their worth over time to the extent that even today most countries find no substitute for them. The importance of school leaving examinations has been clearly demonstrated by the People's Republic of China. During the cultural Revolution (1966 to 1976), China abandoned its tradition of relying on the school leaving examinations for appointing people to high office and the allocation of scarce places in higher education. Certificates of political activism and political correctness replaced the school leaving examination. Noah and Eckstein (1992:15) assert that:

> "... acceptance into higher education was determined largely by class background, work experience, [and] recommendations concerning political reliability. Academic examinations were rejected both as symbol of traditional oppression and a powerful means of maintaining social differentiation."

Due to problems in the labour market, educational deficiencies, the poor standard quality of teachers and poor standards of personnel in all sectors, ideological consideration as a device for selection and replacement was abandoned and replaced by the reintroduction of the school leaving examinations.

The People's Republic of China is not the only country which abandoned the school leaving examination, although it serves as a good example. Noah and Eckstein (1992:5,6) argue:

> "From time to time, nations have tried to abandon examinations at the end of secondary school, but have then been forced to backtrack."

The Soviet Union also abandoned the school leaving examination in 1918. Just like in China, admission to higher education and the appointment of people in government service were determined on the basis of social class origin and political activism. Noah and Eckstein (1992:164) assert that:

> "Soon after the Bolshevik revolution, examinations, school tests, and marks (including examination for university entrance) were all abolished as symbols of Czarist elitism and discrimination."

By the end of the 1920s the government was already under severe attack for having abandoned

examinations. The school leaving examinations were reintroduced by the Central Committee of the Communist Party in 1932. Since then the school leaving examination is a well-entrenched feature of the Soviet Union education system.

2.4.4 The relationship between the formal curriculum, the hidden curriculum and the school leaving examination

Though the concepts *formal curriculum, hidden curriculum* and the *school leaving examination* are separately defined and interpreted by the researcher, their practical inter-relatedness cannot be ignored. The inter-relatedness of the hidden curriculum and the formal curriculum is clearly argued by Wren (1999:594):

> "... usually, when educators refer to school curriculum, they have explicit, consciously planned course objectives in mind. In contrast to this didactic curriculum, students experience an unwritten curriculum characterized by informality and lack of conscious planning."

Though schools are structured and organised to cater for the formal curriculum, they end up catering for many other things which cannot be accounted for in terms of the formal curriculum alone. Learners go to school to learn various subjects but end up learning many other things which cannot be explained in terms of subjects alone. Though the school leaving examination intends to evaluate the mastery of the formal curriculum, it ends up evaluating the mastery of both the formal curriculum and the hidden curriculum. This indicates that the mastery of both curricula is needed for learner improvement performance. Bloom (1972:344) asserts that:

> "Our innocence has been in giving our attention solely to the manifest curriculum while we overlooked the latent one."

2.5 CONCLUSION

The South African school leaving examination affirms the functionalist theories and the reproductive theories with regard to its functions. As the school leaving examination allocates scarce places in post-secondary education, it basically acts as a sifting device for post-secondary educational institutions, social classes and economic institutions like factories. While the school

leaving examination "processes" knowledge, it also "processes" people according to societal classes.

The school leaving examination does not only require learners to reproduce knowledge but also to produce knowledge. Through its meritocratic ranking and evaluation, the school leaving examination not only allocates places but also denies others some opportunities. As the school leaving examination measures the effectiveness of teachers, learners and the school as a whole, it can result in the persual of grades, ranks, selection and certification rather than learning.

While acknowledging the diverse criticisms and the ongoing debate based on the value of the school leaving examinations in South Africa and many other countries, it provides an important national criterion against which the performance of the education system as a whole can be measured.

CHAPTER 3

HISTORICAL BACKGROUND OF THE SCHOOL LEAVING EXAMINATION AND THE HIDDEN CURRICULUM IN SOUTH AFRICA AND THE NORTHERN PROVINCE SINCE 1910

3.1 INTRODUCTION

This chapter intends to discuss the history of the school leaving examination in South Africa and its hidden curriculum. It aims at giving in nutshell the historical events of the South African school leaving examination as impacted by the hidden curriculum throughout the ages. While admitting that the history of the South African school leaving examination can be traced back from the founding of the Cape Public Board in 1858, I intend to focus on the school leaving examination in South Africa from 1910. Attention will be given to selected historical events since 1910 which, in my view, have influenced the South African school leaving examination as impacted by the hidden curriculum as it manifests itself in South Africa, including the Northern Province.

This chapter argues that the South African school leaving examination can only be understood if it is viewed against the background of the country's broad policy of apartheid and the aim of apartheid education. This study will briefly focus on the influence of the following aspects on the school leaving examination:

Different educational histories experienced by South Africans: a brief history of the division, inequality, contestation and conflict in South African schools; the role played by the Joint Matriculation Board (JMB) and the South African Certification Council (SAFCERT). This chapter focuses on the University of the Cape of Good Hope and the South African school leaving examinations, 1910 - 1917; the Joint Matriculation Board (JMB) and its constitution, 1917 - 1947; the decentralisation of education, the matriculation function of the JMB as impacted by the hidden curriculum, 1918 - 1953; language, decentralisation of education and the hidden curriculum, 1910 - 1953; the Joint Matriculation Board, decentralisation and hidden curriculum, 1918 - 1953; the relationship between the Joint Matriculation Board, the Committee of Vice-

Chancellors and the Committee of University Principals; the constitution of the Joint Matriculation Board and the hidden curriculum, 1948 - 1986; the functions of the Joint Matriculation Board and the hidden curriculum, 1948 - 1986; educational funding and the South African school leaving examination and the hidden curriculum, 1948 - 1994; the 1976 uprising, the South African school leaving examination and the hidden curriculum as well as the South African Certification Council (SAFCERT) and the hidden curriculum. This chapter closes with an analysis of the school leaving examination results of the Northern Province as compared to other South African provinces from 1994 - 2001.

3.2 THE UNIVERSITY OF THE CAPE OF GOOD HOPE AND THE SOUTH AFRICAN SCHOOL LEAVING EXAMINATION 1910 - 1917

When the four colonies, viz. Natal, the Cape, the Transvaal and the Orange Free State were united by the Act of Union in 1910, the University of the Cape of Good Hope was responsible for the school leaving examination functions of the whole country. The University of the Cape of Good Hope replaced the preceding examination boards and was responsible for the control and conducting primary, secondary and tertiary examinations and prescribing standards for the issuing of certificates. The school leaving examination and the determining of the admission requirements for university studies were the primary focus of the University of the Cape of Good Hope until the termination of its services in 1917. Behr (1988:183) asserts that:

> "It controlled the Junior Certificate and Matriculation examinations, as well as entry to the Public service ... The colleges continued to do the teaching, but the University of the Cape of Good Hope laid down the syllabuses and conducted the examination."

Though the University of the Cape of Good Hope had some shortcomings, it ensured the improvement of standards along the entire spectrum of education in those early years. Trumpelmann (1991: 4) argues that:

> "The Cape Matriculation examination not only gained in popularity ... but ... the examination was recognised by several foreign educational bodies."

3.3 THE JOINT MATRICULATION BOARD (JMB)

In 1918 the Joint Matriculation Board (JMB) was founded and charged with the responsibility of conducting the school leaving examination of the three universities, viz. the University of the Cape of Good Hope (the University of South Africa), the University of Cape Town and the University of Stellenbosch. The JMB was further charged with the responsibility of prescribing the conditions of exemption from the examination which were subject to the approval of the Minister of Education (Trümpelmann 1991:5).

Section 16 of Act No. 12 of 1916 authorised the JMB to issue matriculation and exemption certificates to successful candidates. It was also responsible for designing some basic subject packages for university admission. Such subject packages were regarded as the yardstick for probable successful university study.

The Board was responsible for issuing certificates of success in individual subjects. It contributed to subject curriculum development of subject committees, examiners and moderators. The JMB managed to keep a watchful eye on subject standards. Trümpelmann (1991: 40) avers:

> "... it was regarded as one of the functions of the JMB to exercise control over syllabuses in order to ensure that they conformed to the requirements for university admission."

Though the primary function of the JMB was to structure university admission, it also functioned as an examining body, conducting its own school leaving examination.

3.4 THE CONSTITUTION OF THE JMB AND THE HIDDEN CURRICULUM, 1917 - 1947

The Joint Matriculation Board was founded with 23 members which consisted of four representatives for each of the three white universities, viz. the University of the Cape of Good Hope, the University of Cape Town and the University of Stellenbosch; five representatives of the education departments and six representatives from government and private schools (Trümpelmann 1991:7).

As the number of white universities increased, the members of the Board also increased. In 1922

the representation of the universities was reduced to three people per university. In 1930 the membership of the Board rose to 26 due to the establishment of the University of Pretoria. The admission of members from South West Africa and Southern Rhodesia increased the number to thirty-four.

During this period many interested groups, e.g. The Federal Council of Teachers, the Catholic schools, etc., applied for representation on the Board but all the applications were turned down.

Throughout this period, the constitution of the Board was exclusively white. A black university, e.g. Fort Hare which was founded in 1916, was not allowed to have representation on the Board and this marked the beginning of the power struggle for control and representation between the Joint Matriculation Board and the black universities. Though the primary functions of the Board, viz. conducting and overseeing the university entrance examination and the granting of exemption, served all the people of South Africa, the Board membership was dominated by whites. Trumpelmann (1991: 11) avers:

> "It is also striking that the Board's composition reflected the political realities of the day quite accurately ... the Board's character was explicitly ethnic and in effect it was dominated by whites."

Although the Board was to serve all the people of South Africa, it had to execute its functions in a discriminatory manner, i.e. on the basis of colour in order to comply with the political realities of the time. The Constitution of the Board guaranteed whites power and control over the school leaving examination and over other racial groups.

3.5 THE DECENTRALISATION OF EDUCATION, THE MATRICULATION FUNCTIONS OF THE JMB AND THE HIDDEN CURRICULUM, 1918 - 1953

Throughout South African history, centralisation versus decentralisation of education had always been a problem which took various forms. When the JMB was founded in 1918, it had to contend with this old, national problem.

The problem of centralisation versus decentralisation was not only an educational problem and can only be understood against the background of the political, economical and social activities of that time.

3.5.1 Language, decentralisation of education and the hidden curriculum 1910 - 1953

When the JMB was founded in 1918, centralisation versus decentralisation of education operated under the banner of language. The issue of language had been a basis for differing concepts and the struggle for nationalism. Language and nationhood were always equated and language was viewed as a symbol of national identity.

The struggle for language rights among whites resulted in separate English and Afrikaans medium schools. In order to inculcate the co-operation of all the Europeans who had made South Africa their permanent home, the English and Dutch languages were placed on an equal footing by the Union constitution. Article 137 of the Union (Malherbe 1977:9) states:

> "Both the English and Dutch languages shall be official languages of the Union, and shall be treated on a footing of equality and process and enjoy equal freedom, rights and privileges."

The aim of this article was to wipe out the bitterness of the past by encouraging healthy co-operation between Dutch and English speakers. As education was a provincial task, the four provinces, viz. the Transvaal, the Cape, Natal and the Orange Free State, were granted time for the implementation of language equality through dual medium or bilingualism. Instead of welding together all the whites in all the provinces, the implementation of dual medium divided them further. Though the principle of dual medium was introduced in all the provinces, language problems remained unsolved.

When the JMB started its primary functions of determining university admission according to subject packages, a language problem in the form of Afrikaans versus Dutch arose. The core of the argument was the recognition of Afrikaans as distinct from Dutch as a school subject.

Due to persistent representation by several Afrikaner bodies which even led to the split of the teachers' societies, Afrikaans was recognized as a subject for both ordinary and higher grade. The recognition of Afrikaans as a subject gave rise to discontent among the predominantly English speaking areas which viewed that as an unnecessary strict examination rule which aimed at penalizing them by denying them learning other world-wide languages. Commenting on the issue of Afrikaans and Dutch, Trumpelmann (1991: 58) stated that:

> "This issue proved to have been a delicate matter which indicated some sensitivity on the Board .... In the nature of things, this language issue also showed political undertones."

It was not languages *per se* or the learning of English, Dutch or Afrikaans which were a problem, but the extent of centralisation versus decentralisation of authority or power, be it in education or politics. Language was just a blanket which covered numerous hidden structures and a hidden curriculum which include, *inter alia*, power struggle between English speakers and Afrikaans speakers with regard to control over education, including control over the school leaving examination, citizenship, race, nationhood, etc. According to Malherbe (1977:4) it was British imperialism which the Afrikaners hated, not English as such.

3.5.2 The Joint Matriculation Board, decentralisation and the hidden curriculum 1918-1953

When the JMB took over the responsibility of co-ordinating and conducting the matriculation examination, there was a strong urge by the provincial education departments for the right to conduct their own examinations. The decentralisation of the matriculation function and the devolution of authority were advocated mainly by the Afrikaners and Afrikaner journals, viz. *Het Schoolblad*, *De Unie* and *Het Christelik Schoolblad* which incited the public and the provinces to conduct and control their own matriculation examination.

The Transvaal Education Department (TED) applied to the JMB for a departmental school leaving examination in the Transvaal which was granted in 1921. The JMB was praised by *Die Christelike Skoolblad* for granting such permission and out of fear that the JMB would change its position.

Since a precedent was set by the JMB by granting permission to the TED, other education departments started considering conducting and controlling their own matriculation examinations. The Education Department of the Cape Province was granted permission to institute its own departmental matriculation examination in 1923. In 1932 the Union Education Department of the Orange Free State was granted recognition of its National Senior Certificate. The Education Department of the Orange Free State was granted permission to institute its own departmental matriculation examination in 1939. In 1953, Natal was granted permission to conduct its own

matric examination.

The granting of permission to various departments to conduct their own matriculation examinations broadened the primary functions of the JMB. The permission granted to various departments was subject to certain conditions. Education departments were to conduct their own examinations subject to JMB control as a measure of ensuring the quality of the examinations. The JMB had to exercise control over the syllabi, question papers and the marking of examination scripts annually in order to ensure that they conformed to the requirements for university admission. Two members of JMB were assigned to each departmental examination board in order to ensure the standards of the examination.

Although the JMB approved the decentralisation of the matriculation examination functions, some Afrikaner education journals, e.g. *Die Skoolblad*, which advocated complete autonomy of the departments, were not satisfied and appealed for greater decentralisation. The decentralisation of the matriculation functions was used as a blanket which covered many hidden issues which include devolution of power to the provinces so that they could be autonomous.

3.6 THE RELATIONSHIP BETWEEN THE JOINT MATRICULATION BOARD, THE COMMITTEE OF VICE-CHANCELLORS AND THE COMMITTEE OF UNIVERSITY PRINCIPALS - STRUGGLE FOR POWER AND CONTROL

Although the JMB was charged with the task of determining university admission and conducting the matriculation examination, it was not entirely autonomous since its function was only advisory. The JMB did not have the legal competence to change or amend university admission requirements but could only make a recommendation to the Vice-Chancellors' Committee (VCC). According to Trumpelmann (1991: 19):

> "... the VCC was authorised to promulgate, amend or withdraw regulations affecting the JMB. Amendments to the JMB's statute could be considered by the VCC."

The JMB and the VCC could not always agree on the basis of legal powers and functions. The disagreements were, *inter alia*, (Trumpelmann 1991:19):

> "... differing university admission packages (which continued up to 1931); different views as to the position of Afrikaans as distinct from Nederlands as school subject."

Some of the proposals of the JMB with regard to university admission packages were viewed as not being suitable for courses for entrance to universities or educationally unsound, hence approval could not always be obtained. Inadequate communication between the JMB and the VCC aggravated their differences.

In order to ease the tension between the JMB and the VCC, it was decided in 1929 by the Minister of Education that the matriculation examination should no longer be subject to the approval of the VCC. After the autonomy of the JMB with regard to university admission had frequently been questioned, the Minister of Education further decided that all regulations and standards of the JMB be subjected to the Department's approval.

The tension between the JMB and the VCC was further eased by the University Act, Act No. 61 of 1955, which replaced the VCC with the Committee of University Principals (CUP). Two members of the CUP served in the JMB and the relationship between the two bodies was cordial. Throughout this period, the tension between the JMB, VCC and CUP was based on a power struggle for controlling university admission and other matriculation functions.

3.7 THE CONSTITUTION OF THE JOINT MATRICULATION BOARD AND THE HIDDEN CURRICULUM, 1948 - 1986

Although the primary functions of the JMB remained almost the same throughout its existence, the scope of its functions broadened from time to time and it had to face some new challenges in order to keep pace with reality. The Board membership grew with every increase of white universities and remained static with every increase of black universities.

In line with the country's broad policy of separate development, the Department of Bantu Education was allowed to have representation on the Board in 1958; in 1966 the Department of Coloured Affairs followed suit as did the Department of Indian Affairs in 1969. In 1958, the first black university, Fort Hare, was allowed to have representation on the Board. However, within two years of service on the Board, Fort Hare University was expelled from the Board as it was argued that it was not instituted by the Government Act.

While all white universities had Board representation of two members per university, black universities were allowed in 1971 to have Board representation of one member representing all the black universities. Although the same rule was applied to the coloured universities, their representation was later increased to two while that of black universities remained at one.

The application of this principle probably ensured white domination of the Board. Trümpelmann (1991: 9) argues that in practice the constitution of the Board at this stage was exclusively white. It was only towards the end of the Board's existence that coloureds, Indians and blacks also became members of the Board though white domination remained the principle of the Board throughout.

The advent of the homeland system and the tricameral system affected the composition of the JMB. In 1988 the membership of the Board was forty six which included the following (Trumpelmann 1991: 10):

> "... twenty two were representatives from white universities, and also two CUP members, four representatives of coloured universities, one from black universities, nine from education departments, six representatives of government schools and two private schools."

Representatives of the homelands and black universities were given observer status and in 1990 they were allowed eleven representatives. The constitution of the Board had always been questioned by various institutions including Fort Hare University, particularly regarding the lack of equal representation among the universities and among people of different population registration groups. In the light of its composition, the JMB has always been viewed with suspicion. Trumpelmann (1991: 136) argues:

> "The fact that almost throughout, the board was constituted of white members only, affirmed that the Board was obliged to function within a specific ideological reality."

3.8 THE JOINT MATRICULATION BOARD FUNCTIONS AND THE HIDDEN CURRICULUM, 1948 - 1986

Since 1948 the JMB had to operate within the country's broad policy of separate development. The various apartheid acts affected the JMB since apartheid was the policy of the country. The

primary functions of the JMB, viz. conducting and determining university entrance examinations, granting exemption, allocation and selection, certification, standardisation, etc. were based on the policy of apartheid.

The JMB had to co-ordinate the school leaving examinations of various departments, viz. the Transvaal Education Department, the Natal Education Department, the Cape Education Department, the Orange Free State Education Department, the Department of Indian Affairs, the Department of Coloured Affairs and the Department of Bantu Education (which was renamed to the Department of Education and Training in 1979). Since some of the departments were imposed by the government on the people they were supposed to serve, viz. the Department of Bantu Education, the Department of Coloured Education and the Department of Indian Education, the JMB had to contend indirectly or directly with the problems emanating from such departments. Although the JMB and the Department of National Education were responsible for co-ordinating education and ensuring quality in the school leaving examinations of various departments, the results of learners of different population groups always differed greatly.

Though the JMB was charged with the responsibility of co-ordinating and overseeing the examinations of the above departments, it also conducted its own examination and issued certificates. The various departments were responsible for conducting their own examinations subject to JMB control.

The introduction of the homelands, viz. Transkei, Venda, Bophuthatswana, Ciskei, Gazankulu, KaNgwane, KwaNdebele, KwaZulu, Lebowa, Qwaqwa and the establishment of a three chamber parliament consisting of the House of Assembly (for whites), the House of Representatives (for coloureds), and the House of Delegates (for Indians) resulted in eighteen racially-divided education departments. The JMB and the Department of National Education had to co-ordinate the school leaving examination functions of the eighteen racially-divided education departments.

The centralisation and decentralisation of the school leaving examination were often debated within the JMB and even outside the Board. In 1969 there were nine JMB examination bodies in South Africa. A great deal of research was conducted on the issue of centralisation and decentralisation. The debates focussed on whether one examination body and one university admission examination would be in the best interest of the whole South Africa as opposed to the existing examination bodies with their divergent university admission examinations.

In 1968 Professor de Waal strongly advocated the centralisation of the school leaving examination functions. He proposed that subjects sharing a common basic syllabus should be examined by means of one joint question paper. De Waal was supported by the Suid-Afrikaanse Akademie vir Wetenskap en Kuns, the Van Wyk De Vries Report, the CUP and other Board members. The protagonists of decentralisation included the six education departments, the Pretorius Report, the Steyn Report, the Wilks Committee, *Die Christelike Skoolblad, Die Unie,* etc.

While some of the examining bodies were founded mainly on geographical grounds, some were founded on the basis of race and colour. The Department of Bantu Education (Department of Education and Training) as an examining body was solely for blacks, irrespective of the geographical area.

Though the JMB remained a committed examining body by serving all the people of South Africa, it remained a pillar of consolidating and co-ordinating the racially and ethnically divided education departments as created by the apartheid government. It functioned within the apartheid policies and managed to co-ordinate and implement the apartheid acts in its operation. The JMB had been very active in matters affecting the education of whites while the problems which affected the majority of the South African population were often left to the Bantu Education Department. Irrespective of the many problems which were in the realm of the school leaving examination, particularly amongst the blacks, the Board could not initiate any solution or any reform. Trumpelmann (1991: 137) avers that the Board rarely spearheaded any reform or renewal, on the contrary, it could merely react to such innovative initiatives. Throughout its existence, the Board had always served the interests of the whites rather than those of other people of different population registration groups.

The adoption of the new constitution in 1984, which gave rise to the tricameral system, i.e. the three chamber parliament, resulted in the restructuring of the South African education system, including the JMB. The main committee of the HSRC accused the JMB of allowing matric to continue dominating the entire school system, to the detriment of curriculum development. The main committee (HSRC 1981:31) argues that:

> "... the provision of education has always primarily been geared to preparing pupils for study at university ... The result is that a large part of the white population enters the world of work without adequate vocational qualification, skills or appropriate value system."

The committee recommended the establishment of a new council which could take over the school leaving examination functions from the JMB. The main committee of the HSRC summed up the services of the Board as follows (HSRC 1981:129):

> "... the JMB had fulfilled an important function in controlling and maintaining standards for university admission, thereby forestalling fragmentation ... the JMB had concerned itself too narrowly with universities only."

3.9 EDUCATIONAL FUNDING AND THE SOUTH AFRICAN SCHOOL LEAVING EXAMINATION AND THE HIDDEN CURRICULUM, 1948 - 1994

Throughout the history of apartheid education, viz. 1948 to 1994, educational funding, one of the hidden structures of apartheid education, was used as a mechanism of social, political and economical control. Financial resources, the life-blood of any education system, were used as a means of controlling the quality of education, including the South African school leaving examination.

Through the skewed funding principle, the government could determine and control the number of pupils per population registration group who should have access to primary, secondary and tertiary education. Numbers of pupils per population registration group were controlled from an early stage.

In line with the discriminatory and unequal education funding policies of the government, the school leaving examination results of various population registration groups clearly resembled the skewed funding policy. As more money was given to white schools, followed by Indian schools, coloured schools and lastly black schools, the school leaving examination results of white schools have always been the best, followed by the Indian, coloured and lastly black schools (Table 3.5). Throughout the history of the apartheid government, this has been an inherent trend of the school leaving examination.

Apart from the fact that from 1976 to 1981 the government started to narrow the funding gap, notwithstanding the acceptance of the HSRC report (1981) which recommended that the

government refrain from discriminatory educational policies, practically very little change was effected in terms of the funding policy (See Tables 3.1 - 3.3).

Table 3.1 Per capita expenditure on education in South Africa: Selected years

Year	Black	Coloured	Indian	White
1953-4	17	40	40	128
1969-70	17	73	81	282
1975-6	42*	140	190	591
1977-8	54*	185	276	657
1980-1	139*	253	513	913
1982-3	146*	498	711	1 211
1984-5	227*	639	1 112	1 702
1986-7	369*	887	1 714	2 299
1988–9	656*	1 221	2 067	2 882

* Excluding T.B.V.C.

Source: Christie, 1991:108

Until 1994, the control and administration of education in South Africa was fragmented into fifteen different ministries of education, viz. six of the self-governing territories, four in the independent homelands, one responsible for the Department of Education and Training (catering for blacks outside the homelands, one in each of the three tricameral houses of parliament catering for whites, coloureds and Indians) and one of the Department of National Education which co-ordinated all the departments.

In order to ensure that the quality of education offered by the various departments to various ethnic groups varied, the government continued to apply the skewed funding system (see Tables 3.1 - 3.4).

Table 3.2 Per capita expenditure on education in South Africa in ratio forms: selected years (in Rand)

Year	Black	Coloured	Indian	White
1953-4	R1	R2.35	R2,35	R7,53
1969-70	1*	4,29	4,76	16,59
1975-6	1*	3,33	4,52	14,07
1977-8	1*	3,43	5,11	12,17
1980-1	1*	1,82	3,69	6,57
1982-3	1*	3,40	4,86	8,27
1984-5	1*	2,81	4,90	7,50
1986-7	1*	2,40	4,64	6,23
1988–9	1*	1,86	3,15	4,39

* Excluding T.B.V.C.
Source: Christie, 1991:110

Table 3.3 Per capita expenditure by former departments, 1994

Former departments	Rands
House of Assembly	5 403
House of Delegates	4 687
House of Representatives	3 691
Qwaqwa	2 241
DET	2 184
Ciskei	2 056
Venda	1 792
Gazankulu	1 699
KwaNdebele	1 595
Bophuthatswana	1 580
Lebowa	1 549
KaNgwane	1 480
KwaZulu	1 459
Transkei	1 053
Average	2 222

Source: Department of Education, 1995:15

Table 3.4 School leaving examination results according to population group for the period 1979 to 1994

YEAR	CANDIDATES	AFRICANS		WHITES		COLOUREDS		ASIANS		TOTAL	
		Number	%	Number	%	Number	%	Number	%	Number	%
1979	Number	23 096		49 160		7 654		5 366		85 276	
	Matriculation exemption	5 776	25.01%	22 623	46.02%	2 456	32.9%	1 605	29.91%	32 460	38.06%
	School Leaving Certificate	10 364	44,87%	24 116	49.06%	4 323	56.48%	3 050	56.84%	41 853	49.08%
	TOTAL PASSES	16 140	69.88%	46 739	95.08%	6 779	88.57%	4 655	86.75%	74 313	87.14%
1980	Number	43 237		52 786		8 389		5 395		109 807	
	Matriculation exemption	6 447	14.91%	24 277	45.99%	1 416	16.88%	1 871	34.68%	34 011	30.97%
	School Leaving Certificate	16 203	37.47%	25 753	48.79%	3 866	46.08%	2 764	51.23%	48 586	44.25%
	TOTAL PASSES	22 650	52.39%	50 030	94.78%	5 282	62.96%	4 635	85.91%	82 597	75.22%
1981	Number	57 529		52 507		9 269		5 986		125 291	
	Matriculation exemption	6 803	11.83%	24 469	46.60%	1 384	14.39%	2 086	34.85%	34 742	27.73%
	School Leaving Certificate	22 220	38.62%	24 873	47.37%	3 895	42.02%	2 909	48.60%	53 897	43.02%
	TOTAL PASSES	29 023	50.45%	49 342	93.97%	5 279	56.95%	4 995	83.44%	88 639	70.75%
1982	Number	70 241		52 418		10 207		6 622		139 488	
	Matriculation exemption	7 005	9.97%	24 162	46.09%	1 696	16.62%	2 426	36.64%	35 289	25.30%
	School Leaving Certificate	26 954	38.37%	25 374	48.41%	5 127	50.67%	3 127	47.22%	60 627	43.46%
	TOTAL PASSES	33 959	48.35%	49 536	94.50%	6 868	67.29%	5 553	83.86%	95 916	68.76%
1983	Number	82 449		53 317		11 076		7 403		154 245	
	Matriculation exemption	8 128	9.86%	24 762	46.44%	1 679	15.16%	3 097	41.83%	37 666	24.42%
	School Leaving Certificate	31 687	38.43%	25 357	47.56%	6 215	56.11%	3 258	44.01%	66 517	43.12%
	TOTAL PASSES	39 815	48.29%	50 119	94.00%	7 894	71.27%	6 355	85.84%	104 183	67.54%
1984	Number	86 191		57 005		14 138		10 508		167 842	
	Matriculation exemption	9 727	11.29%	25 391	44.54%	2 108	14.91%	3 561	33.89%	40 787	24.30%
	School Leaving Certificate	32 219	37.38%	27 043	47.44%	8 273	58.52%	5 530	52.63%	73 065	43.53%
	TOTAL PASSES	41 946	48.67%	52 434	91.98%	10 381	73.43%	9 091	86.52%	113 852	67.83%

Table 3.4/ Continued

YEAR	CANDIDATES	AFRICANS		WHITES		COLOUREDS		ASIANS		TOTAL	
		Number	%	Number	%	Number	%	Number	%	Number	%
1985	Number	82 815		59 991		11 052		11 109		164 967	
	Matriculation exemption	9 958	12.02%	26 243	43.74%	1 381	12.50%	3 582	32 24%	41 164	24.95%
	School Leaving Certificate	28 741	34,71%	29 029	48.39%	5 734	51.88%	6 142	55.29%	69 646	42.22%
	TOTAL PASSES	38 699	46.73%	55 272	92.13%	7 115	64.38%	9 724	87.53%	110 810	67.17%
1986	Number	99 715		64 327		17 624		11 406		193 072	
	Matriculation exemption	13 460	13.50%	28 071	43.64%	2 707	15.36%	3 787	33.20%	48 025	24.87%
	School Leaving Certificate	37 867	37.98%	34 447	53.55%	9 212	52.27%	6 142	53.85%	87 668	45.41%
	TOTAL PASSES	51 327	51.47%	59 915	93.14%	11 919	67.63%	9 929	87.05%	133 090	68.93%
1987	Number	150 119		64 672		18 289		12 429		245 509	
	Matriculation exemption	24 597	16.39%	27 508	42.53%	3 456	18.95%	4 625	37.21%	60 195	24.52%
	School Leaving Certificate	59 601	39.70%	34 024	52.61%	9 825	53.72%	7 211	58.02%	110 661	45.07%
	TOTAL PASSES	84 198	56.09%	61 532	95.14%	13 290	72.67%	11 836	95.23%	170 856	69.59%
1988	Number	187 123		69 549		21 456		13 221		291 349	
	Matriculation exemption	30 685	16.40%	29 126	41.88%	3 492	16.28%	5 397	40.82%	68 700	23.58%
	School Leaving Certificate	75 500	40.35%	37 683	54.18%	10 679	49.77%	7 180	54.31%	131 042	44.98%
	TOTAL PASSES	106 185	56.75%	66 809	96.06%	14 171	66.05%	12 577	95.13%	199 742	68.56%
1989	Number	209 319		70 666		22 666		14 191		316 842	
	Matriculation exemption	21 357	10.20%	29 933	42.36%	4 044	17.84%	5 889	41.50%	61 223	19.32%
	School Leaving Certificate	66 153	31.60%	37 892	53.62%	12 431	54.84%	7 393	52.10%	123 869	39.09%
	TOTAL PASSES	87 510	41.81%	67 825	95.98%	16 475	72.69%	12 282	93.59%	185 092	58.42%
1990	Number	255 498		68 097		22 315		14 542		360 452	
	Matriculation exemption	21 025	8.23%	27 986	41.10%	4 656	20.86%	6 614	45.48%	60 281	16.72%
	School Leaving Certificate	72 837	28.51%	37 269	54.73%	13 661	61.22%	7 201	49.52%	130 968	36.33%
	TOTAL PASSES	93 862	36.74%	65 255	95.83%	18 317	82.08%	13 815	95.00%	191 249	53.06%

Table 3.4/ Continued

YEAR	CANDIDATES	AFRICANS		WHITES		COLOUREDS		ASIANS		TOTAL	
		Number	%	Number	%	Number	%	Number	%	Number	%
1991	Number	304 315		67 490		22 405		14 258		408 468	
	Matriculation exemption	33 330	10.95%	27 751	41.12%	4 911	21.92%	7 062	49.53%	73 054	17.88%
	School Leaving Certificate	91 013	29.91%	37 064	54.92%	13 646	60.91%	6 630	48.50%	148 353	36.32%
	TOTAL PASSES	124 343	40.86%	64 815	96.04%	18 557	82.83%	13 692	96.03%	221 407	54.20%
1992	Number	342 038		67 549		24 419		14 485		448 491	
	Matriculation exemption	35 357	10.34%	27 968	41.40%	5 120	20.97%	7 156	49.40%	75 601	18.68%
	School Leaving Certificate	114 624	33.51%	37 740	55.87%	15 994	65.50%	6 568	45.34%	174 926	39.00%
	TOTAL PASSES	149 981	43.85%	65 708	97.27%	21 114	86.47%	13 724	94.75%	250 527	55.86%
1993	Number	366 501		65 019		25 735		15 203		472 458	
	Matriculation exemption	29 517	8.05%	27 030	41.57%	5 411	21.03%	6 862	45.14%	68 820	14.57%
	School Leaving Certificate	113 570	30.99%	36 229	55.72%	16 666	64.76%	7 025	46.21%	173 490	36.72%
	TOTAL PASSES	143 087	39.04%	63 259	97.29%	22 0777	85.79%	13 887	91.34%	242 310	52.29%
1994	Number	392 434		62 507		25 375		15 092		495 408	
	Matriculation exemption	49 239	12.55%	26 057	41.69%	5 562	21.92%	7 639	50.62%	88 497	17.86%
	School Leaving Certificate	141 101	35.96%	34 764	55.62%	16 639	65.57%	6 342	42.02%	198 846	40.14%
	TOTAL PASSES	190 340	48.50%	60 821	97.30%	22 201	87.49%	3 981	92.64%	287 343	58.00%

Source: Strauss, J.P., Plekker, S.J., Strauss, J.W.W. and Van der Linde, H.J. (1992, 1993, 1994).

3.10 THE 1976 UPRISING, THE SOUTH AFRICAN SCHOOL LEAVING EXAMINATION AND THE HIDDEN CURRICULUM

From 1960 up to the early 1970s there was a growing militancy among black pupils. Those authorities in schools who were associated with apartheid were often targeted for resistance.

The dissatisfaction with the quality of education culminated in the 1976 uprising which started in Soweto and later spread like wildfire throughout the country. Parents, students, children and workers joined hands in protesting against the medium of Afrikaans. Half of the subjects in standards 5 and 6 were to be taught by medium of Afrikaans as instructed by the Minister of Bantu Education. As the protests spread further afield, the source changed from one area to another and from time to time.

June 1976 marked the beginning of a new era - a long and continuing history of resistance to the schooling system. In an attempt to portray the resistance, Christie (1986:221) argues:

> "Sometimes this protest and opposition was mainly confined and linked to events outside of school; sometimes it was well organized beforehand; sometimes it was spontaneous."

In 1980, the Cillie Commission which was appointed by the government to investigate the uprising, reported that besides the objection to Afrikaans as a medium of instruction there was general dissatisfaction with the quality of education. It was not only Afrikaans *per se* which the blacks, Indians and coloureds protested against but the whole oppressive apartheid system. While some people opposed it for educational reasons, some opposed it for political reasons. Some people viewed it as a way of extending and intensifying the offensive, oppressive system.

Although the actions of the protest varied from place to place and from time to time, they all culminated in one clear message, viz. attempting to make Bantu Education fail. This strategy resulted in a large number of casualties. A very high price was paid in terms of large numbers of learners, particularly blacks, who failed the school leaving examination. Some learners were detained before writing the school leaving examination while some fled into exile. This resulted in the congestion of learners in matric classes.

3.11 THE SOUTH AFRICAN CERTIFICATION COUNCIL (SAFCERT) AND THE HIDDEN CURRICULUM

The South African Certification Council Act, Act No. 85 of 1986 and the Universities Amendment Act terminated the services of the JMB as an examining body but allowed it to continue to exist as a committee of the CUP. In order to terminate the examinations of the Board, the system was phased out which allowed the Board to continue with its examining functions until 1991.

The act established an autonomous certification council, viz. the South African Certification Council which consists of twelve members appointed by the Minister of National Education. The South African Certification Council (SAFCERT) took over the responsibility for the school leaving examination functions, viz. quality assurance.

SAFCERT is an independent board under the auspices of the Minister of Education. Until 1994 SAFCERT consisted of 12 members, i.e. eight members with relevant qualifications and expertise appointed by the Minister and one member from each of the four national education departments (white, coloured, Indian and black).

Being an apartheid structure, SAFCERT had to undergo some changes in order to keep pace with the changing needs of the democratic South Africa. During the apartheid era, i.e. until 1994, the constitution of SAFCERT resembled the political realities of that time, viz. being ethnic, dominated by whites and functioning within the broad policy of apartheid. The Department of Education (2000:5) asserts that:

> "SAFCERT ... did not appropriately represent all stakeholders in education and therefore presented the false image of being the custodian of standards in education. SAFCERT at that stage discriminately applied its standards keeping function to various Examining Bodies."

Up to 1994 SAFCERT functioned like its predecessor, the JMB. While it was its responsibility to co-ordinate the school leaving examination of the eighteen racially-divided education departments, it discriminately applied its functions to various examining bodies in order to comply with the broad policy of the country. The Department of Education (2000:5) asserts that:

> "Given the low levels of provisioning in the homelands and in ex-DET and the

> resultant poor performance in these systems, SAFCERT was compelled to upwardly adjusting raw scores in excess of acceptable practice so as to present a more favourable picture of performance in these systems."

In 1998 a new Council was appointed by the Minister in order to ensure the representativeness of the democratic South Africa. The Department of Education (2000:5) argues:

> "... since then SAFCERT has indicated a strong commitment to transforming its role and image so that it appropriately executes its functions of quality assurance."

The basic functions of SAFCERT include, *inter alia*, the co-ordination of the school leaving examinations of the nine provincial education departments. Through moderation of the question papers and monitoring of the conduct of the school leaving examination, SAFCERT ensures the integrity of the examination and the standardisation of the results.

3.12 THE SCHOOL LEAVING EXAMINATION RESULTS OF THE NORTHERN PROVINCE AND OTHER SOUTH AFRICAN PROVINCES, 1994 - 2000

While acknowledging that poor results in the South African school leaving examination is a problem faced by all the provinces of South Africa, the Northern Province is the most affected. Throughout the early years of the South Africa democratic government, viz. 1994 to 1999, the Northern Province has obtained the worst results of all the provinces.

In 1994 in South Africa there were 495 408 candidates who wrote the school leaving examination. Out of this total only 287 343 (58%) candidates passed and 208 065 (42%) candidates failed the school leaving examination. The Northern Province had a total of 129 951 candidates sitting for the school leaving examination, with a pass rate of 57 731 (44,4%) and a failure rate of 72 220 (55,6%).

While the Western Cape topped all the provinces with a pass rate of 85,6%, the Northern Province obtained the lowest pass rate of 44,4%. While the percentage pass rate of the whole South Africa was 58,0%, the Northern Province percentage pass rate was far below par. The pass rate of 44,4% of the Northern Province consists mainly of candidates who passed without endorsement, i.e. without matric exemption (see Table 3.5).

In 1994 the poor results of the Northern Province in the school leaving examination were mainly attributed to apartheid policies since the control of education was still vested in the former seven departments of education, viz. the Department of Education and Training, Lebowa, Venda, Gazankulu, the House of Delegates and the Transvaal Department of Education and the House of Assembly.

In 1995 there were 531 453 candidates in South Africa who wrote the school leaving examination. Of that total only 283 742 (53,4%) candidates passed and 247 711 (46,6%) candidates failed the school leaving examination. A total of 138 816 candidates sat for the school leaving examination in the Northern Province and only 52 425 (37,8%) candidates passed while 86 391 (62,2%) failed. Whereas the Western Cape topped all the provinces with a pass rate of 82,7%, the Northern Province obtained the lowest pass rate, viz. 37,8%, which is far below the South African pass rate of 53,4%. The pass rate of 37,8% of the Northern Province consists mainly of candidates who passed without university endorsement (Table 3.6).

In 1996, there were 518 225 candidates in South Africa who wrote the school leaving examination. Of that total the results of 4 357 (0,8%) candidates were pending while 279 487 (54,4%) candidates passed and 234 381 (45,6%) candidates failed. A total of 126 081 candidates sat for the school leaving examination in the Northern Province and the results of 3 634 (2%) candidates were pending while 47 569 (38,8%) candidates passed and 74 878 (61,2%) failed. The Western Cape topped all the provinces' pass rate while the Northern Province obtained the lowest pass rate of 38,8% (Table 3.7).

In 1997, South Africa had 559 233 candidates who wrote the school leaving examination. Of that total, the results of 263 (0,0%) candidates were pending while 264 795 (47,4%) candidates passed and 294 175 (52,6%) failed the school leaving examination. A total of 128 559 candidates sat for the school leaving examination in the Northern Province and only 41 031 (31,9%) passed; 87 432 (69,1%) failed while the results of 96 (0,1%) were pending. The Western Cape topped all the provinces with a pass rate of 76,2% while the Northern Province obtained the lowest pass rate of 31,9% (see Table 3.8).

Table 3.5 School leaving examination results by province for candidates with six or more subjects for 1994

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	29 824			29 824	4 291	14,4	16 767	58,2	8 706	29,4	25 533	85,6	1
N. Cape	5 855			5 885	1 304	22,3	3 318	56,6	1 235	21,1	4 551	77,7	2
North West	34 984			34 984	10 412	29,8	16 542	47,3	8 030	23,0	24 572	70,2	3
Kwa-Zulu Natal	75 409			75 409	24 404	32,4	31 555	41,8	19 450	25,8	51 005	67,6	4
Gauteng	75 266			75 266	29 123	38,7	30 445	40,4	15 696	20,9	46 143	61,3	5
E. Cape	73 728			73 728	81 847	43,2	31 233	42,4	10 648	14,4	41 881	56,8	6
O.F.S.	30 278			30 278	13 390	44,2	12 352	40,8	4 536	15,0	16 888	55,8	7
Mpumalanga	40 113			40 113	21 074	52,5	14 672	36,6	4 367	10,9	19 039	47,5	8
N. Province	129 951			129 951	72 220	55,6	41 964	32,3	15 767	12,1	57 731	44,4	9
TOTAL (RSA)	495 408			495 408	208 065	42,0	198 846	40,1	88 497	17,8	287 343	58,0	

Source: Rearranged from Department of Education 1997; Department of Education 1998

Table 3.6 School leaving examination results by province for candidates with six or more subjects for 1995

Povince	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	31 867			31 867	5 509	17,3	17 611	55,3	8 747	27,4	26 358	82,7	1
N. Cape	6 529			6 529	1 666	25,5	3 725	57,1	1 138	17,4	4 863	74,5	2
Kwa-Zulu Natal	87 053			87 053	26 751	30,7	38 205	43,9	22 097	25,4	60 302	69,3	3
North West	41 950			41 950	14 138	33,7	20 710	49,4	7 102	16,9	27 812	66,3	4
Gauteng	79 215			79 215	33 275	42,0	31 047	39,2	14 893	18,8	45 940	58,0	5
O.F.S.	33 147			33 147	16 680	50,3	12 574	37,9	3 893	11,7	16 467	49,7	6
E. Cape	67 397			67 397	35 177	52,2	25 039	37,2	7 181	10,7	32 220	47,8	7
Mpumalanga	45 479			45 479	28 124	61,8	13 951	30,7	3 404	7,5	17 355	38,2	8
N. Province	138 816			138 816	86 391	62,2	42 069	30,3	10 366	7,5	52 425	37,8	9
TOTAL (RSA)	531 453			531 453	247 711	46,6	204 921	38,6	78 821	14,8	283 742	53,4	

Source: Rearranged from Department of Education 1997; Department of Education 1998

Table 3.7 School leaving examination results by province for candidates with six or more subjects for 1996

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	34 830	0	0	34 830	6 890	19,8	15 810	45,4	12 130	34,8	27 940	80,2	1
N. Cape	7 111	104	0,15	7 007	1 813	25,9	3 969	56,6	1 225	17,5	5 194	74,1	2
North West	46 349	128	0,3	46 221	14 036	30,4	24 574	53,2	7 611	16,5	32 185	69,6	3
Kwa-Zulu Natal	86 608	152	0,2	86 456	33 059	38,2	33 357	38,6	20 040	23,2	53 397	61,8	4
Gauteng	72 959	3 434	4,7	69 525	27 385	39,4	28 332	40,8	13 810	19,9	42 142	60,6	5
O.F.S.	35 554	28	0,1	35 526	17 373	48,9	13 945	39,3	4 208	11,8	18 153	51,1	6
E. Cape	66 609	9	0,3	66 600	33 961	51,0	25 578	38,4	7 061	10,6	32 639	49,0	7
Mpumalanga	41 731	101	0,24	41 630	21 891	52,6	15 407	37,0	4 332	10,4	19 739	47,4	8
N. Province	126 081	3 634	2,8	122 447	74 878	61,2	38 218	31,2	9 351	7,6	47 569	38,8	9
TOTAL (RSA)	517 832	7 590	1,5	510 242	231 284	45,3	199 190	39,0	79 768	15,6	278 958	54,7	

Source: Rearranged from Department of Education 1997; Department of Education 1998

Table 3.8 School leaving examination results by province for candidates with six or more subjects for 1997

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	37 197	0	0,0	37 197	8 816	23,7	19 590	52,7	8 791	23,6	28 381	76,3	1
N. Cape	7 604	0	0,0	7 604	2 700	36,3	3 725	49,0	1 119	14,7	4 844	63,7	2
Kwa-Zulu Natal	104 751	317	0,3	104 434	48 975	46,9	36 607	35,1	18 862	18,1	55 459	53,1	3
Gauteng	75 709	9	0,0	75 700	36 702	48,5	25 983	34,3	13 015	17,2	38 998	51,5	4
North-West	48 534	0	0,0	48 534	24 285	50,0	18 918	39,0	5 331	11,0	24 249	50,0	5
Mpumalanga	37 893	159	0,4	37 734	20 498	54,3	13 830	36,7	3 406	9,0	17 236	45,7	6
E. Cape	76 701	1	0,0	76 700	41 899	64,8	27 742	36,2	7 059	9,2	34 801	45,4	7
O.F.S.	40 035	8	0,0	40 027	23 083	57,7	12 667	31,6	4 277	10,7	16 944	42,3	8
N. Province	127 722	385	0,3	127 337	86 849	68,2	23 331	26,2	7 157	5,6	40 488	31,8	9
TOTAL (RSA)	556 146	879	0,16	555 267	293 867	52,9	192 393	34,6	69 007	12,5	261 400	47,1	

Source: rearranged from Department of Education 1999; Department of Education 1999

In 1998 a total of 552 862 candidates sat for the South African school leaving examination. Of that total, the results of 478 (0,1%) were pending while 272 488 (49,3%) candidates passed and 279 896 (50,7%) candidates failed. A total of 114 621 candidates sat for the school leaving examination in the Northern Province and only 40 218 (35,2%) candidates passed and 74 115 (64,8%) failed while the results of 288 (0,3%) candidates were pending. The Western Cape topped all the provinces with the pass rate of 79,0% whereas the Northern Province obtained the lowest pass rate of 35,2% (see Table 3.9).

In 1999, there were 511 474 candidates in South Africa who sat for the school leaving examination. Of that total, the results of 315 (0,1%) were pending while 249 831 (48,9%) candidates passed and 261 328 (51,1%) candidates failed. A total of 104 200 candidates sat for the school leaving examination in the Northern Province and only 39 093 (37,5%) candidates passed, 65 049 (62,5%) candidates failed while the results of 58 (0,1%) candidates were pending.

Although the 1999 school leaving examination results of South Africa as a whole recorded a decrease in the pass rate by 0,4% compared to 1998, the Northern Province recorded an improvement of 2,5%. However, the performance of the Northern Province remained the lowest compared to other provinces. Whereas the Western Cape topped all the provinces with a pass rate of 78,8%, the Northern Province obtained the lowest pass rate of 37,5% (see Table 3.10).

In 2000, a total number of 489 941 candidates sat for the South African school leaving examination. Of that total, the results of 643 (0,1%) were pending while 283 294 (57,9%) candidates passed and 206 004 (42,1%) candidates failed. A total of 95 191 sat for the school leaving examination in the Northern Province and only 48 886 (51,4%) candidates passed, 46 132 (48,6%) candidates failed while the results of 173 (0,2%) candidates were pending. Though the 2000 school leaving examination results of South Africa as a whole recorded an improvement of 8,0% compared to 1999, the Northern Province recorded an improvement of 13,9%. The performance of the Northern Province compared to other provinces remained at the last but one position, i.e. performing better than the Eastern Cape. The Western Cape continued to top all the provinces with a pass rate of 80,6% (see Table 3.11).

Table 3.9 School leaving examination results by province for candidates with six or more subjects for 1998

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	38 546	0	0,0	38 546	8 108	21,0	21 410	55,5	9 028	23,4	30 438	79,0	1
N. Cape	7 429	0	0,0	7 429	2 571	34,6	4 052	54,5	806	10,8	4 858	65,4	2
Gauteng	76 861	85	0,1	76 776	34 076	44,4	30 202	39,3	12 498	16,3	42 700	55,6	3
North West	42 436	47	0,1	42 389	19 231	45,4	17 467	41,2	5 691	13,4	23 158	54,6	4
Mpumalanga	41 612	58	0,1	41 554	19 667	47,3	16 703	40,2	5 184	12,5	21 887	52,7	5
Kwa-Zulu Natal	108 063	0	0,0	108 063	53 739	49,7	36 326	33,6	17 998	16,7	54 324	50,3	6
E. Cape	82 517	0	0,0	82 517	45 311	54,9	30 673	37,2	6 533	7,9	37 206	45,1	7
Free State	40 777	0	0,0	40 777	23 078	56,6	13 361	32,8	4 338	10,6	17 699	43,4	8
N. Province	114 621	288	0,3	114 333	74 115	64,8	32 438	28,4	7 780	6,8	40 218	35,2	9
TOTAL (RSA)	552 862	478	0,1	552 385	279 896	50,7	202 632	36,7	69 856	12,6	272 488	49,3	

Source: rearranged from Department of Education 1999; Department of Education 1999

Table 3.10 School leaving examination results by province for candidates with six or more subjects for 1999

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	37 199	0	0,0	37 199	7 896	21,2	20 213	54,3	9 090	24,4	29 303	78,8	1
N. Cape	7 160	1	0,0	7 159	2 556	35,7	3 795	53,0	808	11,3	4 603	64,3	2
Gauteng	71 757	1	0,0	71 756	30 820	43,0	29 457	41,1	11 479	16,0	40 936	57,0	3
North West	36 819	0	0,0	36 819	17 632	47,9	14 485	39,3	4 702	12,8	19 187	52,1	4
Kwa-Zulu Natal	103 268	164	0,2	103 104	50 798	49,3	35 731	34,7	16 575	16,1	52 306	50,7	5
Mpumalanga	38 236	5	0,0	38 231	19 766	51,7	14 277	37,3	4 188	11,0	18 465	48,3	6
Free State	33 004	4	0,0	33 000	19 091	57,9	10 325	31,3	3 584	10,9	13 909	42,1	7
E. Cape	79 831	82	0,1	79 749	47 720	59,8	26 591	33,3	5 438	6,8	32 029	40,2	8
N. Province	104 200	58	0,1	104 142	65 049	62,5	31 232	30,0	7 861	7,5	39 093	37,5	9
TOTAL (RSA)	511 474	315	0,1	511 159	261 328	36,4	186 106	36,4	63 725	12,6	249 831	48,9	

Source: Department of Education 1999

Table 3.11 School leaving examination results by province for candidates with six or more subjects for 2000

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
W. Cape	37 818	0	0,0	37 818	7 329	19,4	21 254	56,2	9 235	24,4	30 489	80,6	1
N. Cape	7 054	0	0,0	7 054	2 035	28,8	4 127	58,5	892	12,6	5 019	71,2	2
Gauteng	68 202	6	0,0	67 196	22 140	32,5	33 160	48,6	12 896	18,9	46 056	67,5	3
North West	40 098	1	0,0	40 097	16 731	41,7	18 309	45,7	5 057	12,6	23 366	58,3	4
Kwa-Zulu Natal	96 432	31	0,0	96 392	41 264	42,8	39 473	41,9	15 655	16,2	55 128	57,2	5
Mpumalanga	41 115	359	0,9	40 756	19 062	46,8	16 932	41,5	4 762	11,7	21 694	53,2	6
Free State	29 477	15	0,1	29 462	13 924	47,3	11 841	40,2	3 697	12,5	15 538	52,7	7
N. Province	95 191	173	0,2	95 018	46 132	48,6	37 786	39,8	11 100	11,7	48 886	51,4	8
E. Cape	74 563	58	0,1	74 505	37 387	50,2	31 786	42,7	5 332	7,2	37 118	49,8	9
TOTAL (RSA)	489 941	643	0,1	489 298	206 004	42,1	214 668	43,9	68 626	14,0	283 294	57,9	

Source: Department of Education 2000

In 2001, a total number of 449 371 candidates sat for the South African school leaving examination. Of that total, the results of 39 (0,0%) were pending while 277 206 (61,7%) candidates passed and 172 126 (38,3%) candidates failed. A total of 82 246 sat for the school leaving examination in the Northern Province and only 48 971 (59,5%) candidates passed, 33 271 (40,5%) candidates failed while the results of 4 (0,0%) candidates were pending. Though the 2001 school leaving examination results of South Africa as a whole recorded an improvement of 3,8% compared to 2000, the Northern Province recorded an improvement of 8,1%. The performance of the Northern Province compared to other provinces remained at the last but third position, i.e. performing better than the Free State, Mpumalanga and the Eastern Cape. The Northern Cape topped all the provinces with a pass rate of 84,2% (see Table 3.12).

From 1994 to 1999 the Northern Province had the largest number of grade 12 candidates, followed by KwaZulu Natal. In the year 2000 the Northern Province had the second largest number of grade 12 candidates, topped only by KwaZulu Natal. From 1995 to 2000, the number of grade 12 candidates in the Northern Province have decreased from 138 816 to 95 191. Such a large decrease can probably be attributed to, *inter alia*, the introduction of the policy of allowing grade 12 learners to repeat the class only once. Until 1996, grade 12 learners could repeat a class for as many times as they wished.

From 1994 to 2001, the Northern Province did not obtain a pass rate higher than the South African pass rate. The pass rate of the Northern Province from 1994 to 2001 was 44,4%, 37,8%, 38,8%, 31,9%, 35,2%, 37,5%, 51,4% and 59,5% respectively while the South African pass rate was 58,0%, 53,4%, 54,7%, 47,1%, 49,3%, 48,9%, 57,9% and 61,7% respectively. During the above-mentioned period, the Northern Province did not obtain an endorsement pass rate higher than the South African endorsement pass rate (see Table 3.13).

Table 3.12 School leaving examination results by province for candidates with six or more subjects for 2001

Province	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
N. Cape	6 619	0	0,0	6 619	1 048	15,8	4 596	69,4	975	14,7	5 571	84,2	1
W. Cape	37 559	0	0,0	37 559	6 510	17,3	21 671	57,7	9 378	25,0	31 049	82,7	2
Gauteng	64 339	1	0,0	64 338	16 970	26,4	33 671	52,3	13 697	21,3	47 366	73,6	3
Kwa-Zulu Natal	93 340	2	0,0	93 338	34 718	37,2	42 923	46,0	15 697	16,8	58 620	62,8	4
North West	36 734	1	0,0	36 733	13 770	37,5	17 684	48,1	5 279	14,4	22 963	62,5	5
N. Province	82 246	4	0,0	82 242	33 271	40,5	37 977	46,2	10 994	13,4	48 971	59,5	6
Free State	26 637	0	0,0	26 637	19 034	41,0	11 850	44,5	3 853	14,5	15 703	59,0	7
Mpumalanga	38 693	2	0,0	38 691	20 555	53,1	14 435	37,3	3 701	9,6	18 136	46,9	8
E. Cape	63 204	29	0,0	63 175	34 350	54,4	24 692	39,1	4 133	6,5	28 825	45,6	9
TOTAL (RSA)	449 371	39	0,0	449 332	172 126	38,3	209 499	46,6	67 707	15,1	277 206	61,7	

Source: Department of Education 2001

Table 3.13 School leaving examination results for the Northern Province candidates with six or more subjects, from 1994 to 2001

Year	No. of candidates wrote	No. awaiting results		No. wrote exclude awaiting results	No. failed		Number of candidates passed						Position
							Without endorsement		With endorsement		Total		
		No.	%		No.	%	No.	%	No.	%	No.	%	
1994	129 951	0	0,0	129 951	72 220	55,6	41 964	32,3	15 767	12,1	57 731	44,4	9
1995	138 816	0	0,0	138 816	86 391	62,2	42 059	30,3	10 366	7,5	52 425	37,8	9
1996	126 081	3 634	2,9	122 447	74 878	61,2	38 218	31,2	9 351	7,6	47 569	38,8	9
1997	128 559	96	0,1	128 463	87 432	68,1	33 765	26,3	7 266	5,7	41 031	31,9	9
1998	114 621	288	0,3	114 333	74 115	64,8	32 438	28,4	7 780	6,8	40 218	35,2	9
1999	104 200	58	0,1	104 142	65 049	62,5	31 232	30,0	7 861	7,5	39 093	37,5	9
2000	95 191	173	0,2	95 018	46 132	48,6	37 786	39,8	11 100	11,7	48 886	51,4	8
2001	82 246	4	0,0	82 242	33 271	40,5	37 977	46,2	20 994	13,4	48 971	59,5	6

Source: Rearranged from: Department of Education 1997, 1998, 1999, 2000, 2001

3.13 EXPLANATION FOR BAD RESULTS 1994 - 2001

Although poor learner performances in the South African school leaving examination were attributed to various factors, the following were regarded as the main contributory factors:

The legacy of apartheid education was mainly blamed for poor learner performances from 1994 to 1997. The high failure rate in the school leaving examination in the Northern Province was attributed to the previous policies of the apartheid government which included skewed resource provisioning. Due to the above-mentioned resource provisioning policy, homeland schools, particularly the black rural schools, were neglected and under resourced. Motsoaledi (1996:2) asserts that:

> "All in all, the causes can be contributed to the policies of apartheid. These policies have created conditions that made it extremely difficult for children to study in rural schools. These also eroded the quality of teachers produced in the former homelands."

While the ongoing impact of poor resource provisioning has been acknowledged, other contributing factors were identified from 1998 to 2001, which include, *inter alia*, the collapse of a culture of learning, teaching and service. The collapse of a culture of learning, teaching and service in schools included a lack of commitment from learners, educators and parents with regard to school matters, a lack of permanently appointed school principals, poor attendance monitoring of both educators and learners, a lack of capacity to manage and govern schools, etc. (Northern Province Education, Arts, Culture and Sport 1998).

3.14 CONCLUSION

From 1910 to the year 2001, the school leaving examination in South Africa, including in the Northern Province, had to perform its basic function of allocating and legitimizing while contending with numerous problems. During the pre-apartheid period, the school leaving examination, through the University of the Cape of Good Hope and the Joint Matriculation Board had to contend with the decentralisation of education based on "language and nationhood" amongst the whites and the general neglect of education for blacks (Behr & McMillan 1971:394).

During the apartheid period, viz. 1948 to 1994, the school leaving examination, through the Joint Matriculation Board, the South African Certification Council and other related structures, had to contend with the co-ordination of the eighteen racially-divided education departments by applying its moderation and monitoring functions. The democratic period, viz. from 1994 onwards, required SAFCERT and other related structures to be transformed in order to keep pace with democratic functions, which include quality assurance of the South African school leaving examination without discrimination.

CHAPTER 4

METHODOLOGY EMPLOYED FOR DATA COLLECTION

4.1 INTRODUCTION

This chapter intends to discuss the methodology employed for data collection. It focuses on the purpose of the research, permission obtained, the choice of research methodology, validity and reliability, choice of the population group, method of sampling and the selection of respondents as well as the questionnaire.

4.2 THE PURPOSE OF THE RESEARCH PROJECT

The purpose of this research project is to collect relevant data which will assist in determining whether there is a meaningful/significant link between the differences in the results of the South African school leaving examination of various schools in the Northern Province and the hidden curriculum. It aims at determining whether the differences in the South African school leaving examination results of various schools in the Northern Province can be partly attributed to the way the formal curriculum and the formal structures of various schools are being impacted by the informal curriculum and the informal structure, i.e. the hidden curriculum.

Although the above hypothesis can be tested against numerous aspects of the formal curriculum, due to time and financial constraints, I have decided to limit the questionnaires to nine aspects of the hidden curriculum which are mainly informed by the literature review and which are viewed by myself as being at the core of both the formal curriculum and the hidden curriculum, viz. general information, attitude, punctuality and attendance, afternoon studies, school timetable, syllabi and written work, discipline and school policy, support services and staff development as well as motivation and acceptance of the responsibility for the results which will be argued in paragraph 4.7.

Babbie (1998:90) mentions three most common and useful purposes of social research, viz. exploration, description and explanation. Without drawing lines between the three purposes, I

view the purpose of this research project as being more explanatory since I intend to search for a linkage or relationship among the variables, viz., the South African school leaving examination results and the hidden curriculum.

4.3 PERMISSION TO CONDUCT RESEARCH

In reply to my application and the University of Pretoria's application to conduct research, permission was granted in writing by the Northern Province Education, Arts, Culture and Sport on the 29th June 1998 (see Appendices N, O and P). Since the permission clearly stipulated that I have to inform the Regional Director of the research taking place in his schools, I decided to introduce myself physically to the former at the Northern Regional offices. Verbal permission was granted by the Regional Director's office which referred me to the relevant district, viz. Soutpansberg.

As the grade 12 learners were busy writing the trial examination in August and September 1998, I could not proceed with the arrangement for permission.

Permission to conduct research was renewed on 5 July 1999. Permission was granted by the Soutpansberg District Manager in writing to visit the sample schools (see Appendix Q). Although the district manager granted permission to visit the schools, I first had to introduce myself to the circuit managers as recommended by the District Manager. All the circuit managers granted permission verbally and assisted me in locating the sample schools.

As the circuit managers advised me to inform the schools, I applied to the principals for permission to conduct research (see Appendix R). Before the actual research could be started, I decided to introduce myself physically to the principals of the sample schools and made arrangements for the dates and times on which their schools could be visited. See Appendix F for the school visit schedule.

4.4 CHOICE OF RESEARCH METHODOLOGY, VALIDITY AND RELIABILITY

As the purpose of this research project is to investigate whether the differences in the South African school leaving examination results of various schools in the Northern Province can be partly attributed to the impact of the hidden curriculum, I found the quantitative research method

and its techniques to be suitable for this type of study rather than the qualitative method. My choice of the quantitative method and techniques was determined by, *inter alia*, the ontological and epistemological assumptions (Mouton 1996) which include the type of research problem and the research purpose. Mouton (1996:39) asserts that:

> "Similarly, the notion of that constitutes good information or valid results (the epistemological dimension) influences our decision to formulate a research problem in a particular way ... the nature of the unit of analysis dictates one particular choice of technique and rules out another."

Due to the nature of the phenomena being investigated and the large size of the population group and the sample, I had to use the quantitative research method while acknowledging its limitations and while I am fully aware of the fact that most of the studies in the area of the hidden curriculum have been conducted through qualitative research methods. This includes qualitative studies by Gatto (1992), Gilborn (1992), Cusick (1973), Willis (1977), McLaren (1986, 1993), Omokhodion (1989), etc.

In choosing the research method, I conducted a pre-survey and interviews in three schools which included one school from the former Department of Education and Training, one school from former House of Delegates and one from former Transvaal Education Department. Three principals, five grade 12 learners and five grade 12 educators took part in the pre-survey and interviews. After comparing information gathered through interviews and questionnaires, the quantitative method of research was chosen for the following reasons:

Due to the unequal power relation between educators and learners (Jackson 1990), due to the emotional and intellectual dependency (Gatto 1992) which are linked to the cultural ethos of the Soutpansberg district where educators' authority cannot be questioned, challenged or doubted, learners are very sensitive to communicate any negative information which implicates educators while on the other hand educators are free to communicate and blame the learners.

Educators of schools which performed poorly blamed the learners while principals blamed both learners and educators. Educators and principals of schools which performed well attributed good performance to themselves, i.e. their hard work while learners of the latter schools attributed good performance to educators, principals and themselves.

As the timing of this research project coincided with the educators' mass actions, electioneering, political activities and post-election fever (see Chapter 5), which were characterised by unorganised criminal activities, mistrust and unsafe conditions for any stranger, in-depth observation or interviews were not possible. I planned the survey in such a way that very little time would be spent in schools and to avoid a situation where I would have to frequent a school or use the same route frequently. As I sought accommodation in Makhado next to the police station, my safety and my property were always assured.

The choice of the quantitative method is also influenced by the different educational histories which emanated from the historical unequal funding and other resource provisioning which ultimately resulted in different racial and ethnic schools which hardly resembled each other (see Chapter 3). In view of the fact that the research was conducted at the time when the Department of Education was still engaged in reducing the gap in resource provisioning, the application of the qualitative research method would provide information based on schools divided along racial and ethnic lines but not of the non-ethnic and non-racial Soutpansberg district nor of the Northern Province.

Due to the racial and ethnic barriers which were created by the former so-called separate development policies, the period when the research was conducted, in-depth observations or interviews which would be required by this study could not be possible. Although apartheid was illegal, people were still racially, ethnically and culturally divided when the research was conducted, hence any close interaction between whites, Indians and blacks was still viewed as a cultural and racial taboo, as was revealed by the pre-survey.

Due to the conservative nature of the Soutpansberg people which is reinforced by the racial division, in-depth observations or interviews would result in gender taboos as girls and boys do not freely interact as was revealed by the pre-survey. Notwithstanding my status as a researcher, due to my gender, boys interacted more freely with me while girls, particularly of other races, could hardly interact with me.

4.5 CHOICE OF THE POPULATION GROUP AND SAMPLE

The Northern Province of Education, Arts, Culture and Sport consists of thirty-six district (area) offices. Each district office has a number of circuit offices. The Northern Province Education,

Arts, Culture and Sport had a total number of 1 254 secondary schools which entered candidates for the 1999 South African school leaving examination.

Due to the large population of the secondary schools, financial and time constraints, I chose the Soutpansberg district as my area of research. The majority of the former racially-divided education departments were found in the Soutpansberg district, i.e. the Venda Education Department, the Gazankulu Education Department, the Transvaal Education Department, the House of Assembly and the House of Delegates. In this study, I view the above-mentioned former departments of education as a fair representation of the former Northern Province departments of education and the Northern Province schools.

As the Soutpansberg district consists of 65 secondary schools that had entered candidates for the 1999 South African school leaving examination, all the secondary schools were grouped into three groups according to their 1999 final examination results.

Schools which obtained an aggregate pass of 0% - 30% were grouped in the bottom category (which is viewed as poor performance) and accounts for 18 schools. Schools which obtained an aggregate of 31% - 49% (which I view as a fair performance) accounts for 25 schools. Schools which obtained 50-100% (which I view as a good performance) accounts for 25 schools.

Due to the large number of secondary schools (65) as well as financial and time constraints, I deemed the sampling technique necessary. In defining sampling, Mouton (1996:135) argues:

> "... we usually select only some of the elements with the intention of finding out something about the total population from which they are taken."

Babbie (1998:192) concurs with Mouton in defining sampling:

> "... the process of selecting observations ... allows a researcher to make relative few and generalize from those observations to a much wider population."

The inclusion of all 65 schools within the three groups, viz. top, middle and bottom, is done in order to give each member of the population an equal chance of being selected. Mouton (1996: 138) argues that every member of the population must have an equal chance of being selected.

In each of the above-mentioned categories 10 schools were selected using the random sampling technique. Ten schools in each group, totalling 30 schools were viewed as a fair sampling number to represent the whole population. Mouton (1996:136) argues:

> "The key concept in sampling is representativeness. Unless the sample from which we will generalize 'truthfully' or 'faithfully' represents the population from which it is drawn, we have no reason to believe that the population has the same properties as those of the sample."

In order to ensure representativeness and unbiasedness in selecting schools, I requested the assistance of a research support consultant (University of Pretoria, Department of Information Technology) to perform a random selection of schools.

The 1999 performance list of all the Northern Province secondary schools was supplied by the Northern Province Education, Arts, Culture and Sport. The researcher compiled a merit list of the Soutpansberg District secondary schools and supplied it to a research support consultant who made a random selection of schools (see Appendix D: 1999 merit list of the Soutpansberg District Senior Certificate; Appendix E: Random selection of schools: Top, Middle and Bottom.)

A complex sample which consisted of two levels was used, viz. a sample for schools and a sample for learners within schools. A stratified random sample was used for selection of schools. Babbie (1998:217) explains stratified sampling as the grouping of the units composing a population into homogenous groups (or strata) before sampling. This procedure improves the representativeness of a sample, at least in terms of the stratification variables.

Schools were grouped into three strata, viz. top, middle and bottom performers. A random sample of schools was selected from each stratum.

A systematic sample of 20% of the 2000 grade 12 learners of each school was selected from the class list. All the 1999 grade 12 educators of the sample schools who were present on the day of the survey were expected to complete the questionnaires.

4.6 THE QUESTIONNAIRES

The questionnaires excluded information based on the availability of facilities and did not require the respondents to supply any information on the availability of facilities as an in-depth related study has been conducted by other researchers, including the Human Sciences Research Council (1997) and Sheppard (1998) (see Chapter 3).

Before drawing up the final questionnaires I consulted a research support consultant and a statistician (University of Pretoria) who checked and corrected the draft questionnaires.

In order to collect data, questionnaires were distributed among the randomly selected grade 12 secondary schools of the Soutpansberg District which entered for the 1999 Senior Certificate examinations. According to Babbie (1990:377) a questionnaire is defined as:

> "A document containing questions and other types of items designed to solicit information appropriate to analysis."

The purpose of the questionnaire is clearly stated by Babbie (1995:158):

> "Questionnaires provide a method of collecting data by asking people questions or asking them to agree or disagree with the statements representing different points of view."

While acknowledging the numerous ways of collecting survey data and the strengths and weaknesses thereof, I find self-administered questionnaires as being more appropriate to this type of research than the other forms of interview surveys, viz. face-to-face interviews or telephone interviews. Self-administered questionnaires are clearly explained by Babbie (1998:257-258):

> "... respondents are asked to complete the questionnaires themselves ... Research workers deliver the questionnaires themselves ... Research workers deliver the questionnaires to the homes of sample respondents and explain the study. The questionnaire is then picked up later by the research team."

Due to the poor condition of the roads and the distance between schools, I had to deliver the questionnaires to the schools and waited for completion by the respondents. As the differences

in the results of the South African school leaving examination of various schools in the Soutpansberg District can be a sensitive issue, particularly where there are some extremes in performances and where there is an unequal power relation among the respondents, viz. the principals, educators and learners (Lynch 1989:1), self-administered questionnaires were necessary to ensure the unbiasedness of the respondents.

The questionnaires consist of close-ended questions as well as many open-ended elements. The questionnaires were to be answered by 30 principals, 20% of the 2000 grade 12 learners and all the 2000 grade 12 educators of the randomly selected schools. Jolliffe (1986:24-25) defines those types of questions as:

> "In an open question respondents are left to make up their own responses whereas in a closed question a list of responses is given and respondents choose the appropriate one."

As I am aware of the shortcomings of close-ended questions, *inter alia* the denial of any spontaneity of response by the respondent, a possible lack of the respondent's appropriate category for his or her answer or insufficient details, an open-ended element is attached to almost all the questions. Bailey (1994:122) argues that:

> "A questionnaire containing primarily fixed alternative questions should contain at least one open-ended question (at the end of the questionnaire) to determine whether anything of importance to the respondent has been omitted."

My choice of the closed-ended questions is based on, *inter alia*, the large number of sample schools and the respondents, as well as the time and money available for this research project. Since the purpose of the research is to compare the under-performing, middle-performing and high- performing schools, standardized answers which can be coded and analysed are essential (Bailey 1994:119).

Although the above-mentioned hypothesis can be better tested against numerous aspects, due to time and financial constraints, I decided to limit the questionnaire to nine aspects, viz. general information, attitude, punctuality and attendance, afternoon studies, school policy, support services and staff development, motivation and value expectation accepting responsibility for the results and school timetable, as well as syllabi and written work (see Appendices A, B and C).

The choice of the nine aspects of the questionnaire from which categories of questions are derived is mainly informed by the literature review of the conceptual framework, i.e. the notion of the hidden curriculum and the school leaving examination as will be explained below under sections of the questionnaires.

4.7 SECTIONS OF THE QUESTIONNAIRES

4.7.1 General information

In this section I intend to investigate, against the background of the hidden curriculum, whether the differences in the South African school leaving examination results of various schools in the Northern Province can be attributed to variables like gender, age, experience, years in grade, qualifications and choice of the subject group. The following questions were put to the educators, principals and learners:

Educators:

- Indicate your gender
- Indicate your main subject which you taught in grade 12 in 1999
- What is your highest qualification in the subject mentioned

Principals:

- Indicate your gender
- Experience as a principal
- Indicate your academic and professional qualifications

Learners:

- Indicate your gender
- Age in years
- Years in grade 12
- Which subject group are you doing?
  - Commercial
  - Science
  - General

4.7.2 Attitude and the hidden curriculum

While acknowledging the diversity of definitions and definitional problems of the concept *attitude*, Oppenheim (1992:174, 175) offers the following explanation.

> "Attitude is a state of readiness, a tendency to act or react in a certain manner when confronted with certain stimuli. Most of an individual's attitudes are usually dormant and are expressed in speech or behaviour only when the object of the attitude is perceived."

Attitudes, like many other components of behaviour, are strengthened by beliefs or opinions and are often expressed in evaluative terms like *good* or *bad, desirable* or *undesirable, acceptable* or *unacceptable, satisfied* or *dissatisfied*, etc.

Zimbardo (1977:30) defines attitude as:

> "Private events whose existence we infer from our own introspection or from some form of behavioral evidence when they are expressed overtly in word or deed."

Attitudes have many attributes and differ in intensity and endurance. Attitudes can impact either positively or negatively on any form of performance as is affirmed by Willis (1977) who attributed the oppositional behaviour and the counter-school culture of working class learners to their own attitude towards school as a whole. This has been further asserted by Jackson (1990:74) who links performance of good learners with positive attitudes. It is against this background that I intend to investigate whether the differences in the South African school leaving examination results of various schools in the Northern Province can be attributed to the impact of attitudes. The following questions were asked:

Educators:

- Rate your enjoyment in teaching the subject mentioned in question 5.
- If 1, why did you teach it?
- Comment on the 1999 grade 12 final examination results of the subject mentioned in 5.
- Do you think your learners were capable of obtaining more than 80% in your subject?
- What final results (pass percentage) did you expect from your learners in your subject?

Principals:

- Rate your enjoyment in heading your school in 1999.
- Comment on the 1999 grade 12 final examination results of your school.
- Do you think your learners were capable of obtaining more than 80% pass aggregate?
- What final results (pass percentage) did you expect from your learners?

Learners:

- Rate your enjoyment in doing the subject group mentioned in question 7.
- Do you like all the subjects which you are doing?
- Comment on the 1999 grade 12 final examination results of your school.
- Do you think your learners were capable of obtaining more than 80% pass aggregate?
- What final results do you expect from your final examination?

4.7.3 Punctuality, attendance and the hidden curriculum

While the Department of Education has some basic guidelines to regulate punctuality and attendance of both educators and learners, each school has to develop its own policy of controlling punctuality and attendance. While it is acknowledged that punctuality and attendance and the way policies impact on punctuality and attendance differ from school to school, Jackson (1990:12) argues that:

> "... responsibility of the teacher and one that calls our attention to another important aspect of classroom life, is that of serving as an official timekeeper. It is he who sees to it that things begin and end on time..."

Both educators and learners should learn to observe time if they want to achieve their objectives through schooling as all school activities are regulated by time. The importance of punctuality is indicated by Gatto (1992:6) as he argues:

> "But when the bell rings, I insist they drop whatever it is we have been doing and proceed quickly to the next work station. They must turn on and off like a light switch. Nothing important is ever finished in my class nor in any class I know of."

The following questions were asked to investigate the mediation of time by learners, educators and principals in order to ascertain whether the differences in the grade 12 school performance in the South African school leaving examination can be attributed to punctuality and attendance.

Educators:

- Comment on the 1999 grade 12 learners' attendance of your lessons.
- What action was taken against the learners who failed to attend your lessons regularly?
- Comment on the 1999 grade 12 learners' punctuality during your lessons.
- What action was taken against the learners who failed to be punctual during your lessons?

Principals:

- Comment on the 1999 grade 12 learners'school attendance.
- What action was taken against the learners who failed to attend school regularly?
- Comment on the 1999 grade 12 learners' punctuality during the lessons.
- What action was taken against the learners who failed to be punctual during lessons?

Learners:

- Comment on the 2000 grade 12 learners' attendance of lessons.
- What action is taken against the learners who fail to attend lessons regularly?
- Comment on the 2000 grade 12 learners' punctuality during the lessons.
- What is action is taken against the learners who fail to be punctual during the lessons?

4.7.4 Afternoon studies and the hidden curriculum

While the importance of afternoon studies as a way of creating additional time for learners to study is acknowledged, the time allocated and the way it is controlled differs from school to school. While acknowledging the numerous factors which impact on the attendance of afternoon studies, it remains the responsibility of both learners and educators to create favourable conditions which will motivate learners to attend these afternoon sessions. The unequal power relationship between educators and learners (Jackson, 1990) gives educators more responsibility in allocating time, including scheduling afternoon studies. In explaining the responsibility of educators as official timekeepers, Jackson (1990:12) argues:

> "It is he who sees to it that things begin and end on time, more or less. He determines the proper moment for switching from discussion to workbooks, or from spelling to arithmetic."

Appendices A, B, C, questions under section D (afternoon studies) investigate whether the difference in the grade 12 school performance in the South African school leaving examination

can be attributed to afternoon studies. The questionnaire investigates whether good or poor performance can be linked to the presence or lack of afternoon studies, whether afternoon studies were controlled, whether attendance was satisfactory and whether afternoon study lessons were conducted. The following questions were asked:

Educators:

- Did your school have an afternoon study timetable for grade 12 learners?
- Comment on the 1999 grade 12 learners' attendance of afternoon studies.
- How many days per week did you teach your grade 12 learners during afternoon studies?

Principals:

- Did your school have an afternoon study timetable for grade 12 learners?
- Comment on the 1999 grade 12 learners' attendance of afternoon studies.
- Did your school have afternoon study lessons for grade 12 learners?

Learners:

- Does your school have an afternoons study timetable for grade 12 learners?
- Comment on the 2000 grade 12 learners' attendance of afternoon studies.
- Does your school have afternoon study lessons for grade 12 learners?

4.7.5 School timetable, syllabi, written work and the hidden curriculum

While the Department of Education has the task of prescribing and supplying all the syllabi which have to be covered within a given period, schools have the responsibility of timetabling the syllabi. Lynch (1989:29) argues that:

> "The manner in which knowledge is selected, and the ways in which it is organized and evaluated, are largely identical in all schools. The content of syllabi is similar as it is specified annually by a centralized government authority, the Department of Education."

School timetables direct teaching and learning activities and indicate how the school manages its time. As each school has the task of drawing up its own timetable, timetabling determines the particularistic and universalistic character of a school. The school timetable has to accommodate

and to schedule the formal curriculum and the formal activities of the school. Through timetabling, educators have a responsibility of imparting the curriculum and the syllabi to the learners within a given time. Although this may have an unintended effect of fragmenting the educational experience for learners (Cusick 1973) or the alienation and violation of inner time experience (Berkhout & Bergh 1994), timetabling remains an important feature of the school and the future life of learners. Cusick (1973:212) asserts that:

> "This is in part a result of the compartmentalization of knowledge and the corresponding routine demands that a new activity begin every forty or fifty minutes. It is also a result of the way classes are run."

Notwithstanding the universalistic contents of the syllabi, the particularistic and the universalistic features of the timetable and written work, Northern Province grade 12 schools produce final examination results of far a different quality.

It is against this background that I intend to investigate whether the differences in the final examination results of various schools in the Northern Province can be attributed to the mediation of timetabling, written work or syllabi. The questionnaires focus *inter alia*, on the completion of the syllabi and the quantity of written work given. The following questions were asked:

Educators:

- Were you able to teach on the 1st day of the 1st semester in 1999?
- How often per month did you test your 1999 grade 12 learners?
- How did you react to the grade 12 learners who failed tests?
- How often per month did you give the grade 12 learners homework?
- How often per month did you give the grade 12 learners class work?
- In which month did you complete the syllabus of the subject you mentioned in question 5?

Principals:

- Did your school manage to teach on the 1st day of the 1st semester in 1999?
- According to your school policy, how often per month were the 1999 grade 12 learners supposed to be tested per subject?
- How did you react to the grade 12 learners who failed tests?

- According to your policy, how often per month were the 1999 grade 12 learners supposed to be given homework per subject?
- How often per month were the 1999 grade 12 learners supposed to be given class work per subject?
- In what month were the educators expected to complete the 1999 grade 12 syllabi?

Learners:

- Were you taught on the 1st day of the 1st semester this year?
- How often per month are you tested per subject?
- What action is taken against the learners who fail tests?
- How often per month are you given homework per subject?
- How often per month are you given class work per subject?
- In which month do you expect educators to complete their 2000 grade 12 syllabi?

4.7.6 Discipline, school policy and the hidden curriculum

Discipline is a multi-dimensional concept. In this study I intend to focus on discipline as explained by Hindess (1996:113) who argues that:

> "It is a power exercised over one or more individuals in order to provide them with particular skills and attributes, to develop their capacity for self-control, to promote their ability to act in concert, to render them amenable to instruction, or to mould their characters in other ways."

Discipline, power and authority imply each other although they may not have the same definition. In any learning situation where objectives are set, there should be discipline to ensure that the task is performed smoothly and procedurally. The importance of discipline is argued by Gatto (1992:12):

> "Children must be closely watched if you want to keep a society under tight central control. Children will follow a private drummer if you can't get them into a uniformed marching band."

The unequal power relation (Jackson 1990) between learners, educators and principals necessitates discipline in order to attain the set objectives. Jackson (1990:10) argues:

> "Teachers are indeed more powerful than students, in the sense of having greater responsibility for giving shape to classroom events and this sharp difference in authority is another feature of school life which students must learn..."

School policies should help to create a favourable discipline which would enhance teaching and learning. Lynch (1989:30), however, argues that:

> "... school administrators, teachers and pupils mediate the application of state educational policies to themselves."

In their mediation of school policies, learners, educators and principals engage in particularistic and universalistic practices which aim at producing good results which comply with public expectation. Due to the hierarchical relations between learners, educators and principals (Lynch 1989), i.e. the unequal power relations (Jackson 1990), due to the learners' dependency on rules and regulations (Cusick 1973), educators and principals as the official mediators of state policy have more responsibility in ensuring that schools operate a system of maintenance and procedural activities (Lynch 1989) that promote favourable learning conditions. Apple (1990:87) focuses on the potency of school discipline as reproductive force and as the maintenance of hegemony as he differentiates basic rules from the preference rules and argues that the hidden curriculum serves to reinforce the basic ground rules. He argues further that the basic rules as the broad parameters in which action takes place are tacitly learned and are neither rarely questioned nor communicated as they reside at the root of the learners' brains. Although schools have to operate a system of maintenance and procedural activities, the mediation of school discipline and school policies differs from school to school and impacts on the examination results differently.

Appendices A, B and C (questions under F), investigate the mediation of discipline and school policies with an attempt to investigate whether poor learner performance in the school leaving examination in the Northern Province can be attributed to differential disciplinary patterns of the various schools. The questions investigate whether both learners and educators have managed to create discipline which will enable the school to achieve its aim, which includes good learner performance in the school leaving examination. The following questions were asked:

Educators:

- What contribution did the regulations of your school have on the discipline of your grade

12 learners?

- Evaluate the implementation of the school regulations in terms of their contribution to the grade 12 results of your subject.
- What action was taken against grade 12 learners who violated the regulations of your school policy?

Principals:

- What contribution did the regulations of your school have on the discipline of the grade 12 learners?
- Evaluate the implementation of the school regulations in terms of their contribution to the grade 12 results.
- What action was taken against grade 12 learners who violated the regulations of the school policy?

Learners:

- What contribution do the regulations of your school have on the discipline of the grade 12 learners?
- Evaluate the implementation of the school regulations in terms of their contribution to the grade 12 results.
- What action is taken against grade 12 learners who violate the regulations of the school policy?

4.7.7 Support services, staff development and the hidden curriculum

Support services and staff development can impact on any form of performance, including learner performance, educator performance and principal performance. This questionnaire focuses on support services and staff development in the form of in-service training and workshops for educators and principals, inspection by the circuit managers, services of the Professional Auxiliary Services Personnel as well as support services in the form of providing additional books and parental support. Education support services are defined by the Department of Education (1997:2):

> "All human and other resources that provide support to individual learners and to all aspects of the system."

Inappropriate and inadequate provision of support services hamper meaningful learning and teaching. Beck (2000:383) asserts:

> "We often need assistance from other people to achieve our goals and so we affiliate with others because of this need. The assistance that they give us may reinforce and maintain our affiliative behavior over long periods of time."

Commenting on the parental role in the education of the child, Gatto (1992:18) warns parents who completely "dump" their children in the hands of educators as he argues:

> "They are mistrustful of intimacy like the children of divorce they really are (for we have divorced them from significant parental attention)."

Appendices A, B and C, questions under section G (Support Services and staff development), investigate whether the differences in the grade 12 school performance in the South African school leaving examination can be attributed to the above-mentioned forms of support services and staff development. The following questions were asked:

Educators:

- How many in-service training courses have you attended in 1999 for the subject mentioned in question 5?
- Rate the principal's support in terms of his/her contribution to the 1999 results of the subject mentioned in question 5.
- Were you guided on the requirements for the 1999 grade 12 final examination?
- Were you visited by the Professional Auxiliary Services personnel in 1999 to assist you in teaching your subject?
- Besides the textbooks, did your grade 12 learners have additional books which could assist them in learning your subject?
- Besides the textbooks, did you have additional books which could assist you in teaching your subject?

Principals:

- How many management workshops have you attended in 1999 which aimed at developing your management skills?

- Rate your support in terms of your contribution to the 1999 grade 12 final examination results.
- Were you visited by the circuit manager in 1999 to advise you on school management?
- Do you think inspection could improve the 1999 grade 12 results?
- Rate the parents' support in terms of their contribution to the 1999 grade 12 final examination results.
- Rate the support of the Professional Auxiliary Services personnel in terms of their contribution to the 1999 grade 12 results.

Learners:

- Have you visited a library this year (2000)?
- Do you know the requirements of the syllabi of the subjects which you are doing?
- Were you guided on the pass requirements for the 2000 grade 12 final examination?
- Besides the textbooks, do you have additional books which can assist you in your studies?

4.7.8 Motivation, value expectation and the hidden curriculum

The concept *motivation* can be defined from various points of view, *inter alia*, the biological, the behavioural and the cognitive approach. Being a multiple determined concept, motivation is expressed by Petri (1991:3-4) as follows:

> "Motivation is the concept we use when we describe the forces acting on or within an organism to initiate and direct behaviour .... to indicate the direction of behaviour... to explain why behaviour occurs in the one situation but not in the other."

As Petri (1991) ascribes more intense behaviour to the results of higher levels of motivation, I intend to investigate whether the differences in the quality of the school leaving examination results of various schools can be attributed to higher levels of motivation, lower levels of motivation or even a lack of motivation. By means of the questionnaires I intend to investigate why a certain behaviour occurs in one situation but not in the others, i.e. why some schools do well in the South African school leaving examination while others fail. Beck (2000:2) asserts:

> "Motivation is one of the explanations we use when we try to account for the variability of behaviour ... why some kids do well in school when equally talented ones fail?"

The questionnaires further investigate the value expectation of learners, educators and principals. Beck (1983:19) argues that value is a motivational concept, and something that has value is an incentive.

Learners who recognize the value of the South African school leaving examination are expected to be motivated and to work very hard in order to attain it. Value expectation, a form of intrinsic motivation, enhances performance. Beck (2000:31) argues:

> "Motivation is a theoretical concept that accounts for why people (or animals) choose to engage in particular behaviours at particular time."

The questionnaires focus on intrinsic and extrinsic motivation. While acknowledging the potence and relevance of intrinsic motivation, it does not imply that extrinsic motivation has no role in enhancing learning. Intrinsic motivation is clearly defined by Ausubel (1978:495) as the acquisition of knowledge as an end in itself or for its own sake.

Comparing intrinsic and extrinsic motivation, Geen (1995:120) argues:

> "... when a reward is offered, people low in achievement motivation may value competence as much as high achievers do when no reward is offered ... Thus high achievers may value competence less when a reward is offered than when one is not."

In order to investigate whether the differences in the school leaving examination results can be linked to the mediation patterns of motivation, the following questions were asked:

Educators:

- How did you treat the grade 12 learners who performed exceptionally well in your subject final examination?
- How many external visits did your school have in your subject in 1999 which intended to motivate the grade 12 learners?

- In which FEST (Foundation for Education, Science and Technology) competition did your grade 12 learners take part in 1999?
- In your view, what were the future plans of the majority of your 1999 grade 12 learners for the year 2000?

Principals:

- How did you treat the grade 12 learners who performed exceptionally well in the 1999 final examination?
- How many external visits did your school have in 1999 which intended to motivate the grade 12 learners?
- In which FEST (Foundation for Education, Science and Technology) competition did your grade 12 learners take part in 1999?
- In your view, what were the future plans of the majority of your 1999 grade 12 learners for the year 2000?

Learners:

- How do you want your school to treat you if you perform exceptionably well in your examinations?
- How many external visits did your school have this year 2000 which intended to motivate the grade 12 learners?
- In which FEST (Foundation for Education, Science and Technology) competition did you take part this year 2000?
- What are your future plans for the year 2001?

4.7.9 The hidden curriculum and the acceptance of responsibility for the final examination results

The questionnaires investigate whether the grade 12 learners, educators and principals are aware of their responsibility as demanded by, *inter alia*, the state, commerce, parents, etc. While learners, educators and principals should be allowed to choose what is good for themselves, they should also accept responsibility for their own behaviour. Lynch (1989:32) argues:

> "Teachers (especially in second level) must be seen to get results if they are to have professional credibility - the most visible results are the grade levels attained in

public examinations."

Educators, learners and principals should be aware of the value of the South African school leaving examination and should also accept responsibility for the results. The acceptance of responsibility for the results would motivate learners, principals and educators to improve their performance.

Gatto (1992:1) argues that some educators teach for the sake of complying with their employment contract and without taking responsibility for the results.

> "The license I have certifies that I am an instructor of English language and English literature, but that isn't what I do at all. I don't teach English, I teach school and I win awards doing it."

The seven universally taught lessons as explained by Gatto affirms the need to reflect on what educators teach, i.e. the contents of the curriculum, and how they teach, i.e. teaching methods.

The questionnaires investigate whether learners, educators and principals are aware of the importance of their collaborative efforts in improving the grade 12 results and that any failure affects all the stakeholders. The following questions were asked:

Educators:

- If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?
- If your school achieved an unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

Principals:

- If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?
- If your school achieved unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

Learners:

- If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination,

who would you commend the most?

- If your school achieved an unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

4.8 CONCLUSION

As the purpose of this chapter is to discuss the methodology employed for data collection, quantitative data collection methods will be applied. Three types of questionnaires will be used to collect data, viz., a questionnaire for grade 12 subject educators (Appendix A) which will be completed by the 1999 grade 12 subject educators, a questionnaire for principals (Appendix B) which will be completed by all the principals of the sample schools, and a questionnaire for learners (Appendix C) which will be completed by 20% of the 2000 grade 12 learners of each sample school.

Although I have decided to limit the questionnaires to only nine aspects, viz. attitude, punctuality and attendance, afternoon studies, school policy, support services and staff development, motivation and value expectation, accepting responsibility for the results, school timetable, syllabi and written work as well as general information, I acknowledge the multi-dimensional and non-static nature of the hidden curriculum. The selection of the nine aspects has been influenced by my experience as a principal of a secondary school and what I assume to be the possible factors which may be linked to the differences in the grade 12 school performances in the school leaving examination. This chapter can be graphically depicted by the following figure (Figure 4.1).

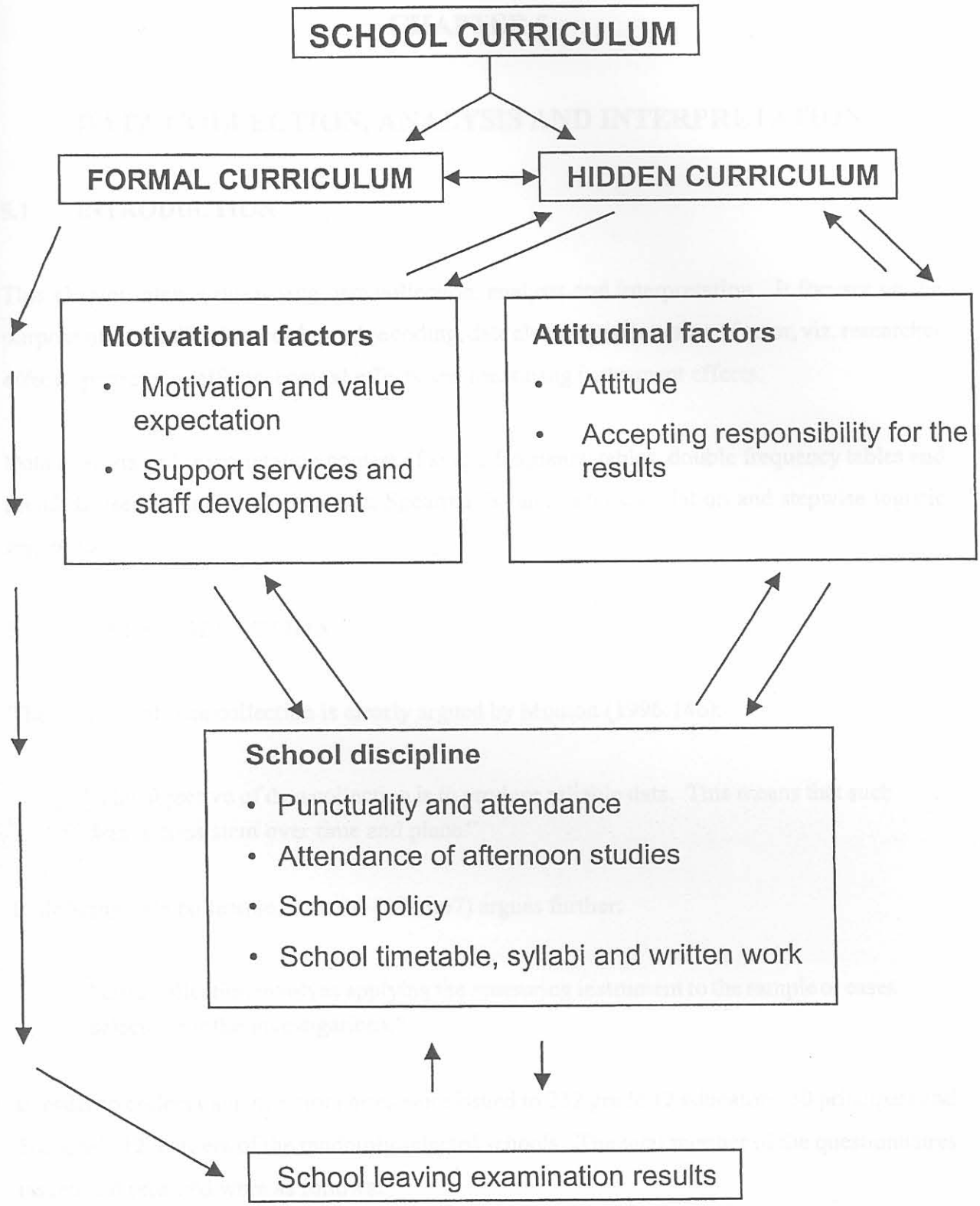

Figure 4.1 Possible impact of the hidden curriculum on the school leaving results in the Northern Province

CHAPTER 5

DATA COLLECTION, ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

This chapter intends discussing data collection, analysis and interpretation. It focuses on the purpose of data collection, editing, edge coding, data cleaning and sources of error, viz. researcher effects, participant effects, context effects and measuring instrument effects.

Data analysis and interpretation consist of single frequency tables, double frequency tables and methods used in analysing data, viz. Spearman's rank order correlation and stepwise logistic regression.

5.2 DATA COLLECTION

The purpose of data collection is clearly argued by Mouton (1996:146):

> "The objective of data collection is to produce reliable data. This means that such data is consistent over time and place."

In defining data collection, Mouton (1996:67) argues further:

> "Data collection involves applying the measuring instrument to the sample or cases selected for the investigations."

In order to collect data, questionnaires were issued to 232 grade 12 educators, 30 principals and 502 grade 12 learners of the randomly selected schools. The total number of the questionnaires issued and returned were as follows:

	Number Issued	Number Returned
Educators (Appendix A)	232	232
Principals (Appendix B)	30	30
Learners (Appendix C)	502	502

Although I administered the completion of the questionnaires, I wish to acknowledge the services of the principals and educators in organising the classes and maintaining discipline. Since I collected the questionnaires immediately after their completion, all the issued questionnaires were collected without any difficulty.

5.3 EDITING

Immediately after all the questionnaires were received, I proceeded with editing. The purpose of editing is clearly argued by Bailey (1994:345):

> "Editing consists of searching for problems ... The editor simply begins by looking over each completed questionnaire, searching for incomplete answers, cases where questions were misunderstood..."

5.4 CODING

Coding, the main task of data reduction, implies assigning a code number to each answer category. As I intended to do a computer analysis, coding was necessary. Babbie (1995:366) argues:

> "For computers to work their magic, they must be able to read the data you've colleted in your research. Moreover, computers are at their best with numbers."

As the questionnaires consist of close-ended and open-ended questions, both precoding and postcoding were applied. Precoding was applied on the close-ended questions. According to Bailey (1994:339) precoding is necessarily limited chiefly to questions whose answer categories are known in advance.

Postcoding was applied to open-ended questions. Bailey (1994:340) argues:

> "In open-ended questions the researcher is often not sure exactly what answers or how many different answer categories will be given, and so he or she often cannot establish codes until he or she has analysed the data."

As the open-ended questions resulted in a wide variety of responses, I had to assign a code

number to each answer category and later combined the code categories in order to facilitate analysis. In combining the code categories, I was guided by the theoretical concepts which are being examined in the study. Babbie (1995:367) argues:

> "Although the coding scheme ought to be tailored to meet particular requirements of the analysis, one great rule of thumb should be kept in mind. If the data are coded to maintain a great deal of detail, code categories can always be combined during analysis that does not require such detail."

As I could not memorize all the appropriate codes for every question due to the fact that the open-ended questions gave room for many answers, a code book was compiled.

5.4.1 Edge-coding

As all the answer categories are assigned a code number, I had to transfer the codes to the margins of the questionnaires. Due to the large number of questionnaires and the time factor, I sought the services of a coding assistant. I had to conduct intensive training of the latter in order to ensure that she understood the operation of the system. While I was confronted with the task of coding, I also had to check the performance of the assistant coder.

5.5 DATA CLEANING

Due to the large sample size, I could only correct the visible errors through editing. I requested the services of a research consultant to do a computer data entry. Data collected were organized into single frequency tables which made data cleaning easier. Babbie (1998:366) argues that no matter how, or how carefully, the data have been entered, some errors are inevitable.

Two types of data cleaning were done, viz. possible-code cleaning and contingency cleaning. Possible-code cleaning is clearly defined by Babbie (1998:367) as:

> ".... the process of checking to see that only those codes assigned to particular attributes - possible codes appear in the data files. This process guards against one class of data-processing error."

As the single frequency tables indicated the variable, frequency, percentage, cumulative frequency and cumulative percentage, I could easily examine the distribution of responses to each variable. Errors which were found were traced back to the source, viz. the questionnaires in order to make the necessary corrections.

Contingency cleaning is defined by Babbie (1998:367) as:

> "... the process of checking to see that only those cases that should have data on a particular variable do in fact have such data. This process guards against another class of data-processing error."

Errors which needed some contingency cleaning appeared mostly in the learners' responses which occurred mainly due to poor language mastery, i.e. English, as well as carelessness.

5.6 SOURCES OF ERROR (OBSERVATION EFFECTS)

In order to explain the problems encountered with this kind of research, I have decided to focus on the four categories of sources of error, viz. researcher effects, participant effects, context effects and measuring instrument effects.

5.6.1 Researcher effects

These are the effects that are due to the researcher. Mouton (1996:146) explains that researcher effects are the negative consequences relating to validity which are directly attributable to the researcher.

Researcher effects are divided into two sections, viz. effects associated with the researcher's characteristics and effects associated with researcher's orientations. Effects associated with the researcher's characteristics include, *inter alia*, the affiliation of the researcher, the image of the researcher and the distance between the researcher and the participant. The fact that the introductory letters indicated that I am a student attached to the University of Pretoria resulted in the respondents being eager to participate in research through the completion of questionnaires. Mouton (1996:149) argues:

> "If the interview is employed by a highly influential organization that is known for the quality of its research, respondents are likely to be better motivated to answer questions seriously and truthfully. Universities and large research organizations usually have reputations of this nature."

The fact that I had a letter of permission from the Northern Province Education, Arts, Culture and Sport and from the District Manager and as I was introduced to schools by the Circuit Manager through letters, my reputation as researcher was boosted to the extent that the respondents were motivated to complete the questionnaires accurately. Although I was a stranger, the respondents were motivated to co-operate.

As the research was conducted at a time when the Northern Province Department of Education attached high value to the South African school leaving examinations results as an important indicator for school performance and as the research coincided with the Department's efforts to improve the results, the timing of the research boosted the reputation of the research project and my image as researcher.

As my residence is closer to the area of the research, viz. the Soutpansberg District and as the respondents and I share many cultural values, including language, most of the respondents were eager to participate in the research project.

The final data cannot be devoid of my prejudices and opinions as argued by Mouton and Marais (1990:84):

> "... it is possible to conclude that the eventual observations are clearly influenced by the prejudice, expectations, attitudes, opinions and belief of the researcher."

5.6.2 Participant effects

Participant effects are explained by Mouton and Marais (1990:79):

> "... individual who is being observed, who is being questioned (the respondents) or to a group of people who are being observed or questioned."

The fact that participants in the social sciences are people, implies that they are aware of the fact that they are objects of investigation and they tend to react to it. Participant effects can be

explained in terms of effects which result from characteristics that are inherent in the participants, e.g. gender, racial group, status, memory decay, the omniscience syndrome, interview saturation and those that are the result of participant orientation, e.g. role selection and the level of motivation of the participants.

While educators and principals could easily remember past events, learners have a problem of memory decay and the omniscience syndrome. Mouton (1996:153) argues:

> "Some respondents appear to believe that they can answer any questions. The researcher must be sensitive to this type of effect to avoid the inclusion of responses that are not authentic."

Due to the omniscience syndrome, some respondents went to the extent of answering all the questions, including those which they were not supposed to answer.

As the questionnaires were supposed to be completed by all the 1999 grade 12 educators and all the principals of the randomly selected schools, the researcher experienced almost no problem with regard to the role selection of the learners, i.e. selecting 20% from each school's learner population.

While the selected learners showed a high level of motivation to participate by merely being selected, principals and educators, particularly those of schools which performed poorly, showed a very low level of motivation as they viewed the questionnaires as a way of accounting for the learners' performance and also as an instrument which could be used against them. As the research coincided with the school visits by departmental officials, learners, particularly from schools which performed poorly, wanted to use the research time to voice their dissatisfaction with educators, principals and the school as a whole because they could not separate my work as a researcher and the work of the departmental officials.

5.6.3 Context effects

Context effects are clearly defined by Mouton and Marais (1990:80):

> "... the broad spatio-temporal circumstances under which research is conducted ... and the specific spatio-temporal settings."

Context effects can be explained by focussing on the broader spatio-temporal factors which include cultural factors, political factors, the period during which the research is conducted and the narrower research setting within which the research is conducted.

I initially planned to start with school visits in August 1999. As the planned period coincided with the educators' mass actions and electioneering political activities, I had no alternative but to postpone the visits to the year 2000.

The period during which the research was conducted, viz. the year 2000, coincided with the floods, particularly in the Nzhelele area where the main Nzhelele bridge was swept away. This resulted in reviewing the school visit timetable. Due to flood damage, road conditions were very poor, to such an extent that I had to park my car far away from some schools and travel by foot. This resulted in applying all my efforts in trying to reduce the actual time spent with individual schools. As a result of poor road conditions which included lack of bridges, I could not reach the Ramabulana Secondary School and an alternative school was visited, viz. the Swobani Secondary School.

The research coincided with a poor communication network which was aggravated by the floods which left many schools without telephones. In order to communicate with various schools, I requested circuit officials to assist in distributing letters regarding appointments to conduct the research.

5.6.4 Measuring instrument effects

Measuring instrument effects are defined by Mouton (1996:146) as:

> "The negative consequences or lack of validity that may be directly attributed to some aspects of the measuring instrument."

In order to check the possible problems which might be related to the questionnaires and to check whether learners, educators and principals would be able to complete the questionnaire, I selected a small group of 3 principals, 5 grade 12 learners and 5 grade 12 educators to complete the questionnaires before they could be distributed to the randomly selected schools. The responses of the small group convinced me of the viability of this type of research.

As the questionnaires consist of, *inter alia*, close-ended questions, I am aware of their shortcomings, viz. the denial of any spontaneity of response by the respondent and a possible lack of the respondent's appropriate category for his or her answer. In recognising the above-mentioned shortcomings, an open-ended element has been attached to most of the questions.

Although an open-ended element is attached to most of the questions, the space provided on the questionnaires may limit some responses, i.e. some respondents may like to supply more information but due to the limited space, they may be forced to limit their responses.

As a result of the length of the questionnaire, viz. 11 pages, some of the respondents complained about the time taken in order to complete the questionnaires.

5.7 DATA COLLECTED

Due to the large sample size, I requested a research consultant to transfer the edge codes into the computer in order to quantify the collected data. The edge codes were converted into a machine-readable form, i.e. a form that can be read and analysed by the computer. The collected data were as follows (Appendix G: Educators' data; Appendix H: Principals' data and Appendix I: Learners' data).

5.8 FREQUENCY TABLES

In order to analyse the collected data, I sought the assistance of a research consultant to organise the collected data into single frequency tables, viz. a single frequency table for educators, a single frequency table for principals and a single frequency table for learners (see Appendices G, H, I).

As the single frequency tables indicated the variable, frequency, percentage as well as the cumulative percentage, I could easily identify any error and make the necessary corrections by tracing the error back to its original source through possible-code cleaning and contingency cleaning.

As the middle and the bottom performing schools revealed almost similar responses to the questionnaires, the performance of the two groups were merged into one group for the sake of analysis, viz. middle/bottom performing schools while the top performing schools remained intact, i.e. performance between 0-49% represented the middle/bottom performance while a performance

of 50% and above represented the top performing schools.

I further requested the research consultant to organise the single frequency tables into double frequency tables which show the performance of two groups, i.e. the top performing and the middle/bottom performing schools (see Appendices J, K, L, M).

5.9 METHODS USED FOR ANALYSING DATA

In attempting to find an appropriate analytical technique, I had to consider numerous techniques with the assistance of a statistician. Initially the chi-square was used and later found not to be appropriate as the sample size was very small, i.e. 75% of the cells had expected counts of less than 5.

With the assistance of a statistician, I had to apply other techniques, viz. the Spearman's rank order correlation coefficient and a stepwise logistic regression. The Spearman's rank order correlation coefficient was applied to the interpretation of the principals' data, while a stepwise logic regression was applied to the interpretation of the educators' and learners' data. Defining the Spearman's rank order correlation coefficient, Ary (1990:155, 162) argues:

> "The Spearman's rank order correlation is a special case of the Pearson product moment correlation ... [it] is part of the same statistical family as the median. It is an ordinal statistic designed for use with ordinal data ... [and] is used to find the relationship between two sets of ranks."

Like the Pearson product moment coefficient of correlation, the Spearman's rank order correlation is the statistical index used for finding the relationship between two sets of linearly distributed interval data and it varies from -1.00 (when the individual ranks on one variable are exactly the opposite of their ranks on the other variables) to +1.00 (when each individual has the same rank on both variables). The rank correlation coefficient will be zero if there is no relationship between the variables. The Spearman's rank correlation is one of the indices of correlation which aims at finding the strength of relationship among different types of variables.

As correlation coefficients indicate the direction (positive or negative) and the strength of a relationship between variables, they are by no means indicative of a cause and effect relationship.

Ary (1990:152) argues that:

> "Correlation does not necessarily indicate causation. When two variables are found to be correlated, this indicates that relative positions in one variable are associated with relative positions in the other variable. It does not necessarily mean that changes in one variable are caused by changes in the other variable."

In this study I have decided to use correlation coefficients to indicate only the strength of a relationship between variables and to limit the values to *strong, weak* and *no correlation.* I further decided to report on the variables which have a strong correlation only, i.e. a correlation closer to 1.

In order to interpret the educators' data and the learners' data, a stepwise logistic regression technique was applied to determine the relation between the school's performance and the variables. While acknowledging the inadequacies of logistic regression with regard to its interpretation, appropriate and comprehensive use and confusion which may arise from its four modelling techniques, viz. direct, sequential, stepwise and best K-predictors (Peng, So Harry, Stage and St. John 2002:260), the stepwise logistic regression method was applied. In a stepwise logistic regression, the dependent variable is a binary variable. The school performance (top or middle/bottom) was used as the dependent variable. A stepwise logistic regression is clearly defined by Hair, Anderson, Tatham and Black (1998:246) as a specialised form of regression that is formulated to predict and explain a binary (two-group) categorical variable rather than a metric dependent measure.

Stepwise regression selects variables from a group of possible variables based on their ability to explain the dependent variable. In this study, a number of possible factors that were thought to be contributing to the performance of a school were measured and used as explanatory variables. In analysing the data, one representative educator or learner per school was selected, based on the mode of every variable.

5.10 PRINCIPALS' DATA

Based on the Spearman's rank order correlation coefficient, the following variables revealed a strong correlation: V9, V13, V52, V11, V7, V18, V22 and V44 (see Appendix K).

V9 School's performance and the principal's rating of the school performance

Question: Comment on the 1999 grade 12 final examination results of your school.

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	0 0.00 0.00 0.00	1 3.33 10.00 12.50	5 16.67 50.00 71.43	4 13.33 40.00 100.00	10 33.33
Mid/Bot	11 36.67 55.00 100.00	7 23.33 35.00 87.50	3 6.67 10.00 28.57	0 0.00 0.00 0.00	20 66.67
Total	11 36.67	8 26.67	7 23.33	4 13.33	30 100.00

The correlation between the school's performance and the principal's rating of the school's performance was found to be 0.76326, i.e. p = 0.76326.

9 out of 10, i.e. 90% of top performing school principals rated their school's performance as good or very good, while 18 out of 20, i.e. 90% of the middle/bottom performing school principals rated their school's performance as poor or fair. The rating by the principals of middle/bottom performing schools regarding their school's performance as being good or very good seems to be inconsistent with the actual situation and can probably lead to continuous poor performance since such principals seem to be satisfied with their schools' performance.

V13 School performance and the principal's expectations of the final results

Question: What final results (pass percentage) did you expect from your learners?

0-30	1	31-50	2	51-80	3	81-100	4

Responses:

Frequency percent Row Pct Col Pct	Fair	Good	Very good	Total
Top	0 0.00 0.00 0.00	8 26.67 80.00 57.14	2 6.67 20.00 100.00	10 33.33
Mid/Bot	14 46.67 70.00 100.00	6 20.00 30.00 42.86	0 0.00 0.00 0.00	20 66.67
Total	14 46.67	14 46.67	2 6.67	30 100.00

The correlation between the school's performance and the principal's expectations of the final results was found to be 0.69533, i.e. p = 0.69533.

Though there is no principal who expected his learners to perform poorly, i.e. between 0-30%, all the principals of the top performing schools expected a good or very good performance, while 6 out of 20, i.e. 30% of the middle/bottom performing school principals expected the same.

As all the principals of the top performing schools expected a good or very good performance from their learners, while only 30% of the middle/bottom performing schools expected the same, the expectations of principals regarding the final results correlate positively with the actual results. This indicates that principals who expect poor results from their learners are likely to get poor results while principals who expect good results from their learners are likely to get good results.

V52 School performance and the commendation for an exceptionally good pass rate

Question: If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?

Learners	1
Educators	2
Principal	3
Other (specify)	4

Responses:

Frequency percent Row Pct Col Pct	Learners	Educators	Principal	Other	Total
Top	0 0.00 0.00 0.00	3 10.00 30.00 37.50	3 10.00 30.00 50.00	4 13.33 40.00 100.00	10 33.33
Mid/Bot	12 40.00 60.00 100.00	5 16.67 25.00 62.50	3 10.00 15.00 50.00	0 0.00 0.00 0.00	20 66.67
Total	12 40.00	8 26.67	6 20.00	4 13.33	30 100.00

The correlation between the school's performance and the commendation for an exceptionally good pass rate was found to be 0.67742, i.e. p = 0.67742.

7 out of 10, i.e. 70% of the top performing school principals were of the opinion that the principal, learners, educators and parents should be commended for an exceptionally good pass rate while 17 of 20, i.e. 85%, of the middle/bottom performing school principals had an opinion that learners and educators should be commended for an exceptionally good pass rate.

This indicates that the middle/bottom performing school principals do not regard themselves as part of the people who should take responsibility for good or poor learner performance and this can probably be, *inter alia*, a significant factor in determining the differences in performance between the top and the middle/bottom performing schools.

V11 School performance and the principal's opinion on the capability for 80% performance

Question: Do you think your learners were capable of obtaining more than an 80% pass aggregate?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
Top	9 30.00 90.00 52.94	1 3.33 10.00 7.69	10 33.33
Mid/Bot	8 26.67 40.00 47.06	12 40.00 60.00 92.31	20 66.67
Total	17 56.67	13 43.33	30 100.00

The correlation between the principals' opinion (based on the capability for 80% performance) and the school performance was found to be 0.47565, i.e. p = 0.47565.

9 out of 10, i.e. 90% of the top performing school principals were of the opinion that their learners were capable of obtaining more than an 80% pass aggregate while 12 out of 20, i.e. 60% of the

middle/bottom performing school principals were of the opinion that their learners were not capable of obtaining more than an 80% pass aggregate.

The middle/bottom performing school principals did not have an opinion that their learners were capable of obtaining more than an 80% pass aggregate, which indicates that they did not expect an exceptionally good performance from their learners. Undoubtedly this can, *inter alia,* be a significant factor in determining the differences in performance between the top performing schools and the middle/bottom performing schools.

V7 School performance and the principal's enjoyment in heading the school

Question: Rate your enjoyment in heading your school in 1999.

Bad	1	2	3	4	5	6	7	8	Good

Responses:

Frequency percent Row Pct Col Pct	1	2	3	4	5	6	7	8	Total
Top	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 3.33 10.00 20.00	1 3.33 10.00 20.00	3 10.00 30.00 42.86	5 16.67 50.00 62.50	10 33.33
Mid/Bot	2 6.67 10.00 100.00	1 3.33 5.00 100.00	1 3.33 5.00 100.00	2 6.67 10.00 100.00	4 13.33 20.00 80.00	3 10.00 15.00 75.00	4 13.33 20.00 57.14	3 10.00 15.00 37.50	20 66.67
Total	2 26.67	1 3.33	1 3.33	2 6.67	5 16.67	4 13.33	7 23.33	8 26.67	30 100.00

The correlation between the school's performance and the principal's enjoyment in heading their schools was found to be 0.47484, i.e. p = 0.47484.

All the principals of the top performing schools rated their enjoyment in heading their schools as being good or very good, while 6 out of 20, i.e. 30% of the middle/bottom performing school principals rated their enjoyment in heading their schools as being poor or fair.

Based on the principals' report, schools of which the principals enjoy heading, tend to perform better than the schools of which the principals do not enjoy heading them, hence the principals' enjoyment in heading the school is a significant factor in determining the differences in performance between the top performing schools and the middle/bottom performing schools.

V18 School performance and the punctuality of learners at lessons

Question: Comment on the 1999 grade 12 learners' punctuality during the lessons

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	0 0.00 0.00 0.00	3 10.00 30.00 27.27	4 33.33 40.00 44.44	3 10.00 30.00 75.00	10 33.33
Mid/Bot	6 20.00 30.00 100.00	8 26.67 40.00 72.73	5 16.67 25.00 55.56	1 3.33 5.00 25.00	20 66.67
Total	6 20.00	11 36.67	9 30.00	4 13.33	30 100.00

The correlation between the school's performance and the punctuality of learners at lessons was found to be 0.46562, i.e. p = 0.46562.

7 out of 10, i.e. 70% of the top performing school principals rated the punctuality of learners at lessons as good or very good while 14 out of 20, i.e. 70% of the middle/bottom performing school principals rated the punctuality of learners as being poor or fair.

Based on the principals' responses, schools where learners attend lessons punctually tend to perform better than those schools which have poor learner punctuality. In this study, punctuality at lessons is a significant factor in determining the differences in performance between the top performing schools and the middle/bottom performing schools.

V22 School performance and the attendance of learners at afternoon studies

Question: Comment on the 1999 grade 12 learners attendance of afternoon studies.

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	2 6.67 20.00 22.22	1 3.33 10.00 11.11	3 10.00 30.00 37.50	4 13.33 40.00 100.00	10 33.33
Mid/Bot	7 23.33 35.00 77.78	8 26.67 40.00 88.89	5 16.67 25.00 62.50	0 0.00 0.00 0.00	20 66.67
Total	9 30.00	9 30.00	8 26.67	4 13.33	30 100.00

The correlation between the school performance and the attendance of learners at afternoon studies was found to be 0.42880, i.e. p = 0.42880.

7 out of 10, i.e. 70% of the top performing school principals rated the grade 12 learners' attendance at afternoon studies as good and very good, while 15 out of 20, i.e. 75% of the middle/bottom performing school principals rated the learners' attendance as poor or fair.

Based on the principals' reports, schools which have good attendance of learners at afternoon studies tend to perform better than schools which have poor learner attendance. This indicates that poor learner performance in this study could be attributed to, *inter alia,* poor learner attendance at afternoon studies.

V44 School performance and parental support

Question: Rate the support of parents in terms of their contribution to the 1999 grade 12 final examination results.

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	2 6.67 20.00 18.18	2 6.67 20.00 20.00	4 13.33 40.00 66.67	2 6.67 20.00 66.67	10 33.33
Mid/Bot	9 30.00 45.00 81.82	8 26.67 40.00 80.00	2 6.67 10.00 33.33	1 3.33 5.00 33.33	20 66.67
Total	11 36.67	10 33.33	6 20.00	3 10.00	30 100.00

The correlation between school performance and parental support in terms of their contribution to the final examination results was found to be 0.39488, i.e. p = 0.39488.

6 out of 10, i.e. 60% of the top performing school principals rated parental support as being good and very good, while 17 out of 20 principals of the middle/bottom performing schools rated

parental support as being poor or fair. The principals' reports indicate that schools which are well supported by parents tend to perform better than schools that are not well supported by parents.

5.11 EDUCATORS' DATA

Based on a stepwise logistic regression, one representative educator per school was selected based on the mode of every variable. The following variables were found to be important in determining the differences in performance between the top performing schools and the middle/ bottom performing schools (see Appendix J).

V9 School performance and the rating of school performance

Question: Comment on the 1999 grade 12 final examination results of the subject mentioned in 5.

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	0 0.00 0.00 0.00	22 9.48 28.21 27.50	34 14.66 43.59 39.08	22 9.48 28.21 50.00	78 33.62
2	21 9.05 13.64 100.00	58 25.00 37.66 72.50	53 22.84 34.42 60.92	22 9.48 14.92 50.00	154 66.38
Total	21 9.05	80 34.48	87 37.50	44 18.97	232 100.00

The correlation between the school's performance and the subject educators' rating of the school's performance was found to be 0.26256, i.e. p = 0.26256.

A high number, viz. 56 out of 78, i.e. 71,8% of the top performing school educators rated their school performance as good or very good while 75 out of 154, i.e. 48,7% of the middle/bottom performing school educators also rated their schools' performance as good or very good.

The fact that 48,7% of the middle/bottom performing school educators also rated their school performance as good or very good seems to be inconsistent with the actual situation and indicates clearly that they are probably not even aware of the poor performance of their schools. Undoubtedly this factor can result in continuous poor performance since such educators seem to be satisfied with the results.

V33 School performance and the contribution of school regulations on discipline

Question: What contribution did the regulations of your school have on the discipline of your grade 12 learners?

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	0 0.00 0.00 0.00	11 4.74 14.10 14.47	39 16.81 50.00 38.24	28 12.07 35.90 57.14	78 33.62
2	5 2.16 3.25 100.00	65 28.02 42.21 85.53	63 27.16 40.91 61.76	21 9.05 13.64 42.86	154 66.38
Total	5 2.16	76 32.76	102 43.97	49 21.12	232 100.00

The correlation between the school's performance and the contribution of the school regulations on the discipline of grade 12 learners was found to be 0.34798, i.e. p = 0.34798.

67 out of 78, i.e. 85,9% of the top performing school educators rated the contribution of school regulations on the discipline of grade 12 learners as good or very good while 84 out of 154, i.e. 54,5% of the middle/bottom performing school educators rated the same. A higher percentage of the top performing school educators rated the contribution of school regulations on the discipline of grade 12 learners as good or very good as compared to that of the middle/bottom school educators, which indicates that the top performing schools have better discipline than the middle/bottom performing schools.

V22 Correlation between the school's performance and the attendance of learners at afternoon studies

Question: Comment on the 1999 grade 12 learners' attendance of afternoon studies:

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	34 14.66 43.59 52.31	16 6.90 20.51 21.62	21 9.05 26.92 31.34	7 3.02 8.97 26.92	78 33.62
2	31 13.36 20.13 47.69	58 25.00 37.66 78.38	46 19.83 29.87 68.66	19 8.19 12.34 73.08	154 66.38
Total	65 28.02	74 31.90	67 28.88	26 11.21	232 100.00

The correlation between the school's performance and the attendance of learners at afternoon studies as reported by grade 12 educators was found to be 0.16412, i.e. $p = 0.16412$.

50 out of 78, i.e. 64,1% of the top performing school educators rated grade 12 learners' attendance at afternoon studies as being poor or fair while 89 of 154, i.e. 57,8% also rated the learner attendance of afternoon studies as being poor or fair. In this study, the attendance of learners at afternoon studies is therefore not an important factor in determining the differences in the performance between the top performing schools and the middle/bottom performing schools as in both groups the attendance of learners is not good.

5.12 DATA OF LEARNERS

Based on a stepwise logistic regression, one representative learner per school was selected based on the mode of every variable. The following variables were found to be important in determining the differences in performance between the top performing schools and the middle/ bottom performing schools (see Appendix L).

V12 School's performance and the rating of learners of the school's performance

Question: Comment on the 1999 grade 12 final examination results of your school

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	9 1.79 7.20 7.50	19 3.78 15.20 12.93	65 12.95 52.00 39.16	32 6.37 25.60 46.38	125 24.90
2	111 22.11 29.44 92.50	128 25.50 33.95 87.07	101 20.12 26.79 60.84	37 7.37 9.81 53.62	377 75.10
Total	120 23.90	147 29.28	166 33.07	69 13.75	502 100.00

The correlation between the school's performance and the rating of learners of the school's performance was found to be 0.34922, i.e. p = 0.34922.

97 out of 125, i.e. 77.6% of the top performing school learners rated the school's performance as good or very good while 138 out of 377, i.e. 36,6% of the middle/bottom performing school learners also rated the same. The fact that some of the middle/bottom performing school learners, viz. 36,6% also rated their school's performance as being good or very good seems to be inconsistent with the actual situation and can lead to continuous poor performance since such learners seem to be satisfied with the performance of their school.

V27 School performance and afternoon study lessons

Question: Does your school have afternoon study lessons for grade 12 learners?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
1	67 13.35 53.60 19.25	58 11.55 46.40 37.66	125 24.90
2	281 55.98 74.54 80.75	96 19.12 25.46 62.34	377 75.10
Total	348 69.32	154 30.68	502 100.00

The correlation between the school's performance and afternoon study lessons for grade 12 learners was found to be 0.04004, i.e. p = 0.04004.

67 out of 125, i.e. 53,6% of the top performing school learners reported that their schools had afternoon study lessons while 281 out of 377, i.e. 74,5% of the middle/bottom performing school learners also reported the same. Based on the learners' report, only 53,6% of the top performing schools had afternoon study lessons as compared to 74,55% of the middle/bottom performing schools. In this study it was found that afternoon study lessons is not a significant factor in determining the differences in performance between the top and the middle/bottom performing schools.

V16 School performance and the learners' expectation of the final results

Question: What final results do you expect from your final examination?

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	2 0.40 1.60 8.70	6 1.20 4.80 16.22	30 5.98 24.00 16.48	87 17.33 69.60 33.46	125 24.90
2	21 4.18 5.57 91.30	31 6.18 8.22 83.78	152 30.28 40.32 83.52	173 34.46 45.89 66.54	377 75.10
Total	23 4.58	37 7.37	182 36.25	260 51.79	502 100.00

The correlation between the school's performance and the expectation of learners of the final results was found to be 0.20417, i.e. p = 0.20417.

117 out of 125, i.e. 93,6% of the top performing school learners expected good or very good final results while 325 out of 377, i.e. 86,2% of the middle/bottom performing school learners expected the same results. Though both groups expected good or very good results, a higher percentage of top performing school learners, viz. 93,6% expected good or very good results as compared

to 86,2% of the middle/bottom performing school learners.

V38 School performance and the implementation of school regulations

Question: Evaluate the implementation of school regulations in terms of their contribution to the grade 12 results.

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
1	3 0.60 2.40 14.29	24 4.78 19.20 14.72	60 11.95 48.00 25.42	38 7.57 30.40 46.34	125 24.90
2	18 3.59 4.77 85.71	139 27.69 36.87 85.28	176 35.06 46.68 74.58	44 8.76 11.67 53.66	377 75.10
Total	21 4.18	163 32.47	236 47.01	82 16.33	502 100.00

The correlation between school performance and the implementation of school regulations was found to be 0.23188, i.e. p = 0.23188.

98 out of 125, i.e. 78,4% of the top performing school learners rated the implementation of school regulations in terms of their contribution to the grade 12 results as good or very good while 220 out of 377, i.e. 58,3% of the middle/bottom performing school learners also rated the implementation of school regulations as good or very good. Based on the rating of learners, top performing schools seem to have better discipline than the middle/bottom performing schools.

V29 School performance and teaching on the 1st day of the 1st semester

Question: Were you taught on the 1st day of the 1st semester this year?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
1	62 12.35 49.60 20.39	63 12.55 50.40 31.82	125 24.90
2	242 48.21 64.19 79.61	135 26.89 35.81 68.18	377 75.10
Total	304 60.56	198 39.44	502 100.00

The correlation between the school's performance and teaching on the 1st day of the 1st semester was found to be 0.12910, i.e. p = 0.12910.

62 out of 125, i.e. 49,6% of the top performing school learners reported having been taught on the 1st day of the 1st semester while 242 out of 377 middle/bottom performing school learners reported the same. While the importance of starting to teach on the first day of the first semester, i.e. the 1st day of the reopening of school cannot be refuted, it does not seem to be significant in this study in determining the differences in performance between the top and middle/bottom performing schools.

V41 School performance and the visit of learners to the library

Question: Have you visited a library this year 2000?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
1	30 5.98 24.00 17.96	95 18.92 76.00 28.36	125 24.90
2	137 27.29 36.34 82.04	240 47.81 63.66 71.64	377 75.10
Total	167 33.27	335 66.73	502 100.00

The correlation between the school's performance and a visit to the library by learners was found to be 0.1325, i.e. p = 0.11325.

30 out of 125, i.e. 24% of the top performing school learners reported having visited a library while 135 out of 377 middle/bottom performing school learners, i.e. 35,8% reported the same. A higher percentage of the middle/bottom performing school learners, i.e. 35,8% reported having visited the library but still failed to perform well as compared to 24% of the top performing school learners who reported the same, which indicates that the differences in grade 12 learner performance in this study cannot be attributed to learners having visited the library or not.

V14 School performance and the opinion of learners (based on the capability for 80% performance)

Question: Do you think your learners were capable of obtaining more than 80% pass aggregate?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
1	105 20.92 84.00 30.79	20 3.98 16.00 12.42	125 24.90
2	236 47.01 62.60 69.21	141 28.09 37.40 87.58	377 75.10
Total	341 67.93	161 32.07	502 100.00

The correlation between the school's performance and the opinion of learners (based on the capability for 80% performance) was found to be 0.19827, i.e. p = 0.19827.

105 out of 125, i.e. 84% of the top performing school learners were of the opinion that their learners were capable of obtaining more than an 80% pass aggregate while 236 out of 377, i.e. 62,6% of the middle/bottom performing school learners had the same opinion.

A higher percentage of the top performing school learners, i.e. 84% were of the opinion that their learners were capable of obtaining more than an 80% pass aggregate and still perform well as compared to the 62,6% of the middle/bottom performing school learners who had the same opinion, which indicates that the differences in performance between the top performing schools and the middle/bottom performing schools can *inter alia,* be attributed to the opinion of learners on the performance, i.e. the expectation of learners.

V24 School performance and afternoon study timetable

Question: Does your school have afternoon study timetable for grade 12 learners?

Yes	1	No	2

Responses:

Frequency percent Row Pct Col Pct	Yes	No	Total
1	51 10.16 40.80 18.48	74 14.74 59.20 32.74	125 24.90
2	225 44.82 59.68 81.52	152 30.28 40.32 67.26	377 75.10
Total	276 54.98	226 45.02	502 100.00

The correlation between the school's performance and the availability of an afternoon study timetable was found to be 0.16412, i.e. p = 0.16412.

51 out of 125, i.e. 40,8% of top performing school learners reported that their schools had an afternoon study timetable for grade 12 learners while 225 out of 377 middle/bottom performing school learners reported the same.

A higher percentage of middle/bottom performing school learners, i.e. 59,6% reported that their schools had an afternoon study timetable and yet they could not perform well as compared to 48,8% of the top performing school learners who reported the same, which indicates that the differences between the top and the middle/bottom performing schools cannot be attributed to whether the school had an afternoon study timetable or not.

V35 School performance and the month in which educators were expected to complete the syllabi

Question: In what month do you expect the educators to complete their 2000 grade 12 syllabi?

Responses:

Frequency percent Row Pct Col Pct	Jan	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.20 0.80 10.00	23 4.58 18.40 21.90	37 7.37 29.60 23.72	14 2.79 11.20 35.00	32 6.37 25.60 29.91	14 2.79 11.20 19.72	3 0.60 2.40 42.86	1 0.20 0.80 100.0 0	0 0.00 0.00 0.00	125 24.90
2	1 0.20 0.27 100.00	3 0.60 0.80 100.00	9 1.79 2.39 90.00	82 16.33 21.75 78.10	119 23.71 31.56 78.10	26 5.18 6.90 65.00	75 14.94 19.89 70.09	57 11.35 15.12 80.28	4 0.80 1.06 57.14	0 0.00 0.00 0.00	1 0.20 0.27 100.00	377 75.10
Total	1 0.20	3 0.60	10 1.99	105 20.92	156 31.08	40 7.973	107 21.31	71 14.14	7 1.39	1 0.20	1 0.20	502 100.0 0

The correlation between school performance and the month in which educators were expected to complete the syllabi was found to be 0.05778, i.e. p = 0.05778.

60 out of 125, i.e. 48% of the top performing school learners expected their educators to complete the syllabi in good or very good time, viz. July, August or September while 158 out of 377, i.e. 41,9% of the middle/bottom performing school learners expected their educators to complete the syllabi during the same months.

A higher percentage of the top performing school learners, i.e. 48% expected their educators to complete the syllabi in good and very good time as compared to 41,9% of the middle/bottom performing school learners, which indicates that the differences in the performance between the top and the middle/bottom performing schools could, *inter alia*, be attributed to the period in which educators complete the syllabi.

5.13 COMBINATION OF DATA

As the individual analysis of the double frequency tables, viz. educators, principals and learners, revealed different variables which determine different school performance, I found it necessary to do a further analysis of the combined data. Variables that question almost the same aspect were grouped together in order to determine the variables which are important for the determination of the differences in performance between the top performing schools and the middle/bottom performing schools.

As the Spearman's correlation coefficient was applied on the data of the principals while a stepwise logistic regression was applied on the educators and learners, the following variables were found to be important: G15 and G9 (see Appendix M).

G15 School performance and the learners' school attendance

Question: Comment on the 1999 grade 12 learners' attendance of lessons

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	0 0.00 0.00 0.00	5 5.56 16.67 20.00	14 15.56 46.67 32.56	11 12.22 36.67 78.57	30 33.33
Mid/Bot	8 8.89 13.33 100.00	20 22.22 33.33 80.00	29 32.22 48.33 67.44	3 3.33 5.00 21.43	60 66.67
Total	8 8.89	25 27.78	43 47.78	14 15.56	90 100.00

The correlation between the school's performance and the grade 12 learners' school attendance as rated by subject educators, principals and learners was found to be 0.18675, i.e. $p = 0.18675$.

25 out of 30, i.e. 83,3% of the top performing schools (educators, principals and learners) rated grade 12 learners' school attendance as good or very good while 32 out of 60, i.e. 52,3% of the middle/bottom performing schools (educators, principals and learners) rated the same. This indicates that top performing schools have better learner attendance than the middle/bottom performing schools, hence it can be concluded that the differences in performance between top performing schools and the middle/bottom performing schools can, *inter alia,* be attributed to learners' school attendance.

G9 School performance and the rating of the school's performance

Question: Comment on the 1999 grade 12 final examination results

Poor	1	Fair	2	Good	3	Very good	4

Responses:

Frequency percent Row Pct Col Pct	Poor	Fair	Good	Very good	Total
Top	0 0.00 0.00 0.00	4 4.44 13.33 14.81	20 22.22 66.67 55.56	6 6.67 20.00 75.00	30 33.33
Mid/Bot	19 21.11 31.67 100.00	23 25.56 38.33 85.19	16 17.78 26.67 44.44	2 2.22 3.33 25.00	60 66.67
Total	19 21.11	27 30.00	36 40.00	8 8.89	90 100.00

The correlation between the school's performance and the rating of the school's performance by subject educators, principals and learners was found to be 0.34943, i.e. p = 0.34943.

26 out of 30, i.e. 86,7% of the top performing schools (educators, principals and learners) rated their school performance as good or very good while 18 out of 60, i.e. 30% of the middle/bottom performing schools (educators, principals and learners) rated the same. Some of the middle/bottom performing schools, i.e. 30% also rated their school's performance as good or very good, which indicates clearly that some middle/bottom performing schools are not aware of their poor performance.

5.14 CONCLUSION

As the purpose of this study is to investigate whether the differences in the South African school leaving examination results of various schools in the Northern Province can partly be attributed to the impact of the hidden curriculum, the following factors which are attributed to the hidden curriculum have been found to impact on the examination results.

The rating of the school performance by educators, principals and learners is found to be inconsistent with the actual situation and is also rated differently.

- The expectation of poor results by educators, principals and learners. Principals seem not to accept responsibility for the results and seem not to enjoy heading their schools.
- Poor school attendance by learners. The punctuality of learners at lessons seems to be poor.
- Poor attendance of afternoon studies by learners.
- Poor school support by the parents.
- School discipline seems to be poor.
- Inability of educators to complete the syllabi in good time.

The above-mentioned factors which are viewed as the attributes of the hidden curriculum can be grouped in three main categories, viz. motivational factors, attitudinal factors and disciplinary factors. The findings of this study can be summarized in the following figure (Figure 5.1):

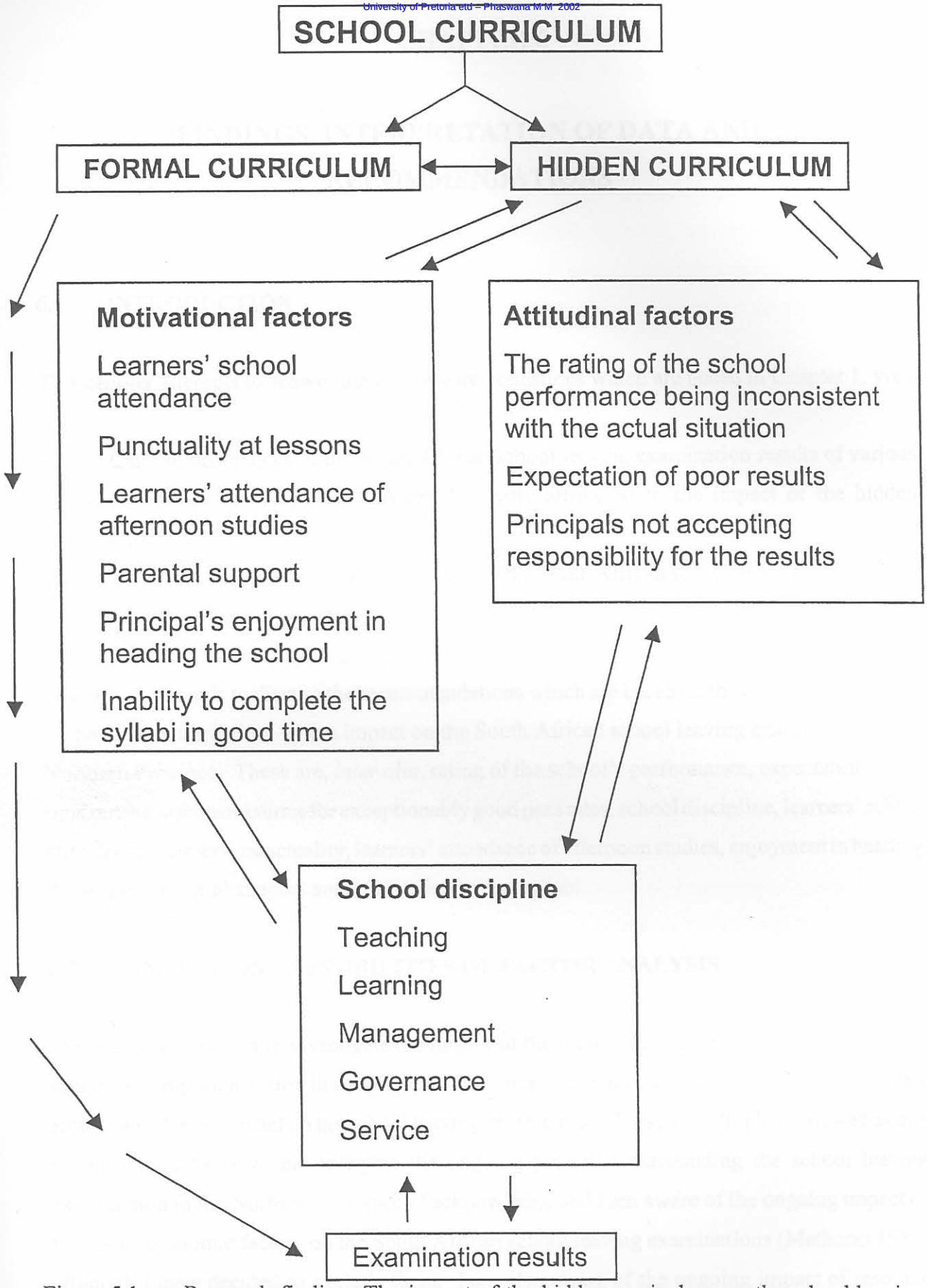

Figure 5.1 Research finding: The impact of the hidden curriculum on the school leaving examination in the Northern Province

CHAPTER 6

FINDINGS, INTERPRETATION OF DATA AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter attempts to answer the two research questions which are posed in Chapter 1, viz.,

- Can the differences in the South African school leaving examination results of various schools in the Northern Province be partly attributed to the impact of the hidden curriculum?
- How does the hidden curriculum impact on the South African school leaving examination in the Northern Province?

The chapter intends to discuss the recommendations which are based on the identified attributes of the hidden curriculum which impact on the South African school leaving examination in the Northern Province. These are, *inter alia*, rating of the school's performance, expectation of the final results, commendations for exceptionably good pass rates, school discipline, learners' school attendance, learners' punctuality, learners' attendance of afternoon studies, enjoyment in heading the school, parental support and completion of the syllabi.

6.2 LIMITATIONS/POSSIBILITIES OF FACTOR ANALYSIS

The fact that I decided to investigate the impact of the hidden curriculum on the South African school leaving examination in the Northern Province does not in any way intend to nullify other factors which also impact on the school leaving examination. This study should be viewed as one of the lenses to view and interpret the ongoing problems surrounding the school leaving examination in the Northern Province. I acknowledge and I am aware of the ongoing impact of the socio-economic factors on the South African school leaving examinations (Mathonsi 1986) although I have decided to exclude them. I am also aware of the ongoing impact of resource provisioning on the South African school leaving examination in the Northern Province (Department of Education 1997) and have decided to exclude it as well. I am also aware of the

commitment and efforts of the Northern Province government to redress the ongoing impact of the socio-economic factors and resource provisioning on the Northern Province schools.

Although I intend to report on the impact of the hidden curriculum on the South African school leaving examination in the Northern Province, the survey has been limited to the Soutpansberg district due to financial and time constraints. Nonetheless, based on my experience as school principal currently working and living in that area, I am convinced that what the facts which have been revealed by the sample schools, remain a fair representation of Northern Province schools.

6.3 SCHOOL PERFORMANCE AND RATING OF SCHOOL PERFORMANCE

This study has revealed that the differences in the South African school leaving examination results of various schools in the Northern Province can be partly attributed to the impact of the hidden curriculum through the rating of school performance.

The fact that the principals of schools that perform very well are aware of their school's performance while those principals of schools which do not perform as well are not aware of their school's performance serve as a firm basis for improvement, development and sustainance. Having identified and acknowledging that the middle/bottom schools are not performing as expected, strategies and appropriate support services can be developed to improve the performance of such schools.

The fact that learners and educators of some of the middle/bottom performing schools rated their schools' performance as being good while it is poor, seems inconsistent with the actual situation and this encourages further poor performance by learners which will affect their entire lives. Dreeben (1968:71) argues that

> "... pupils whose work is consistently poor not only must participate in achievement activities leading to their failure, they must also experience living with that failure."

Learners and educators who rate their school's performance as being good while it is poor, may probably not even find it necessary to improve as they seem to be satisfied with their poor performance. The fact that such learners and educators viewed and rated their performance differently from the department of education and the public as a whole, can be misleading to themselves and may lead to continuous poor performance. The rating by the above-mentioned

learners and educators can be attributed to numerous factors, including an unwillingness to admit to the problem or ignorance with regard to what a good pass rate means. Intervention strategies are needed to awaken the consciences of such learners and educators in order to make them aware and acknowledge their poor performance. In order to improve the school's performance, those schools whose performance is poor should acknowledge their poor performance. This may also be the case with those schools which perform well, i.e. acknowledging their good performance and find ways of maintaining such performance.

Schools which do not perform well may not regard themselves as being incapable of performing well, but should view their failure to perform well as a temporary activity for that year only. By building on their failure, a clear capacity programme can be built which can ensure future performance improvement.

Principals, educators and learners of schools which do not perform well will have to change their attitude in order to improve their performance.

6.4 SCHOOLS' PERFORMANCE AND EXPECTATION OF FINAL RESULTS

This study has revealed that the differences in the South African school leaving examination results can be attributed to the expectation of final results. The research has indicated that there is a correlation between the expectation of the final results and the actual results. Schools in which learners, educators and principals have high expectations of the final results tend to perform better than schools which have low expectations. High and low expectations of the final results can be attributed to the positive or negative attitudes of educators, learners and principals. In defining attitude, Beck (2000:358) agues that:

> "Attitudes are positive or negative feelings about something ... Specifically, an attitude is a positive or negative affective response directed towards a specific person, object, situation, and so on."

While negative feelings inhibit any type of performance, positive feelings enhance performance. Educators, principals and learners who expect good results are more likely to achieve better results than those who expect poor results.

As attitude is often defined in terms of its three components, viz. affective responses, cognition and conation, and in recognition that the three components influence each other, expectation of

the final results is an affective response. In defining affective response, Beck (2000:358) argues:

> "This is the basic attitude, referring to a positive or negative feeling, a like or dislike, with regard to a particular person, object or thing."

As attitudes influence behaviour or performance, a change in attitude is necessary in order to enhance learner performance. Since learners, educators and principals go to school having a common purpose, i.e. learning and teaching and good performance in the final examination, they have no sound reason to expect poor final results. Lynch (1989:32) argues:

> "Teachers (especially in second level) must be seen to get results if they are to have professional credibility - the most visible results are the grade levels attained in public examinations."

Instead of expecting poor results, i.e. having a negative feeling about the results, principals, learners and educators have to jointly work hard in order to attain good results. Considering the period during which the research was conducted, viz. April, May, June and irrespective of the weaknesses or problems encountered, the expectation of poor final results during those early months seems strange.

As a negative attitude is a critical barrier to effective learning, teaching and management, a change in attitude remains a crucial factor in enhancing performance.

6.5 SCHOOL PERFORMANCE AND COMMENDATION FOR SCHOOLS WITH EXCEPTIONALLY GOOD PASS RATES

This study has revealed that commendation for good pass rates impact on learner performance. It has been revealed that while principals of schools which perform very well identify themselves fully with the performance of their learners, principals of schools which perform poorly do not identify themselves with their learners' performance as they view poor learner performance as the responsibility of both educators and learners.

As the grade 12 results are used to evaluate the quality of learners, educators, the school and the education system as a whole (Lynch 1989:32), all the stakeholders, including principals, should accept responsibility for the results, irrespective of whether they are good or poor. The school leaving examination results do not only serve as a yardstick to gauge the quality of educators and

learners but also to evaluate the quality of the principal and his management team. In order to improve the results, principals, learners, educators and other stakeholders should view the final results as collaborative efforts and should own the results without shifting the blame.

6.6 SCHOOL PERFORMANCE AND THE CONTRIBUTION OF SCHOOL REGULATIONS ON DISCIPLINE

Research has indicated that schools which have good discipline tend to perform better than schools which have poor discipline. While it is acknowledged that meaningful learning and teaching cannot take place without a certain minimal level of order and decorum, discipline should not be equated with authoritarianism or permissiveness. Discipline is seen as the orderly regulation of school activities to ensure that all efforts work towards achieving the set goals within the given time.

The importance of discipline is clearly explained by Cusick (1973:208) as he argues that:

> "... to support that routinization, the school needs an extensive body of rules and regulations to ensure that the students adhere to the routine. Carrying with it a number of sanctions, these rules and regulations provide the incentive needed to make the students stay in a subordinate position."

While each school is given the responsibility of formulating its own disciplinary policy (rules and regulations) as guided by broad departmental policy, discipline remains a universal cultural phenomenon that has four functions. Ausubel (1978:510-511) asserts that:

> "... it is necessary for socialization, ... normal personality maturation, ... internalization of moral standards and obligations ... [and] children's emotional security."

While acknowledging that good discipline enhances learner performance, appropriate disciplinary practices will always differ from school to school and from time to time. Irrespective of the multi-disciplinary practices, i.e. the particularistic and universalistic practices, good school discipline should, *inter alia*, enhance learning and teaching which results in good performance.

Learner performance can be improved if those schools which perform poorly can be supported to

maintain appropriate discipline. This will undoubtedly require regular control, monitoring and assessment of these schools. Jackson (1990:13) asserts that:

> "... some kinds of control are necessary, if the school's goals are to be reached and social chaos averted."

The unequal power relation gives educators more responsibility in maintaining school discipline, although learners are expected to stay in their subordinate position (Cusick 1973). This, however, does not imply that learners have no role to play in their own discipline. As the behaviour of learners is controlled, the behaviour of educators and the behaviour of the school need to be controlled. In dealing with learners, educators need to exercise equanimity as learners are confronted with the dilemma of complying with peer expectations and institutional expectations. Jackson (1990:13) asserts that:

> "The problem for some, is how to become a good student while remaining a good guy, how to be at the head of the class while still being in the center of the group."

Although learners are expected to comply with institutional expectations, the school may not breed docile learners but has to equip learners with skills of questioning and exploring. While the ultimate aim of institutional expectations is self-discipline, educators have to guard against learners who give only minimal compliance to discipline or who conform to institutional expectations for the sake of being praised as they know that non-conformity can lead to punishment. Cusick (1973:213) argues that:

> "... students can do well in school even if they give only minimal compliance to the system."

Differential disciplinary patterns of schools and differences in learner performances can probably be linked to class structures, i.e. the disciplinary patterns of schools reproduce the social and economic classes. Bowles and Gintis (1976:132) assert that:

> "... working-class schools tend to emphasize behavioral control and rule-following, while schools in well-to-do suburbs employ relatively open systems that favor greater student participation, ... a value system stressing internalized standards of control."

Differences in performance of learners can be attributed to the extent to which school norms are communicated and internalized by both educators and learners. Dreeben (1968:45) asserts that:

> "The acceptance of norms is a variable, and refers to the extent to which a person imposes obligations on himself, to how intensely he holds them."

Dreeben views the school's function, *inter alia*, as helping learners to learn to accept social norms and to act accordingly since these norms that are tacitly learned penetrate many areas of learners' future lives. Dreeben (1968:45) assets that:

> "... there is variation both in the degree of norm acceptance and in the relationship between the norm and behaviour oriented to it..."

In addition to the fact that learners come to school with the main aim of learning while educators come to school to teach, both learners ad educators acknowledge directly or indirectly the need for discipline. Jackson (1990:30) argues:

> "At the heart of the teacher's authority is his command over students' attention. Students are expected to attend to certain matters while they are in the classroom, and much of the teacher's energies are spent in making sure that this happens."

As research has indicated that schools which have poor discipline tend to perform poorly, it is mainly the educators' responsibility to create a favourable discipline which will make learners learn and teachers teach.

Without lessening the responsibility of learners towards creating a favourable discipline for themselves, educators, particularly principals, have a task of creating or enforcing discipline where it seems lacking even if it may seem to be prescriptive or restrictive. Jackson (1990:30) affirms:

> "The important point is that students must learn to employ their executive powers in the service of the teacher's desires rather than their own even if it hurts."

While it is acknowledged that learners and educators have a role to play in creating the necessary school discipline, noting that learners may not always be blamed for poor school discipline, research indicates that educators in the schools performing poorly do not exert enough effort in creating or enforcing discipline.

6.7 SCHOOL PERFORMANCE AND THE LEARNERS' SCHOOL ATTENDANCE

This study has revealed that the differences in the South African school leaving examination results of various schools in the Northern Province can be partly attributed to the impact of the hidden curriculum through the school attendance of learners. The research has indicated that schools which have good learner school attendance tend to perform better than schools which have poor learner attendance. School attendance impacts on all the school activities and is a basic condition of being a learner. Absenteeism hampers any form of performance, including school performance. Jackson (1990:85) asserts:

> "Nothing is more obvious than that a student must be in attendance if he is to enjoy the benefits of instruction, and from a recognition of this truism have sprung teachers registers ... and other well-known school practices, all designed to monitor the student's physical presence."

School attendance, i.e. physical presence of the learners, serves as a basic condition for being a learner. While educators and parents have the responsibility of encouraging learners to attend school regularly, the final responsibility of attendance lies with the learner as no one can attend on his or her behalf. Although the department of education has a policy with regard to learners' school attendance, the problem which is faced by principals and educators is its practical implementation. As the policy of the department aims at encouraging regular learner school attendance rather than to punish learners for non-attendance, learners usually play with policies and beat the system. Problems relating to school performance and the school attendance of learners in the Northern Province seem to be closely related to the social relation of society and the school, i.e. they seem to reflect the community, family or societal background. Dreeben (1968:2) argues that:

> "... the school constitutes a component of a larger network of social institutions that includes the family ... it represents a link not only between successive phases of the life cycle between the private realm of the family and the larger public domain."

The child, being a learner and a member of the larger society and the family, is probably influenced by both the family and society. Learner school attendance in the Northern Province cannot be devoid from the influence of both the family and society *per se*. Bowles and Gintis (1976:143)

assert that:

> "There is a tendency for families to reproduce in their offspring not only a consciousness tailored to the objective nature of the work world, but to prepare them for economic positions roughly comparable to their own."

School attendance in the Northern Province can be linked to the hierarchical societal classes whereby poor school attendance is very common amongst the working class learners than the middle class learners. The counter-school culture which is characterised by indiscipline and opposition to school authority as developed by the working class learners, usually discourages regular school attendance by its members as they argue that nothing valuable is done at school. The "lads" (Willis 1977:27) argue that:

> "... of a Monday afternoon, we'd have nothing right? Nothing hardly relating to school work, Tuesday afternoon we have swimming and they stick you in a classroom for the rest of the afternoon, Wednesday afternoon you have games and there's only Thursday and Friday afternoon that you work, if you call that work. The last lesson Friday afternoon we used to go and doss, half of us wagged out o' lessons and the other half go into the classroom, sit down and just go to sleep..."

Poor school attendance of the working class learners together with their ill-discipline in the classroom and opposition to authority result in the working class cultural pattern of failure which perpetuates the working class cycle.

Poor school attendance by learners in some communities in the Northern Province can be linked to ongoing ritualistic practices that impact on school activities (McLaren 1986, 1993). These cultural practices and performances which are passed on from one generation to another, silently oppose regular school attendance. Ideologies, born by such ritualistic practices and performances are very common among working class communities as compared to middle class communities. Although such practices are mainly organised by parents, individual parents end up having very little influence or control over them since they are firmly rooted in rituals, idol worship and cultural identity with regard to *manhood* or *motherhood*. These cultural practices which tend to be a cultural heritage, are rarely discussed by parents, learners or educators as they are regarded as cultural secrets although they form a very strong counter-school culture. McLaren (1993:3) argues:

> "In order for the educators to speak intelligibly and tellingly about human behaviour in a school milieu, the concept of ritual needs to be examined in all its complexity and multiplicity; moreover, it must be reconsidered and re-examined from a different theoretical starting point."

Some ritual and cultural activities like initiation schools start during the school holidays as they target learners but extend to school days while some occur on weekends and engage the learners to the extent that they cannot spend a minute on studies. The success of these rituals and cultural activities depend mainly on the involvement of secondary school learners, particularly the grade 11 and 12 learners. Learner absenteeism, which is caused by attendance of cultural activities, is rarely questioned by schools due to the fear that is born of ritualistic belief.

Poor school attendance by learners in some communities in the Northern Province can be linked to cultural domination and political power since some of the activities are organised by various government officials which mainly target secondary school learners as their audience and attendance. Due to poor attendance by parents and as parents attendance cannot always be guaranteed, most of the government departments and officials use secondary schools or venues which are very close to schools as a way of targeting learners and also as a way of guaranteeing good attendance of their planned activities.

Poor school attendance in some communities in the Northern Province can be linked to economic reproduction which is in the form of a monthly child grant whereby girls who have children and who are not married have a monthly income. While such grants are an important means of living and while in some cases are they only means of family income, such grants are usually paid out during school hours. This results in young unmarried mothers absenting themselves from school in order to receive the child grant. While young mothers absent themselves from school to receive the child grant, many other learners also absent themselves from school as they are entrusted with the responsibility of accompanying their parents to the pension pay-stations to receive their pension money. Since these pensions are usually the only source of income for the whole family, educators find it difficult to stop such practices.

As education is viewed as the transmission of cultural knowledge (McLaren 1993:25) in the Northern Province, the cultural practices of the dominant group, i.e. blacks, were mainly neglected by the school curriculum due to the long-standing history of the apartheid government. Even today, there is still a wide gap between cultural practices and school curriculum, hence the ongoing counter-school culture and its impact on school attendance.

In some communities, learner absenteeism is associated with the socio-economic conditions of the families. As most of the learners come from poverty-stricken communities which are poorly resourced and as most of the learners come from families where one or both parents are unemployed or poorly remunerated, absenteeism becomes the only way of supplementing the family's income. Some learners are entrusted with the task of caring for the families, including caring for their younger sisters and brothers as parents are employed far away from the home. Some learners, particularly girls, are single mothers who have the responsibility of caring for their children while attending school. While few learners can voice their real problems, the majority of the learners are shy to communicate their problems as they do not want to expose their family conditions. As most of the learners have valid reasons of absenting themselves, it is clear that schools alone are unable to stamp out learner absenteeism. Educators, learners, parents and the state should join hands in fighting learner absenteeism, lest a cycle of ongoing poverty and unemployment is perpetuated. If the basic services of the rural communities can be addressed, e.g. an adequate supply of water, electricity, etc., the school attendance of learners can undoubtedly be improved drastically.

6.8 SCHOOL PERFORMANCE AND PUNCTUALITY OF LEARNERS DURING LESSONS

It has been revealed that schools where learners are punctual at lessons tend to perform better than schools which have poor punctuality. Punctuality, being a condition for any successful learning and teaching, needs to be observed at all times as it affects the learners' life at school and their future life. Although the Northern Province Department of Education has directed schools to develop a mechanism of stamping out the tardiness of both learners and educators, and although schools have policies of controlling punctuality, the tardiness of learners is still a serious problem in most schools.

Although timetabling is a common feature of all schools, the observance of the timetable by both learners and educators differs from school to school, learner to learner and educator to educator. While in most schools timetabling is reinforced by clocks, bells and sirens, the differences between schools, learners and educators is mainly how they transit from the clock time, bells and sirens to the inner time (Berkhout & Bergh 1994:53; McLaren 1986:94). As clocks, bells and sirens cannot activate learners' or educators' movements against their will, the main difference between schools is the meaning attached to bells, clocks, and sirens. Berkhout and Bergh (1994:53) argue that:

> "Ringing bells and changing between classes require certain physical and mental actions from students ... This transition from clock time to inner time and vice versa requires mental and emotional energy..."

While some of the factors which lead to tardiness can be attributed to learners, there are some factors which need parental and community involvement.

Problems relating to the punctuality of learners at lessons affirm how structural forces outside the school can impact on the functioning of the school *per se.* Apple (1995) affirms how the structural forces outside the school are interwoven and impact on the functioning of the school by focussing on the cultural and economic productive and distributive functions of the school. Apple (1995:41) asserts that:

> "... there is an interplay, one that is quite complex, between the school's role in the production of agents for the social division of labor ... and the school's place as a mode of production of cultural capital."

Most of the problems relating to punctuality can be linked to the rural nature of families and communities and their societal classes. Being the poorest of all the provinces with very few industries, the Northern Province, and particularly its schools, are less exposed and less influenced by industrial life which demands punctuality among its workers (Bowles & Gintis 1976:143). As learners are less motivated to prepare themselves for an higher economic status, they are influenced to prepare themselves for family and community functions which accommodate delays and tardiness.

Willis (1977) affirms the school's role in the reproduction of agents for the social division of labour as he reflects on how the middle class learners get middle class jobs while the working class learners get working class jobs. Although both middle class and working class learners may attend same school and receive the same tuition in the same class, the working class learners exclude themselves from the dominant school culture by forming a working class counter-school culture (Willis 1977:27) which is characterized by informal student mobility which can take the form of truancy or poor punctuality at lessons. Willis argues that:

> "Some of the lads develop the ability of moving about the school at their own will

> to a remarkable degree ... being free out of class, being in class doing no work, being in the wrong class, roaming the corridors looking for excitement, being asleep in private."

The counter-school culture, which includes poor punctuality at lessons, results in poor performance or even failure of the working class learners which channel them to working class jobs.

As conditions and factors which cause tardiness vary from school to school and from place to place, educators, learners, parents and the community as a whole should seek effective ways of addressing this problem.

6.9 SCHOOL PERFORMANCE AND LEARNER ATTENDANCE OF AFTERNOON STUDIES

As revealed by this research project, schools which have good learner attendance at afternoon studies tend to perform better than schools which have poor or no afternoon studies. The principal, learners, educators and school governing body have to determine the times of the school day in such a way that afternoon studies will be accommodated.

Although the reasons for not having afternoon studies are many and varied, compulsory afternoon studies have to be introduced by all secondary schools in order to create a conducive learning environment which would allow any learner to study with minimal disturbances.

In view of the fact that the Northern Province is almost 97% rural, most of the learners come from working class rural homes which are characterized by child labour and a lack of basic learning facilities and services. Schools tend to be the only conducive learning environment available, hence the importance of learner attendance at afternoon studies.

While acknowledging numerous factors, e.g. internal and external factors which make the attendance at afternoon studies by learners almost impossible, educators as official timekeepers have a responsibility of creating favourable conditions for learners to attend afternoon studies. Jackson (1990:12) asserts that:

> "he decides ... whether those who take the bus may be dismissed. In many schools he is assisted in this job by an elaborate system of bells and buzzers."

Afternoon study attendance cannot be separated from school attendance. Schools which have poor school attendance tend to have poor afternoon study attendance. Afternoon study attendance and school attendance can be linked to hierarchical societal classes. Working class learners tend to have more problems in attending afternoon studies than the middle class learners due to *inter alia*, poor socio-economic conditions of their homes which make afternoon study attendance difficult. The counter-school culture of working class learners exhibits itself mainly in poor attendance of afternoon studies (Willis 1977).

6.10 SCHOOL PERFORMANCE AND ENJOYMENT IN HEADING THE SCHOOL

Research has shown that schools in which principals enjoy their calling tend to perform better than schools in which their principals do not enjoy their calling, i.e. the principals' enjoyment in leading the school impacts on school performance. Jackson (1990:74) argues that:

> "The person who enters a situation feeling generally satisfied with the condition in which he finds himself is more likely than is his disgruntled companion to cope successfully with the specific demands of that situation."

As scholastic success engenders positive attitudes toward school, i.e. enhancing the possibility for further success, it impacts positively on the learners', educators' and principals' satisfaction or enjoyment.

In recognition that the principals of schools which perform poorly do not simply choose not to enjoy heading their schools nor choose not to perform well, it is necessary to determine the reasons which make them not enjoy their work. Although the reasons are many and varied, the basic problem is probably a failure to perform as expected. Failure to perform as expected by the department of education and the public as a whole, breeds many other problems, including disciplinary problems. The school as a social institution has to comply with the public expectation which includes, *inter alia*, good learner performance at the end of the year.

While the principal's enjoyment in heading the school impacts positively on the school

performance, good school performance becomes an end in itself and for its own sake. Geen (1995:120) asserts that:

> "If a person has a high level of achievement motivation - that is, if he or she values achievement for its own sake - the competence at a task will be highly valued even if no reward is given."

Good learner performance tends to motivate educators, learners, principals and all the stakeholders to work harder than before while poor performance can discourage them to make any effort to improve performance. As a lack of enjoyment in heading the school can easily degenerate into a lack of interest and a negative attitude in heading the school, principals which perform poorly need to be supported to the extent that they can view themselves as possible good achievers.

Instead of labelling the schools which perform poorly with derogatory names like "dysfunctional, hall of shame schools", instead of threatening the principals of such schools with demotion or transfer (Northern Province Department of Education 2000:13) some intervening strategies and programmes need to be developed to place such schools at a level which can make them perform well. A programme of action support needs to be developed which will assist performance, challenge schools to set realistic and attainable goals and to constantly evaluate their progress towards the set goals.

A lack of enjoyment in heading the school and poor school performance should not be attributed solely to poor school management techniques or personality attributes of the principal without taking cognizance of the numerous factors which can impact on the school as a whole.

6.11 SCHOOL PERFORMANCE AND PARENTAL SUPPORT

As revealed by this research project, schools which are well supported by parents tend to perform better than schools which are not well supported by parents. Parents need to be encouraged to play a meaningful role in the education of their children. Parents have to be urged to support educators in the performance of their professional tasks as educators undertake the socialisation and caring services of their children for a larger proportion of the daily period. Lynch (1989:30) asserts that:

> "Because schools undertake the socialization of all children for a larger proportion of their waking-day, parents (of all classes and genders) are freed from the responsibilities of caring for them. They can pursue work or leisure..."

Although Lynch argues that parents are freed from their responsibilities of caring for their children during school time, this does not mean that they are freed from all their responsibilities with regard to their children's needs and education as educators' services cannot replace all the parental responsibilities. Although educators daily spend a large proportion with learners, parents may not dump their responsibilities (Gatto 1992) in the hands of educators by virtue of being subject experts as parental services cannot be confined to school subjects.

Poor parental recognition and poor parental involvement in school activities can probably be linked to, *inter alia*, a high level of parent illiteracy and a lack of capacity in school governance matters which are very common amongst the working class parents.

Differences in parental support seem to reflect and reproduce the differential literacy class structure which is further reinforced by inequalities in financial resources. Bowles and Gintis (1976:133) argue that:

> "The well-financed school attended by the children of the rich can offer much greater opportunities for the development of the capacity for sustained independent work..."

Although parents may not concern themselves with the trivial activities of the school, and though they may not be involved with actual classroom teaching, they have to be actively involved in the education of their children, which includes governance of schools and other support services.

Parents as primary care-givers of children and as the prime resource of the education of learners should be recognised, empowered and encouraged to be fully involved in the education of their children.

6.12 SCHOOL PERFORMANCE AND THE COMPLETION OF THE SYLLABI

This research project has indicated that there is a correlation between the period in which educators complete their syllabi and the performance of learners. Schools which have educators who complete their syllabi in good time tend to produce better results than schools which have educators who complete their syllabi at the last minute.

While acknowledging the unavoidable crowded nature of the classroom with its features, viz. delay, denial, interruption and social distraction (Jackson 1990:17), educators as official timekeepers have a responsibility of scheduling school activities in accordance with the given and available time. Jackson (1990:13) asserts:

> "... that school is a place where things often happen not because students want them to, but because it is time for them to occur."

Failure to complete the syllabi at the right time can be attributed to various factors, including the failure of educators of pre-matric classes to complete the syllabi. Failure of the pre-matric class educators to complete the syllabi results in a future learning barrier as learners will be expected to master the content of the matric subjects without having the necessary background.

Other factors which result in the failure of educators to complete the syllabi are poor lesson attendance by both educators and learners, a lack of supporting materials or other resources, failure of educators to master the subject content, etc. In order to complete the syllabi in good time, both educators' and learners' activities need to be controlled and directed towards a specific goal, viz. the good performance of learners. Cusick (1973:208) asserts that:

> "Combined, these previously mentioned characteristics (batch processing, etc.) need yet another reinforcer in order to operate effectively. They need routinization of activity so that both teachers and students will know where to go and when to go there."

Routinization, i.e. timetabling, permeates the whole school system and continually affects the lives of educators and learners (notwithstanding its unintended effects like fragmentation of the school

day into a series of unrelated events which result in the alienation of the learner from his/her world) is stifling learners' creativity as ideas do not get time to develop and is depriving learners of the possibility of playing an active role in society. Gatto (1992:30) argues that:

> "But these activities are just a more cosmetic way to create dependent human beings, unable to fill their own hours, unable to initiate lines of meaning to give substance and pleasure to their existence. It's a national disease, this dependency and aimlessness..."

This study has revealed that while all schools have clocks or bells or sirens which reinforces timetables in controlling the school activities with the ultimate aim of completing the syllabi in good time, the main difference between schools is the meaning attached to the bells, clocks and sirens. This results in schools which perform well completing the syllabi in good time while schools which perform poorly fail to complete the syllabi in good time.

6.13 CONCLUSION

It had been found that differential school performance in the South African school leaving examination in the northern Province can be viewed against the background of both the formal curriculum and the hidden curriculum. Besides learning from the formal curriculum, learners learn from the structures of attitude, discipline and parental support.

This study has revealed that differential school performance can be partly attributed to the impact of the hidden curriculum through attitudes as learners learn from the structures of attitude towards schooling, i.e. schools where there is a high expectation of the final results, where principals enjoy heading their schools and identify themselves fully with the performance of their learners tend to perform better than schools where the above mentioned are either poor or absent. It has further been revealed that while learners and educators of the good performing schools are aware of their good performance and put more efforts to improve their performance, learners and educators of poor performing schools are not aware of their poor performance, hence, further poor performance which affect their entire lives.

Differential school performance can be partly attributed to the impact of the hidden curriculum through discipline as research has indicated that learners learn from the structures of discipline. It has been revealed that schools which have good discipline, i.e. good learner school attendance, good afternoon study attendance, where learners are punctual at lessons and where the syllabi is completed in good time tend to perform better than schools where the above mentioned are either poor or absent. It has been revealed further that differential disciplinary patterns of schools and differences in learner performances can probably be linked to the social and economic class structures whereby the working class learners exclude themselves from the dominant school culture by forming a working class counter-school culture.

Differential school performance can probably be linked to the impact of the hidden curriculum through parental support. Research has indicated that learners learn from the structures of parental support, i.e. financial support, involvement in school governance, school meeting attendance, etc. This study has revealed that schools which are well supported by parents tend to perform better than schools which are not well supported. Poor parental support and poor parental involvement in school activities can probably be linked to a high level of parent illiteracy and a lack of capacity in school governance matters which are very common amongst the working class parents.

6.13.1 Further research

The investigation of the possible impact of the hidden curriculum on the South African school leaving examination in the Northern Province has revealed a need for continuous research to investigate its possible impact on learner performance. This study should not be seen as a once-off exercise but should be viewed as an investigation-in-progress. The hidden curriculum cannot be studied as a static phenomenon with the same fixed patterns or characteristics but should be viewed as a time-bound and place-bound changing phenomenon which needs continuous re-visiting.

As this study has used the quantitative research method for data collection, analysis and interpretation, qualitative research is needed to provide more information with regard to patterns, the relationship or correlation of variables which seem to impact on the learners' performance in the school leaving examination in the Northern Province.

REFERENCES

Anyon, J. 1979. Ideology and United States history textbooks. *Harvard Educational Review* 49(3): 361-386.

Anyon, J. 1981. Social class and school knowledge. *Curriculum Inquiry* 11(1): 3-42.

Apple, M.W. 1979. *Ideology and curriculum*. London: Routledge & Chapman and Hall Inc.

Apple, M.W. 1982. *Education and power*. London: Routledge & Kegan Paul.

Apple, M.W. 1986. *Teachers and texts: a political economy of class and gender relations in education*. London: Routledge and Kegan Paul.

Apple, M.W. 1990. *Ideology and curriculum*. 2nd ed. New York: Routledge.

Apple, M.W. 1995. *Education and power*. 2nd edition. London: Routledge.

Ary, D., Jacobs, L.C. & Razavieh, A. 1990. *Introduction to research in education*. 4th edition. Fort Worth: Holt, Rinehart and Winston Inc.

Assor, A. & Gordon, D. 1987. The implicit learning theory of hidden curriculum research. *Journal of Curriculum Studies* 19(4): 329-339.

Ausubel, D.P., Novak, J.D. & Hanesian, H. 1978. *Educational Pscychology. A cognitive view*. 2nd edition. New York: Holt, Rinehart and Winston.

Babbie, E. 1990. *Survey research methods*. Belmont: Wadsworth Publishing Company.

Babbie, E. 1995. *The practice of social research*. 7th ed. Belmont: Wadsworth Publishing Company.

Babbie, E. 1998. *The practice of social research*. 8th ed. Belmont: Wadsworth Publishing Company.

Babbie, E. 2001. *The practice of social research.* 9th ed. Belmont: Wadsworth Thompson Learning.

Babbie, E. & Mouton, J. 2001. *The practice of social research.* South African edition. Cape Town: Oxford University Press.

Bailey, K.D. 1994. *Methods of social research.* Fourth edition. New York: The Free Press.

Beck, R.C. 1983. *Motivation theories and principles.* 2nd edition. New Jersey: Prentice-Hall Inc.

Beck, R.C. 2000. *Motivation theories and principles.* 4th edition. New Jersey: Prentice-Hall, Inc.

Behr, A.L. 1988. *Education in South Africa. Origins, Issues and Trends: 1652 - 1988.* Pretoria, Cape Town: Academica.

Behr, A.L. & Macmillan, R.G. 1971. Education in South Africa. Pretoria: J.L. van Schaik.

Berkhout, S.J. & Bergh, A.-M. 1994. The hidden curriculum: Neglected dimension of the South African educational reform debate. *Educare* 23(1): 48-58.

Berkhout, S.J. & Bergh, A.-M. 1997. *School-leaving examination in South Africa: Powerful force in transformation or symbolic manipulation?* Pretoria: University of Pretoria.

Bigelow, W. 1990. Inside the classroom: Social vision and critical pedagogy. *Teachers College Record* 91(3): 435-446.

Bloom, S.B. 1972. Innocence in education. *School Review* 80(3): 333-352.

Bowles, S. 1977. Unequal education and the reproduction of the social division of labor, pp 137-153 in: J. Karabel and A.H. Halsey (eds). *Power and ideology in education.* New York: Oxford University Press.

Bowles, S. & Gintis, H. 1976. *Schooling in capitalist America: Educational reform and the contradictions of economic life.* London: Routledge & Kegan Paul.

Brubaker, D.L. 1982. *Curriculum planning. The dynamics of theory and practice.* Glenview, Illinois: Scott, Foresman and Company.

Casey, M.B. & Tucker, E.C. 1994. Problem-centred classrooms. *Phi Delta Kappan* 76(2): 139-146.

Christie, P. 1986. *The right to learn (the struggle for education in South Africa).* Johannesburg: A Sached Trust/Ravan Press Publication.

Christie, P. 1991. *The right to learn (the struggle for education in South Africa).* Johannesburg: A Sached Trust/Ravan Press Publication.

Cornbleth, C. 1984. Beyond hidden curriculum? *Journal of Curriculum Studies* 16(1): 29-36.

Cusick, P. 1973. *Inside high school.* New York: Holt, Renehort and Winston.

Department of Education. 1995. *Report of the Committee to review the organisation, governance and funding of schools.* Pretoria: Department of Education.

Department of Education. 1997. *School register of needs survey.* Pretoria: Department of Education.

Department of Education. 1997. *1996 examination results.* Pretoria: Department of Education.

Department of Education. 1997. *Quality education for all. Overcoming barriers to learning and development.* Pretoria: Department of Education.

Department of Education 1998. *Preliminary report on the 1997 Senior Certificate examination results.* Pretoria: Department of Education.

Department of Education. 1998. *Workshop proceeding: Improvement of grade 12 performance.* Pretoria: Department of Education.

Department of Education. 1999. *Preliminary report on the 1998 Senior Certificate examination.*

Pretoria: Department of Education.

Department of Education. 1999. *Report on the 1999 Senior Certificate examination.* Pretoria: Department of Education.

Department of Education. 2000. *Preliminary report on the 1999 Senior Certificate Examination.* Cape Town: Department of Education.

Department of Education. 2001. *Report on the 2000 Senior Certificate Examination.* Cape Town: Department of Education.

Dreeben, R. 1968. *On what is learned in schools.* Reading, Mass: Addison Wesley.

Dreeben, R. 1976. The unwritten curriculum and its relation to values. *Journal of Curriculum Studies* 8(2): 111-124.

Eckstein, M.A. & Noah, H.J. 1993. *Secondary school examinations, International perspectives on policies and practice.* Yale University: Yale University Press.

Gatto, J.T. 1992. *Dumbing us down. The hidden curriculum of compulsory schooling.* Philadelphia, PA: New Society Publishers.

Geen, R.G. 1995. *Human motivation. A social psychological approach.* Pacific Grove: Brooks/Cole Publishing Company.

Gilborn, D. 1992. Citizenship, race and the hidden curriculum. *International Studies in Sociology of Education* 2(1):57-74.

Giroux, H. 1983. Theories of reproduction and resistance in the new sociology of education. *Harvard Educational Review* 53(3): 257-293.

Giroux, H. 1988. *Teachers as intellectuals: Toward a critical pedagogy of learning.* Massachusetts: Bergin & Carvey Publishers, Inc.

Gordon, D. 1980. The immorality of the hidden curriculum. *Journal of Moral Education* 10(1): 3-8.

Gordon, D. 1982. The concept of the hidden curriculum. *Journal of Philosophy of Education* 16(2): 187-198.

Gordon, D. 1983. Rules and effectiveness of the hidden curriculum. *Journal of Philosophy of Education* 17(2): 207-218.

Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. 1998. *Multivariate data analysis*. 5th edition. New Jersey: Prentice-Hall International, Inc.

Hass, G. & Parkay, F.W. 1993. *Curriculum planning. A new approach.* Sixth edition. Massachusetts: Allyn and Bacon.

Hindess, B. 1996. *Discourses of power: From Hobbes to Foucault.* Cambridge: Blackwell Publishers Ltd.

Human Sciences Research Council. 1981. *Provision of Education in the RSA. Report of the Main Committee of the HSRC inquiry into Education.* Pretoria: HSRC.

Jackson, P.W. 1990. *Life in classrooms.* New York: Holt, Rinehart and Winston.

Jollife, F.R. 1986. *Survey design and analysis.* Chichester: Ellis Horwood Ltd.

Kelly, A.V. 1989. *The curriculum: Theory and Practice.* 3rd edition. London: Chapman.

Lynch, K. 1989. *The hidden curriculum: Reproduction in education, an appraisal.* London: The Falmer Press.

McLaren, P. 1986. *Schooling as a ritual performance: towards a political economy of educational symbols and gestures.* London: Routledge & Kegan Paul.

McLaren, P. 1993. Schooling as a ritual performance: towards a political economy of educational

symbols and gestures. 2nd edition. London and New York: Routledge.

Malherbe, E.G. 1977. *Education in South Africa,* Vol. 2. Cape Town: Juta.

Martin, J.R. 1976. What should we do with a hidden curriculum when we find one? *Curriculum Inquiry* 6(1): 135-151.

Mathonsi, E.N. 1986. Black matriculation results: A mechanism of social control? M.Ed. Dissertation. Johannesburg: University of the Witwatersrand.

Mbingeleli, V.L. 1997. The mediation of some universal aspects of schooling in Kathorus secondary schools. M.Ed. Dissertation. Pretoria: University of Pretoria.

Molepo, M.M. 1999. Empowering parents as stakeholders in the democratisation of education. M.Ed. Dissertation. Pretoria: University of Pretoria.

Motsoaledi, P.A. 1996. *The penetration of new information technologies into developing countries: Cultural hegemony or mutual exchange.* Moscow: UNESCO.

Mouton, J. 1996. *Understanding social research.* Pretoria: J.L. van Schaik.

Mouton, J. & Marais, H.C. 1990. *Basic concepts in the methodology of the social sciences.* Pretoria: Human Sciences Research Council.

Noah, H.J. & Eckstein, M.A. 1992. Comparing national systems of secondary school leaving examinations. Pp 3-22 in: M.A. Eckstein and Noah, H.J. (eds). *Examinations: Comparative and international studies.* Oxford: Pergamon Press.

Noah, H.J. & Eckstein, M.A. 1992. The two faces of examinations: A comparative and international perspective. Pp 147-170 in: M.A. Eckstein and Noah, H.J. (eds). *Examinations: Comparative and international studies.* Oxford: Pergamon Press.

Northern Province Education, Arts, Culture and Sport. 1996. *Education reconstruction declaration.* Pietersburg.

Northern Province Education, Arts, Culture and Sport. 1996. *Help end the education disaster in the Northern Province: Bring democratic school governance to our schools*. Pietersburg.

Northern Province Education, Arts, Culture and Sport. 1998. *Culture of learning, teaching and service (COLTS)* Pietersburg.

Northern Province Education, Arts, Culture and Sport. 1998. *Official announcement of the 1998 grade 12 examination results*. Pietersburg.

Northern Province Education, Arts, Culture and Sport. 1999. *Official announcement of the 1999 grade 12 examination results*. Pietersburg.

Northern Province Education, Arts, Culture and Sport. 2000. *Official announcement of the 2000 grade 12 examination results*. Pietersburg.

Northern Province Education, Arts, Culture and Sport. 2001. *Official announcement of the 2001 grade 12 examination results*. Pietersburg.

Omokhodion Otibor, T. 1989. Classroom observed: The hidden curriculum in Lagos, Nigeria. *International Journal of Educational Development* 9(2):99-110.

Oppenheim, A.N. 1992. *Questionnaire design, interviewing and attitude measurement.* New ed. London: Printer Publishers Ltd.

Peng Chao-Ying, J., So Tak-Shing, H., Stage, F.K. & St. John, E.P. 2002. The use and interpretation of logistic regression in higher education journals; 1988-1999. *Research in Higher Education* 43(3): 259-293.

Petri, H.L. 1991. *Motivation: Theory, research and application*. 3th edition. Belmont, Wadsworth Publishing Company.

Portelli, J.P. 1993. Exposing the hidden curriculum. *Journal of Curriculum Studies* 25(4): 343-358.

Republic of South Africa. 1994. Notice No. 16118 of 1994. Department of Education. *Government Gazette* 354 no. 5434. 2 December 1994.

Sambell, K. & McDowell, L. 1998. The construction of the hidden curriculum: Messages and meanings in the assessment of student learning. *Assessment and evaluation in Higher Education* 23(4): 391-402.

Sheppard, C.J. 1998. A school-based indicator model for quality education in South Africa. PhD Thesis. Pretoria: University of Pretoria.

Snyder, B.R. 1971. *The hidden curriculum.* Cambridge: The MIT Press.

Strauss, J.P., Plekker, S.J., Strauss, J.W. & Van der Linde, H.J. 1992. *Education and manpower development.* Bloemfontein: University of the Orange Free State.

Strauss, J.P., Plekker, S.J., Strauss, J.W. & Van der Linde, H.J. 1993. *Education and manpower development.* Bloemfontein: University of the Orange Free State.

Strauss, J.P., Plekker, S.J., Strauss, J.W. & Van der Linde, H.J. 1994. *Education and manpower development.* Bloemfontein: University of the Orange Free State.

Tamir, P. 1988. Making the best use of matriculation examinations. *Spectrum* 26(4): 43-45.

Taylor, N. 1999. Learning outcomes: How will we know them? Pp 185-204 in: N. Taylor and P. Vinjevold (eds). *Getting learning right. Report of the President's education initiative research project.* Wits: The Joint Education Trust.

Thulare, S.M. 1992. Strategic planning as part of the managerial task of a school principal. Unpublished PhD thesis. Pretoria: University of Pretoria.

Trümpelmann, M.H. 1991. *The Joint Matriculation Board: Seventy five years. Achievement in perspective.* Copy No. 296. Goodwood: National Book Printer.

Willis, P.E. 1977. *Learning to labour. How working class kids get working class jobs.*

Hampshire: Gower Publishing Company Limited.

Wren, D.J. 1999. School culture: Exploring the hidden curriculum. *Adolescence* 34(135): 593-596.

Zais, R.S. 1976. *Curriculum principles and foundations*. New York: Harper & Row Publishers, Inc.

Zimbardo, P.G. & Abbesen, E.B. 1977. *Influencing attitudes and changing behaviour*. London: Addison-Wesley Publishing Company.

APPENDIX A

QUESTIONNAIRE FOR GRADE 12 SUBJECT EDUCATORS

Instructions:

a) Do not write your name on the questionnaire.

b) The answers supplied in this questionnaire will remain confidential - please answer all questions.

c) Encircle a shaded number and explain where you are required to do so

e.g. Are you a grade 12 learner? | Yes | 1 | No | 2 |

d) Start with question 4 on page 2.

		For office use	
1. Respondent number	V1		1-3
2. School number	V2		4-5
3. Type	V3		6

For office use

A. GENERAL INFORMATION

4. Gender: Male 1 Female 2 — V4 ☐ 7

5. Indicate your main subject which you taught in grade 12 in 1999 — V5 ☐☐ 8-9

Afrikaans	1	Accounting	2	Geography	3
English	4	Biology	5	B.Econom.	6
Sepedi	7	Economics	8	History	9
Tshivenda	10	H. Econom.	11	Maths	12
Xitsonga	13	N. Work	14	P. Science	15
Agric. Sc.	16	Other (specify)			17

6. What is your highest qualification in the subject mentioned in question 5? ..... — V6 ☐ 10

B. ATTITUDE

7. Rate your enjoyment in teaching the subject mentioned in question 5.

Bad	1	2	3	4	5	6	7	8	Good

V7 ☐ 11

7.1 If 1, why did you teach it? — V8 ☐☐ 12-13

Compelled to teach it	1
Compromised to teach it	2
Volunteered to teach it	3
Other (specify)	4

8. Comment on the 1999 grade 12 final examination results of the subjected mentioned in 5.

Poor	1	Fair	2	Good	3	Very good	4

V9 ☐ 14

8.1 If poor, mention one main contributory factor. — V10 ☐☐ 15-16

.....

.....

9. Do you think your learners were capable of obtaining more than an 80% pass rate in your subject?

Yes	1	No	2

V11 ☐ 17

For office use

9.1 If no, mention one main contributory factor.

.....

.....

V12 [ ][ ] 18-19

10. What final results (pass percentage) did you expect from learners in your subject?

0-30	1	31-50	2	51-80	3	81-100	4

V13 [ ] 20

C. PUNCTUALITY AND ATTENDANCE

11. Comment on the 1999 grade 12 learners' attendance of lessons.

Poor	1	Fair	2	Good	3	Very good	4

V15 [ ] 21-22

11.1 If poor, what were the common reasons given by the learners?

Illness	1
Family tasks	2
Community tasks	3
Other (specify)	4

V16 [ ][ ] 24-25

12. What action was taken against the learners who failed to attend your lessons regularly?

Nothing	1
Punished	2
Reported to parents	3
Other (specify)	4

V17 [ ][ ] 26-27

13. Comment on the 1999 grade 12 learners' punctuality during your lessons.

Poor	1	Fair	2	Good	3	Very good	4

V18 [ ] 28

13.1 If poor, what was the main reason given by the learners?

Delay caused by other learners	1
Movement of learners between classes	2
Movement of educators between classes	3
Other (specify)	4

V19 [ ][ ] 29-30

For office use

14. What action was taken against the learners who failed to be punctual during your lessons?

Informed parents	1	
Punished	2	
Expelled from class	3	V20 [ ][ ] 31-32
Other (specify)	4	

D. AFTERNOON STUDIES

15. Did your school have an afternoon study timetable for grade 12 learners?

Yes	1	No	2	V21 [ ] 33

16. Comment on the 1999 grade 12 learners' attendance of afternoon studies:

Poor	1	Fair	2	Good	3	Very good	4	V22 [ ] 34

16.1 If poor, what was the main reason given by the learners?

Transport problem	1	
Truancy	2	
Family tasks	3	V23 [ ][ ] 35-36
Other (specify)	4	

17. How many days per week did you teach your grade 12 learners during afternoon studies?

0	1	1-2	2	3-4	3	5	4	V24 [ ] 37

17.1 If the answer is zero, what was your main reason?

Transport problem	1	
Family tasks	2	
Not necessary	3	V25 [ ][ ] 38-39
Other (specify)	4	

For office use

E. SCHOOL TIMETABLE, SYLLABI AND WRITTEN WORK

18. Were you able to teach on the 1st day of the 1st semester in 1999?

Yes	1	No	2

V26 ☐ 40

18.1 If no, give one main reason

Poor attendance of learners	1
Administrative work	2
Lack of timetable	3
Other (specify)	4

V27 ☐☐ 41-42

19. How often per month did you test your 1999 grade 12 learners?

☐

V28 ☐ 43

20. How did you react to the grade 12 learners who failed tests?

Informed parents	1
Punished	2
Gave another test	3
Other (specify)	4

V29 ☐☐ 44-45

21. How often per month did you test your 1999 grade 12 learners?

☐

V30 ☐ 46

22. How often per month did you test your 1999 grade 12 class-work?

☐

V31 ☐ 47

23. In which month did you complete the syllabus of the subject mentioned in question 5?

☐

V32 ☐ 48

For office use

F. DISCIPLINE AND SCHOOL POLICY

24. What influence did the regulations of your school have on the discipline of your grade 12 learners?

Poor	1	Fair	2	Good	3	Very good	4

V33 ☐ 49

24.1 If poor, mention one main contributory factor. V34 ☐☐ 50-51

.....

.....

25. Evaluate the implementation of the school regulations in terms of their contribution to the grade 12 results in your subject.

Poor	1	Fair	2	Good	3	Very good	4

V35 ☐ 52

25.1 If poor, mention one main contributory factor. V36 ☐☐ 53-54

.....

.....

26. What action was taken against grade 12 learners who violated the regulations of your school policy?

Informed parents	1
Punished	2
Expelled from class	3
Other (specify)	4

V37 ☐☐ 55-56

G. SUPPORT SERVICES AND STAFF DEVELOPMENT

27. How many in-service training courses have you attended in 1999 for the subject mentioned in question 5?

☐ V38 ☐ 57

For office use

27.1 If the answer is zero, do you think the in-service training courses could help you to improve on the 1999 results of the subject mentioned in question 5?

Yes	1	No	2

V39 ☐ 58

28. Rate the principal's support in terms of his/her contribution to the 1999 results of the subject mentioned in question 5.

Poor	1	Fair	2	Good	3	Very good	4

V40 ☐ 59

29. Were you guided on the requirements for the 1999 grade 12 final examination?

Yes	1	No	2

V41 ☐ 60

30. Were you visited by the Professional Auxiliary Services Personnel in 1999 to assist you in teaching your subject mentioned in question 5?

Yes	1	No	2

V42 ☐ 61

30.1 If no, do you think such visits could help you to improve the results?

Yes	1	No	2

V43 ☐ 62

31. Besides the textbooks, did your grade 12 learners have additional books which could assist them in studying your subject?

Yes	1	No	2

V44 ☐ 63

32. Besides the textbooks, did you have additional books which could assist you in teaching your subject?

Yes	1	No	2

V45 ☐ 64

For office use

H. MOTIVATION AND VALUE EXPECTATION

33. How did you treat the grade 12 learners who performed exceptionally well in your examination?

Informed parents	1	V46 [ ][ ] 65-66
Gave prizes	2	
Praised	3	
Other (specify)	4	

34. How many external visits did your school have in your subject in 1999 which intended to motivate the grade 12 learners?

[ ] V47 [ ] 67

34.1 If the answer is zero, do you think such visits could motivate your grade 12 learners to improve their performance?

Yes	1	No	2	V48 [ ] 68

35. In which FEST competition (Foundation for Education, Science and Technology) did your grade 12 learners take part in 1999?

None	1	V49 [ ][ ] 69-70
Maths	2	
Science	3	
Other (specify)	4	

35.1 If none, do you think participation in the FEST competition could motivate the learners to improve the results of your subject?

Yes	1	No	2	V50 [ ] 71

36. In your view, what were the future plans of the majority of your 1999 grade 12 learners for the year 2000?

Join the labour market	1	V51 [ ][ ] 72-73
Attend tertiary institutions	2	
Not yet decided	3	
Other (specify)	4	

For office use

I. ACCEPTING RESPONSIBILITY FOR THE RESULTS

37. If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?

Learners	1	
Educators	2	
Principal	3	V56 ☐☐ 74-75
Other (specify)	4	

38. If your school achieved an unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

Learners	1	
Educators	2	
Principal	3	V57 ☐☐ 76-77
Other (specify)	4	

Thank you for your co-operation

APPENDIX B

QUESTIONNAIRE FOR PRINCIPALS

Instructions:

a) Do not write your name on the questionnaire.

b) The answers supplied in this questionnaire will remain confidential - please answer all questions.

c) Encircle a shaded number and explain where you are required to do so

e.g. Are you the principal? | Yes | 1 | No | 2 |

d) Start with question 4 on page 2.

		For office use	
1.	Respondent number	V1	1-3
2.	School number	V2	4-5
3.	Type	V3	6

For office use

A. GENERAL INFORMATION

4. Gender: Male 1 Female 2 — V4 ☐ 7

5. Number of years experience as a principal: ☐ — V5 ☐☐ 8-9

6. Indicate your academic and professional qualifications.

..... — V6 ☐ 10

B. ATTITUDE

7. Rate your enjoyment in heading your school in 1999.

Bad 1 2 3 4 5 6 7 8 Good — V7 ☐ 11

7.1 If 1, substantiate with one main contributory factor.

.....

..... — V8 ☐☐ 12-13

8. Comment on the 1999 grade 12 final examination results of your school.

Bad 1 2 3 4 5 6 7 8 Good — V9 ☐ 14

8.2 If poor, mention one contributory factor.

..... — V10 ☐☐ 15-16

.....

9. Do you think your learners were capable of obtaining more than an 80% pass aggregate?

Yes 1 No 2 — V11 ☐ 17

9.1 If no, mention one main contributory factor.

..... — V12 ☐☐ 18-19

.....

10. What final results (pass percentage) did you expect from your learners?

0-30	1	31-50	2	51-80	3	81-100	4

V13 ☐ 20

10.1 If 0-30, substantiate with one main contributory factor.

.....

V14 ☐☐ 21-22

.....

C. PUNCTUALITY AND ATTENDANCE

11. Comment on the 1999 grade 12 learners' attendance.

Poor	1	Fair	2	Good	3	Very good	4

V15 ☐ 23

11.1 If poor, what were the common reasons given by the learners?

Illness	1
Family tasks	2
Community tasks	3
Other (specify)	4

V16 ☐☐ 24-25

12. What action was taken against the learners who failed to attend lessons regularly?

Nothing	1
Punished	2
Reported to parents	3
Other (specify)	4

V17 ☐☐ 26-27

13. Comment on the 1999 grade 12 learners' punctuality for the lessons.

Poor	1	Fair	2	Good	3	Very good	4

V18 ☐ 28

13.1 If poor, what was the main reason given by the learners?

Delay caused by other lessons	1
Movement of learners between classes	2
Movement of educators between classes	3
Other (specify)	4

V19 ☐☐ 29-30

For office use

14. What action was taken against learners who failed to be punctual for the lessons?

Informed parents	1	
Punished	2	
Expelled	3	V20 ☐☐ 31-32
Other (specify)	4	

D. AFTERNOON STUDIES

15. Did your school have an afternoon study timetable for grade 12 learners?

Yes	1	No	2	V21 ☐ 33

16. Comment on the 1999 grade 12 learners' attendance of afternoon studies:

Poor	1	Fair	2	Good	3	Very good	4	V22 ☐ 34

16.1 If poor, what was the main reason given by the learners?

Transport problem	1	
Truancy	2	
Family tasks	3	V23 ☐☐ 35-36
Other (specify)	4	

17. Did your school have afternoon study lessons for grade 12 learners?

Yes	1	No	2	V24 ☐ 37

17.1 If no, what was the main reason?

Transport problem	1	
Family tasks	2	
Not necessary	3	V25 ☐☐ 38-39
Other (specify)	4	

For office use

E. SCHOOL TIMETABLE, SYLLABI AND WRITTEN WORK

18. Did your school manage to teach on the 1st day of the 1st semester this year?

Yes	1	No	2

V26 ☐ 40

18.1 If no, give one main reason

Poor attendance of learners	1
Administrative work	2
Lack of timetable	3
Other (specify)	4

V27 ☐☐ 41-42

19. According to your school policy, how often per month were the 1999 grade 12 learners supposed to be tested in each subject?

☐

V28 ☐ 43

20. How did you react to the grade 12 learners who failed tests?

Informed parents	1
Punished	2
Given another test	3
Other (specify)	4

V29 ☐☐ 44-45

21. According to your school policy, how often per month were the 1999 grade 12 learners supposed to be given home-work in each subject?

☐

V30 ☐ 46

22. How often per month were the 1999 grade 12 learners supposed to be given class-work in each subject?

☐

V31 ☐ 47

23. In what month were educators expected to complete the 1999 grade 12 syllabi ?

☐

V32 ☐ 48

For office use

F. DISCIPLINE AND SCHOOL POLICY

24. What contribution did the regulations of your school have on the discipline of grade 12 learners?

Poor	1	Fair	2	Good	3	Very good	4

V33 ☐ 49

24.1 If poor, mention one main contributory factor. V34 ☐☐ 50-51

.....

.....

25. Evaluate the implementation of school regulations in terms of their contribution to the grade 12 results.

Poor	1	Fair	2	Good	3	Very good	4

V35 ☐ 52

25.1 If poor, mention one main contributory factor. V36 ☐☐ 53-54

.....

.....

26. What action was taken against grade 12 learners who violated the regulations of the school policy?

Informed parents	1
Punished	2
Expelled from class	3
Other (specify)	4

V37 ☐☐ 55-56

G. SUPPORT SERVICES AND STAFF DEVELOPMENT

27. How many management workshops have you attended in 1999 which aimed at developing your management skills?

☐ V38 ☐ 57

For office use

27.1 If the answer is zero, do you think management workshops could help you improve on the 1999 grade 12 final examination results?

Yes	1	No	2

V39 ☐ 58

28. Rate your support in terms of your contribution to the 1999 final examination results.

Poor	1	Fair	2	Good	3	Very good	4

V40 ☐ 59

29. Were you visited by the circuit manager in 1999 to advise you on school management?

Yes	1	No	2

V41 ☐ 60

29.1 If not, do you think such visits could help you to improve on the 1999 grade 12 final examination results?

Yes	1	No	2

V42 ☐ 61

30. Do you think inspection could improve on the 1999 grade 12 results?

Yes	1	No	2

V43 ☐ 62

31. Rate the support of parents in terms of their contribution to the 1999 grade 12 final examination results.

Poor	1	Fair	2	Good	3	Very good	4

V44 ☐ 63

32. Rate the support of the Professional Auxiliary Services in terms of their contribution to the 1999 grade 12 final examination results.

Poor	1	Fair	2	Good	3	Very good	4

V45 ☐ 64

H. MOTIVATION AND VALUE EXPECTATION

33. How did you treat the grade 12 learners who performed exceptionally well in the 1999 final examination?

Informed parents	1
Gave prizes	2
Praised	3
Other (specify)	4

V46 [ ][ ] 65-66

34. How many external visits did your school have this year which intended to motivate the grade 12 learners?

[ ]

V47 [ ] 67

34.1 If the answer is zero, do you think such visits can motivate your grade 12 learners to improve their performance?

Yes	1	No	2

V48 [ ] 68

35. In which FEST competition (Foundation for Education, Science and Technology) did your grade 12 learners take part in 1999?

None	1
Maths	2
Science	3
Other (specify)	4

V49 [ ][ ] 69-70

35.1 If none, do you think participation in the FEST competition could motivate learners to improve the results?

Yes	1	No	2

V50 [ ] 71

36. In your view, what were the future plans of the majority of your 1999 grade 12 learners for the year 2000?

Join the labour market	1
Attend tertiary institutions	2
Not yet decided	3
Other (specify)	4

V51 [ ][ ] 72-73

I. ACCEPTING RESPONSIBILITY FOR THE RESULTS

37. If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?

Learners	1	
Educators	2	
Principal	3	V52 ☐☐ 74-75
Other (specify)	4	

38. If your school achieved an unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

Learners	1	
Educators	2	
Principal	3	V53 ☐☐ 76-77
Other (specify)	4	

Thank you for your cooperation

APPENDIX C

QUESTIONNAIRE FOR GRADE 12 LEARNERS

Instructions:

a. Do not write your name on the questionnaire.
b. The answers supplied in this questionnaire will remain confidential - please answer all questions.
c. Encircle a shaded number and explain where you are required to do so

e.g. Are you a grade 12 learner? | Yes | 1 | No | 2 |

d. Start with question 4 on page 2.

		For office use	
1. Respondent number	V1		1-3
2. School number	V2		4-5
3. Type	V3		6

For office use

A. GENERAL INFORMATION

4. Gender: Male 1 Female 2 — V4 ☐ 7

5. Age in years: ☐☐ — V5 ☐☐ 8-9

6. Years in grade 12: ☐☐ — V6 ☐☐ 10

7. Which subject group are you studying?

Commercial	1
Science	2
General	3
Other (specify)	4

V7 ☐☐ 11

B. ATTITUDE

8. Rate your enjoyment in doing the subject group mentioned in question 7.

Bad	1	2	3	4	5	6	7	8	Good

V8 ☐ 12

8.1 If 1, why did you follow it?

Compelled to do it	1
Did not have knowledge thereof	2
Volunteered to do it	3
Other (specify)	4

V9 ☐☐ 13-14

9. Do you like all the subjects which you are studying?

Yes	1	No	2

V10 ☐ 15

9.1 If not, mention the subject which you dislike the most.

☐

V11 ☐☐ 16-17

10. Comment on the 1999 grade 12 final examination results of your school.

Poor	1	Fair	2	Good	3	Very good	4

V12 ☐ 18

10.1 If poor, mention one main contributory factor.

.....

.....

V13 [ ][ ] 19-20

11. Do you think your learners were capable of obtaining more than an 80% pass aggregate?

Yes	1	No	2

V14 [ ] 21

11.1 If not, mention one main contributory factor.

.....

.....

V15 [ ][ ] 22-23

12. What final results do you expect from your final examination?

Poor	1	Fair	2	Good	3	Very good	4

V16 [ ] 24

12.1 If poor, give one main reason.

.....

.....

V17 [ ][ ] 25-26

C. PUNCTUALITY AND ATTENDANCE

13. Comment on the 2000 grade 12 learners' attendance of lessons.

Poor	1	Fair	2	Good	3	Very good	4

V18 [ ] 27

13.1 If poor, what are the common reasons given by learners?

Illness	1
Family tasks	2
Community tasks	3
Other (specify)	4

V19 [ ][ ] 28-29

For office use

14. What action is taken against the learners who fail to attend lessons regularly?

Nothing	1	
Punished	2	
Reported to parents	3	V20 [ ][ ] 30-31
Other (specify)	4	

15. Comment on the 2000 grade 12 learners' punctuality at the lessons.

Poor	1	Fair	2	Good	3	Very good	4	V21 [ ] 32

15.1 If poor, what was the main reason given by learners?

Delay caused by other lessons	1	
Movement of learners between classes	2	
Movement of educators between classes	3	V22 [ ][ ] 33-34
Other (specify)	4	

16. What action is taken against learners who fail to be punctual for the lessons?

Informed parents	1	
Punished	2	
Expelled	3	V23 [ ][ ] 35-36
Other (specify)	4	

D. AFTERNOON STUDIES

17. Does your school have an afternoon study timetable for grade 12 learners?

Yes	1	No	2	V24 [ ] 37

18. Comment on the 2000 grade 12 learners' attendance of afternoon studies:

Poor	1	Fair	2	Good	3	Very good	4	V25 [ ] 38

18.1 If poor, what was the main reason given by the learners?

Transport problem	1	
Truancy	2	
Family tasks	3	V26 ☐☐ 39-40
Other (specify)	4	

19. Does your school have afternoon study lessons for grade 12 learners?

Yes	1	No	2	V27 ☐ 41

19.1 If not, what is the main reason?

Transport problem	1	
Family tasks	2	
Not necessary	3	V28 ☐☐ 42-43
Other (specify)	4	

E. SCHOOL TIMETABLE, SYLLABI AND WRITTEN WORK

20. Were you taught on the 1st day of the 1st semester this year?

Yes	1	No	2	V29 ☐ 44

20.1 If not, give one main reason

Poor attendance of learners	1	
Administrative work	2	
Lack of timetable	3	V30 ☐☐ 45-46
Other (specify)	4	

21. How often per month per subject are you tested?

☐	V31 ☐ 47

22. What action is taken against learners who fail tests?

Informed parents	1	
Punished	2	
Given another test	3	V32 ☐☐ 48-49
Other (specify)	4	

For office use

23. How often per month are you given homework in each subject?

V33 ☐ 50

24. How often per month are you given class-work in each subject?

V34 ☐ 51

25. In what month do you expect educators to complete their 2000 grade 12 syllabi?

V35 ☐ 52

F. DISCIPLINE AND SCHOOL POLICY

26. What contribution do the regulations of your school have on the discipline of the grade 12 learners?

Poor	1	Fair	2	Good	3	Very good	4

V36 ☐ 53

26.1 If poor, mention one main contributory factor. V37 ☐☐ 54-55

.....

.....

27. Evaluate the implementation of the school regulations in terms of their contribution to grade 12 results.

Poor	1	Fair	2	Good	3	Very good	4

V38 ☐ 56

27.1 If poor, mention one main contributory factor. V39 ☐☐ 57-58

.....

28. What action is taken against grade 12 learners who violate the regulations of the school policy?

Informed parents	1
Punished	2
Expelled from class	3
Other (specify)	4

V40 ☐☐ 59-60

G. SUPPORT SERVICES AND STAFF DEVELOPMENT

29. Have you visited a library this year (2000)?

Yes	1	No	2

V41 ☐ 61

29.1 If not, give a reason.

No library at school	1
Lack of time	2
Lack of library information	3
Other (specify)	4

V42 ☐☐ 62-63

30. Do you know the requirements of the syllabi with regard to the subjects which you are studying?

Yes	1	No	2

V43 ☐ 64

31. Were you guided on the pass requirements for the 2000 grade 12 final examination?

Yes	1	No	2

V44 ☐ 65

32. Besides the textbooks, do you have additional books which can assist you in your studies?

Yes	1	No	2

V45 ☐ 66

H. MOTIVATION AND VALUE EXPECTATION

33. How do you want your school to treat you if you perform exceptionally well in your examination?

Inform parents	1
Give prizes	2
Praise	3
Other (specify)	4

V46 ☐☐ 67-68

34. How many external visits did your school have this year (2000) which is intended to motivate grade 12 learners?

☐

V47 ☐ 69

For office use

34.1 If the answer is zero, do you think such visits can motivate you to improve your performance?

Yes	1	No	2

V48 ☐ 70

35. In which FEST competition (Foundation for Education, Science and Technology) did you take part this year (2000)?

None	1
Maths	2
Science	3
Other (specify)	4

V49 ☐☐ 71-72

35.1 If none, do you think participation in the FEST competition can motivate you to improve your performance?

Yes	1	No	2

V50 ☐ 73

36. What are your plans for the year 2001?

Join the labour market	1
Attend tertiary institutions	2
Not yet decided	3
Other (specify)	4

V51 ☐☐ 74-75

I. ACCEPTING RESPONSIBILITY FOR THE RESULTS

37. If your school achieved an exceptionally good pass rate in the 1999 grade 12 examination, who would you commend the most?

Learners	1
Educators	2
Principal	3
Other (specify)	4

V56 ☐☐ 76-77

38. If your school achieved an unsatisfactory pass rate in the 1999 grade 12 examination, who would you chiefly blame?

Learners	1
Educators	2
Principal	3
Other (specify)	4

V57 ☐☐ 78-79

Thank you for your co-operation

APPENDIX D

NORTHERN PROVINCE DEPARTMENT OF EDUCATION

Region 3 (Northern) Soutpansberg District 1999 school leaving examination results

No.	Centre	No. wrote	No. Pass	% Pass	ME Pass	SC Pass
1.	Louis Trichardt	93	93	100,00	38	55
2.	Emmanuels	17	17	100,00	8	9
3	LTT Murunwa	3	3	100,00	3	0
4	Mamvuka	26	24	92,31	12	12
5	Eric Louw	72	65	90,28	22	43
6	Eltivillas	25	22	88,00	11	11
7	Waterval	68	59	86,76	25	34
8	Rivubye	90	76	84,44	18	53
9	Nngweni	117	96	82,05	62	34
10	Elim	69	55	79,71	15	49
11	Tshianane	22	17	77,27	2	15
12	Lemana	78	59	75,64	21	38
13	Luswinzhe	15	11	73,33	1	10
14	Patrick Ramaano	174	126	72,41	34	92
15	Humbelani	66	47	71,21	13	34
16	Dzata	81	54	66,67	17	37
17	Tshiawelo	68	45	66,18	5	40
18	Nnditsheni	49	30	61,22	7	23
19	H.S. Phillips	60	36	60,00	8	28
20	Nkoneni	17	9	52,94	1	8
21	Frank Ravele	53	27	50,94	1	8
22	Nndweleni	107	54	50,47	11	43

No	Centre	No. wrote	No. pass	% Pass	ME Pass	SC Pass
23	Tshifhena	110	54	49,09	18	36
24	Johannes Mulambilu	33	16	48,48	5	11
25	Ramashia	48	23	47,92	4	19
26	Mulenga	69	31	44,93	4	27
27	Masereni	28	12	42,86	0	12
28	Jack Lavhenga	49	21	42,86	0	12
30	Kutama	166	71	42,77	18	53
31	Maneledzi	207	87	42,03	23	64
32	Ozias Davhana	85	35	41,18	6	29
33	Mudimeli	54	22	40,74	5	17
34	Litshofu	176	69	39,20	19	50
35	Mathede	47	18	38,30	2	16
36	Jonathan Mushaathama	87	33	37,93	8	25
37	Musina	98	37	37,76	6	31
38	Ravhuhani	35	13	37,14	4	9
39	Mushaathoni	95	35	36,84	3	32
40	Vhusendeka	57	21	36,84	1	20
41	Tshilongoni	76	27	35,53	3	24
42	Hendric Nthanbeleni	34	12	35,29	1	11
43	Tshwime	16	46	33,82	15	31
44	George Mbulaheni	63	21	33,33	4	17
45	Swongozwi	73	24	32,88	5	19
46	Phririphiri	138	45	32,61	18	27
47	Sinthumule	174	55	31,61	8	47
48	Jonathan Thifulufhelwe	114	35	30,70	7	28
49	Khakhu	114	35	30,70	7	28
50	Swombani	76	23	30,26	3	20
51	Ramabulana	38	11	28,95	2	9
52	Dinbanyika	109	29	26,61	6	23

No.	Centre	No. wrote	No. pass	% Pass	ME Pass	SC Pass
53	Miriyavhavha	12	3	25,00	0	3
54	Tshirululuni	44	11	25,00	2	9
55	Vhulaudzi	140	33	23,57	9	24
56	Luatama	77	18	23,38	1	17
57	Solomon Maelula	116	27	23,28	6	21
58	Nndavheleseni	31	7	22,58	0	7
59	Mmilige	76	17	22,37	1	16
60	Luvhivhini	104	23	22,12	4	19
61	Sinugani	71	15	21,13	1	21
62	Thokampe	103	21	20,39	0	21
63	Mphephu	249	40	16,06	7	33
64	Tshiungulela	104	14	13,46	1	13
65	Masedi Combined	18	1	5,56	1	0

APPENDIX E

RANDOM SELECTION OF SCHOOLS

Herewith the random selection of schools you are to visit.
The file TOP DATA contains the 22 TOP SCHOOLS and you should try to visit the first 10 from DZATA through PATRICK RAMAANO

The file MIDD DATA contains the 25 MIDDLE SCHOOLS and you should try to visit the first 10 from MAINGANYA through KUTAMA

The file BOTT DATA contains the 18 BOTTOM SCHOOLS and you should try to visit the first 10 from SOLOMON MAELULA through MPHEPHU

If you are unable to visit any of the ten schools as indicated visit from school number eleven onwards until ten schools per TOP MIDD and BOTT have visited respectively.

TOP SCHOOLS : FILE TOP DATA

16	01	DZATA	081	054	066.67	17	37
10	02	ELIM	069	055	079.71	15	40
18	03	NNDITSHENI	049	030	061.22	07	23
12	04	LEMANA	078	059	075.64	21	38
15	05	HUMBELANI	066	047	071.21	13	34
04	06	MAMVUKA	026	024	092.31	12	12
09	07	NNGWENI	117	096	082.05	62	34
19	08	H.S.S. PHILLIPS	060	036	060.00	08	28
06	09	ELTIVILLAS	025	022	088.00	11	11
14	10	PATRICK RAMAANO	174	126	072.41	34	92
05	11	ERIC LOUW	072	065	090.28	22	43
20	12	NKONENI	017	009	052.94	01	08
01	13	LOUIS TRICHARDT	093	093	100.00	38	55
07	14	WATERVAL	068	059	086.76	25	34
13	15	LUSWINZHE	015	011	073.33	01	10
22	16	NNDWELENI	107	054	050.47	11	43
17	17	TSHIAWELO	068	045	066.18	05	40
02	18	EMMANUEL	017	017	100.00	08	09
08	19	RIVUBYE	090	076	084.44	18	53
21	20	FRANIK RAVELE	053	027	050.94	04	23
03	21	LTT MURUNWA	003	003	100.00	03	00
11	22	TSHIANANE	022	017	077.27	02	15

MIDDLE SCHOOLS ; FILE MIDD DATA

37	01	MAINGANYA	105	039	037.14	06	33
45	02	SWONGOZWI	073	024	032.88	05	19
28	03	JACK . LAVHENGWA	049	021	042.86	02	19
23	04	TSHIFHENA	110	054	049.09	18	36
41	05	TSHILOGONI	076	027	035.53	03	24
25	06	RAMASHIA	048	023	047.92	04	19
33	07	LITSHOFU	176	069	039.20	19	50
26	08	MULENGA	069	031	044.93	04	27
24	09	JOHANNES	033	016	048.48	05	11
29	10	KUTAMA	166	071	042.77	18	53
44	11	GEORGE MBULAHENI	063	021	033.33	04	17
40	12	VHUSENDEKA	057	021	036.84	01	20
47	13	SINTHUMULE	174	055	031.61	08	47
39	14	MUSHAATHONI	095	035	036.84	03	32
27	15	MASERENI	028	012	042.86	00	12
43	16	TSHWIME	136	046	033.82	15	31
35	17	JONATHAN MUSHAATHAMA	087	033	037.93	08	25
38	18	RAVHUHALI	035	013	037.14	04	09
46	19	PHIRIPHIRI	138	045	032.61	18	27
36	20	MUSINA	098	037	037.76	06	31
42	21	HENDRIC	034	012	035.29	01	11
30	22	MANELEDZI	207	087	042.03	23	64
31	23	OZIAS DAVHANA	085	035	041.18	06	29
34	24	MATHEDE	047	018	038.30	02	16
32	25	MUDIMELI	054	022	040.74	05	17

BOTTOM SCHOOLS: FILE BOTT DATA

57	01	SOLOMON MAELULA	116	027	023.28	06	21
60	02	LUVHIVHINI	104	023	022.12	04	19
53	03	MIRIYAVHAVHA	012	003	025.00	00	03
55	04	VHULAUDZI	140	033	023.57	09	24
59	05	MMILIGE	076	017	022.37	01	16
58	06	NNDAVHELESENI	031	007	022.58	00	07
49	07	KHAKHU	114	035	030.70	06	29
61	08	THOKAMPE	103	021	020.39	00	21
51	09	RAMABULANA	038	011	028.95	02	09
63	10	MPHEPHU	249	040	016.06	07	33
50	11	SWOMBANI	076	023	030.26	03	20
62	12	SINUGANI	071	015	021.13	01	14
48	13	JONATHAN THIFULUFHELWE	114	035	030.70	07	28
56	14	LUATAMA	077	018	023.38	01	17
54	15	TSHIRULULUNI	044	011	025.00	02	09
52	16	DIMBANYIKA	109	029	026.61	06	23
64	17	TSHIUNGULELA	104	014	013.46	01	13
65	18	MASEDI COMBINED	018	001	005.56	01	00

APPENDIX F

SCHOOL VISIT SCHEDULE

TOP SCHOOLS

School visited			Date of visit	Time
16	01	Dzata	31 May 2000	09:30
10	02	Elim	22 May 2000	08:00
18	03	Nnditsheni	1 June 2000	12:30
12	04	Lemana	22 May 2000	10:00
15	05	Humbelani	30 May 2000	09:30
04	06	Mamvuka	2 June 2000	08:00
09	07	Nnweni	1 June 2000	09:30
19	08	H.S. Phillips	22 May 2000	12:00
06	09	Eltivillas	23 May 2000	08:00
14	10	Patrick Ramaano	31 May 2000	11:00

MIDDLE SCHOOLS

45	02	Swongozwi	24 May 2000	08:00
28	03	Jack Lavhengwa	2 June 2000	10:00
23	04	Tshifhena	29 May 2000	12:30
41	05	Tshilogoni	29 May 2000	11:00
33	07	Litshofu	23 May 2000	10:00
26	08	Mulenga	1 June 2000	11:00
24	09	Johannes Mulambilu	30 May 2000	11:00
29	10	Kutama	24 May 2000	10:00
44	11	George Mbulaheni	1 June 2000	08:00
40	12	Vhusendeka	29 May 2000	09:30

BOTTOM SCHOOLS

School visited			Date of visit	Time
57	01	Solomon Maelula	29 May 2000	08:00
60	02	Luvhivhini	24 May 2000	12:00
53	03	Miriyavhavha	30 May 2000	12:30
55	04	Vhulaudzi	30 May 2000	08:00
59	05	Mmilige	26 May 2000	10:00
58	06	Ndavheleseni	31 May 2000	12:30
49	07	Khakhu	2 June 2000	12:00
61	08	Thokampe	26 May 2000	08:00
63	10	Mphephu	31 May 2000	08:00
50	11	Swobani	23 May 2000	12:00

APPENDIX G

ANALYSIS OF DATA: EDUCATORS

The FREQ Procedure

School number : V2

V2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
4	7	3.02	7	3.02
6	7	3.02	14	6.03
9	10	4.31	24	10.34
10	6	2.59	30	12.93
12	9	3.88	39	16.81
14	9	3.88	48	20.69
15	8	3.45	56	24.14
16	6	2.59	62	26.72
18	7	3.02	69	29.74
19	9	3.88	78	33.62
23	8	3.45	86	37.07
24	8	3.45	94	40.52
26	9	3.88	103	44.40
28	9	3.88	112	48.28
29	9	3.88	121	52.16
33	9	3.88	130	56.03
40	4	1.72	134	57.76
41	10	4.31	144	62.07
44	5	2.16	149	64.22
45	9	3.88	158	68.10
49	8	3.45	166	71.55
50	7	3.02	173	74.57
53	5	2.16	178	76.72
55	10	4.31	188	81.03
57	6	2.59	194	83.62
58	5	2.16	199	85.78
59	6	2.59	205	88.36
60	10	4.31	215	92.67
61	9	3.88	224	96.55
63	8	3.45	232	100.00

Gender : V4

V4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	151	65.09	151	65.09
2	81	34.91	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Experience : V5

V5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	14	6.03	14	6.03
2	6	2.59	20	8.62
3	18	7.76	38	16.38
4	20	8.62	58	25.00
5	28	12.07	86	37.07
6	6	2.59	92	39.66
7	4	1.72	96	41.38
8	17	7.33	113	48.71
9	20	8.62	133	57.33
10	20	8.62	153	65.95
11	7	3.02	160	68.97
12	24	10.34	184	79.31
13	4	1.72	188	81.03
14	6	2.59	194	83.62
15	13	5.60	207	89.22
16	15	6.47	222	95.69
17	10	4.31	232	100.00

Qualification : V6

V6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	4.31	10	4.31
2	151	65.09	161	69.40
3	15	6.47	176	75.86
4	7	3.02	183	78.88
5	32	13.79	215	92.67
6	5	2.16	220	94.83
7	9	3.88	229	98.71
8	3	1.29	232	100.00

Enjoyment : V7

V7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	5.17	12	5.17
2	1	0.43	13	5.60
3	3	1.29	16	6.90
4	7	3.02	23	9.91
5	10	4.31	33	14.22
6	14	6.03	47	20.26
7	33	14.22	80	34.48
8	152	65.52	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Bad : V8

V8	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	8.33	1	8.33
2	1	8.33	2	16.67
3	10	83.33	12	100.00

Frequency Missing = 220

Grade : V9

V9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	21	9.05	21	9.05
2	80	34.48	101	43.53
3	87	37.50	188	81.03
4	44	18.97	232	100.00

Grade poor : V10

V10	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	4	19.05	4	19.05
2	2	9.52	6	28.57
3	3	14.29	9	42.86
4	1	4.76	10	47.62
5	2	9.52	12	57.14
6	2	9.52	14	66.67
7	3	14.29	17	80.95
8	1	4.76	18	85.71
9	1	4.76	19	90.48
10	2	9.52	21	100.00

Frequency Missing = 211

Capable : V11

V11	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	142	61.21	142	61.21
2	90	38.79	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Factor : V12

V12	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	11.11	10	11.11
2	4	4.44	14	15.56
3	13	14.44	27	30.00
4	6	6.67	33	36.67
5	4	4.44	37	41.11
6	5	5.56	42	46.67
7	3	3.33	45	50.00
8	3	3.33	48	53.33
9	4	4.44	52	57.78
10	4	4.44	56	62.22
11	3	3.33	59	65.56
12	7	7.78	66	73.33
13	4	4.44	70	77.78
14	3	3.33	73	81.11
15	4	4.44	77	85.56
16	3	3.33	80	88.89
17	4	4.44	84	93.33
18	4	4.44	88	97.78
19	2	2.22	90	100.00

Frequency Missing = 142

Final : V13

V13	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	6	2.59	6	2.59
2	64	27.59	70	30.17
3	90	38.79	160	68.97
4	72	31.03	232	100.00

Substantiate : V14

V14	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	16.67	1	16.67
2	2	33.33	3	50.00
3	1	16.67	4	66.67
5	1	16.67	5	83.33
6	1	16.67	6	100.00

Frequency Missing = 226

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Attendance : V15

V15	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	8	3.45	8	3.45
2	63	27.16	71	30.60
3	101	43.53	172	74.14
4	60	25.86	232	100.00

Poor att : V16

V16	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	1	12.50	1	12.50
3	1	12.50	2	25.00
4	4	50.00	6	75.00
5	1	12.50	7	87.50
6	1	12.50	8	100.00

Frequency Missing = 224

Action : V17

V17	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	35	15.09	35	15.09
2	112	48.28	147	63.36
3	77	33.19	224	96.55
5	3	1.29	227	97.84
6	2	0.86	229	98.71
7	1	0.43	230	99.14
8	1	0.43	231	99.57
9	1	0.43	232	100.00

Punctuality : V18

V18	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	6	2.59	6	2.59
2	72	31.03	78	33.62
3	100	43.10	178	76.72
4	54	23.28	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Reason : V19

V19	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	33.33	2	33.33
2	2	33.33	4	66.67
4	1	16.67	5	83.33
5	1	16.67	6	100.00

Frequency Missing = 226

Punctual act : V20

V20	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	45	19.40	45	19.40
2	115	49.57	160	68.97
3	46	19.83	206	88.79
4	8	3.45	214	92.24
5	2	0.86	216	93.10
6	1	0.43	217	93.53
7	10	4.31	227	97.84
8	1	0.43	228	98.28
9	1	0.43	229	98.71
10	3	1.29	232	100.00

Afternoon : V21

V21	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	141	60.78	141	60.78
2	90	38.79	231	99.57
3	1	0.43	232	100.00

Afternoon att : V22

V22	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	65	28.02	65	28.02
2	74	31.90	139	59.91
3	67	28.88	206	88.79
4	26	11.21	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Afternoon poor : V23

V23	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	7.69	5	7.69
2	49	75.38	54	83.08
3	3	4.62	57	87.69
4	1	1.54	58	89.23
5	4	6.15	62	95.38
6	1	1.54	63	96.92
7	2	3.08	65	100.00

Frequency Missing = 167

Lessons : V24

V24	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	87	37.50	87	37.50
2	77	33.19	164	70.69
3	40	17.24	204	87.93
4	26	11.21	230	99.14
5	2	0.86	232	100.00

No lessons : V25

V25	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	14	15.38	14	15.38
2	13	14.29	27	29.67
3	46	50.55	73	80.22
4	1	1.10	74	81.32
5	3	3.30	77	84.62
6	4	4.40	81	89.01
7	3	3.30	84	92.31
8	3	3.30	87	95.60
9	1	1.10	88	96.70
10	1	1.10	89	97.80
11	1	1.10	90	98.90
12	1	1.10	91	100.00

Frequency Missing = 141

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Day 1 : V26

V26	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	115	49.57	115	49.57
2	117	50.43	232	100.00

No : V27

V27	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	38	32.76	38	32.76
2	76	65.52	114	98.28
3	2	1.72	116	100.00

Frequency Missing = 116

Month : V28

V28	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	107	46.12	107	46.12
2	63	27.16	170	73.28
3	22	9.48	192	82.76
4	24	10.34	216	93.10
5	4	1.72	220	94.83
6	1	0.43	221	95.26
8	1	0.43	222	95.69
9	10	4.31	232	100.00

React : V29

V29	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	23	9.96	23	9.96
2	61	26.41	84	36.36
3	100	43.29	184	79.65
4	2	0.87	186	80.52
5	14	6.06	200	86.58
6	12	5.19	212	91.77
7	12	5.19	224	96.97
8	6	2.60	230	99.57
9	1	0.43	231	100.00

Frequency Missing = 1

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Home-work : V30

V30	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	0.86	2	0.86
2	41	17.67	43	18.53
3	16	6.90	59	25.43
4	33	14.22	92	39.66
5	5	2.16	97	41.81
6	8	3.45	105	45.26
8	35	15.09	140	60.34
9	92	39.66	232	100.00

Class-work : V31

V31	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	2	0.86	2	0.86
1	4	1.72	6	2.59
2	36	15.52	42	18.10
3	12	5.17	54	23.28
4	28	12.07	82	35.34
5	14	6.03	96	41.38
6	12	5.17	108	46.55
8	26	11.21	134	57.76
9	98	42.24	232	100.00

Complete : V32

V32	Frequency	Percent	Cumulative Frequency	Cumulative Percent
D	4	1.72	4	1.72
E	18	7.76	22	9.48
F	27	11.64	49	21.12
G	18	7.76	67	28.88
H	64	27.59	131	56.47
I	87	37.50	218	93.97
J	13	5.60	231	99.57
K	1	0.43	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Regulations : V33

V33	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	2.16	5	2.16
2	76	32.76	81	34.91
3	102	43.97	183	78.88
4	49	21.12	232	100.00

Poor reg : V34

V34	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	40.00	2	40.00
2	3	60.00	5	100.00

Frequency Missing = 227

Evaluate : V35

V35	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	2.16	5	2.16
2	85	36.64	90	38.79
3	107	46.12	197	84.91
4	35	15.09	232	100.00

Poor eval : V36

V36	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	20.00	1	20.00
2	3	60.00	4	80.00
3	1	20.00	5	100.00

Frequency Missing = 227

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Action reg : V37

V37	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	150	64.66	150	64.66
2	58	25.00	208	89.66
3	15	6.47	223	96.12
4	2	0.86	225	96.98
5	5	2.16	230	99.14
6	1	0.43	231	99.57
7	1	0.43	232	100.00

Management : V38

V38	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	65	28.02	65	28.02
1	58	25.00	123	53.02
2	42	18.10	165	71.12
3	48	20.69	213	91.81
4	11	4.74	224	96.55
5	3	1.29	227	97.84
6	3	1.29	230	99.14
7	1	0.43	231	99.57
9	1	0.43	232	100.00

Zero manage : V39

V39	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	56	84.85	56	84.85
2	10	15.15	66	100.00

Frequency Missing = 166

Support : V40

V40	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	4.31	10	4.31
2	49	21.12	59	25.43
3	104	44.83	163	70.26
4	69	29.74	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Visited : V41

V41	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	177	76.29	177	76.29
2	55	23.71	232	100.00

No visit : V42

V42	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	69	29.74	69	29.74
2	163	70.26	232	100.00

Inspection : V43

V43	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	138	84.66	138	84.66
2	25	15.34	163	100.00

Frequency Missing = 69

Parents : V44

V44	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	106	45.69	106	45.69
2	126	54.31	232	100.00

PAS : V45

V45	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	190	81.90	190	81.90
2	42	18.10	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Exceptional : V46

V46	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	15	6.47	15	6.47
2	58	25.00	73	31.47
3	152	65.52	225	96.98
4	7	3.02	232	100.00

External : V47

V47	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	142	61.21	142	61.21
1	59	25.43	201	86.64
2	25	10.78	226	97.41
3	2	0.86	228	98.28
4	3	1.29	231	99.57
6	1	0.43	232	100.00

Zero ext : V48

V48	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	130	91.55	130	91.55
2	12	8.45	142	100.00

Frequency Missing = 90

FEST : V49

V49	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	138	59.48	138	59.48
2	61	26.29	199	85.78
3	32	13.79	231	99.57
4	1	0.43	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

No FEST : V50

V50	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	126	91.30	126	91.30
2	12	8.70	138	100.00

Frequency Missing = 94

Plans : V51

V51	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	17	7.33	17	7.33
2	144	62.07	161	69.40
3	69	29.74	230	99.14
4	2	0.86	232	100.00

Good pass : V52

V52	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	100	43.10	100	43.10
2	65	28.02	165	71.12
3	12	5.17	177	76.29
4	26	11.21	203	87.50
5	12	5.17	215	92.67
6	4	1.72	219	94.40
7	2	0.86	221	95.26
8	5	2.16	226	97.41
9	1	0.43	227	97.84
10	3	1.29	230	99.14
11	1	0.43	231	99.57
12	1	0.43	232	100.00

(P01) : PROC FREQ of varbs from set EDUC

The FREQ Procedure

Bad pass : V53

V53	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	143	61.64	143	61.64
2	24	10.34	167	71.98
3	8	3.45	175	75.43
4	20	8.62	195	84.05
5	8	3.45	203	87.50
6	2	0.86	205	88.36
7	8	3.45	213	91.81
8	4	1.72	217	93.53
9	4	1.72	221	95.26
10	4	1.72	225	96.98
11	5	2.16	230	99.14
12	2	0.86	232	100.00

APPENDIX H

ANALYSIS OF DATA: PRINCIPALS

The FREQ Procedure

School number : V2

V2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
4	1	3.33	1	3.33
6	1	3.33	2	6.67
9	1	3.33	3	10.00
10	1	3.33	4	13.33
12	1	3.33	5	16.67
14	1	3.33	6	20.00
15	1	3.33	7	23.33
16	1	3.33	8	26.67
18	1	3.33	9	30.00
19	1	3.33	10	33.33
23	1	3.33	11	36.67
24	1	3.33	12	40.00
26	1	3.33	13	43.33
28	1	3.33	14	46.67
29	1	3.33	15	50.00
33	1	3.33	16	53.33
40	1	3.33	17	56.67
41	1	3.33	18	60.00
44	1	3.33	19	63.33
45	1	3.33	20	66.67
49	1	3.33	21	70.00
50	1	3.33	22	73.33
53	1	3.33	23	76.67
55	1	3.33	24	80.00
57	1	3.33	25	83.33
58	1	3.33	26	86.67
59	1	3.33	27	90.00
60	1	3.33	28	93.33
61	1	3.33	29	96.67
63	1	3.33	30	100.00

Gender : V4

V4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	25	83.33	25	83.33
2	5	16.67	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Experience : V5

V5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	3	10.00	4	13.33
3	1	3.33	5	16.67
4	1	3.33	6	20.00
5	1	3.33	7	23.33
7	2	6.67	9	30.00
8	2	6.67	11	36.67
10	1	3.33	12	40.00
13	3	10.00	15	50.00
14	3	10.00	18	60.00
15	4	13.33	22	73.33
16	1	3.33	23	76.67
20	2	6.67	25	83.33
21	1	3.33	26	86.67
22	1	3.33	27	90.00
26	2	6.67	29	96.67
28	1	3.33	30	100.00

Qualification : V6

V6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	1	3.33	2	6.67
3	1	3.33	3	10.00
4	1	3.33	4	13.33
5	11	36.67	15	50.00
6	12	40.00	27	90.00
7	3	10.00	30	100.00

Enjoyment : V7

V7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	6.67	2	6.67
2	1	3.33	3	10.00
3	1	3.33	4	13.33
4	2	6.67	6	20.00
5	5	16.67	11	36.67
6	4	13.33	15	50.00
7	7	23.33	22	73.33
8	8	26.67	30	100.00

(P02) : PROC FREQ of verbs from data set PRIN

The FREQ Procedure

Bad : V8

V8	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	50.00	1	50.00
2	1	50.00	2	100.00

Frequency Missing = 28

Grade : V9

V9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	11	36.67	11	36.67
2	8	26.67	19	63.33
3	7	23.33	26	86.67
4	4	13.33	30	100.00

Grade poor : V10

V10	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	9.09	1	9.09
2	1	9.09	2	18.18
3	1	9.09	3	27.27
4	2	18.18	5	45.45
5	1	9.09	6	54.55
6	1	9.09	7	63.64
7	1	9.09	8	72.73
8	1	9.09	9	81.82
9	1	9.09	10	90.91
10	1	9.09	11	100.00

Frequency Missing = 19

Capable : V11

V11	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	17	56.67	17	56.67
2	13	43.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Factor : V12

V12	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	15.38	2	15.38
2	1	7.69	3	23.08
3	1	7.69	4	30.77
4	1	7.69	5	38.46
5	2	15.38	7	53.85
6	1	7.69	8	61.54
7	1	7.69	9	69.23
8	3	23.08	12	92.31
9	1	7.69	13	100.00

Frequency Missing = 17

Final : V13

V13	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	14	46.67	14	46.67
3	14	46.67	28	93.33
4	2	6.67	30	100.00

Substantiate : V14

V14	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 30

Attendance : V15

V15	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	7	23.33	7	23.33
2	9	30.00	16	53.33
3	11	36.67	27	90.00
4	3	10.00	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Poor att : V16

V16	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	14.29	1	14.29
3	3	42.86	4	57.14
4	1	14.29	5	71.43
5	1	14.29	6	85.71
6	1	14.29	7	100.00

Frequency Missing = 23

Action : V17

V17	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	13	43.33	14	46.67
3	15	50.00	29	96.67
4	1	3.33	30	100.00

Punctuality : V18

V18	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	6	20.00	6	20.00
2	11	36.67	17	56.67
3	9	30.00	26	86.67
4	4	13.33	30	100.00

Reason : V19

V19	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	16.67	1	16.67
2	2	33.33	3	50.00
3	1	16.67	4	66.67
4	1	16.67	5	83.33
5	1	16.67	6	100.00

Frequency Missing = 24

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Punctual act : V20

V20	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	16.67	5	16.67
2	17	56.67	22	73.33
3	4	13.33	26	86.67
4	2	6.67	28	93.33
5	2	6.67	30	100.00

Afternoon : V21

V21	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	19	63.33	19	63.33
2	11	36.67	30	100.00

Afternoon att : V22

V22	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	9	30.00	9	30.00
2	9	30.00	18	60.00
3	8	26.67	26	86.67
4	4	13.33	30	100.00

Afternoon poor : V23

V23	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	11.11	1	11.11
2	6	66.67	7	77.78
4	1	11.11	8	88.89
5	1	11.11	9	100.00

Frequency Missing = 21

Lessons : V24

V24	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	23	76.67	23	76.67
2	7	23.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

No lessons : V25

V25	Frequency	Percent	Cumulative Frequency	Cumulative Percent
3	6	85.71	6	85.71
4	1	14.29	7	100.00

Frequency Missing = 23

Day 1 : V26

V26	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	9	30.00	9	30.00
2	21	70.00	30	100.00

No : V27

V27	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	11	52.38	11	52.38
2	10	47.62	21	100.00

Frequency Missing = 9

Month : V28

V28	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	20	66.67	20	66.67
2	7	23.33	27	90.00
3	1	3.33	28	93.33
4	1	3.33	29	96.67
9	1	3.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

React : V29

V29	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	13	43.33	13	43.33
2	3	10.00	16	53.33
3	5	16.67	21	70.00
4	2	6.67	23	76.67
5	3	10.00	26	86.67
6	1	3.33	27	90.00
7	2	6.67	29	96.67
8	1	3.33	30	100.00

Home-work : V30

V30	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	3	10.00	3	10.00
3	2	6.67	5	16.67
4	10	33.33	15	50.00
8	3	10.00	18	60.00
9	12	40.00	30	100.00

Class-work : V31

V31	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	2	6.67	3	10.00
4	8	26.67	11	36.67
6	1	3.33	12	40.00
8	4	13.33	16	53.33
9	14	46.67	30	100.00

Complete : V32

V32	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	5	16.67	5	16.67
G	6	20.00	11	36.67
H	8	26.67	19	63.33
I	11	36.67	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Regulations : V33

V33	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	9	30.00	10	33.33
3	11	36.67	21	70.00
4	9	30.00	30	100.00

Poor reg : V34

V34	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	100.00	1	100.00

Frequency Missing = 29

Evaluate : V35

V35	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	12	40.00	13	43.33
3	11	36.67	24	80.00
4	6	20.00	30	100.00

Poor eval : V36

V36	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	100.00	1	100.00

Frequency Missing = 29

Action reg : V37

V37	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	19	63.33	19	63.33
2	7	23.33	26	86.67
3	4	13.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Management : V38

V38	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	6	20.00	6	20.00
1	8	26.67	14	46.67
2	11	36.67	25	83.33
5	3	10.00	28	93.33
9	2	6.67	30	100.00

Zero manage : V39

V39	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	83.33	5	83.33
2	1	16.67	6	100.00

Frequency Missing = 24

Support : V40

V40	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	3.33	1	3.33
2	3	10.00	4	13.33
3	18	60.00	22	73.33
4	8	26.67	30	100.00

Visited : V41

V41	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	9	30.00	9	30.00
2	21	70.00	30	100.00

No visit : V42

V42	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	19	90.48	19	90.48
2	2	9.52	21	100.00

Frequency Missing = 9

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Inspection : V43

V43	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	29	96.67	29	96.67
2	1	3.33	30	100.00

Parents : V44

V44	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	11	36.67	11	36.67
2	10	33.33	21	70.00
3	6	20.00	27	90.00
4	3	10.00	30	100.00

PAS : V45

V45	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	16	53.33	16	53.33
2	10	33.33	26	86.67
3	4	13.33	30	100.00

Exceptional : V46

V46	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	7	23.33	7	23.33
2	11	36.67	18	60.00
3	9	30.00	27	90.00
4	3	10.00	30	100.00

External : V47

V47	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	10	33.33	10	33.33
1	11	36.67	21	70.00
2	6	20.00	27	90.00
3	2	6.67	29	96.67
6	1	3.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Zero ext : V48

V48	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	100.00	10	100.00

Frequency Missing = 20

FEST : V49

V49	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	16	53.33	16	53.33
2	12	40.00	28	93.33
3	2	6.67	30	100.00

No FEST : V50

V50	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	15	93.75	15	93.75
2	1	6.25	16	100.00

Frequency Missing = 14

Plans : V51

V51	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3	10.00	3	10.00
2	22	73.33	25	83.33
3	5	16.67	30	100.00

Good pass : V52

V52	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	40.00	12	40.00
2	8	26.67	20	66.67
4	6	20.00	26	86.67
5	4	13.33	30	100.00

(P02) : PROC FREQ of varbs from data set PRIN

The FREQ Procedure

Bad pass : V53

V53	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	13	43.33	13	43.33
2	7	23.33	20	66.67
4	4	13.33	24	80.00
5	1	3.33	25	83.33
6	1	3.33	26	86.67
7	4	13.33	30	100.00

SP	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	33.33	10	33.33
2	10	33.33	20	66.67
3	10	33.33	30	100.00

VV7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3	10.00	3	10.00
2	3	10.00	6	20.00
3	9	30.00	15	50.00
4	15	50.00	30	100.00

APPENDIX I

ANALYSIS OF DATA: LEARNERS

The FREQ Procedure

School number : V2

V2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
4	5	1.00	5	1.00
6	5	1.00	10	1.99
9	14	2.79	24	4.78
10	14	2.79	38	7.57
12	16	3.19	54	10.76
14	22	4.38	76	15.14
15	13	2.59	89	17.73
16	16	3.19	105	20.92
18	10	1.99	115	22.91
19	10	1.99	125	24.90
23	22	4.38	147	29.28
24	7	1.39	154	30.68
26	13	2.59	167	33.27
28	9	1.79	176	35.06
29	33	6.57	209	41.63
33	35	6.97	244	48.61
40	11	2.19	255	50.80
41	15	2.99	270	53.78
44	13	2.59	283	56.37
45	15	2.99	298	59.36
49	23	4.58	321	63.94
50	15	2.99	336	66.93
53	2	0.40	338	67.33
55	28	5.58	366	72.91
57	23	4.58	389	77.49
58	6	1.20	395	78.69
59	15	2.99	410	81.67
60	21	4.18	431	85.86
61	21	4.18	452	90.04
63	50	9.96	502	100.00

Gender : V4

V4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	263	52.39	263	52.39
2	239	47.61	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Age : V5

V5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
16	21	4.18	21	4.18
17	94	18.73	115	22.91
18	143	28.49	258	51.39
19	88	17.53	346	68.92
20	65	12.95	411	81.87
21	39	7.77	450	89.64
22	27	5.38	477	95.02
23	10	1.99	487	97.01
24	8	1.59	495	98.61
25	6	1.20	501	99.80
26	1	0.20	502	100.00

Years : V6

V6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	349	69.52	349	69.52
2	153	30.48	502	100.00

Subject : V7

V7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	179	35.66	179	35.66
2	205	40.84	384	76.49
3	108	21.51	492	98.01
4	10	1.99	502	100.00

Enjoy : V8

V8	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	53	10.56	53	10.56
2	11	2.19	64	12.75
3	10	1.99	74	14.74
4	20	3.98	94	18.73
5	29	5.78	123	24.50
6	38	7.57	161	32.07
7	108	21.51	269	53.59
8	233	46.41	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Bad : V9

V9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	9.62	5	9.62
2	15	28.85	20	38.46
3	30	57.69	50	96.15
4	1	1.92	51	98.08
5	1	1.92	52	100.00

Frequency Missing = 450

Like : V10

V10	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	412	82.07	412	82.07
2	90	17.93	502	100.00

No like : V11

V11	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	35	38.89	35	38.89
2	3	3.33	38	42.22
3	3	3.33	41	45.56
4	2	2.22	43	47.78
5	11	12.22	54	60.00
6	3	3.33	57	63.33
8	2	2.22	59	65.56
10	2	2.22	61	67.78
12	20	22.22	81	90.00
15	1	1.11	82	91.11
16	4	4.44	86	95.56
17	4	4.44	90	100.00

Frequency Missing = 412

Finals : V12

V12	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	120	23.90	120	23.90
2	147	29.28	267	53.19
3	166	33.07	433	86.25
4	69	13.75	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Poor : V13

V13	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	10.00	12	10.00
2	19	15.83	31	25.83
3	10	8.33	41	34.17
4	3	2.50	44	36.67
5	5	4.17	49	40.83
6	7	5.83	56	46.67
7	2	1.67	58	48.33
8	8	6.67	66	55.00
9	5	4.17	71	59.17
10	18	15.00	89	74.17
11	13	10.83	102	85.00
12	3	2.50	105	87.50
13	2	1.67	107	89.17
14	2	1.67	109	90.83
15	3	2.50	112	93.33
16	1	0.83	113	94.17
17	2	1.67	115	95.83
18	2	1.67	117	97.50
19	2	1.67	119	99.17
20	1	0.83	120	100.00

Frequency Missing = 382

Capable : V14

V14	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	341	67.93	341	67.93
2	161	32.07	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Not capable : V15

V15	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	9	5.63	9	5.63
2	10	6.25	19	11.88
3	31	19.38	50	31.25
4	12	7.50	62	38.75
5	2	1.25	64	40.00
6	2	1.25	66	41.25
7	13	8.13	79	49.38
8	25	15.63	104	65.00
9	3	1.88	107	66.88
10	11	6.88	118	73.75
11	10	6.25	128	80.00
12	2	1.25	130	81.25
13	5	3.13	135	84.38
14	9	5.63	144	90.00
15	12	7.50	156	97.50
16	1	0.63	157	98.13
17	1	0.63	158	98.75
18	1	0.63	159	99.38
19	1	0.63	160	100.00

Frequency Missing = 342

Results : V16

V16	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	23	4.58	23	4.58
2	37	7.37	60	11.95
3	182	36.25	242	48.21
4	260	51.79	502	100.00

Poor results : V17

V17	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	4	17.39	4	17.39
2	2	8.70	6	26.09
3	3	13.04	9	39.13
4	5	21.74	14	60.87
5	1	4.35	15	65.22
6	3	13.04	18	78.26
8	5	21.74	23	100.00

Frequency Missing = 479

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Attendance : V18

V18	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	57	11.35	57	11.35
2	83	16.53	140	27.89
3	222	44.22	362	72.11
4	140	27.89	502	100.00

Poor att : V19

V19	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	15	26.79	15	26.79
2	11	19.64	26	46.43
3	10	17.86	36	64.29
4	10	17.86	46	82.14
5	3	5.36	49	87.50
6	2	3.57	51	91.07
7	2	3.57	53	94.64
8	3	5.36	56	100.00

Frequency Missing = 446

Action : V20

V20	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	70	13.94	70	13.94
2	157	31.27	227	45.22
3	270	53.78	497	99.00
4	2	0.40	499	99.40
5	2	0.40	501	99.80
6	1	0.20	502	100.00

Punctuality : V21

V21	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	82	16.33	82	16.33
2	111	22.11	193	38.45
3	229	45.62	422	84.06
4	80	15.94	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Delay : V22

V22	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	14	17.07	14	17.07
2	43	52.44	57	69.51
3	17	20.73	74	90.24
4	2	2.44	76	92.68
5	2	2.44	78	95.12
6	2	2.44	80	97.56
7	1	1.22	81	98.78
8	1	1.22	82	100.00

Frequency Missing = 420

Action pun : V23

V23	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	202	40.24	202	40.24
2	191	38.05	393	78.29
3	95	18.92	488	97.21
4	12	2.39	500	99.60
5	2	0.40	502	100.00

Afternoon : V24

V24	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	276	54.98	276	54.98
2	226	45.02	502	100.00

Afternoon att : V25

V25	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	170	33.86	170	33.86
2	106	21.12	276	54.98
3	156	31.08	432	86.06
4	70	13.94	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Poor after : V26

V26	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	54	31.76	54	31.76
2	78	45.88	132	77.65
3	23	13.53	155	91.18
4	5	2.94	160	94.12
5	7	4.12	167	98.24
6	2	1.18	169	99.41
7	1	0.59	170	100.00

Frequency Missing = 332

Grade 12 : V27

V27	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	348	69.32	348	69.32
2	154	30.68	502	100.00

Transport : V28

V28	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	63	41.18	63	41.18
2	9	5.88	72	47.06
3	46	30.07	118	77.12
4	12	7.84	130	84.97
5	3	1.96	133	86.93
6	2	1.31	135	88.24
7	5	3.27	140	91.50
8	2	1.31	142	92.81
9	3	1.96	145	94.77
10	1	0.65	146	95.42
11	4	2.61	150	98.04
12	2	1.31	152	99.35
13	1	0.65	153	100.00

Frequency Missing = 349

Day 1 : V29

V29	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	304	60.56	304	60.56
2	198	39.44	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Not taught : V30

V30	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	0.51	1	0.51
1	68	34.34	69	34.85
2	91	45.96	160	80.81
3	37	18.69	197	99.49
4	1	0.51	198	100.00

Frequency Missing = 304

Tested : V31

V31	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	7	1.40	7	1.40
1	218	43.51	225	44.91
2	90	17.96	315	62.87
3	53	10.58	368	73.45
4	62	12.38	430	85.83
5	11	2.20	441	88.02
6	18	3.59	459	91.62
7	21	4.19	480	95.81
8	2	0.40	482	96.21
9	19	3.79	501	100.00

Frequency Missing = 1

Failures : V32

V32	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	96	19.12	96	19.12
2	175	34.86	271	53.98
3	159	31.67	430	85.66
4	57	11.35	487	97.01
5	6	1.20	493	98.21
6	1	0.20	494	98.41
7	1	0.20	495	98.61
8	1	0.20	496	98.80
9	2	0.40	498	99.20
10	2	0.40	500	99.60
11	2	0.40	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Home work : V33

V33	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3	0.60	3	0.60
1	10	1.99	13	2.59
2	27	5.38	40	7.97
3	33	6.57	73	14.54
4	29	5.78	102	20.32
5	21	4.18	123	24.50
6	19	3.78	142	28.29
7	20	3.98	162	32.27
8	13	2.59	175	34.86
9	327	65.14	502	100.00

Class work : V34

V34	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	0.20	1	0.20
1	8	1.59	9	1.79
2	24	4.78	33	6.57
3	24	4.78	57	11.35
4	29	5.78	86	17.13
5	16	3.19	102	20.32
6	18	3.59	120	23.90
7	16	3.19	136	27.09
8	13	2.59	149	29.68
9	353	70.32	502	100.00

Complete : V35

V35	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	1	0.20	1	0.20
C	3	0.60	4	0.80
D	10	1.99	14	2.79
E	105	20.92	119	23.71
F	156	31.08	275	54.78
G	40	7.97	315	62.75
H	107	21.31	422	84.06
I	71	14.14	493	98.21
J	7	1.39	500	99.60
K	1	0.20	501	99.80
L	1	0.20	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Regulations : V36

V36	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	31	6.18	31	6.18
2	123	24.50	154	30.68
3	236	47.01	390	77.69
4	112	22.31	502	100.00

Poor reg : V37

V37	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	7	22.58	7	22.58
2	4	12.90	11	35.48
3	3	9.68	14	45.16
4	4	12.90	18	58.06
5	5	16.13	23	74.19
6	3	9.68	26	83.87
7	2	6.45	28	90.32
8	2	6.45	30	96.77
9	1	3.23	31	100.00

Frequency Missing = 471

Implement : V38

V38	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	21	4.18	21	4.18
2	163	32.47	184	36.65
3	236	47.01	420	83.67
4	82	16.33	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Poor imp : V39

V39	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3	14.29	3	14.29
2	1	4.76	4	19.05
3	4	19.05	8	38.10
4	2	9.52	10	47.62
5	4	19.05	14	66.67
6	3	14.29	17	80.95
7	1	4.76	18	85.71
8	2	9.52	20	95.24
9	1	4.76	21	100.00

Frequency Missing = 481

Action reg : V40

V40	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	308	61.35	308	61.35
2	125	24.90	433	86.25
3	62	12.35	495	98.61
4	6	1.20	501	99.80
5	1	0.20	502	100.00

Visited : V41

V41	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	167	33.27	167	33.27
2	335	66.73	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

No visit : V42

V42	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	234	69.85	234	69.85
2	43	12.84	277	82.69
3	48	14.33	325	97.01
4	4	1.19	329	98.21
5	1	0.30	330	98.51
6	1	0.30	331	98.81
7	2	0.60	333	99.40
8	1	0.30	334	99.70
9	1	0.30	335	100.00

Frequency Missing = 167

Syllabi : V43

V43	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	405	80.68	405	80.68
2	97	19.32	502	100.00

Guided : V44

V44	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	390	77.69	390	77.69
2	112	22.31	502	100.00

Textbooks : V45

V45	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	276	54.98	276	54.98
2	226	45.02	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

Treat : V46

V46	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	66	13.15	66	13.15
2	338	67.33	404	80.48
3	83	16.53	487	97.01
4	12	2.39	499	99.40
5	3	0.60	502	100.00

External : V47

V47	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	181	36.06	181	36.06
1	149	29.68	330	65.74
2	109	21.71	439	87.45
3	24	4.78	463	92.23
4	9	1.79	472	94.02
5	5	1.00	477	95.02
6	4	0.80	481	95.82
7	4	0.80	485	96.61
8	1	0.20	486	96.81
9	16	3.19	502	100.00

Zero ext : V48

V48	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	0.55	1	0.55
1	146	79.78	147	80.33
2	36	19.67	183	100.00

Frequency Missing = 319

FEST : V49

V49	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	370	73.71	370	73.71
2	93	18.53	463	92.23
3	39	7.77	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

No FEST : V50

V50	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	307	82.97	307	82.97
2	63	17.03	370	100.00

Frequency Missing = 132

Plans : V51

V51	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	31	6.18	31	6.18
2	432	86.06	463	92.23
3	39	7.77	502	100.00

Good pass : V52

V52	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	256	51.00	256	51.00
2	124	24.70	380	75.70
3	106	21.12	486	96.81
4	12	2.39	498	99.20
5	1	0.20	499	99.40
6	3	0.60	502	100.00

Bad pass : V53

V53	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	290	57.77	290	57.77
2	125	24.90	415	82.67
3	76	15.14	491	97.81
4	9	1.79	500	99.60
5	2	0.40	502	100.00

(P03-R0) : PROC FREQ of varbs from data set LERN

The FREQ Procedure

VV35	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	0.20	1	0.20
3	3	0.60	4	0.80
4	10	1.99	14	2.79
5	105	20.92	119	23.71
6	156	31.08	275	54.78
7	40	7.97	315	62.75
8	107	21.31	422	84.06
9	71	14.14	493	98.21
10	7	1.39	500	99.60
11	1	0.20	501	99.80
12	1	0.20	502	100.00

APPENDIX J

SELECTION: EDUCATORS DATA

(P01) : PROC PRINT of data set P01NSP based on varb NSP

Obs	VARB	ASPCORR	TSPCORR	NUM
1	V33	0.34798	-0.34798	19
2	V35	0.31799	-0.31799	20
3	V18	0.27285	-0.27285	08
4	V15	0.27011	-0.27011	06
5	V9	0.26256	-0.26256	03
6	V40	0.21537	-0.21537	24
7	V13	0.18564	-0.18564	05
8	V22	0.16412	0.16412	11
9	V11	0.15464	0.15464	04
10	V42	0.14368	-0.14368	26
11	V21	0.13514	-0.13514	10
12	V51	0.12640	0.12640	32
13	V44	0.11653	0.11653	27
14	V38	0.10161	0.10161	22
15	V31	0.09346	0.09346	17
16	V7	0.08126	-0.08126	02
17	V24	0.07271	0.07271	12
18	V53	0.06406	0.06406	34
19	V4	0.05297	-0.05297	01
20	V45	0.05025	0.05025	28
21	V29	0.04662	0.04662	15
22	V46	0.03908	-0.03908	29
23	V39	0.03858	-0.03858	23
24	V52	0.03835	0.03835	33
25	V32	0.03700	-0.03700	18
26	V28	0.03682	0.03682	14
27	V37	0.03499	-0.03499	21
28	V17	0.02812	0.02812	07
29	V47	0.01962	-0.01962	30
30	V49	0.01554	0.01554	31
31	V26	0.01211	-0.01211	13
32	V41	0.01054	0.01054	25
33	V30	0.00290	-0.00290	16
34	V20	0.00213	0.00213	09

The LOGISTIC Procedure

Analysis of Effects in the Model

Effect	DF	Score Chi-Square	Pr > ChiSq
V45	1	0.2738	0.6008
V46	1	1.0314	0.3098
V47	1	0.0017	0.9673
V49	1	0.3417	0.5589
V51	1	0.0076	0.9307
V52	1	1.3046	0.2534
V53	1	3.3857	0.0658

Summary of Stepwise Selection

Step	Effect Entered	Effect Removed	DF	Number In	Score Chi-Square	Wald Chi-Square	Pr > ChiSq	Variable Label
1	V33		1	1	27.4654	.	<.0001	Regulations : V33
2	V22		1	2	13.0261	.	0.0003	Afternoon att : V22
3	V9		1	3	7.9013	.	0.0049	Grade : V9

The FREQ Procedure

Table of NSP by V33

NSP V33(Regulations : V33)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
1	0	11	39	28	78
	0.00	4.74	16.81	12.07	33.62
	0.00	14.10	50.00	35.90	
	0.00	14.47	38.24	57.14	
2	5	65	63	21	154
	2.16	28.02	27.16	9.05	66.38
	3.25	42.21	40.91	13.64	
	100.00	85.53	61.76	42.86	
Total	5	76	102	49	232
	2.16	32.76	43.97	21.12	100.00

Table of NSP by V22

NSP	V22(Afternoon att : V22)				
Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
1	34	16	21	7	78
	14.66	6.90	9.05	3.02	33.62
	43.59	20.51	26.92	8.97	
	52.31	21.62	31.34	26.92	
2	31	58	46	19	154
	13.36	25.00	19.83	8.19	66.38
	20.13	37.66	29.87	12.34	
	47.69	78.38	68.66	73.08	
Total	65	74	67	26	232
	28.02	31.90	28.88	11.21	100.00

The FREQ Procedure

Table of NSP by V9

NSP V9(Grade : V9)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
1	0	22	34	22	78
	0.00	9.48	14.66	9.48	33.62
	0.00	28.21	43.59	28.21	
	0.00	27.50	39.08	50.00	
2	21	58	53	22	154
	9.05	25.00	22.84	9.48	66.38
	13.64	37.66	34.42	14.29	
	100.00	72.50	60.92	50.00	
Total	21	80	87	44	232
	9.05	34.48	37.50	18.97	100.00

APPENDIX K

SELECTION: PRINCIPALS DATA

(P02A) : PROC PRINT of data set P02ANSP based on varb NSP

Obs	VARB	ASPCORR	TSPCORR	NUM
1	V9	0.76326	-0.76326	03
2	V13	0.69533	-0.69533	05
3	V52	0.67742	-0.67742	32
4	V11	0.47565	0.47565	04
5	V7	0.47484	-0.47484	02
6	V18	0.46562	-0.46562	08
7	V22	0.42880	-0.42880	11
8	V44	0.39488	-0.39488	26
9	V15	0.33381	-0.33381	06
10	V20	0.31744	-0.31744	09
11	V43	0.26261	-0.26261	25
12	V51	0.23717	0.23717	31
13	V24	0.22291	0.22291	12
14	V33	0.21557	-0.21557	19
15	V31	0.20057	-0.20057	17
16	V40	0.17748	-0.17748	23
17	V29	0.15823	-0.15823	15
18	V26	0.15430	0.15430	13
19	V41	0.15430	-0.15430	24
20	V37	0.15281	0.15281	21
21	V35	0.15243	-0.15243	20
22	V53	0.12902	-0.12902	33
23	V4	0.12649	0.12649	01
24	V30	0.12072	-0.12072	16
25	V21	0.09782	0.09782	10
26	V28	0.09332	0.09332	14
27	V32	0.08943	0.08943	18
28	V47	0.08152	0.08152	29
29	V46	0.07703	-0.07703	28
30	V38	0.05951	0.05951	22
31	V45	0.03631	0.03631	27
32	V17	0.02750	-0.02750	07
33	V49	0.00000	0.00000	30

The FREQ Procedure

Table of NSP by V13

NSP V13(Final : V13)

Frequency / Percent / Row Pct / Col Pct	2	3	4	Total
Top	0	8	2	10
	0.00	26.67	6.67	33.33
	0.00	80.00	20.00	
	0.00	57.14	100.00	
Mid/Bot	14	6	0	20
	46.67	20.00	0.00	66.67
	70.00	30.00	0.00	
	100.00	42.86	0.00	
Total	14	14	2	30
	46.67	46.67	6.67	100.00

Statistics for Table of NSP by V13

Statistic	DF	Value	Prob
Chi-Square	2	14.5714	0.0007
Likelihood Ratio Chi-Square	2	19.0694	<.0001
Mantel-Haenszel Chi-Square	1	13.9821	0.0002
Phi Coefficient		0.6969	
Contingency Coefficient		0.5718	
Cramer's V		0.6969	

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V52

NSP V52(Good pass : V52)

Frequency / Percent / Row Pct / Col Pct	1	2	4	5	Total
Top	0	3	3	4	10
	0.00	10.00	10.00	13.33	33.33
	0.00	30.00	30.00	40.00	
	0.00	37.50	50.00	100.00	
Mid/Bot	12	5	3	0	20
	40.00	16.67	10.00	0.00	66.67
	60.00	25.00	15.00	0.00	
	100.00	62.50	50.00	0.00	
Total	12	8	6	4	30
	40.00	26.67	20.00	13.33	100.00

Statistics for Table of NSP by V52

Statistic	DF	Value	Prob
Chi-Square	3	14.8125	0.0020
Likelihood Ratio Chi-Square	3	19.2881	0.0002
Mantel-Haenszel Chi-Square	1	12.6875	0.0004
Phi Coefficient		0.7027	
Contingency Coefficient		0.5749	
Cramer's V		0.7027	

WARNING: 75% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V11

NSP V11(Capable : V11)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
Top	9	1	10
	30.00	3.33	33.33
	90.00	10.00	
	52.94	7.69	
Mid/Bot	8	12	20
	26.67	40.00	66.67
	40.00	60.00	
	47.06	92.31	
Total	17	13	30
	56.67	43.33	100.00

Statistics for Table of NSP by V11

Statistic	DF	Value	Prob
Chi-Square	1	6.7873	0.0092
Likelihood Ratio Chi-Square	1	7.6318	0.0057
Continuity Adj. Chi-Square	1	4.9038	0.0268
Mantel-Haenszel Chi-Square	1	6.5611	0.0104
Phi Coefficient		0.4757	
Contingency Coefficient		0.4295	
Cramer's V		0.4757	

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Cell (1,1) Frequency (F)	9
Left-sided Pr <= F	0.9994
Right-sided Pr >= F	0.0112
Table Probability (P)	0.0105
Two-sided Pr <= P	0.0174

Sample Size = 30

The FREQ Procedure

Table of NSP by V7

NSP V7(Enjoyment : V7)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	5	6	7	8	Total
Top	0	0	0	0	1	1	3	5	10
	0.00	0.00	0.00	0.00	3.33	3.33	10.00	16.67	33.33
	0.00	0.00	0.00	0.00	10.00	10.00	30.00	50.00	
	0.00	0.00	0.00	0.00	20.00	25.00	42.86	62.50	
Mid/Bot	2	1	1	2	4	3	4	3	20
	6.67	3.33	3.33	6.67	13.33	10.00	13.33	10.00	66.67
	10.00	5.00	5.00	10.00	20.00	15.00	20.00	15.00	
	100.00	100.00	100.00	100.00	80.00	75.00	57.14	37.50	
Total	2	1	1	2	5	4	7	8	30
	6.67	3.33	3.33	6.67	16.67	13.33	23.33	26.67	100.00

Statistics for Table of NSP by V7

Statistic	DF	Value	Prob
Chi-Square	7	6.8732	0.4422
Likelihood Ratio Chi-Square	7	8.5424	0.2872
Mantel-Haenszel Chi-Square	1	5.8023	0.0160
Phi Coefficient		0.4787	
Contingency Coefficient		0.4317	
Cramer's V		0.4787	

WARNING: 94% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V18

NSP V18(Punctuality : V18)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	0	3	4	3	10
	0.00	10.00	13.33	10.00	33.33
	0.00	30.00	40.00	30.00	
	0.00	27.27	44.44	75.00	
Mid/Bot	6	8	5	1	20
	20.00	26.67	16.67	3.33	66.67
	30.00	40.00	25.00	5.00	
	100.00	72.73	55.56	25.00	
Total	6	11	9	4	30
	20.00	36.67	30.00	13.33	100.00

Statistics for Table of NSP by V18

Statistic	DF	Value	Prob
Chi-Square	3	6.8068	0.0783
Likelihood Ratio Chi-Square	3	8.4359	0.0378
Mantel-Haenszel Chi-Square	1	6.4703	0.0110
Phi Coefficient		0.4763	
Contingency Coefficient		0.4300	
Cramer's V		0.4763	

WARNING: 75% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V22

NSP V22(Afternoon att : V22)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	2	1	3	4	10
	6.67	3.33	10.00	13.33	33.33
	20.00	10.00	30.00	40.00	
	22.22	11.11	37.50	100.00	
Mid/Bot	7	8	5	0	20
	23.33	26.67	16.67	0.00	66.67
	35.00	40.00	25.00	0.00	
	77.78	88.89	62.50	0.00	
Total	9	9	8	4	30
	30.00	30.00	26.67	13.33	100.00

Statistics for Table of NSP by V22

Statistic	DF	Value	Prob
Chi-Square	3	10.5625	0.0143
Likelihood Ratio Chi-Square	3	11.7921	0.0081
Mantel-Haenszel Chi-Square	1	6.1637	0.0130
Phi Coefficient		0.5934	
Contingency Coefficient		0.5103	
Cramer's V		0.5934	

WARNING: 63% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V44

NSP V44(Parents : V44)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	2	2	4	2	10
	6.67	6.67	13.33	6.67	33.33
	20.00	20.00	40.00	20.00	
	18.18	20.00	66.67	66.67	
Mid/Bot	9	8	2	1	20
	30.00	26.67	6.67	3.33	66.67
	45.00	40.00	10.00	5.00	
	81.82	80.00	33.33	33.33	
Total	11	10	6	3	30
	36.67	33.33	20.00	10.00	100.00

Statistics for Table of NSP by V44

Statistic	DF	Value	Prob
Chi-Square	3	6.4364	0.0922
Likelihood Ratio Chi-Square	3	6.2945	0.0981
Mantel-Haenszel Chi-Square	1	4.8222	0.0281
Phi Coefficient		0.4632	
Contingency Coefficient		0.4203	
Cramer's V		0.4632	

WARNING: 75% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

The FREQ Procedure

Table of NSP by V9

NSP V9(Grade : V9)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	0	1	5	4	10
	0.00	3.33	16.67	13.33	33.33
	0.00	10.00	50.00	40.00	
	0.00	12.50	71.43	100.00	
Mid/Bot	11	7	2	0	20
	36.67	23.33	6.67	0.00	66.67
	55.00	35.00	10.00	0.00	
	100.00	87.50	28.57	0.00	
Total	11	8	7	4	30
	36.67	26.67	23.33	13.33	100.00

Statistics for Table of NSP by V9

Statistic	DF	Value	Prob
Chi-Square	3	19.6339	0.0002
Likelihood Ratio Chi-Square	3	23.7868	<.0001
Mantel-Haenszel Chi-Square	1	17.6917	<.0001
Phi Coefficient		0.8090	
Contingency Coefficient		0.6289	
Cramer's V		0.8090	

WARNING: 75% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 30

APPENDIX L

SELECTION: LEARNERS DATA

(P03) : PROC PRINT of data set P03NSP based on varb NSP

Obs	VARB	ASPCORR	TSPCORR	NUM
1	V12	0.34922	-0.34922	07
2	V38	0.23188	-0.23188	24
3	V16	0.20417	-0.20417	09
4	V14	0.19827	0.19827	08
5	V27	0.19632	-0.19632	16
6	V36	0.17638	-0.17638	23
7	V21	0.17014	-0.17014	12
8	V24	0.16412	-0.16412	14
9	V18	0.15089	-0.15089	10
10	V29	0.12910	-0.12910	17
11	V51	0.12310	-0.12310	33
12	V32	0.12177	-0.12177	19
13	V41	0.11325	-0.11325	26
14	V47	0.09602	0.09602	31
15	V44	0.07869	-0.07869	28
16	V33	0.06723	-0.06723	20
17	V31	0.06307	-0.06307	18
18	V35	0.05778	-0.05778	22
19	V43	0.05655	-0.05655	27
20	V25	0.05335	0.05335	15
21	V5	0.05206	0.05206	02
22	V6	0.05101	0.05101	03
23	V40	0.04343	0.04343	25
24	V10	0.04311	-0.04311	06
25	V8	0.04245	-0.04245	05
26	V46	0.04072	-0.04072	30
27	V20	0.04004	-0.04004	11
28	V52	0.03535	0.03535	34
29	V45	0.03032	0.03032	29
30	V34	0.03004	-0.03004	21
31	V7	0.02188	-0.02188	04
32	V53	0.01804	0.01804	35
33	V4	0.01395	0.01395	01
34	V49	0.01301	0.01301	32
35	V23	0.01004	-0.01004	13

The LOGISTIC Procedure

Summary of Stepwise Selection

Effect Entered	Effect Removed	DF	Number In	Score Chi-Square	Wald Chi-Square	Pr > ChiSq	Variable Label
V12		1	1	59.2952	.	<.0001	Finals : V12
V27		1	2	21.3904	.	<.0001	Grade 12 : V27
V16		1	3	16.0114	.	<.0001	Results : V16
V38		1	4	8.5974	.	0.0034	Implement : V38
V29		1	5	9.6456	.	0.0019	Day 1 : V29
V41		1	6	5.9341	.	0.0149	Visited : V41
V14		1	7	5.5610	.	0.0184	Capable : V14
V24		1	8	5.2951	.	0.0214	Afternoon : V24
VV35		1	9	6.3632	.	0.0117	

The FREQ Procedure

Table of NSP by V12

NSP V12(Finals : V12)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
1	9	19	65	32	125
	1.79	3.78	12.95	6.37	24.90
	7.20	15.20	52.00	25.60	
	7.50	12.93	39.16	46.38	
2	111	128	101	37	377
	22.11	25.50	20.12	7.37	75.10
	29.44	33.95	26.79	9.81	
	92.50	87.07	60.84	53.62	
Total	120	147	166	69	502
	23.90	29.28	33.07	13.75	100.00

Table of NSP by V27

NSP V27(Grade 12 : V27)

Frequency Percent Row Pct Col Pct	1	2	Total
1	67 13.35 53.60 19.25	58 11.55 46.40 37.66	125 24.90
2	281 55.98 74.54 80.75	96 19.12 25.46 62.34	377 75.10
Total	348 69.32	154 30.68	502 100.00

The FREQ Procedure

Table of NSP by V16

NSP V16(Results : V16)

Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
1	2	6	30	87	125
	0.40	1.20	5.98	17.33	24.90
	1.60	4.80	24.00	69.60	
	8.70	16.22	16.48	33.46	
2	21	31	152	173	377
	4.18	6.18	30.28	34.46	75.10
	5.57	8.22	40.32	45.89	
	91.30	83.78	83.52	66.54	
Total	23	37	182	260	502
	4.58	7.37	36.25	51.79	100.00

Table of NSP by V38

NSP V38(Implement : V38)

Frequency Percent Row Pct Col Pct	1	2	3	4	Total
1	3	24	60	38	125
	0.60	4.78	11.95	7.57	24.90
	2.40	19.20	48.00	30.40	
	14.29	14.72	25.42	46.34	
2	18	139	176	44	377
	3.59	27.69	35.06	8.76	75.10
	4.77	36.87	46.68	11.67	
	85.71	85.28	74.58	53.66	
Total	21	163	236	82	502
	4.18	32.47	47.01	16.33	100.00

The FREQ Procedure

Table of NSP by V29

NSP V29(Day 1 : V29)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1	62	63	125
	12.35	12.55	24.90
	49.60	50.40	
	20.39	31.82	
2	242	135	377
	48.21	26.89	75.10
	64.19	35.81	
	79.61	68.18	
Total	304	198	502
	60.56	39.44	100.00

Table of NSP by V41

NSP V41(Visited : V41)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1	30	95	125
	5.98	18.92	24.90
	24.00	76.00	
	17.96	28.36	
2	137	240	377
	27.29	47.81	75.10
	36.34	63.66	
	82.04	71.64	
Total	167	335	502
	33.27	66.73	100.00

The FREQ Procedure

Table of NSP by V14

NSP V14(Capable : V14)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1	105	20	125
	20.92	3.98	24.90
	84.00	16.00	
	30.79	12.42	
2	236	141	377
	47.01	28.09	75.10
	62.60	37.40	
	69.21	87.58	
Total	341	161	502
	67.93	32.07	100.00

Table of NSP by V24

NSP V24(Afternoon : V24)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1	51	74	125
	10.16	14.74	24.90
	40.80	59.20	
	18.48	32.74	
2	225	152	377
	44.82	30.28	75.10
	59.68	40.32	
	81.52	67.26	
Total	276	226	502
	54.98	45.02	100.00

The FREQ Procedure

Table of NSP by VV35

NSP / VV35	1	3	4	5	6	7	8	9	10	11	12	Total
1	0	0	1	23	37	14	32	14	3	1	0	125
	0.00	0.00	0.20	4.58	7.37	2.79	6.37	2.79	0.60	0.20	0.00	24.90
	0.00	0.00	0.80	18.40	29.60	11.20	25.60	11.20	2.40	0.80	0.00	
	0.00	0.00	10.00	21.90	23.72	35.00	29.91	19.72	42.86	100.00	0.00	
2	1	3	9	82	119	26	75	57	4	0	1	377
	0.20	0.60	1.79	16.33	23.71	5.18	14.94	11.35	0.80	0.00	0.20	75.10
	0.27	0.80	2.39	21.75	31.56	6.90	19.89	15.12	1.06	0.00	0.27	
	100.00	100.00	90.00	78.10	76.28	65.00	70.09	80.28	57.14	0.00	100.00	
Total	1	3	10	105	156	40	107	71	7	1	1	502
	0.20	0.60	1.99	20.92	31.08	7.97	21.31	14.14	1.39	0.20	0.20	100.00

(P05-R1a) : PROC LOGISTIC with MODEL of NSP = G9 G11 G13 G15 G17 G18 G20 G21 G22 G26 G28 G29 G31 G32 G33 G35 G37 G46 G47 G48 G49 G51 G52 G53 / SELECTION=STEPWISE DETAILS from data set COMBO

The LOGISTIC Procedure

Analysis of Effects Not in the Model

Effect	DF	Score Chi-Square	Pr > ChiSq
G11	1	0.0013	0.9716
G13	1	1.9990	0.1574
G17	1	0.0694	0.7921
G18	1	0.9834	0.3214
G20	1	1.0231	0.3118
G21	1	0.3065	0.5798
G22	1	0.0773	0.7810
G26	1	1.0056	0.3160
G28	1	0.0008	0.9776
G29	1	3.0828	0.0791
G31	1	0.8112	0.3678
G32	1	0.6242	0.4295
G33	1	1.3263	0.2495
G35	1	0.8956	0.3440
G37	1	0.1886	0.6641
G47	1	0.9759	0.3232
G48	1	2.6627	0.1027
G49	1	1.8843	0.1698
G51	1	0.0296	0.8633
G52	1	2.3183	0.1279
G53	1	0.5948	0.4406

NOTE: No (additional) effects met the 0.05 significance level for entry into the model.

Summary of Stepwise Selection

Step	Effect Entered	Effect Removed	DF	Number In	Score Chi-Square	Wald Chi-Square	Pr > ChiSq
1	G15		1	1	13.0834	.	0.0003
2	G46		1	2	9.7630	.	0.0018
3	G9		1	3	9.5554	.	0.0020

The FREQ Procedure

Table of NSP by G15

NSP	G15				
Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	0 0.00 0.00 0.00	5 5.56 16.67 20.00	14 15.56 46.67 32.56	11 12.22 36.67 78.57	30 33.33
Mid/Bot	8 8.89 13.33 100.00	20 22.22 33.33 80.00	29 32.22 48.33 67.44	3 3.33 5.00 21.43	60 66.67
Total	8 8.89	25 27.78	43 47.78	14 15.56	90 100.00

Table of NSP by G46

NSP	G46				
Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	2 2.22 6.67 25.00	13 14.44 43.33 28.89	13 14.44 43.33 38.24	2 2.22 6.67 66.67	30 33.33
Mid/Bot	6 6.67 10.00 75.00	32 35.56 53.33 71.11	21 23.33 35.00 61.76	1 1.11 1.67 33.33	60 66.67
Total	8 8.89	45 50.00	34 37.78	3 3.33	90 100.00

The FREQ Procedure

Table of NSP by G9

NSP	G9				
Frequency / Percent / Row Pct / Col Pct	1	2	3	4	Total
Top	0	4	20	6	30
	0.00	4.44	22.22	6.67	33.33
	0.00	13.33	66.67	20.00	
	0.00	14.81	55.56	75.00	
Mid/Bot	19	23	16	2	60
	21.11	25.56	17.78	2.22	66.67
	31.67	38.33	26.67	3.33	
	100.00	85.19	44.44	25.00	
Total	19	27	36	8	90
	21.11	30.00	40.00	8.89	100.00

APPENDIX N APPLICATION TO CONDUCT RESEARCH

P.O. Box 470
RAMOKGOPA
0811

29 April 1998

The Superintendent General
Dept. of Education, Arts and Culture
PIETERSBURG
0700

Dear Sir

APPLICATION : CONDUCTING RESEARCH

I hereby make an application for conducting research in your department, regions, area offices, circuit offices and schools.

I am a registered student, doing PHD degree in the Department of Education Management, Faculty of Education University of Pretoria.

My research topic is : "The impact of the hidden Curriculum on the South African School leaving examination in the Northern Province." My promoter is Prof. Berkhout S.J.

Attached : University application

Yours faithfully

M.M. Phaswana

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M.M. PHASWANA (Mr.)

APPENDIX O APPLICATION TO CONDUCT RESEARCH

University of Pretoria
Pretoria 0002 Republic of South Africa Tel (012) 4209111
Fax (012) 3422712 / 432185

Faculty of Education

03-02- 1999

The Superintendent General
Northern Province
Department of Education
PIETERSBURG
0700

REQUEST TO CONDUCT RESEARCH: PERIOD FEB 1999 TO

SEPTEMBER 1999

This is to certify that Mr MM Phaswana of PO Box 470, Ramokgopa, 0811 is a postgraduate student registered for a PhD degree in the Department of Education Management, Faculty of Education, University of Pretoria.

His research topic is: *"The impact of the hidden curriculum on the South African school leaving examination in the Northern Province."* His promotor is prof SJ Berkhout.

This is a friendly request to allow him to conduct research with regard to the above mentioned topic in your department, regions, area offices, circuit offices and schools as per appointment.

Thank you for your co-operation.

Yours faithfully

Prof SJ Berkhout
Department of Education

APPENDIX P

PERMISSION TO CONDUCT RESEARCH

NORTHERN PROVINCE

EDUCATION, ARTS, CULTURE & SPORTS

Enq: N.M Nghatsane

Mr. Phaswana
Box 470
Ramskgopa
0811

Dear sir/madam

REQUEST TO CONDUCT RESEARCH IN OUR SCHOOLS AND GOVERNMENT INSTITUTIONS:

Your request to conduct research in "The Impact of the.." with the Northern Province educational institution and educators is hereby granted.

You will be expected to keep the Regional Directors informed of research taking place in their schools and for that reason we attach a list of regional directors.

We will appreciate if we could be supplied with the findings of your research , this will help to improve teaching in our schools.

We hope you will find this arrangement helpful.

Superintendent General

Date : 99/7/5

APPENDIX Q PERMISSION TO CONDUCT RESEARCH

EDUCATION, ARTS, CULTURE AND SPORTS
NORTHERN PROVINCE
(SOUTPANSBERG DISTRICT OFFICE)

Tel. 015-516 1289/0194/5/6
Fax. 015-516 3494

The District Manager
Private Bag X2009
LOUIS TRICHARDT
0920

Ref.
Enq: J.G. Ramuedzisi 99.08.13

Mr. Phaswana
P.O. Box 470
RAMOKGOPA

PERMISSION TOCONDUCT RESEARCH IN THE SOUTPANSBERG DISTRICT SCHOOLS

1. The above matter refers.

2. I have the pleasure to inform you that you may visit schools in our District to make arrangements for conducting your research. It will be a good idea to first contact the Circuit Manager before you start visiting schools in a particular circuit. The circuit contact telephones are as follows:

   2.1 Nzhelele East - 015. 9730028
   2.2 Nzhelele West and Soutpansberg North - 015. 9664004
   2.3 Soutpansberg East – 015. 5163280
   2.4 Soutpansberg west – 0020 Tshilwavhusiku 31.

3. We wish all the best in your research.

DISTRICT MANAGER: SOUTPANSBERG DISTICT
/alm

APPENDIX R APPLICATION TO CONDUCT RESEARCH

Tel: home: (015) 3974718
Cell: 0829571042

P. O. Box 470
RAMOKGOPA

28 April 2000

The Principal

.....

Dear Sir

APPLICATION: CONDUCTING RESEARCH: 16th May to 28th July 2000

I hereby make an application for conducting research in your school for the period mentioned above.

I am a registered student, doing PHD degree in the Department of Education Management, Faculty of Education, University of Pretoria. My promoter is Prof. Berkhout S.J.

My research topic is: "The impact of the hidden curriculum on the South African School leaving examination in the Northern Province."

My research will be in the form of structured questionnaires which shall be administered by one member of the staff (preferably) or by the researcher. The questionnaires shall be completed by the principal, 1999 grade 12 educators and 20% of the grade 12 learners which shall almost equally represent all the subject groupings. Duration of the survey is 1 hour.

Attached: Permission letter granted by the Soutpansberg District Manager.

Yours faithfully

.....
M. M. PHASWANA (Mr).