

**Research for Masters In Education
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**Topic: Influence of Classroom Climate on Academic Achievement
of Learners in Secondary Schools**

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Declaration

The researcher, Jayshree Chrisenduth, hereby declares that the dissertation is her own work based on literature review and analysis of research data. Any other work or data that was consulted has been cited when necessary.

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Influence of classroom climate on academic achievement of learners in secondary schools

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ABSTRACT

This research was conducted to determine whether classroom climate influences academic achievement of secondary school learners. The literature study indicates that the classroom climate factors such as organization of learning space, learner involvement and discipline have a direct influence on academic achievement.

To confirm the influence of the above factors, the research was conducted at four secondary schools in the Amajuba District of Newcastle. The research revealed that a significant positive correlation exists between classroom climate and academic achievement of learners in secondary schools. The research further confirmed that the lack of organization of learning space, lack of learner involvement in lessons and lack of classroom discipline contributes to poor academic achievement in secondary schools.

A positive classroom climate is facilitated by educators being given maximum opportunity to teach and learners being given maximum opportunity to learn. The benefit of a positive classroom climate is that the joy of learning is unfolded in an environment that enables each learner to thrive and to soar to greatness by achieving academic success. Ultimately the positive transformation of our society lies within the domain of our emerging generation. Thus positive classroom climate is necessary to raise matric the pass rate of 70% in the Kwa-Zulu Natal Province.

CHAPTER 1

1.1 Overview of the study

During the current period of transition and transformation in our country, researchers are searching for a delicate balance between quality education and equality in education. Quality education is aimed at enabling learners to develop to their full potential and equality in education refers to equal expenditure on education, equal access to knowledge and equal participation in educational decision-making procedures (Steyn, 2000). Although there may be some progress regarding basic education and functional literacy and the movement towards more equality, there is concern about the quality of education in South Africa. The relatively high spending on education contrasts sharply with our poor educational performance. There is a general perception that South African education standards are declining and this is reflected by poor results in the Senior Certificate Examinations that indicate mediocrity as a norm and a lack of a teaching culture at schools (Steyn, Du Plessis & De Klerk, 1997).

The political paradigm shift of 1994 favoured an equality paradigm that should be balanced by maintaining high standards in education, if learners are to be prepared adequately for full participation in our competitive environment. The central theme of Kwa-Zulu Natal Department of Education's strategic plan for the period 1 April 2005 to 31 March 2010 is "Getting Kwa-Zulu Natal learning" by planning around the concept of "life-long learning" based on the Renaissance child. (Department of Education, 2005:4). The Renaissance child, is a child rooted in the African soil yet adept as a global player in the 21st century. To develop the Renaissance child, the primary focus in the next five years will be on the four key components of education: the child, the educator, the physical and cultural environments in which learning occurs. Government alone cannot deliver the quality education that the Renaissance learners deserve and require. The educator plays a vital role in creating a climate that supports effective teaching and learning in the classrooms. Thus the organisation of learning space; learner involvement and discipline in the classroom are important factors influencing academic achievement.

Quality is at the top of the agendas of educational policy makers and improving quality is probably the most important task facing educational institutions today. Increasingly, quality in education makes the difference between success and failure. According to Steyn (2001), quality education has shown an increase in learner achievement, the learner is the primary and ultimate customer in any decision within the educational institution. Educators play a major role in the development of learners and research shows that both learners and parents regard educators as one of the important factors influencing learner's success. In this regard, organisation of learning space, learner involvement and discipline in the classroom play a major role in influencing academic achievement. However, South Africa is currently in the first phase of the most significant cycle of social reform in its history and the country's success depends largely on the way problems in education are addressed. The quality and the standard of teaching and learning are crucial for national development. In South African context schools face very limited budgets, yet this need not hinder the implementation of quality in schools. Creation of a positive classroom climate leads to improvement in learner self-concept and learner achievement. (Chisholm & Vally, 1996).

According to Masutha and Ackermann (1999), the classroom climate significantly influences learner's achievement. A positive classroom climate that enhances academic achievement is facilitated by support, positive feedback, interest in learner's progress, and consideration of learner's feelings (Anderson, 1990).

The Classroom climate is more than the instructional or learning climate. The class climate can be presented as the "context" of a class dealing with patterns of behaviours, or interactions. Classroom climate is more than good morale, more than a happy glow. A positive climate includes everyone focusing on outcomes, as well as on personal relationships. The ideal classroom climate engages everyone enthusiastically in achieving the individual and group goals at hand. (West, 1984:57-59).

Educators in the classroom are facilitators of learning. The transformation of education emphasizes the right of all to quality education. This implies redress of the discriminatory, unbalanced and inequitable distribution of education services, and the development of a world-class education system geared to meeting the challenges of

the 21st century. Furthermore, everyone has the right to receive education in the official language of their choice in the public educational institutions where that is reasonable and practicable. South African Schools Act, (Act No. 84 of 1996) promotes access, quality, redress and equity as well as democratic governance in the schooling system. The Act further guarantees the right of access to quality education and makes education compulsory for all learners from 7 to 14 years of age (Department of Education, 2005). All learners have the ability to learn and the aim must be to continuously improve their academic achievement. Learning is the responsibility of each learner but it can be supported by others and they must be encouraged to learn (Kanjji, 1996).

Since classroom interactions are an important source of learning, educators need to provide structures and informal peer interaction in the classroom so that learners are encouraged to be actively involved in lessons and to take full advantage of the opportunities to learn (Mwamwenda, 1995). Research studies show that educators who are committed to creating opportunities for learner involvement in classroom activities, are able to enhance the teaching and learning climate (Seedhouse, 1996). In classrooms, with high educator learner ratio, learners have little contact with educators, who are forced to adopt authoritarian, rigid teaching method based on repetition and regurgitation of facts. The learner's participation is very minimal or non-existent. Learners who should be central in the learning situation are actually sidelined. Tlale (1991), indicates that, in classrooms where educators fail to plan learning activities that involve learners, participation in the learning activity is greatly minimised and some learners are passive. Du Toit (1994), argues that passive behaviour is strongly associated with insecurity. Insecure children avoid participation and prefer to be left alone. They withdraw and are unwilling to take risks because they are afraid to make mistakes. This type of behaviour does not encourage learning and may impact negatively on academic achievement.

Large enrolments undermine discipline. Disruptive behaviour (e.g. noise, disrespect for authority etc.) in secondary schools interferes seriously with the classrooms teaching and learning climate (Mabeba & Prinsloo, 2000). Educators regard the ability to control a class as a matter of prime importance. Learners prefer strict educators who involve them in the management of discipline, and are ready to allow them to determine the consequences of their behaviour. Learners prefer

participative decision-making which educators are unlikely to allow in overcrowded classrooms. This does not lead to the expected ideal of a positive and enthusiastic climate of learning and teaching in our schools (Mabeba & Prinsloo, 2000).

Research indicates that classroom climate is determined by the organisation of learning space, learner involvement and discipline that may help each individual feel personal worth, dignity and importance, while simultaneously helping create a sense of belonging to something beyond ourselves. The climate of a classroom can foster resilience or become a risk factor in the lives of people who work or learn in a place called school (Freiberg, 1990). According to Chisholm and Vally (1996), in many South African schools there is a breakdown of the culture of learning and teaching. The schools are faced with the problems of high educator-learner ratio, lack of learner involvement and disruptive behaviour. The consequences of these are evident in learner's achievements at school. Thus classroom climate can either help or hinder the learning process in Secondary schools.

1.2. Motivation for the study

The motivation for this study stems from the growing concern about poor educational outcomes in the present South African society especially in previously disadvantaged schools. For those who do not drop out, the poor academic achievement are evident at Senior Secondary Level.

As a nation, we are focused on raising the level of academic achievement in our schools. The learning climate that is determined by the organization of learning space; learner involvement in lessons and discipline in the classroom are often unnoticed in the assessment process. However these variables significantly influence academic achievement of learners. The literature review clearly indicates that there is a greater need for emphasis on the classroom climate that may enhance academic achievement of learners. According to Becker and Luther (2002), educator support in the classroom have been consistently linked with increased learner achievement motivation and academic success. Learners' relationships with educators become increasingly significant as they look for role models and support from non-parental adults. Research shows that learners who feel their educators encourage them are more committed to learning and are more successful

academically. Experts believe that positive achievement outcomes result from classroom climates that promote learner achievement.

Myburgh and Grobler (1999), indicated that modern society is attaching an ever-increasing importance to achievement, especially academic achievement. In fact, education authorities and researchers are expressing an increasing need to identify factors that influence learners' academic achievement. They ascribe this need to, inter alia, a growing awareness that individual differences in intelligence cannot account for all or even the majority of the differences in learners' academic achievement. According to Masutha and Ackermann (1999), educators significantly influence learners' behaviour in various ways, for example their achievement motivation, classroom discipline, as well as their attitude towards their work and peers.

Van der Horst and McDonald (1997), define the classroom climate as "the psychological and social feeling or atmosphere that exists in each classroom". In this regard Meier (1996:12), stresses that, "smallness (a low learner: educator ratio) is a prerequisite for a climate which will be conducive to learning. In such a classroom it will probably be easier to cultivate and to develop democratic habits." Meier (1996:12), concludes that such "a climate emerges from authentic relationships built on face-to-face conversations by people engaged in common work and common work standards" and that getting the classroom size (learner: educator ratio) right is necessary."

A major part of a learners life, approximately six hours every day is spent in the classroom. The learners' development and performance at school is reflected in various areas such as the academic, cultural and sporting spheres. Good academic results are often indicative of future vocational success. Various classroom climate factors have been identified which influences academic achievements of learners.

Research indicates that the organization of learning space enhances academic achievement if there is sufficient space for desks to be arranged in groups; educator-learner ratio is less than 1:25 and if the educator and learners engage in face- to-face communication. Active involvement of learners in the classroom implies that learners engage co-operatively in group activities; learners understand the medium

of instruction during teaching and learners actively participate in classroom discussions.

Classroom discipline that promotes academic achievement reflects learner behaviour that is not disruptive and does not interfere with the activities of the lesson.

Classroom management strategies indicate that educators act according to code of conduct of the school when learners break rules and they endeavour to understand learners' behaviour and provide support. Learners in orderly classrooms are extrinsically motivated when educators provide positive feedback and frequent verbal support and praise.

Thus academic achievement of learners is influenced either positively or negatively by their learning contexts. According to Steyn (2001), learner involvement, support and encouragement are important factors influencing learner's success. Learner-educator relationships are facilitated by co-operative, accepting environments where praise, recognition and respect contribute to creating positive classroom climate. Learner's success or achievement is enhanced when educators establish an academically demanding classroom that has clearly defined objectives, explicit instructions and an orderly and efficient environment (Steyn, 2001).

In many South African schools there is a breakdown of the culture of learning and teaching and the problem of high educator-learner ratio has aggravated the situation. Education cannot afford to allow under-achievement to impact negatively on the economy of South Africa. The education of a nation's children is influenced to a large extent by the classroom climate. Efforts to bring about improvement in education often focuses on several aspects in the education system. The South African education system is currently attempting to address the poor culture of teaching and learning in many schools. Focusing on people is the key to effective improvement and quality in schools. According to Steyn (1999), the neglect of quality in education and the rapid increase in learner enrolment, led to the disintegration of learning climate and the death of a culture of learning in many schools. Many South African rural communities are characterized by low levels of academic motivation, and a high failure and drop out rate (Masutha & Ackermann 1999). Research on the influence of the classroom climate on the academic achievement of secondary school learners has not been investigated in the Amajuba

District (Newcastle) of Kwa-Zulu Natal. All learners have the ability to learn and the aim must be to continuously improve their performance. Learning is the responsibility of each learner, but others can support it by helping to remove obstacles to learning. The researcher values the need to investigate the influence of classroom climate on academic achievement in secondary schools. In classrooms characterized by discipline, with appropriate interaction, (amongst learners, and between educators and learners) appropriate patterns of reinforcement and instruction, the learners will acquire a sense of control over their academic achievement and overcome the feelings of futility (West 1984). As a result this study will inform the necessary stakeholders in the Amajuba District in Kwa-Zulu Natal of the importance of the classroom climate on academic achievement of secondary school learners. Thus endeavours to organize learning space that enhances educator-learner interaction; learner involvement and discipline in the classroom are factors being investigated which are considered important in bringing about effective improvement of academic achievement of learners.

1.3. Statement of the Problem

The research questions that the study is attempting to address are:

- 1.3.1 How does organization of learning space in classrooms influence academic achievement?
- 1.3.2 Is there a relationship, if any, between learner involvement and academic achievement?
- 1.3.3 To what extent does learner discipline in the classroom influence academic achievement?

1.4. Aims of the Study

- 1.4.1 To establish whether organization of learning space in classrooms is associated with learners academic achievements in secondary schools.
- 1.4.2 To establish whether a relationship exists between learner involvement and academic achievement.
- 1.4.3 To determine whether discipline influences academic achievement of learners In secondary schools.

1.5. Hypothesis

The following hypothesis were formulated.

- 1.5.1 There is significant positive correlation between organization of learning space in classrooms and academic achievement of Secondary School learners.
- 1.5.2 There is significant positive correlation between learner involvement in classrooms and academic achievement of Secondary School learners.
- 1.5.3 There is significant positive correlation between discipline in classrooms and academic achievement of Secondary School learners.

1.6. Operational Definitions

1.6.1 Classroom Climate

The classroom has an “ethos” that influences learners as a group. This ethos includes patterns of learner and educator interaction, which may be influenced by the organisation of learning space, learner's involvement in classroom activities and learners' behaviour. The classroom climate can be presented as the “context” of the classroom dealing with patterns of behaviours, or interactions. A positive climate includes everyone focusing on the classroom goals and learner outcomes, as well as personal relationships. The ideal classroom climate engages everyone enthusiastically in achieving the individual and group goals of attaining success (West, 1984). Thus classroom climate refers to the attributes of the teaching-learning environment at school. These attributes of classroom climate relate to organization of learning space, learner involvement and discipline, which may enhance or hinder the academic achievement of Secondary School learners.

1.6.2 Academic Achievement

For the purposes of the study, achievement will refer to the success that is experienced by the learners at school. Mwamwenda and Mwamwenda (1987:225), believes that every learner at school wants to avoid failure and fulfil a need for success in schoolwork. They may develop an interest in particular fields, which ensures future success. On the contrary, if learners experience failure, they may become de-motivated and may even avoid school.

According to this, academic achievement refers to learner's ability to obtain success in their schoolwork. This success is measured by their ability to perform well in given tests and other related activities (Gallagher 1978:37).

Academic achievement is defined in a variety of ways by researchers. For instance, Genck (1990:80), defines it as academic progress and general development. Hauser (1971:144), regards it as the demonstrated capacity to perform certain tasks or the quality of schooling, whereas Masitsa (1995:12), sees it as the child's ability to successfully complete a given task or a programme at his particular level or standard. In short, all agree that it refers to the learners' ability to obtain success in his schoolwork. As complementary to the foregoing the researcher wishes to define academic achievement as the learners' ability and effort to continuously achieve success in any learning situation at his level or standard at school. It is success in the learning situation or how well one performs at school. In this research academic achievement will be used as synonymous with academic performance/success. Academic achievement leads to a successful end of the learning process. For the purpose of this research, academic achievement will refer to the failure and success that is experienced by senior secondary school learners in the Amajuba District of Kwa-Zulu Natal. Academic achievement refers to learner's ability to succeed in their schoolwork. The pass rate for Grade 12 learners in the year 2004 will be used as an indicator of academic achievement in this study.

1.6.3 Secondary School Learners

The term "learner" will be used in this research to refer specifically to a schoolchild in relation to an educator. The learner is the child whom attends either a primary or secondary school. The primary task of the learner at school is to learn. In learning, he is guided by an educator who is a qualified professional. According to Batchelor (1991: 1170), "learner" refers to a young person under the care of an educator. By a young person, he means a child under the age of puberty. Hawkins (1991:1173), regard the learner as a person who is taught by an educator. Dow (1979:16), states: "To avoid confusion I always call school children learners. I have to reserve the term "student" for university students." To Grugeon & Woods (1990:8), becoming a learner means the transition from home to school or entering a school as a learner. The child attends school so that he can learn under the supervision and guidance of

an educator. At school the child becomes a learner, a person of school age who not only actively wants to learn but who has to learn in a formal, structured and disciplined way. He wants to learn in order to develop his capabilities in accordance with his present stage of development (Fraser, Loubser & Van Rooy, 1990:15).

According to Vrey (1979:165), senior secondary learners refers to learners who are enrolled in grades ten, eleven and twelve, with ages ranging from fifteen to twenty-two years of age. Fredericks (1991:25), points out that by virtue of their age senior secondary learners are in the adolescent stage of development. For the purpose of the study, senior secondary learners will refer to learners who are in grade twelve at schools in Amajuba District, Newcastle – Kwa Zulu Natal. In this study secondary school learners will refer to learners who were enrolled in Grade 12 in the year 2004. The age range of these learners were from seventeen to twenty one years of age.

1.7. Method of Investigation

1.7.1 The Research Design

This study was based on a quantitative approach. In this process of scientifically investigating the research problems, the deductive, empirical cycle was applied, i.e. formulating research hypotheses; designing a research strategy; collecting data; analysis and interpretation. The research took the form of a field study. The dependant variable, learners academic achievement was assessed relative to the independent variable of classrooms climate in secondary schools. This was a comparative study based on exploratory fieldwork involving interviews in secondary schools in the Phumelela Circuit of Amajuba district in Newcastle Region. Thus literature studies served as the framework for the construction of a questionnaire to measure the influence of the independent variable (i.e. classroom climate) on academic achievement.

1.7.2 Sampling Design

Most researchers have used a cluster sampling design. Masutha (1999), Ackermann (1999), Mabeba and Prinsloo (2000), have opted for a stratified random sampling since this sample was considered representative in terms of geographical region and school organisation in the region. In this study, use of cluster sampling is favoured since, a cluster of elements are included in the sample. The sample will consist of 422 learners in Grade 12, 40 Grade 12 educators in the FET phase of four

schools in Phumelela Circuit of Amajuba District in Newcastle, KwaZulu Natal Department of Education.

1.7.3 Research Instrument

Most researchers have used questionnaires. Masutha (1999), Ackermann (1999), Mabeba and Prinsloo (2000), have compiled questionnaires by selecting the most relevant items for the study from existing instruments.

The literature studies will serve as the framework for the construction of the questionnaire. A four point Likert – scale questionnaire was based on the following categories: organisation of learning space; learner involvement and discipline in the classroom. An empirical investigation using a questionnaire will be undertaken with reference to the theoretical framework to determine whether the classroom climate enhances or inhibits academic achievement of secondary school learners.

For the validity and reliability of the research instrument, experts in the field of statistics and education were consulted. The dependent variable was learner's academic achievement and the independent variables were classroom climate. The categories for responses were "strongly disagree; disagree; agree; strongly agree. The statistical analysis was done using the Chi-square procedures.

1.7.4 Procedures and Methodology

A letter was sent to the Chief Superintendent of Education in the Department of Education of Newcastle to request permission to do research at the schools selected.

A pilot study was conducted at a school, which was not included in the research group to refine the questionnaire and administrative procedures. The researcher administered the final questionnaire.

1.7.5 Data Analysis

The raw data was computerized and analysed by an expert. The Chi-square tests were used for data analysis of the statistics and the statistical analysis system (SAS) programme was used. The results are presented by the use of tables and statistical

summaries (e.g. means, standard deviations, correlation coefficient). Descriptive and/or inferential analysis was also done.

1.8. Summary

Secondary school learners are still highly dependent on educator guidance and assistance regarding their academic work. On their own they can easily get lost or derailed. This makes it imperative for educators to create a positive classroom climate. From the mid-eighties up to currently, the black secondary schools became a cause for grave concern – not only to the department, but to all who had interest in education. Many schools were characterized by overcrowded classrooms, lack of learner involvement, lack of discipline, disorder, disrespect for authority and lawlessness. In the process proper teaching and learning were seriously hampered. Anderson (1982), argues that the following classroom climate factors influence academic achievement at schools:

- The physical environment of the classroom (example, it's size relates to learner space);
- the social system (relationships and interactions between learners and relationships and interactions between learners and their educators which relates to learner involvement); and
- learner behaviour in classrooms (i.e. discipline).

"Sine qua non", means an essential condition or a thing that is absolutely necessary before another thing is possible. Both Batchelor (1991:1350), and Hawkins (1991:1345), are in agreement that *"sine qua non"* means an indispensable condition or qualification. Thus it means a thing that is essential if you want to achieve something. Therefore, the establishment of a positive classroom climate is a *"sine qua non"* for academic achievement. The organization of learning space; learner involvement and discipline are attributes of the classroom climate that are considered essential for academic achievement.

CHAPTER 2

2.1 INTRODUCTION

Learning is an active process. It presupposes active involvement by the learner in the act of learning before it can take place (Nicholsan & Lucas, 1984:62). As a result of active involvement learners learn what they are expected to learn to their fullest potential. In a positive classroom climate learners' are happy and enjoy going to school, and educators work together in a systematic way to achieve their objectives (Chrispeels, 1992:125,148). Peterson (1988:253), is of the opinion that if the learning climate places high value on achievement, the educators will try to attend to that goal by seeking ways to improve skills and capacities that foster achievement. For some years there has been evidence of a growing breakdown of schooling which has resulted in a culture of non-learning in many schools. The Daily Dispatch (25 June 1998:19), reported that "non-racial matric examinations and non-racial results hide the truth of the performance of specific racial groups."

Van Der Horst and McDonald (1997:93), define the classroom climate as "the psychological and social feeling or atmosphere that exists in each classroom." In this regard Meier (1996:12), stresses that "smallness (a low learner: educator ratio) is a prerequisite for a climate which will be conducive to learning. In such a classroom it will be easier to cultivate and to develop democratic habits." Meier (1996:12), concludes that such a climate emerges from authentic relationships built on face to face conversations by people engaged in common work and common work standards.

Teaching and learning go hand in hand because there can be no teaching unless learning also takes place. Zanden (1990:152), states that what is learnable is potentially teachable – an assumption that encourages educators and learners. What has been learned is potentially replaceable by new learning – an assumption that underlies psychotherapy, counselling and rehabilitation. Man learns from birth until the very hour of his death. From the outset man is a learning being who is constantly trying to improve his capacity for dominating the earth, for controlling and adapting to it or for changing to facilitate the integration of man and milieu (Van Aswegen, 1979:53). Learning is fundamental to a good life. There is a need to learn

the knowledge, skills and attitudes that will help a person to survive and to actualise in his society. Learning provides the cognitive insight and knowledge necessary to determine the proper behaviour for reaching a desired goal (Kalunger, 1984:17).

Research by Zanden (1990:505-506), indicates that the establishment of a positive classroom climate is not dependent on the learner's social background or intellectual ability. Rutter (1979), a social scientist, led a team of researchers in a three-year study of learners entering twelve secondary schools. The researchers found that schools only a scant distance apart, with learners of similar social backgrounds and intellectual ability, have quite different educational results. The critical element distinguishing the schools was their ethos or climate. Schools with remarkable academic achievement emphasized academic concerns such as spending a high proportion of time on instruction and learning activities.

Thus learners are likely to work better if they are provided with support and are taught in an atmosphere of confidence that they can and will succeed in the tasks they are set. Thus the educator plays a vital role in creating a positive classroom atmosphere to enhance academic achievements of learners. This study will analyse the influence of organization of learning space, learner involvement, and discipline as factors or variables of classroom climate that enhances or hinders academic achievement of Secondary schools learners.

2.2 ORGANIZATION OF LEARNER SPACE

The key to organization of learning space in the classroom is flexibility and imagination. This implies flexible groupings of learners, as well as actual fluidity of movement within the classroom. These methods require the rearranging of classroom furniture as well as the imaginative use of that furniture. It is most important that the learners not be deskbound when involved in learning activities. Sometimes the way an educator groups learners influences the flow of communication. Adams and Biddle (1970), discovered the existence of an action zone in the classroom. This action zone included the learners who sat in the middle aisle. These learners received more opportunity to talk than the others, possibly because the educators tended to stand in front, where their attention was focused on the learners in immediate view. Burden and Fraser (1993), note that, educators have been placing greater importance upon the process of learning and are moving

away from “within-child” explanations for success and failure to “systems-orientated” approaches that focus on evaluating the total context in which learning occurs. A classroom’s climate is not only important in its own right, but it can also influence learner achievement and attitudes.

Classroom discussions are guided by a point of view that includes many interrelated features. The first of these involves the position that knowledge arises within the person, rather than from external sources. When the educator has provided the conditions that stimulate thinking and has taken a sympathetic attitude toward the activities of the learner by entering into a common or conjoint experience, all has been done which a second party can do to instigate learning.

The educator, as enabler, challenges the learner to find things out for himself. He leads the learner to generalizations and inferences regarding the subject matter under study. The educator prompts the learner. He, in effect, says to the learner, “If you wish to know, you must exert your own intellectual effort. You must work with the data from experience yourself. Through your own inquiry will come knowledge.” Knowledge comes about as the learner comprehends the relationships among experiences, that is, understands the basic underlying principals of a particular field of study. *This act of comprehending, or grasping generalizations, is sometimes called insight, sometimes inquiry, and sometimes discovery (Hyman, 1974).* Creating a classroom climate that optimises learner-educator interaction is often hampered in overcrowded classes.

Thus the organization of learning space which is reflected by the classroom seating arrangements, educator-learner ratio and educator-learner interaction will be reviewed.

2.2.1 Seating Arrangements

Discussion requires considerable interchange among participants, and too large a group prohibits it. For teaching, the maximum number of learners for even a skilled educator is around thirty. Beyond this number it is quite easy for an intended discussion to slip into a lecture punctuated with occasional learner contributions. To facilitate the exchange of ideas, it is wise to arrange the chairs in a circle or horseshoe. Such face-to-face situations promote the exchange of ideas and the

building up of mutual trust. Also, the learners should be close enough to each other to be able to interact without raising their voices or squinting to see. Such physical arrangements are essential in creating an atmosphere where teaching by the discussion method can take place (Hyman, 1974).

Kruger and Van Schalkwyk (1996:102), stress that too many learners in a classroom make the creation of a favourable classroom climate difficult. The question may be posed: How can the furniture arrangements hamper a learners' academic outcome? Kohn (1996:55), investigated whether the classroom climate, with particular reference to furniture arrangement, is learner centred or not. According to Kohn (1996), reasons for concern are:

- Desks, arranged in rows and chairs all facing forward as opposed to comfortable working areas and,
- Educators teaching at the front and centre of the classroom as opposed to moving between learners and working directly with them.

Kruger and Van Schalkwyk (1996:93), maintain that the classroom is the space in which an educator should create "a climate which will be conducive to learning" and to attain this goal, "effective classroom management" is imperative. Using the classroom space, the furniture and teaching aids, an educator should organise the classroom so that learners will want to be there and work there. Kruger and Van Schalkwyk (1996:105 – 106), maintain that the classroom climate is negatively affected by over crowdedness. This, in turn, can decrease the learners' academic achievement.

Boyer (1996:7), also states that the priorities of effective schools should be "to create a climate for creative learning, to be a place for active learning, not passive learning, a place where people learn to be creative, not just conformity, where they learn to co-operate, as well as compete."

It has been demonstrated quite clearly that the conditions under which people work affects their output. If they are cold, hungry, unduly worried or stressed they cannot perform up to their usual standard. Likewise, if learners' cannot hear what the educator is saying because he or she is too far away or is speaking too softly or with an unfamiliar accent they will soon lose the sense of what is going on and will cease

to attend. Sometimes learners are hindered in following the interaction because they cannot see clearly what is being demonstrated on the blackboard. All of these are very obvious reasons for learners' difficulties and most of them are under the direct and easy control of the educator. However, the educator must be aware of them, be vigilant to notice them and respond to remove them whenever possible. This can be achieved by organising the learning space so that the classroom climate is conducive to teaching and learning.

Another source of problems is movement in the classroom. Sometimes it is necessary and desirable for learners' to move about in the classroom in order to gain access to equipment, to refer to charts, dictionaries or other resource materials. All of this calls for careful planning in the arrangement of furniture. Thus educators' control of seating arrangements is an area that needs attention in classrooms. In some situations it is a good idea to allow learners to choose where they sit. In others it can be a recipe for disaster. There is no doubt at all that by manipulating seating arrangements changes can be brought about in the behaviour of learners. Most educators will be aware that in some classes a certain group of learners will seek seats (usually at the back of the room) in order to carry on certain ploys which they, the educators, find annoying or disruptive to the rest of the class. By insisting that such learners occupy seats designated by themselves, educators may be able to control the situation. Again, learners who are constantly off-task or interfering with the work of others around them can often be brought into line by moving them to sit nearer the educator or away from peers who are reinforcing their behaviour with attention (Wheldall & Merrett, 1989.41).

Learners will interact more in the manifestly social context that is provided by seating around tables in the classroom. Tables seating facilitates the exchange of ideas. Similarly, when we want learners' to work collaboratively or to discuss issues in a group then tables seating is ideal. The important thing is to match the seating arrangements to the task in hand (Wheldall & Merrett, 1989). The major task of the educator is to ensure that the seating arrangement in the classroom enhances a network of supportive interpersonal relationships that promotes learning.

2.2.2 Educator-Learner ratio

Ballintine (1983:187-189), emphasizes that the classroom climate influences learner attitudes towards learning. Thus, it can generate anti-school feelings, especially in competitive and restrictive classrooms. On the grounds of the increased learner: educator ratio, the complexity of the education system in South Africa and the public demand for accountability, the effectiveness of the classroom educator in creating a classroom climate conducive to learning and teaching are questioned. (Forojalla, 1993:197).

According to Anderson, Rhyan and Shapiro (1989:72), educator: learner ratio in the classroom affects the nature and quality of the teaching-learning process. In very large classes educators may find it difficult to use small group practices or interact frequently with individual learners. Furthermore, learner interaction pattern vary, depending on how the classroom is structured. Open, flexible and democratic classrooms stress the academic and emotional growth of learners. Priedy (1993: 10), adds that smaller classes, with fewer than 24 learners, had a positive impact on learners' academic progress. In classes with 27 or more learners, the effect was less positive. A possible means to indicate overcrowding in schools, is to compare the number of learners with the number of educators. This is called the learner: educator ratio, which is an indication of the average number of learners in one class (Christie, 1991: 127). In 1988 the average learner: educator ratio for Black schools was 38:1, Indian schools 19:1, Coloured schools 18:1 and White schools 14:1. Christie (1991:120-128), argues that the learner: educator ratio in Black schools is unsatisfactory and more educators are required in these schools. Today (2005), despite so many reports and media coverage of the issues of over-crowdedness in classrooms, the situation is still largely unchanged.

According to Clifford (1975:50), "learner complaints of excessive class size are commonplace" and "impersonal lecturers to mass learner audiences contribute to alienation". Louis and Miles (1990:8-9), argue in this respect, that "large classroom size makes interventions logically more difficult and expensive." Lazerson (1985:118), adds that "few individuals can retain a commitment to the transmission of knowledge unless they themselves are involved in learning". Hence, it is evident that educators who lecture at the front of the class will not be able to provide learners with the attention they need to master subject content (Daily Dispatch, 21 April

1999:2). Many educators stand in front of the class during most of the lessons and few learners receive individual attention. It is imperative for learners' and educators to interact with each other during a lesson. This is unavoidably limited in an overcrowded classroom, which is not conducive to establishing a positive classroom climate for learning and teaching. As a consequence, both learner and educator become frustrated.

As far as overcrowding is concerned, most educators feel ineffective in a large class. They feel helpless when they cannot reach out to all learners as soon as possible. In most South African schools, the educator-learner ratio is still high. The ratio of 1:35 is not yet implemented in most schools. According to Du Toit (1994:56), overcrowded classrooms where learners have little contact with educators, usually produce authoritarian, rigid teaching methods that are based on repetition and regurgitation of facts. The objectives of the lesson are not explained and cognitive skills that will be required to complete the task successfully are not clearly set out. Slow learners do not concentrate for long, are easily distracted and do not carry over things learned in one lesson to the next. This may be irksome for other learners in the class (Sands & Kerry 1982:103). The effects on the less able is described as soul destroying due to their feelings of inadequacy. The brisk pace necessary to ensure the continued interest of the majority results in the less able soon being left out. The abler learners suffer a lot when the educator is preoccupied with the less able, saying: the brighter ones have to get on their own as the educator has to give two-thirds of his attention to the less able (Reid, 1981:84-85). Educators face problems of extending the most able whilst at the same giving enough attention and encouragement to the less able (Davies & Cave 1977:45). Some educators have a problem on how to grade work in such a way as to maintain standards but to avoid de-motivating low achievers in overcrowded classrooms.

Clifford (1975:50), and Davis and Arnof (1993:179), state that there is consensus among learners, educators and parents that large classes adversely affect the learners' performance. Louis and Miles (1990:8-9), conclude that conflicts and competition are inevitable in overcrowded classrooms. These could have detrimental implications for learners in overcrowded classrooms. Fontana (1992:114), argues that learners who experience constant failure will probably experience "damage to their self – esteem, with all the undesirable consequences" in respect of learning

outcomes and class control. This should be avoided since in an overcrowded classroom it could have a further adverse impact on learners' academic achievement. Thus, Fontana (1992:61), states that classroom control problems can be created by simply failing to provide children with the right conditions in which to work. Fontana goes on to say that cramped classrooms, "in which there is insufficient space for children to carry out practical activities and open-plan units where the noises from other groups becomes intrusive" contribute to a greater classroom management problem. Seating arrangements in over-crowded classrooms that prevent all children from easily seeing the work being presented or demonstrated by the educator, create a further classroom control problem. According to Boyer (1996:5), "learners need to come together in a school community in which they are known by name, and have a good communication, a sense of justice, of discipline and of caring". The questions that follow are posed in the light of the problem statement of this study: Are high learner: educator ratios conducive to teaching learners who have been neglected in the past and will the learning outcomes of the learners result in a better quality education or successful academic achievement? Is it possible to know all the learners by name, have effective communication on a one-to-one basis, and have caring discipline and justice for all learners when classes are so overcrowded?

2.2.3 Educator-Learner interaction

Fraser and Fisher's (1983), study suggests that academic achievement can be enhanced if the educator attempts to raise the level of actual classroom personalization by moving around the class more to talk individually with learners or by more often helping learners who are experiencing difficulties with their class work.

Teaching leads the learner to independence if it provides him with a way of gaining knowledge on his own. Through discussion the learner not only gains knowledge but he learns how to acquire knowledge autonomously. Emphasis on discovery, indeed, helps the child to learn the varieties of problem solving, of transforming information for better use, helps him to learn how to go about the very task of learning. These notions of autonomy and lifelong pursuit of knowledge are closely linked with another concept, namely, democracy. An argument in support of the discussion method concerns the need for a positive interpersonal relationship between learner and educator. To establish this relationship, it is necessary for the learner and educator

to interact in such a way as to create and maintain mutual trust and respect. Such interaction occurs when the educator and learner engage in exchanges that seek to establish satisfactory generalizations, conclusions, or solutions. That is, when people work together on a common issue, a positive interpersonal relationship is quite likely to result. The inquiry method for teaching, asserts that discussion creates the opportunity for the educator and learner to meet face to face as individual to individual. Such face-to-face encounters can strongly promote positive interpersonal relationships. Discussion “affords a situation in which the educator can establish more effective interpersonal relations and use them more frequently with many more learners in a given learning period than most teaching methods permit” (Bruner, 1978).

The lecture is perhaps the oldest method employed by educators working with groups of learners. This is a traditional method and, in addition, stem from a similar view of teaching. In any era of reform and reconsideration of teaching, traditional methods bear the brunt of sharp negative criticism. The lecture method of conducting a class is guided by a view of teaching that has several special features. The first of these features involves the concept that what the learner needs to know, do, or believe and can know, do, or believe is external to him. The knowledge, for example, that a learner needs to possess and can come to possess is actually held by someone else (the educator) who can transmit it to the learner. Knowledge lies outside of the learner, not within him. When someone communicates knowledge to the learner, the learner’s mind receives it, assimilates it, and stores it along with other knowledge previously gained. The mind is seen as a never-full receptacle that continually receives, sorts, and interrelates externally generated stimuli. This view of teaching depicts the mind, according to Schaffer and Stringfield (1994: 133), “essentially as sifting and sorting the external impressions to which it is receptive”.

Second, teaching is viewed as the activity that brings about the accumulation of the knowledge that is to be utilized by the learner as he performs his life’s activities. The third factor is the idea that the educator has the knowledge to give the learner or can easily acquire it when necessary. The educator can direct the process of accumulation through considered, deliberate selection and timing of inputs.

Moreover, and critical to the entire process of teaching, there is the fourth idea – that the educator can transmit his knowledge to the learner. The educator tells what he knows, and the learner receives and learns. Fifth, this view of teaching acknowledges that the reception by the learner may be either rote reception or meaningful reception. The failure to make the distinction between rote reception and meaningful reception is one factor that has led to the subsequent repudiation of the lecture methods. It is fashionable in many quarters to characterise verbal learning as parrot-like recitation and rote memorization of isolated facts. Research on teaching reveals that variety appears as important for maintaining learner interest and attention, and ultimately for producing higher achievement (Rosenshine & Furst, 1973). The lecture approach has been criticized as follows:

- Lectures deny learners the opportunity to practice social skills.
- Lectures make the implicit assumption that all learners need the same information, and this usually is incorrect.
- Lectures often are longer than the attention span of the learners, so that they begin to tune out.
- Lectures only convey information; they do not affect attitudes or promote skill development.
- Learners can read facts on their own – why waste their time with educators?

The lecture can be so distant as to virtually eliminate the interpersonal relationship between educator and learner. The educator becomes merely an impersonal speaker. This eliminates a feeling of flexibility and freedom in the classroom that impacts negatively on the classroom climate. Interpersonal refers to something that occurs or exists between two or more persons (English & English, 1974:273). Interpersonal relation mentioned above is defined by Petrovsky & Yaroshevsky (1987:153), as a system of attitudes, orientations and expectations of group members with respect to each other, which is determined by the content and organisation of joint activities, on which human communication is based.

Bhagi and Sharma (1992:567), define it as interactions among individuals which involves the pattern of one's dealings with other people, which is regarded as the crucial aspect of one's personality and the basic source of one's emotional security and insecurity. He went as far as saying: It takes people to make people sick and it

takes people to make people better. Research indicates, overcrowded classrooms where the organization of learning space is limited and educator-learner interaction is restricted, impacts negatively on the classroom climate that ultimately inhibits learner achievements.

2.3 LEARNER INVOLVEMENT

As a precaution for learning, involvement is regarded as a basic requirement for adequate significant attribution of meaning. The Oxford Dictionary (1992:432), defines involvement as active participation in a given activity. Baloyi (1992:164), further explains involvement as a deliberate action that is motivated by an interest in a task. From these explanations it is obvious that learners cannot be involved in learning tasks in the classroom if they show no interest in them. This further suggests that involvement is an inherent drive that motivates learners to realise their potential and achieve academically. Studies reveal that there is a connection between active involvement and academic achievement. Canfield (1987:25), illustrates this by stating that one cannot employ a trainer and expect him to do his push-ups for him.

There is no doubt that learner's involvement in the learning activity determines their achievement. Educator involvement in the education of the child may be seen as an extrinsic factor that influences the actual involvement of learners in their class work. Educators need to motivate and encourage learners by means of guiding and helping them to participate in their class work. However, the quality and intensity of learners own involvement in their work will largely determine their academic achievement

It was mentioned earlier that secondary learners attend school in order to realise their potential (Masitsa, 1995:31). This implies that learners are physically and psychologically involved in their schooling. In the classroom, they form relationships with educators, classmates and with the subject matter itself. All these efforts are made in an attempt to actualise their potential so as to achieve academic success.

Learners themselves also realise that they cannot progress successfully at school if they are not involved. It appears as if involvement is necessary for academic success. A lack of involvement, therefore, presupposes inadequate attribution of

meaning and a lack of active participation in class work. This, according to Vrey (1979:35), may lead to inadequate realization of potential.

Involvement, attribution of meaning and experience interact continuously. In an attempt to realise their potential, learners become involved in their studies by assigning meaning to them, and the end result is an experience of success in terms of achievement. Research indicates that learner involvement can be enhanced by

- encouraging group work,
- ensuring learners' have an adequate knowledge of the language which is used for instruction and learning in the classroom
- and implementing teaching strategies that encourage problem-solving thought process and engage all learners actively in the teaching-learning situation.

For the sake of this study, therefore, group work, medium of instruction and teaching strategies are deemed attributes of learner involvement in the classroom that might influence the academic achievement of secondary school learners in Newcastle in Kwa-Zulu Natal.

2.3.1 Group-work

A 'group' refers to a collection of two or more persons who share a common focus of interest and attributes (Harilal, 1996:25). Relation derived from the Latin verb 'relatum' that means to carry, support or to convey something to a favourite person, to communicate with another person and to favour him/her by involving oneself with the other person. Relations, therefore, points to a relationship in which people meet each other (Du Toit, 1994). Thus classroom discussions and small-group activities help learners develop skills in expressing themselves orally and in working with other learners on joint projects. Harilal (1996), summarized the need for such activities this way: Learners need to learn how to orally express ideas effectively, to listen to the ideas of others, and to identify areas of disagreement and consensus and to respect each other in the process.

Each week, learners can be assigned to work in small groups (5-15 learners) to practice communication skills and solve problems. Small groups allow learners to participate in problem-centred discussion, and many learners are more comfortable in expressing themselves in small groups than in whole-class activities. Also, many

more learners are able to practice communication skills than would be possible in a single large group.

Motivation and interest often are affected positively when educators involve learners in small group activities, provide them with interesting projects, and supply them with clear procedural guide-lines for accomplishing goals. Small-group work, if well planned, complements whole-class activities nicely by allowing learners to learn in more social and active ways (Good & Brophy, 1978).

Wright (1975), published an interesting comparison of open classrooms with focus on group-work and traditional instruction. The following table is a summary of these findings:

TABLE: 2.1
COMPARISON OF OPEN AND TRADITIONAL CLASSROOMS

	Open - Informal	Traditional -Formal
Space	Flexible, Variable	Routinized, Fixed
Activities of Children	Wide Range	Narrow Range
Origin of Activity	Children's Spontaneous Interests	Teacher or School Prescribed
Content or Topics	Wide Range	Limited Range
Use of Time	Flexible, Variable	Routinized, Fixed
Initiation of Teacher-Child Interaction	Child	Teacher
Teaching Target	Individual Child	Large or Whole Group
Child-Child Interaction	Unrestricted	Restricted

Classroom grouping assignments should be reviewed regularly and routinely with an eye toward forming new groups. A group should exist because it facilitates teaching and learning by placing together learners who have similar learning needs. Grouping can be a powerful tool if educators use it effectively to organize learners for learning specific skills, and if they disband groups once their usefulness ceases and form new groups as new needs become apparent (Good & Brophy, 1978).

Ferreira (1994:60), adds that parents are not always available, and children may grow up in a home where one or both parents are absent. In these cases it remains solely the responsibility of educators to help learners to realise their potential. In this regard, Dreyer (1994:70), prescribes three requirements that should be met in the classroom:

- learners must be helped to recognise their potential,
- they should have to be motivated to utilize this potential and
- educators must recognise learners potential.

Higgs and Higgs (1994:41), state that teaching a learner is not like processing a machine or a computer. The learners concerned need to experience their class-work as meaningful through active involvement.

In support of the above, Wilson (1993:60), points out that learners also have a responsibility to develop a willingness to learn, to work at understanding tasks and a willingness to co-operate , be self-directed as well as be actively involved in their learning. From the above, it appears that there is a link between academic achievement and learner involvement.

According to Kohn (1996:54), an ideal classroom climate is one that will promote a deep understanding of learning, and social and intellectual growth of the learners'. In such a classroom learners play an active role in decision-making processes. Educators should work together with the learners rather than lecture to them. In this way the learners' interest and questions can contribute much to the mastering of the curriculum content. Thus, the classroom climate should support the learners' desire for discovery, facilitate the process of discovery and ultimately meet their academic, physical and emotional needs.

Since the national Department of Education embarked on outcomes-based education for our schools, group work needs closer examination and attention. Group work is regarded as an integral part of Outcomes Based Education (OBE). The South African Qualifications Authority (SAQA), underlined the importance of group work in OBE in South Africa by proposing, as one of the seven critical cross-

field outcomes, that: learners will work effectively with others as members of a team, group, organisation and community (SAQA, 1997). Group work, however, needs thorough planning and should serve a specific purpose. It is reflected in the learning activity that the learners are involved in. The size of the group impacts largely on the activity and should therefore receive special attention. The classroom layout can and should change for different activities. Learners, will gladly move the classroom furniture around if they are involved in the discussion and decision to change the class layout. The planning and changing of the classroom layout assists and supports the learners in developing skills and knowledge about spatial orientation, decision- making, and working together with others. Placing learners into various groups is a well-known practice of many educators. We need to clarify what groups mean and how these groups can promote effective learning maximally so as to enable learners to achieve academic success. The number of learners in a group can vary according to the resources available and the learners interested in the activity. A group can vary from an individual learner to a whole class. The most common group sizes that educators use are:

- Whole class (approximately 35 learners).
- Small groups (usually 4-8).
- Pairs (two learners working or playing together).
- Individual learners
 - ✓ Individualisation: (each learner working on his or her own unique assignment or project at his or her own pace)
 - ✓ Individuation: all learners doing the same activity (worksheet, project or assignment), but each one doing it by himself/herself (Pretorius, 1998:72).

If educators plan and manage group work effectively it will not lead to problems with discipline. Learners who have not experienced group work before should be introduced to it gradually. Educators should ensure that there are enough learning activities to keep the groups occupied with interesting, challenging tasks appropriate to the level of development of the learners. Educators should further ensure that the learners understand the task(s) as well as their role within the group clearly.

For particular activities, working in groups has definite advantages, especially if the learners are motivated and work towards a common goal. Learners should know exactly what is expected from them in order to avoid groups talking about general interests. Some learners may well dominate discussions or activities during group work, which can lead to disruption. Educators should have sufficient control over the groups to ensure that this does not happen.

Educators who are only used to whole-class grouping may find smaller groups too noisy, with too much movement and activity. The classroom may also look disorganised and untidy, and the teacher may regard the restructuring of the classroom furniture into a number of groups of different sizes as loss of control. Active learning or 'hands-on' activities can curb misbehaviour.

Planning and presenting learning experiences for classes with 40 learners per class complicates individual support and monitoring, or makes it impossible if it is not planned carefully. Thus it is necessary to explore strategies where smaller groups of learners can work on tasks or projects. In smaller groups, the educator can reach out to individual learners more effectively. The working relationship among learners in a group or among groups in a class can be described as individual, co-operative, collaborative or individuated. Different types of working relationships exist among members of a group or among groups in a class. Co-operative group work occurs when learners in a group (or different groups in a class) work on different learning tasks supporting a joint outcome. Collaborative group work requires learners in a group (or groups in a class) to work on the same learning task towards realising a joint outcome.

Whole-class groups allow for more didactic control, whereas co-operative group work makes learners less dependent on the educator. Many educationists regard reaching out to each individual learner as the best way of teaching. It is possible to work with individual learners in a whole-class group when the tasks are planned for learners to participate individually (Pretorius, 1998:87-91). Thus active involvement of learners create a positive classroom climate that will influence academic achievement.

Eggleston and Kerry (1988), suggest that setting up groups needs serious attention; a learning tool which has great potential may not be effectively utilised, they say, since educators do not have efficient knowledge of group dynamics. When setting up group-work, one of the major questions to be addressed has to be: 'What is the best way to arrange the groups?' This is a question for which it is not easy to provide a cut-and-dried response since few studies have directly investigated the problem. Indeed Biott (1984), concluded that it is impossible to opt for any one best composition for groups, since 'decisions about grouping a class will have to be made in a specific context.

Research indicates group work promotes co-operative learning that encourages involvement of learners thus contributing to a positive classroom climate.

2.3.2 Medium of instruction

The medium of instruction can be defined as the means whereby a message is transmitted with reference to speech and writing (Malamah-Thomas 1988:145). According to Doughty and Doughty (1974:76), and the Teacher (March 1998:6-7), learners' home language which is used during everyday living is adequate for their needs in that community. Hence, it is particularly suited to the needs and interests of that community. Learners may have a good command of language for living in their own community, or in the social context of the school environment. However, Doughty and Doughty (1974:76), state that this does not mean that they can necessarily cope with the language which is used for instruction and learning in the classroom. In this regard Wilkinson (1986:63), states that the various terms and usages in a language may influence speakers of different languages to think differently about particular topics and these learners may perceive the world differently. In addition, Fontana (1992:23), emphasizes that "children from other ethnic groups may experience language problems within the classroom. Such problems may mean that they do not understand what the educator requires of them and their failure to comply is due therefore not to defiance, but to simple incomprehension". In the light of the problem statement of this study, the following question needs to be answered: What are the effects on academic achievement of learners if the learner has insufficient knowledge of the medium of instruction that is used?

In this respect Wilkinson (1986:163), concludes that learner's own language can be regarded as a very personal possession and this is an awareness of language as a form of their own personality. Woolfolk (1993:177), maintains that "culture affects communication". It is therefore crucial to become aware of the effect of the medium of instruction in a multicultural, classroom. In an overcrowded classroom, attention should be given to the effects on both the learners and educator when the majority of the learners have inadequate knowledge of the language of instruction. At the school where the researcher teaches, it has been her experience that many Zulu speaking learners have indicated that they experience difficulty in understanding explanations in English, which is the medium of instruction.

Education at the classroom level needs to be recognised as a communicative process, for sharing knowledge, not simple acquiring it or transmitting it, and the prime medium for that sharing is language. Language is at the heart of education not only because it is the principal means of communication between educators and learners, but also for at least two other reasons. One is that language is a vital means by which we represent our own thoughts to ourselves. The Russian psychologist Vygotsky (1978), describes language as a psychological tool, something each of us uses to make sense of experience. The second reason is that language is also our prime cultural tool. It is mainly through the medium of spoken and written language that successive generations of a society benefit from the experience of their forebears.

Education is – or should be – a process for developing the effective use of both these language functions, psychological and cultural so that learners can be actively involved in the teaching and learning process. Becoming 'educated' essentially involves gaining entrance to an intellectual community. It is not simply a matter of acquiring a body of knowledge, and it certainly cannot be achieved through personal, unaided discovery. An educated person not only has access to a certain body of knowledge, but also has acquired a set of procedures for solving problems and a set of language practices for describing and discussing ideas, problems and the relationships between them (Moon & Mayes, 1994).

Communicating information and directions in a clear, comprehensible manner is a teaching skill of great importance. Clear instructions help learners learn faster and

more successfully. It also helps learners understand directions and expectations for behaviour more readily. Although clarity is important in all classroom activities, it is crucial during content development, when nearly all, new subject matter is introduced and taught (Emmer & Evertson, 1984). At the classroom level, education proceeds by the development of shared understanding. Through talk and joint action, participants in the process of teaching and learning can build a body of common knowledge that provides a contextual basis for further educational activity. The extent to which educational knowledge becomes 'common' to learners is one measure of the effectiveness of the educational process. This is reflected in the academic achievement of learners.

In a school situation, especially primarily black South African schools, the child's mother tongue is used as a medium of instruction during the first three years or in foundation phase and lower phase, thereafter English becomes the medium of instruction. Learning a new language creates problems because children spend their time trying to master the second language rather than learning new subject content. It is nevertheless noted that most children find it difficult to follow instructions in a foreign language, which may account for their poor academic performance. Some of them do not follow what is being taught not because they are intellectually less able, but due to an artificially created linguistic problem. According respect to child's mother tongue in school entails cognitive and affective benefits for the reason that the mother tongue is the very lifeblood of human self-awareness, the carrier of identity, the safe repository of a vast array of affective and cognitive templates making up the total web of personality (Mwamwenda 1995:170).

Another aspect that makes it difficult for learners to master the second language is the community in which they grow up as well as their parents. The most important figures in the child's development, community and parents communicate with the child in their mother tongue. This means the child is exposed to the second language mainly during school hours. After school, weekends and during school holidays children have little exposure to the second language. This presents them with problems in mastering the medium of instruction and this may lead to underachievement.

Theories of language development propose that practice is essential for one to learn a language. B.F. Skinner (cited in Mwamwenda, 1995:165), concurs with the above statement by saying: Language is learned in the course of human development through association, imitation, practice and reinforcement. Thus the educator must create an optimum learning environment, since classrooms are highly organized social and cultural learning environments. The classroom must provide the channels through which the learners' academic achievement are enhanced. One of the most important areas of the learning environment is educator and learner interaction.

All educators should blend learner's diverse cultural experiences and backgrounds into meaningful language learning within the classroom and provide opportunities for genuine communication within the classroom. A classroom climate that respects and values the linguistic diversity of the learners should be created. In this way learners feel at home and accepted because they are not considered inferior on the basis of a different linguistic background. This approach cultivates respect and tolerance for the learners' other languages (Lemmer & Squelch, 1993:44).

Multilingualism influences the classroom climate. On one hand, non-English learners may be seen as deprived and disadvantaged (deficit approach) and, on the other hand, language diversity can be seen as a strength and as a potentially enriching characteristic (ability-centred approach). The ability-centred approach should be an essential feature of the classroom that sustains language learning. Educators should harmonize learner's diverse cultural experiences and backgrounds into significant language learning within the classroom, and also provide opportunities for genuine communication within the classroom. Thus, according to Rigg and Allen (1989:xi), learners should be immersed in a rich bath of language within the classroom. Each educator should endeavour to create a positive, non-threatening classroom climate in which learners would be free to participate in all classroom activities. Educators should understand the interests and cultural backgrounds of learners in order to cater for their individual needs. They must assess how well learners can read and write, design relevant activities, and continuously assess progress. Learners should be surrounded by meaningful models of reading and writing and identify with the materials presented in terms of their cultural background (Roux, 1993:162).

Since classroom interactions are an important source of language input for those learning English as a second language, learners must be encouraged to take full advantage of the opportunities available in the instructional environment in class. Interactions must serve the purpose of language learning. To ensure that this happens, educators need to provide structured and informal peer interaction in the classroom to familiarize learners who are culturally diverse thereby creating a positive classroom climate that promotes academic achievement.

2.3.3 Teaching Strategies

A major goal of class restructuring models has been to transform classroom teaching practice, which in turn should lead to improvement in learners' achievement. Taylor and Teddlie (1996), described these predicted changes as follows:

- Anticipated among these changes was a modification in classroom activities with roles for educators and learners redefined. Learning activities were expected to tap complex, problem-solving thought processes, while educators were envisioned to be less directive and more similar to coaches. Concomitantly, learners were predicted to shed their traditional passivity and become actively engaged as learner-workers.

According to the Integrated Quality Management System (Department of Education, 2004), the educator is responsible for creating a positive climate for learning and teaching. Thus the educator should create a climate that enables the learners to participate actively and to achieve success in the learning process. The criteria that are considered to contribute to a classroom climate that is conducive to learning and teaching are: organization of learning space which encourages and supports individual and group activities; active participation of learners in appropriate activities for most of the lesson; learners are encouraged, motivated and there is positive reinforcement and learner discipline.

The area of educator effectiveness research was very active from the early 1970s through the mid-1980s, when a substantial body of literature concerning effective teaching strategies was fully developed. These strategies included: quantity and pacing of instruction, opportunity to learn, time allocation, classroom management, active teaching, whole-class versus small group versus individual instruction, clarity,

proper use of praise, pacing/wait-time, questioning skills, and other instructional practices. Teddlie, Kirby, and Stringfield (1989), indicated that educators in effective schools were more successful in keeping learners on task, spent more time presenting new material, provided more independent practice, demonstrated higher expectations for learners, provided more positive reinforcement, than did their peers in matched ineffective schools.

Slavin's school change model (Slavin, Madden, Dolan, Wasik, Ross, Smith & Dianda, 1996), emphasizes that change has to occur at the intersection of the learner, the educator and the curriculum. His strategy for classroom improvement emphasizes active learning and cooperative learning.

To achieve intellectual potency and autonomy, the learner must actively participate with the educator in teaching. (Active participants, here, does not indicate only oral activity, for it is surely possible to be active intellectually yet passive physically). This participation obviously requires that the educator be, not a dispenser, but an enabler, facilitator, advisor, guide. This requirement, in turn, is related to the idea that a learner learns to be autonomous by practicing, by noting his errors, and by practicing again with his mistakes corrected. The discussion method does not tend to evoke in the learner active engagement in the teaching process. The combination of active participation and intellectual potency yields another feature of the discussion method. The quality rather than the quantity of the knowledge gained by a learner is critical in teaching. Discussion is intellectually productive because it leads to a high degree of retention and assimilation. Learning by discovery may, then, still be considered the chief mode for intellectual productivity and autonomy. When an individual has developed an organizing scheme for his own cognitive activity, he is presumably in a position to harvest a greater amount of knowledge as well as to become increasingly autonomous and independent of all forms of authority. He is better equipped to move into unknown areas, to gather data, and to abstract from these ideas and concepts and thus improve his academic achievement.

Teaching by the discussion method helps to make the act of learning a rewarding experience. That is, "discovery and the sense of confidence it provides is the proper reward for learning" (Hyman, 1974:97). Such approaches will keep learner interest

high primarily because of the intrinsic stimulation of the materials and secondarily by avoidance of the ill effects of passive listening.

Three elements characteristic of the discussion method – active participation, exploration, and the gaining of knowledge that leads to mastery – fulfil a basic human need. To be competent is intrinsically rewarding because it satisfies an intrinsic need to deal with the environment that contributes to a positive classroom climate for teaching and learning.

Higgs and Higgs (1994:43), suggested that the education of human beings is not like processing a computer, but far more complex. This implies that although learners need educational help from educators, they can progress only if they assign meaning to understand and are involved in their classroom activities. Vrey (1979:28), adds that, while learners may live a meaningful life and receive the best instruction, in the final analysis, they themselves must make sense of and understand reality on their own terms. Significant attribution of meaning is therefore an inherent function of any developing person.

In this regard, Woodbridge and Manamela (1992:144), comment that when learners first come to school, they seem to have an eagerness, a thirst for knowledge and a will to learn. They also learn a great deal about their life world through interacting with peers, themselves, parents, teachers, ideas and objects. This suggests that attributing meaning is related to successful learning and subsequent academic achievement.

Supporting the above view, Mellet (1991:108), and Vrey (1979:32), advise that tutorial material must be logically presented in the learning situation, because eventually meaning appears in the mind of the learner. According to Ausubel (1978:27), learning is concerned with discovering the relation between new information and existing knowledge. For this reason, Ausubel regards knowledge as a decisive factor in successful learning. From the above theory one could conclude that meaningful learning occurs when learners can relate new subject matter with existing information in their cognitive structure. This also implies that the attribution of meaning is a cognitive function.

Epstein (1989:285), recommends that tests and examinations should be marked and returned to learners as soon as possible. He maintains that this is important because evaluation provides information to learners about their progress and achievements. This information in turn promotes learners insight into and involvement with their learning and their ability to meet the standards that are set by their educators.

Mellet (1992:109), elaborates on this by proposing that significant attribution requires total personal involvement. It therefore pre-supposes responsibility and commitment on the part of learners learning activities in the classroom. The marks they earn indicate how successfully they have attributed meaning to their learning tasks and the responsibility they have shown. Consequently, the extent of meaningful learning is reflected in their academic achievement as a whole.

Teaching is an art, not a technology. Aspects of instructional technique that made for success were: giving clear instructions and checking they had been understood; achieving an appropriate balance between instruction and class-work striking a balance between whole class teaching and attending to individual learners; skilful use of questioning for purposes of recapitulation, to check that instructions have been understood, for exposition and to maintain order; and the application of immediate feedback not only prompt marking, but also 'public praise and private criticism' (Gage, 1984). Thus a non-linear relationship exists between academic interaction that is created by the educators teaching strategies and the learners academic achievement in the classroom.

2.4 Discipline

Effective learner-educator communication, a policy on discipline and orderliness, rather than comfort are characteristics of a good classroom climate (Edmonds & Frederiksen, 1979). Brookover (1980), suggested that all aspects of the classrooms' learning climate are interrelated, and that climate is closely associated with learner's academic achievement.

Educators who may want to teach in a rather strict manner, in which they are the central force in the classroom, puts constraints on the classroom climate: learners cannot be allowed as much freedom as when educators want their learners to learn

from each other. A healthy organization, according to Gage (1984), deals effectively with outside forces while directing its energies toward its goals, i.e. educational outcomes. It is characterized by high performance standards, high educator expectations and an orderly learning environment with good relationships between educator and learners.

Classroom management is necessary to create conditions for learning and instruction, but management itself is not sufficient for improving learners' academic achievement (Creemers, 1994). The effect of positive climate factors such as the way an educator behaves towards the learners, classroom interactions and orderliness were found to have mostly positive effects on achievement (Creemers, 1994).

Discipline is a very important aspect of effective education. The guide explaining basic aspects of the Schools Act to public and school governors refer to the importance of discipline, and that learners learn best in an orderly and safe environment. Ensuring proper order and discipline in a class is regarded as a management function and a responsibility of the educator. Discipline should not be regarded as enforcing many rules consistently. Discipline refers to inner control and self-management (Department of Education, 1997 (e): 59).

The type of classes in which learners are grouped and the large number of learners in each class are seen as problematic. It is true that educators who do not create a climate conducive to learning at school cannot expect learners to learn seriously. Nemangwele, (1998:40), defines intrinsic motivation as the internal satisfaction the learner feels when performing a task. Although these learners are driven by inner motivation to perform a task, they need the encouragement and direction of their educators. An intrinsically motivated child is not super-human, he also needs support for his efforts and praise of his success, as do other children (Nemangwele, 1998:41).

Furthermore Kohn (1996:55), stresses further that a stark, institutional classroom climate calls for concern because it is opposed to an inviting atmosphere, which will be conducive to learning. Shanker (1977:13), urges that a classroom should not become a place for the sale of knowledge, where educators work as information

mongers and learners are merely the customers buying learning material from a shop. Hence, according to Kohn (1996:54), in a “doing to” classroom, educators tend to focus on the learners’ behaviour in order to elicit compliance. Here the preferred methods are systems of applicable punishment and rewards. Kohn (1996:54), further states that educators should rather strive to create a “working with” climate where the focus is on the learners’ underlying motives to help them develop positive values and a love of learning and schooling. The preferred methods here would include the creation of a caring classroom climate conducive to learning and teaching.

2.4.1. Classroom Behaviour

An optimal classroom climate facilitates learning and fosters academic achievement. Morrison (1977:158), and Galloway (1982:136), record that “problems related to discipline are the greatest source of stress from within the class”. In this respect McKay and Alias (1995:111-112), point out that several educators interviewed revealed that they experience problems of stress and burnout. The pressure to achieve classroom order at the expense of teaching was among the most serious stressors they referred to (McKay & Allais 1995:111-112).

According to Winkler (2003), learning can be a very frightening experience. When we are learning something new, we have to do something that we know we can’t do. We cannot learn without taking risks. If we feel encouraged and safe in the learning environment, it is easier to take a risk. If we feel that we are not allowed to make mistakes, we will not risk anything. When it comes to learning, children behave in the same way as adults. They will not risk learning unless they feel safe and supported.

If we want to make sure that our classrooms are supportive learning environments that help learners to achieve their best, we can always ask ourselves these questions: How do the learners feel? Are they frightened? Are they worried? Are they excited? Are they happy? Do they feel secure? For most learners, feeling is more important than thinking. If they feel that they are loved, they are happy and will try their best. If they feel insecure, they will not try at all. Learners might have the ability but have not had the opportunity to develop some of the educational skills they need in the classroom. When learners find it difficult to learn, they usually hide their learning problems behind disruptive behaviour in class. Many learners don’t know

how to talk about their problems. They cannot tell their educators what they need. If educators look at difficult and disruptive behaviour as one of the ways in which learners tell them about their needs, then educators will understand their learners better.

According to McKay and Allais (1995:112), in South Africa the problems of disciplinary control seem more important than teaching, which is compounded by the excessively high learner: educator ratio. Educators are ultimately forced to use strict control measures to enable them to teach. Several educators indicated that teaching in overcrowded classes meant that authority and discipline had to be strictly enforced and this impairs the spontaneity and creativity of the learners. This point has been reiterated by many educators and learners in the researcher's experience. In this regard Haigh (1990:12), states that the class itself is given and educators may wish they had 20 friendly intellectuals instead of 32 awkward rebels, but the choice is not theirs. Due to this rapid increase in class size, the educator has less control over the learners and chaos could rule.

Brown (1994), stated that the increase in class size and consequent overcrowding of classrooms have detrimental effects on learners' behaviour in schools because they diminish "the opportunities for schools to provide the high quality teaching needed to enhance learner learning and achievement". In the light of the problem statement of this study, the question is whether the learners will achieve academic success in a classroom when too many disciplinary problems are experienced.

When learners suffer from perilously low academic achievements, they can become internally enraged. They feel trapped. Day after day the formal educational process humiliates them, a daily reminder of their cognitive inferiority. According to Levine(2003), learners have very little tolerance for these buried negative sentiments, for these buried negative sentiments, for these abysmally low feelings about themselves. In some cases they are condemned to daily embarrassment in the classroom, and they may become emotional powder kegs that could ignite at any time. These learners are exquisitely susceptible to all the dreaded catastrophic outcomes, including serious substance abuse, depression, juvenile delinquency, teenage pregnancy, and poor academic achievement or dropping out of school. Obviously a lot is at stake.

Every learner has a fundamental need to respect his own particular kind of mind and its potential ways to shine. In seeking such routes toward gratification, educators should stress to the learner that he or she can achieve so as to prevent behaviour that thwarts learning (Levine, 2003).

Some learners get in trouble because they contend with a dysfunction that not only impairs learning but also reduces their self-control. A learner may commit an aggressive act or say something totally indiscreet because he failed to preview before acting or speaking his "bad act" was actually an eruption of impulsivity.

Some learners with expressive language problems reveal rather violent or at least unstable behaviour because they can't use language to cool themselves, slow down, and think through stresses or behavioural decisions; they lack verbal "self-coaching" of their behaviour. In reality these are learners who simply may not know how to resolve conflicts with others or how to converse in a socially ingratiating tone of voice. They are frequently misread as being defiant, arrogant or rude (Leaf, 2005).

According to Levine (2003), some learners feel driven to act out simply to save face. They would much rather be perceived as a bad boy (or girl) than as a dummy. Or a learner who feels totally inadequate in the classroom may assume the role of the class clown. By volunteering to be the hilarious jester, he diverts attention from his shame caused by poor academic achievement. In such instances, the class clown is truly a sad clown. Repeated frustration has the potential to downgrade a learners estimate of self-worth. At any distance along the academic track, a learners mind could derail.

Leaf (2005), suggests that learners are often misdiagnosed as disruptive, hyperactive, suffering from concentration problems, the so-called attention deficit disorders or just plain naughty. They are often given powerful prescription drugs, like the stimulant, Ritalin (which can be used successfully when given to the right learners and monitored correctly), that is said to work paradoxically to calm them down. In effect, this is simply drugging them into submission, attempting to make changes to their brain chemistry to make them fit into a learning environment that does not suit them naturally. That is pretty scary stuff, especially when you realize

that simple changes to the classroom environment are often all that is needed for these learners to concentrate and to learn well.

We need to create education environments that are flexible enough to facilitate learning no matter what type of intelligence dominates in learners. This is possible. We need educators who know not only how each of their learners learns best, but also how they themselves learn best. We need learners who are happy to take responsibility for learning and are not about to sit back and wait for someone to make it happen in them (Leaf, 2005). The classroom climate should foster in learners a searching mind and encourage them to embrace knowledge with passion.

2.4.2 Classroom management strategies

Climate was viewed as the “personality” of the classroom and seen along a continuum from open to closed. Health is another metaphor for examining classroom climate. The idea of positive and healthy relations in an organization is not new and calls attention to conditions that foster effective organizational performance. A healthy organization is defined as one that “not only survives in its environment, but continues to cope adequately over the long haul, and continuously develops and expands its coping abilities”. Implicit in this definition is the idea that healthy organizations manage successfully with disruptive outside forces while effectively directing their energies toward the mission and objectives of the organization. Operations on a given day may be effective or ineffective. Educators in a healthy school are committed to teaching and learning. They set high but achievable goals for learners, maintain high standards of performance, and promote a serious and orderly learning environment. Furthermore, learners work hard on their school work, are highly motivated, and respect other learners whom achieve academically (Haertel, Walberg & Haertel, 1981).

The most important determinant of classroom climate is the educator’s method of classroom management, especially his or her techniques for keeping the class actively attentive to lessons and involved in productive independent activities that foster academic achievement.

Emphasis on behaviour problems and on trying to get rid of them through punishment is ineffective, often making the situation worse. Generally, it is much more effective to stress and reward desirable behaviour and use management techniques that prevent problems from emerging than it is to deal with problems after they emerge. The key to classroom management success lies in the things the educators does ahead of time to create a good learning climate and a low potential for trouble.

Research on measures of classroom management techniques has shown that these were educator behaviours that increased the time learners spent in profitable work activities and led to successful resolution of minor inattention problems before they developed into major disruptions. *This is why researchers stress repeatedly that successful classroom management is primarily a matter of preventing problems before they occur, not the ability to deal with them after they emerge.*

According to Fullan (1995:106), the attitudes and behaviours to be described complement and reinforce one another to form an internally consistent and systematic approach. Attempts to use isolated parts of this system as techniques or gimmicks will not succeed for long. The success of this approach ultimately depends upon the educator's ability to establish credibility with learners and gain their respect. To do this, an educator has to be perceived as an individual person, not an impersonal authority figure or "player of the educator role." An educator who tries to manipulate learners by using gimmicks, without having established good personal relationships, will soon be resorting to threats and punishment. To begin with, educators must like the learners and respect them as individuals. They need not be overdramatic or even particularly affectionate; if they enjoy the learners and have genuine concern for their individual welfare, this will come through in tone of voice, facial expressions, and other everyday behaviour.

Even young children adjust quickly to an educator's personality (Anderson & Brewer, 1945). *There is no need for a quiet or undemonstrative educator to emote in an attempt to impress the learners with his or hers concerns.* It is important, however, to get close to learners during private interactions. An educator who is standoffish will be perceived as cold and will seem to be talking at rather than to the learners, despite good intentions. Therefore, educators should form the habit of bending close

to learners when speaking with them privately. In the early elementary grades, gestures such as patting the head or back or resting the hand on the shoulder are often effective (unless resented by the learner). These are among the ways that educators can communicate concern or affection nonverbally when conferring with, praising, or encouraging learners. Secondary educators should regularly bend close to learners and deal with them at their level during private contacts, however, and should make an effort to get to know each individual. This will provide information about each learner's individual interests and needs, knowledge that will be helpful in individualizing instruction. It will also provide a basis for showing concern and establishing warm relationships with learners.

Good and Brophy (1978), suggests that appropriate expectations are also involved in gaining respect and establishing credibility. Learners tend to adjust to the educator's habits and learn to identify discrepancies between what he or she says and means. If they learn that when the educator looks up and says, "No talking over there," he or she really means "keep the noise down to a tolerable level," they will respond to the second message not the first. This would be all right, except that sometimes the educator really means "keep quiet". At these times, the learners will react in the usual way, and misunderstanding and resentment may result.

Bribing learners to learn reflects inappropriate attitudes toward learning. The educator thinks of school-related tasks as unrewarding drudgery and assumes that learners will not enjoy them. This attitude is picked up quickly by the class, who learn to wince, sigh, or protest whenever a play activity is stopped to begin a lesson. Their behaviour will confirm and reinforce the educator's expectations, and at the same time build up his or her guilt about making them learn. In turn, guilt will tend to make the educator minimize the time spent in lessons and start to bribe learners by promising them rewards if they will tolerate the lesson for a while. This type of educator is not a positive influence on learners, even though he or she may have their affection and, to a degree, their respect. Until there is a change in the educator's attitudes and expectations about learning and about enjoyment of classroom activities, he will achieve poorly, and their next educator will be faced with a rehabilitation job in motivating them to achieve academically.

- Learners will be more likely to follow classroom rules when they understand and accept them.
- Management should be approached with an eye toward maximising the time learners spend in productive work, rather than from a negative viewpoint stressing control of misbehaviour (Good & Brophy, 1978).

According to Fullan (1995:107), classroom management and the conduct of instruction are major problems encountered by educators. These problems are so critical that it is easy to overlook the equally obvious other issues, such as the evaluation of the learners, the educators' evaluation by administration, the need to develop a consistent teaching style, the need to find out how the school functions and the process of getting to know the departmental and school regulations that should be adhered to. Shutte and Bowker (1998:20), report that 10% of the total teaching time in South African schools is wasted achieving class control, which adds up to approximately 20 days. This will have a negative impact on learner's attainment of academic success.

Van der Horst and McDonald (1997:86), urge that educators should "demand more sophisticated classroom management than ever before...and should also accommodate the expanding diversity of learners and settings". Van der Horst and McDonald (1997:110), go on to say that learning "is not only a result of sound management, but also a cause". This raises the question of how or whether sound management can be obtained easily by educators in overcrowded classrooms where there are disruptive learners who have an insufficient knowledge of the language of instruction and where less individual learner attention is noted.

According to Clark and Starr (1986:52), a classroom that is skilfully managed is distraction free. Learners can learn effectively in well-managed classrooms. Effective classroom management entails the creation of a climate favourable to learning and will provide the means of learning. Clark and Starr (1986:52), conclude that for this purpose it involves organizing the physical elements of the classroom, classroom logistics, the materials and the tools of instruction, classroom interpersonal relationships and instruction itself. Researchers emphasize the importance of the effective use of time and space in the classroom to create a positive climate that influences academic achievement of learners.

The educator should implement a classroom organization, plan that is a "well-developed, flexible plan of operation which has limits, but which also tolerates exceptions and variations when goals and circumstances warrant them" (Van der Horst & McDonald 1997:87). In classrooms with enormous management problems, the exceptions and variations could be so severe that the learning process could be neglected, resulting in detrimental effects for the learners' academic achievement.

Research states that for a social system to function effectively, all members of the organisation should know the prescribed rules and regulations that define expectations and appropriate behaviour. This includes day-to-day rules and behaviour, standards of excellence, goals and philosophy and of course procedure for sanctioning inappropriate behaviour (Brookover, 1982:102-105). Therefore there should be rules and standards of behaviour for lunch hour, toilet breaks, assemblies and all other activities that occur inside or outside the classroom. An orderly classroom environment occurs only when learners and educators obey the current code of conduct (Gaddy, 1988:514). It is noteworthy that classroom behaviour and achievement are related. Learners who misbehave in class are likely to do poorly in their school- work. Decisions on which behaviour is regarded as acceptable or unacceptable must, in most cases, be based on how it affects the learning climate. Brookover, 1982:181).

The total school contributes to a positive learning climate when a disciplined and orderly environment is maintained, since educators then spend more time promoting learner achievement. Learners also learn better in a well-organised, orderly and disciplined classrooms. Educators should share the responsibility for creating an orderly, safe and disciplined classrooms in which academic pursuits are not disrupted – an environment of psychological safety. In order to achieve this the following disciplinary problems should be curbed: truancy, absenteeism, tardiness, dodging, insubordination, failure to do or complete assignments, vandalism and disruptions. Lewis (1989:173), is of the opinion that if the classroom climate is to foster learning, concerns over discipline have to be minimal and the approach has to be one of positive reinforcement rather than punishment. Learners have the right to education free from fear, disruption, worry about their safety or their psychological and physical well-being. They dislike disruptive actions caused by other learners,

that negatively affects the quality of their academic achievement and feel frustrated when their ability to engage in academic activities is disrupted. They enjoy a humane atmosphere because it increases their morale (Cruickshank, 1986:118; Phelan, 1992:704; Brookover, 1982:180-181; Berliner, 1989:15). Research indicates classroom management strategies should promote learner achievement by creating an orderly and disciplined classroom climate.

2.4.3 Extrinsic motivation

Bempechat, Graham, and Jimenez, (1999), reported that aspects of the classroom climate such as the relationships that learners establish with educators and peers also affect academic achievement of learners. They found that classes with committed faculty, orderly environments and an emphasis on academics have been associated with lower rates of absenteeism and dropping out. In terms of educator-learner relationships, the data indicate that from pre-school through adolescence, supportive relationships between educators and learners promote academic achievements and positive attitudes toward school belonging.

The term motivation is derived from the Latin verb 'movere' meaning to 'move' (Nemangwele 1998:18). Nemangwele (1998:18), also asserted that: Motivation grows from a need to become competent, from a need to self-actualisation, from a need to become functional, from a need for personal adequacy, from a need for some satisfactory level of self-actualisation – a need to be somebody.

McClelland (Muqsud & Coleman, 1993:850), explain that an achievement motivation is based on a desire to excel. Nemangwele (1998:50), put forth Atkinson's theory of achievement motivation to clarify why some learners choose to become actively involved in learning while others withdraw from active participation. Atkinson makes it clear that: The hope of success motivates people to engage in achievement tasks and fear of failure causes them to avoid tasks. A person becomes involved in a task when the hope of success is stronger than the fear of failure. One avoids the task when the fear of failure is stronger than the hope of success (Nemangwele, 1998:51).

Motivation is the key not only to effective learning but also to good discipline. It is expected that educators will involve learners in learning activities so that effective learning can occur, but de-motivated learners will not become involved. Pretorius (1998:210), states that: A lack of motivation can lead to school fatigue, bunking, leaving school, underachievement and problem behaviour.

It is very clear that every learner wants to experience the listening ear, the sympathetic glance and the encouraging voice of his/her educator (Pretorius 1998:217). Learners who feel good about themselves, their abilities and their surroundings are likely to succeed. But those who see themselves, their abilities and their surroundings in a negative fashion usually tend to underachieve (Purkey 1970:14). Fitts (1972:16), perceives this negativity as the root of academic difficulty, social and emotional problems. In a form of attention seeking the learners create problems in the classroom because of boredom, frustration and indifference.

Learners resort to this behaviour because they see themselves as less adequate, less accepted by peers and adults, withdrawing, self-derogatory, have a depressed attitude towards themselves, show behavioural immaturity, strong inferiority feelings and lack the following: Self-reliance, a sense of personal worth, and a feeling of belonging (Purkey 1970:21). In his discussion on learners who lack motivation Pretorius (1998:154), reveals that: The underachiever tends toward immature behaviour, he is less accepting and also regards himself as less acceptable than other people, he tends to withdraw socially, he lacks personal value, sense of belonging and he experiences feelings of inadequacy and inferiority. Once the child classifies himself/herself as incompetent to meet the challenges of life, he/she becomes less eager to learn, less self-confident, less ambitious and shows an inferiority complex.

The learners of an ignored cultural group may try to protect their self-esteem by developing ineffective coping styles that alienate them from school and are harmful to academic achievement. Sometimes, they may have a diffused identity, low self-esteem and alienation from both their culture and mainstream. This identity conflict is most likely to develop when the values, attitudes and behaviours espoused in the home and at school are incongruent (Ford, 1996:79). The internal conflict they

experience results in their inability to adapt to and blend in with people from different racial and cultural backgrounds (Harilal, 1996:81).

Dekker and Lemmer (1993:52), concur by saying: It is naïve to assume that desegregated schooling will automatically improve equality in education by simple equalizing access. Many people tend to react suspiciously, defensively, even aggressively toward individuals who differ in obvious physical characteristics (Kvaraceus, Gibson and Curtin, 1967:9). It is therefore obvious that cultural diversity, sometimes, represents sources of vulnerability to learners. It hinders their ability to function at their full potential and increases their level of stress which results in a deliberately poor academic achievement in school, rebellion against educators and shunning any behaviour associated with mainstream society.

Lemmer and Squelch (1993:13), regard the classroom as “a micro-culture where the different cultures of learners and educators meet to form one complex and unique classroom culture. People coming from different cultural backgrounds to those of educator and/or dominant culture, might experience cultural alienation.” If experienced, an extreme cultural discontinuity can result in learners failing or even dropping out of school. Research by Lemmer and Squelch (1993:13), suggests that the educator has an important role to play in bridging cultural gaps which may exist in classroom. To achieve this, Lemmer and squelch (1993:13), state that “ it is necessary to acknowledge and respect the different cultures and know about the learner’s background”. When children begin schooling, they need a positive classroom climate; acceptance, approval, and attention from their educators and peers.

If educators are not competent and lack skills on how to deal with learners, because of their own insecurities and anxiety, they end up putting more pressure on these learners. Learning under pressure is associated with fear and could lead to serious detrimental effects on their academic achievement. Educators can become powerful negative motivators simply by the way they relate to learners (Nemangwele 1998:156).

The literature research on classroom climate has laid a foundation for the seriousness of this problem regarding the academic achievement of Secondary School learners.

According to Woodbridge and Manamela (1992:115), educators have a responsibility to orientate and encourage learners towards achieving academically. Learners need educators who are able to inspire and enthuse them. Inspiration encourages learners to assign meaning through involvement in their classroom tasks. In agreement with the above, Mellet (1991:109), states that educators should create a positive educational relationship within which he can effectively motivate learners. Furthermore, educators should feel positive about themselves. It is through a positive perception of themselves that educators are able to maintain strict but fair discipline in the classroom. Woodbridge and Manamela (1992:117), believe that discipline is the cornerstone of any successful learner. Discipline promotes learner development by providing them with increased opportunities for independence, responsibility, self-direction and participation in decision- making. The classroom should be attractive and should create a unique climate that enhances positive experiences for learners. A unique climate implies a situation of acceptance, where each individual is recognised, guided and encouraged.

Hansford (1988:47), believes that a happy state of mind leads to increased receptiveness. This suggests that a mutually positive relationship based on trust, love and understanding initiated by the educator in the classroom is significant for the realization of psycho-educational success. Woodbridge and Manamela (1992:118), elaborate further by stating that a mutual relationship in turn motivates learners to learn and encourages them to fulfil the requirements for achieving academic success.

To reinforce positive performance educators should utilize rewards and punishment. Mellet (1991:88), warns that punishment must not be seen as the opposite of reward. Punishment should always be used as a strategy to encourage learning. Reward and punishment should therefore reflect educator's love, warmth, affection and appreciation for their learners. Reward and punishment can take different forms, such as incentives, removal of negative stimulation, personal recognition of successful attempts to learn, warnings about possible failure and repetition of

incorrect work. Physical punishment should be avoided at all costs. According to Epstein (1989:288), these help to motivate learners and serve as an important means of encouragement because they are designed to prove the learners worth and assist them in achieving academically.

From the above discussion it is evident that educators play a vital role in motivating learners to achieve academically and, one could conclude that by valuing learners, appreciating them through recognizing effort and by showing faith in the learner as a person, educators help learners to accept, value, and appreciate and to have confidence in what they can accomplish.

To counteract the negative effect of experience of failure, Mwamwenda (1995:262), suggests that educators should encourage learners to set themselves goals. They should also be equipped with the knowledge of how to achieve these goals. This is in line with the principle of helping learners to unlock their potential (Dreyer 1994:69). The aim of achievement is self-actualisation. Maslow (1972:200), states that self-actualisation refers to a man's desire for self-fulfilment. Cangen (1987:164), views it as a process of reaching one's self-appointed goals. The above views all agree that the realization of potential is a developmental task. It is achieved through effort. Davis and Rimm (1985:282), strongly feel that the task of learners in the classroom is to realize their potential. Dreyer (1994:70), further argues that the learners alone cannot actualise their potential, but require help from educators.

Vrey (1979:28), refers to these factors as psycho-educational categories, while Mellet (1991:107-110), refers to them as conditions for success in the classrooms. These factors refer to the significant meaning that learners attach to their classroom activities which is acquired through active involvement in the class. Motivation may occur in two ways, namely, intrinsically and extrinsically. According to Mellet (1991:81-82), intrinsic motivation refers to an act performed by a person due to a genuine wish to do it and for which he or she needs no external reward. Mellet (1991:81-82), adds that in the case of extrinsic motivation, the desire to act in a particular way is derived from the source beyond the person concerned. From the above views, it may be said that extrinsically motivated learners learn because

something or someone else activates them to do so, or because they will be rewarded or even punished.

Woodbridge and Manamela (1992:117), suggest that educators should involve learners actively in the planning of classroom activities in order to promote their levels of motivation and thus foster a positive classroom climate that enhances academic achievement.

2.5 SUMMARY

This chapter has considered how the classroom climate influences academic achievement of the senior secondary learners. In the attempt to achieve academically, learners assign meaning through active involvement in classroom activities. The assignment of meaning, involvement and experience have been identified both as essences of as well as preconditions for academic achievement. In addition, this chapter has also emphasized that the classroom is a setting where learners potential are realized. For this reason, the educator's role in creating positive classroom climate that may influence learner's academic achievement cannot be ignored.

To Nielsen (1992:3), positive classroom climate is where the atmosphere is conducive to teaching and learning, where everyone who has interest in the school expresses pride in it, where learners are given maximum opportunities to learn and there are high expectations for learners to achieve.

It is so far abundantly clear that the establishment of a learning climate sets the tone for everything else that is connected with the learners academic achievement. By creating the proper climate for learning everything else should follow. To create a learning climate simply means to create a climate for academic achievement. The establishment of a learning climate is therefore a fundamental prerequisite for academic achievement. In this research the writer would like to define a learning climate as follows: It is an atmosphere characterised by order, discipline, safety and respect in the classroom (where educators truly teach and learners truly learn), which is conducive to orderly learning, inculcates a work ethic, fosters a sense of loyalty and devotion to the learning process and in which everything culminates in commendable academic achievement at school.

CHAPTER THREE

The Research Design

3.1 Introduction

In psychology of education the main concern is the child as a person. The child as a person embraces his capabilities, weaknesses and all the factors that influence him to behave in a specific manner (Oosthuisen, 1991:167). For this reason, the focus of this study is on influence of classroom climate on academic achievement of senior secondary learners in the Amajuba District (Newcastle), Kwa Zulu Natal. To enable the researcher to investigate the problem, the quantitative research method will be applied.

The aim of this chapter therefore is to indicate the research design to be applied. Research design includes statement of the research problem, methods of research, data-collection strategies and data analysis techniques. The questionnaire will be used as data collection strategy.

3.2 The research problem

The researcher has been perturbed by the high failure rate in some schools in Amajuba District, Phumelela Ward (Newcastle Circuit), Kwa Zulu Natal Senior Secondary schools. For this reason, the researcher wishes to investigate influence of classroom climate on the academic achievement of Secondary School learners.

3.3 Demarcation of the research design

To enable the researcher to investigate the research problem, variables must be identified (Jacobs 1992:15). According to Mulder (1989:45), a distinction between different kinds of research is usually made. De Meillon (1991:178), describes a variable as a factor that can influence or be influenced in the research. From the statement of the research problem, dependent and independent variables can be identified as relevant to the study.

Tuckman (1994:58-59), regards an independent variable as a factor or input which operates either within people or outside in their environment to affect their behaviour. Bailey (1987:46), further explains that it is that factor which is selected or

manipulated by the researcher to determine its relationship to an observed phenomenon.

In this study, the independent variables are the classroom climate factors that might influence the academic achievement of secondary school learners in Newcastle.

Tuckman (1979:59), defines a dependent variable as a response variable. He explains that it is an observed aspect of the behaviour of an organism that has been stipulated. Bailey (1987:46), explains it as the factor that is observed and measured to determine the effect of the independent variable. In this study the academic achievement of senior secondary learners in Newcastle serves as the dependent variable.

3.4 Research Method

3.4.1 Quantitative Research Methodology

The quantitative research methodology was selected, which endeavours to quantify the results in terms of numbers, Mouton and Marais (1990:153-167), compare the qualitative and the quantitative approaches by indicating the main differences between them. According to them (1990:155-156), the quantitative approach is "highly formulised... explicitly controlled, with a range that is more exactly defined ...in contra-distinction, qualitative approaches are...not as strictly formulised, while the scope is more likely to be undefined and a more philosophical mode of operation is adopted."

The quantitative approach is objected and the pre-planned observation which may be scalable. During the quantitative approach the context may also be controlled (Mouton & Marais, 1990:162-163). In this study the quantitative approach was followed.

For purposes of this research information was obtained through quantitative measures (structured questionnaire) (Husen, 1997:16-17). The data for this research was obtained from educators' responses to the questionnaire. These educators based their responses on their perceptions or opinions of teaching grade twelve learners in secondary schools in Newcastle.

3.4.2 Procedures followed in the development and testing of the instrument

This section deals with the method of investigation and procedures followed in the development of the questionnaire.

Step One – Compilation of items

Literature review enabled the researcher to compile questions suitable for the problem.

Step two - Categorising of items

The questions compiled above with the help of the literature review were categorised into the following broad areas pertaining to the classroom climate:

- Organisation of learning space
- Learner involvement
- Discipline.

Step three – Development of the questionnaire

The draft instrument was developed from the items categorised above. It was decided that the draft instrument would take the form of a self-report instrument. The motivation for using a self-report measure was because it allows anonymity. More candid response can be obtained when using a self-report measure as opposed to a personal interview (Avery & Walker, 1993:27). This type of questionnaire was also regarded as the most appropriate for scoring purposes.

The design of self-report instrument is in line with the Likert Scale design, which uses a range of items, or statements to which subjects are required to respond. This is the easiest because respondents are asked to respond by indicating their degree of agreement or disagreement (Babbie, 1998:183).

3.4.3 Formulation of items

It was decided that the self-report instruments be re-formatted into a series of short statements. It was also discovered that respondents may have a tendency of misinterpreting questions. As a result some guidelines when formulating the items by Babbie (1998:148-152), were considered. These are listed as follows:

- Items must be simple, clear and direct

- Each statement should contain only one complete thought.
- Double barrelled questions should be avoided
- The use of statements that involve double negatives should be avoided.
- Questions should be relevant.
- Items must be short.
- Items that are "vague modifiers" need to be avoided.
- Respondents must be competent and willing to answer.

3.4.4 Reliability and Validity

McMillan and Schmacher (1993: 385), define reliability as, "the extent to which independent researchers could discover the same phenomena and to which there is agreement on the description of the phenomena between the researcher and participants." Hence, the researcher strove for consistency within the research strategies used.

The researcher ensured that all questions were asked without biasing any of the participants' responses. All the data were collected, analysed and interpreted in the same way immediately after each ethnographic interview. According to Vockell (1983:47), "the most important characteristic of a test is validity." Hence, in this research study the researcher continuously examined whether or not the measurements strategies were really measuring what it purported to be measuring. The aim of this research study was to gain insight into influence of classroom climate on academic achievement of Secondary School learners.

3.4.5 Method of Research

3.4.5.1 The selection of schools and respondents

As suggested by the research design the study was limited to four schools and the respondents, constituted as follows: ten grade twelve educators from each school.

The educators were selected purposefully from four senior secondary schools in the Amajuba district of Newcastle.

The instrument was applied in a natural school environment in four secondary schools in the Amajuba District of Kwa-Zulu Natal. These schools were selected because they were deemed to represent learners from all backgrounds and different environmental up-bringing. The researcher was also based in this area and had access to these schools. Thus this was a convenient sampling method. The criterion used, are that these learners were in the grade twelve class in 2004 and the educators were teaching them during 2004. The school, learners, and educators have been chosen due to their accessibility by the researcher.

3.4.5.2. Study Population

The study population was drawn from secondary schools that were purposefully selected based on the following criteria:

- Schools that achieved 100% pass rate and the other 33% in 2004 matric examination
- Schools that use English as medium of instruction to teach learners from a previously disadvantaged community whose mother tongue was Zulu

Although the study sample was from four secondary schools, this was considered sufficient as the quantitative design allowed the researcher to obtain information rich data on the phenomenon studied.

The study concentrated on the Phumelela Ward of Amajuba district (Newcastle Circuit) of KZN province. This district was ranked third of the four districts within the province in terms of the matric results of year 2004 (Kwa Zulu Department of Education matric 2004 results ranking of districts).

3.4.5.3 Sample

3.4.5.3.1 The description of the research sample

A researcher may administer a questionnaire to gain information or collect data about a particular group of persons, for example black matric learners, as in the case of this study. In this study, therefore, black matric learners have become the target group that is also termed the population of study (Tuckman, 1994:226). According to Mulder (1989:53), population refers to a group similar with respect to one or more characteristics as defined by the researcher.

Since it is an almost impossible task to include the whole population concerned in this investigation, the researcher took a sample from the population and executed her research with it. A sample is a group which is selected from a population and is thus less than the population, while remaining as representative of the population as possible. The sample is selected to give the researcher a manageable group for the purpose of research. If the sample is representative of the population, results or conclusions from research with the sample will also pertain to the population (Tuckman, 1994:226; Mulder, 1989:55). All learners mother tongue is Zulu and they had to write six compulsory subjects in the final examination and all learners were exposed to English as a medium of instruction.

The research sample was drawn from matric learners of Phumelela Ward of Amajuba District in Kwa-Zulu Natal. The sample comprised Grade 12 learners and educators of the four selected secondary schools.

3.4.5.3.2 Sample of learners

The sample of learners was taken from grade twelve. The researcher felt that at this stage each learner had spent enough time in the school for confirmed observations by educators and for a track record to have been established.

3.4.5.3.3 Sample of educators

Ten grade twelve educators from each school were purposefully selected. The educators' sample was heterogeneous, both male and female educators, and all subject areas were represented.

Table 3.1

**Senior Certificate Examination Results Of Amajuba District In
Newcastle Circuit: 2000 -2004**

Year	Provincial Pass Rate	Regional Pass Rate	District Pass Rate
	Kwa-Zulu Natal	Ukhahlamba	Amajuba
2000	57.6%	53.16%	
2001	62.8%	57.81%	
2002	70.8%	60.58%	
2003	77.5%	73.32%	80.22%
2004	73.9%	65.09%	74.63%

Table 3.2

Comparative Pass Rates Of Regions

REGION	2003	2004
Ethekwini	82.32%	77.44%
Umgungundlovu	80.42%	72.78%
Ukhahlamba	73.32%	65.09%
Zululand	71.68%	64.35%

Table 3.3**Amajuba District (Phumelela Ward)****Rank Order Of Matric Exemptions**

	2003			2004			
CENTRE NAME	Cand. Passed	No of ME's	% of Total	Cand. Passed	No of ME'S	% of Total	2004 Rank Order
Islamic College	10	8	80	11	8	66.67	2
Ferrum High	142	49	34.51	164	71	43.29	7
Amajuba Hoer	33	12	36.36	42	14	33.33	9
Charlestown High	19	5	26.32	25	4	16.00	22
Hope High	76	11	14.47	100	13	13.00	26
Siyalungelwa	18	1	5.55	27	3	9.09	31
Panorama High	74	4	5.41	40	4	3.28	51
Totals for Amajuba District	4054	852	21.02	4506	928	20.59	

Table 3.4 Amajuba District Phumelela Ward In Newcastle Circuit(KZN)**Rank Order And Comparison: Grade 12 results: 2002-2004**

		2002	2003	2004
SCHOOL	WARD	% PASS	% PASS	% PASS
Amajuba Hoer	Phumelela	100	100	100
Ferrum High	Phumelela	99.14	100	100
Hope High	Phumelela	100	100	100
Charlestown High	Phumelela	26.53	82.61	100
Islamic College	Phumelela	100	100	91.67
Siyalungelwa Secondary	Phumelela	96.67	75.00	81.82
Panorama High	Phumelela	66.91	69.16	32.79

3.4.6 Data collection strategies

The research consisted of two phases. The first comprised the study of official documents from the Department of Education, in order to examine the previous matric results for 2004. The second phase consisted of an examination of the responses to the questionnaires. The following procedure was followed:

- The principal was informed about the purpose of the empirical study.
- The grade 12 educators in each school were asked to help the researcher facilitate the project by completing the questionnaire.

This procedure was followed to make sure that all grade 12 classes in each school were represented and involved. The researcher was personally involved in the administration of the instrument in order to clarify misunderstanding. The questionnaire was handed to each educator individually. The questionnaire sought the opinions or perceptions of educators. The opinions or perceptions, were then quantified and then became the data for this study.

3.4.7 Summary

The basic aim of this research was to determine the influence of classroom climate on academic achievement of learners in secondary schools. This has lead to the exploration of several aspects of the classroom climate. All the previous chapters probed this problem through the study of literature. In this chapter the problem is subjected to an empirical investigation. The researcher gives a detailed description of the empirical investigation of the topic. In chapter one it was postulated that there is a relationship between the classroom climate and academic achievement. This hypothesis was tested by means of data obtained from grade 12 educators of the sample schools. Thus the information for this study was sourced from the perceptions of these educators.

CHAPTER FOUR

Analysis; interpretation of data and discussion of results

4.1 Introduction

The fundamental purpose of this research is to establish whether a relationship exists between the establishment of a positive classroom climate and academic achievement, in other words whether the establishment of a positive classroom climate is a sine qua non for academic achievement. This problem has been probed in-depth in the previous chapter.

Thus the primary purpose of this thesis, which has been repeatedly stated in this study, is to research whether the establishment of a positive classroom climate is a prerequisite for academic achievement or not. The researcher wants to establish whether there is a correlation between a classroom climate and academic achievement and to what extent a classroom climate can influence academic achievement. The study focuses on the influence of classroom climate on the academic performance of matric learners. The overriding aim is to find out whether failure of matric learners which has been experienced country-wide for a couple of years can be attributed to the lack of a positive classroom climate or not. The aims of the investigation focused on organization of learning space; learner involvement and classroom discipline. In order to achieve the above, the researcher investigated effects of classroom climate on academic achievement. The investigation was done firstly through the study of literature and secondly through empirical research.

4.2 Data Analysis

This chapter discusses the research findings on the influence of classroom climate on academic achievement in secondary schools. A collaborative integration of the respondents' data is presented and certain correlations with the literature study of this research are made as the constituents or patterns emerge.

Stern (1995: 29-30), states that teaching should mean to "give all learners equal opportunities." However, the lack of organization of learning space; lack of learner involvement and lack of classroom discipline may impact negatively on all learners being given equal opportunities to learn and this will have a detrimental result on learners' academic achievement. The following constituents or patterns emerged from

the analysis of data gathered at the schools in the Amajuba District as factors contributing to poor academic achievement, namely:

A non-conducive classroom climate to teaching and learning exists at schools where learners did not achieve academic success as a result of:

- **Lack of organisation of learning space to facilitate learning:**
 - Limited physical space in the classrooms.
 - Limited individual learner attention in the overcrowded classes.
 - The lecturing method was continuously used by the educators.
- **Lack of learner Involvement**
 - Neglected group-work sessions.
 - Minimum learner involvement in classroom activities.
 - The language proficiency barrier with regard to English second language speakers was evident.
 - Neglected learner participation in discussions during lessons.
- **Lack of classroom discipline**
 - High levels of noise and disruption were encountered.
 - Educators exhibited a lack of personal interest in each learner.
 - Lack of a supportive relationship between educator and learner prevailed.

Analysis of research data and according to researchers Christenson and Anderson (2002), the following factors facilitate learners' academic achievement:

- **Organisation of Learning space**
 - Learners success is enhanced when educators establish an academically demanding classroom that has clearly defined objectives, explicit instructions, and an orderly and efficient organization of learning space.
- **Learner Involvement**
 - **Opportunity to Learn:** Learner success is facilitated when youth are provided with various tools for learning such as: varied teaching strategies, and time to practice/master new skills in individual and group-work.

- **Relationships:** The amount of warmth and friendliness; praise and recognition, and the degree to which the educator-learner relationships are positive and respectful also influence academic achievement of learners. These relationships are facilitated by cooperative, accepting classroom climates.
 - **Support:** Progress is facilitated when educators provide frequent verbal support and praise, provide the learners with regular, explicit feedback, talk directly to learners about schoolwork and activities, provide autonomy and supportive environments, and teach problem-solving and negotiation skills. It is what educators do on an ongoing basis to enhance the learners academic success.
- **Discipline**
 - Learners' success is facilitated when educators provide a consistent pattern of events and age appropriate monitoring and supervision (e.g., proactive classroom management). Learners perform better in classroom when they understand their schedule of daily activities, directions for schoolwork, and rules for behaviour.

Establishing a positive classroom climate that enhances academic achievement of Secondary School Learners

Research supports the view that the climate of a particular classroom dictates the rules of the classroom. It affects the nature of human interaction and relations as well as the motivation and commitment of learners in classroom. The classroom climate consists of what people believe about what works and what does not, and how educator and learners should treat one another. Thus a positive climate provides an enriching environment for learners to achieve academic success.

Academic emphasis is an integral part of a positive classroom climate. Thus a positive classroom climate is characterized by the learners' commitment to learn and the educators ability and commitment to teach. Educators can make a tremendous contribution toward the establishment of a positive classroom climate because the education of the learners in the classroom is in their hands. For effective teaching to take place the educator should be well-organized and have a well managed classroom since these would make learners feel the need for learning.

The creation of a positive classroom climate has been found to have a tremendous effect on academic achievement. This is so because in such an atmosphere teaching and learning enjoy maximum support. The class becomes a safe and happy place for educators to teach and learners to learn. To create such a climate the educators will have to show supreme commitment to their work. They will have to ensure that the classroom has clear and consistent rules and policies that reinforce educator authority and promote academic excellence. There should be clearly defined values, norms, goals and a mission which channel all learners in the direction of successful learning. The classroom climate should foster an orderly, safe and disciplined environment in which academic pursuits are never disrupted. Learners should be made to see the need to attend school regularly and on time and to be engaged in academic activities. Educators should demonstrate explicitly to the learners that they care for them since this can likely win their co-operation in academic endeavours.

In order to establish a classroom climate to enhance academic achievement all possible distractions which may interfere with teaching and learning should be kept to the absolute minimum or be simply eliminated. To achieve this the educator will have to ensure that things do not just happen in his classroom. Since educators go to classrooms to teach and educate, and learners to learn, nothing should be allowed to interfere with these fundamental goals. Brookover (1982:84), stated that the primary goal of the classroom's instructional programme is high academic achievement, other activities should facilitate and not displace this ultimate goal.

4.3 Interpretation of Results

4.3.1 Factor Analysis

Factor analysis was computed to determine the underlying groupings/themes. Three sets of factor analyses were computed using the data from the questionnaires: For the 1st (organisation of learning space) factor analysis, items 1.1.1 to 1.3.8 were input. The rotated component matrix indicates which items correlate highly. Component 1 comprises items from 1.3. Component 2 comprises items from 1.2 and Component 3 comprises items from 1.1. In summary, the factor analysis indicates that items 1.1.1 to 1.3.8 can be grouped into 3 themes – the first

theme/factor relates to 1.1 seating arrangements, the second to 1.2 educator-learner ratio and the third to 1.3 educator-learner interaction, (refer to table 4.1).

For the 2nd (learner involvement) factor analysis items 2.1.1 to 2.1.6, 2.2.2 to 2.3.7 were input. Again the rotated component matrix indicates 3 themes relating to groupwork; medium of instruction and teaching strategies, (refer to table 4.2).

For the 3rd (discipline) factor analysis, items 3.1.1 to 3.3.10 were input. Again the rotated component matrix indicates 3 themes relating to classroom behaviour, classroom management strategies and extrinsic motivation, (refer to table 4.3).

Table 4.1 Factor Analysis: Organization of Learning Space

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	698.259
	df	171
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.993	31.544	31.544
2	4.427	23.299	54.843
3	3.732	19.645	74.487

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component		
	1	2	3
B1.3.5	.903	.228	.192
B1.3.4	.903	.257	.210
B1.3.1	.880	.161	.197
B1.3.3	.820	.184	.276
B1.3.2	.818	.137	.296
B1.3.7	.685	.332	.346
B1.2.5	.619	.192	.518
B1.1.2	.514	.391	.443
B1.2.4	.171	.820	.208
B1.2.1	-.053	.782	.375
B1.3.8	.419	.711	.124
B1.2.3	.157	.661	.464
B1.2.2	.340	.659	.305
B1.1.1	.464	.655	-.061
B1.1.5	.218	.563	.517
B1.1.3	.341	.102	.822
B1.1.6	.280	.390	.787
B1.1.4	.290	.464	.631
B1.3.6	.490	.382	.627

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Table 4.2 Factor Analysis: Learner Involvement

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.691
Bartlett's Test of Sphericity	Approx. Chi-Square	687.821
	df	210
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.979	28.472	28.472
2	4.821	22.957	51.429
3	2.259	10.758	62.187
4	1.917	9.128	71.315

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component			
	1	2	3	4
B2.1.4	.904	-.179	-.040	.106
B2.1.3	.845	-.253	.141	.096
B2.1.1	.801	-.330	-.019	.002
B2.1.5	.793	-.016	.345	.182
B2.1.6	.781	.010	.300	.163
B2.3.3	.693	-.027	.394	.439
B2.1.2	.675	-.396	.328	.123
B2.3.4	.637	-.377	.449	.240
B2.3.5	.604	-.456	.473	.163
B2.2.8	-.065	.807	-.162	.042
B2.2.3	-.032	.794	.120	-.137
B2.2.7	-.227	.765	-.276	.069
B2.2.9	-.082	.741	-.360	.008
B2.2.6	-.279	.681	.172	.071
B2.2.5	-.146	.655	-.018	-.274
B2.2.10	-.107	.608	-.047	-.464
B2.2.4	-.316	.584	-.002	-.118
B2.3.6	.249	.037	.781	.133
B2.3.7	.540	-.228	.607	.053
B2.3.1	.135	-.044	.052	.875
B2.3.2	.463	-.186	.282	.651

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 4.3 Factor Analysis: Discipline

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.657
Bartlett's Test of Sphericity	Approx. Chi-Square	1117.011
	df	325
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	9.098	34.992	34.992
2	4.823	18.549	53.541
3	2.777	10.681	64.222
4	2.763	10.628	74.850
5	1.521	5.849	80.700

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
B3.3.3	.885	-.156	.161	.086	-.017
B3.3.5	.860	-.228	.085	.076	.149
B3.3.7	.860	-.225	.186	.165	.152
B3.3.10	.858	-.330	.061	.143	-.058
B3.2.7	.843	-.148	.040	.168	.127
B3.3.6	.839	-.371	.028	.189	.089
B3.3.9	.802	-.316	.023	.363	-.037
B3.3.4	.794	-.161	.305	.140	.181
B3.3.8	.755	-.435	.039	.227	-.071
B3.2.6	.700	-.279	.031	.378	.151
B3.3.2	.697	-.93E-05	.248	.295	-.172
B3.3.1	.606	-.043	.265	.418	-.460
B3.2.3	.527	-.192	.333	.345	.278
B3.1.3	-.202	.859	-.058	-.160	.124
B3.1.4	-.234	.835	.078	-.243	.054
B3.1.2	-.251	.815	-.122	-.025	-.246
B3.1.1	-.099	.780	-.358	.011	-.280
B3.1.6	-.416	.753	.201	-.166	.142
B3.1.7	-.538	.676	.239	.058	.015
B3.2.1	.054	.002	.877	-.125	-.153
B3.2.2	.313	-.014	.848	-.041	-.172
B3.2.9	.386	-.097	.584	.350	.249
B3.2.5	.330	-.163	.012	.790	.110
B3.2.4	.434	-.068	-.064	.780	.166
B3.1.5	-.071	.474	.493	-.606	.040
B3.2.8	.204	-.026	-.194	.237	.856

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

4.3.2 Reliability

The purpose of the reliability tests was to test the reliability of the data. Cronbach's alpha was calculated for items in question 1, then question2 and finally question 3. In all 3 calculations, the value of alpha is above 0.7. Data shown in Table 4.4 to Table 4.6 indicates a high degree of internal consistency and stability amongst the items that were input.

Table 4.4 Reliability: Organization of learning space

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B1.1.1	40.0750	194.8404	.5997	.9547
B1.1.2	40.2250	190.2301	.7483	.9525
B1.1.3	40.0000	191.2308	.6614	.9539
B1.1.4	40.3000	189.0872	.7493	.9524
B1.1.5	40.4750	191.3327	.6953	.9533
B1.1.6	40.6000	187.4256	.7808	.9519
B1.2.1	39.8000	197.6000	.5697	.9550
B1.2.2	39.9250	193.1481	.7197	.9529
B1.2.3	40.2500	192.3462	.6882	.9534
B1.2.4	40.6000	188.9641	.6468	.9545
B1.2.5	40.8250	193.1224	.7391	.9527
B1.3.1	41.1750	194.5071	.7174	.9531
B1.3.2	41.3000	199.8051	.7162	.9538
B1.3.3	41.1750	196.7122	.7351	.9531
B1.3.4	41.0750	188.8917	.7980	.9517
B1.3.5	41.1500	190.9513	.7703	.9522
B1.3.6	40.5500	186.2538	.8298	.9511
B1.3.7	40.6750	188.0712	.7748	.9520
B1.3.8	40.6750	189.6609	.7042	.9532

Reliability Coefficients

N of Cases = 40.0

N of Items = 19

Alpha = .9554

Table 4.5 Reliability: Learner Involvement

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B2.2.3	53.7000	51.6000	.1931	.7138
B2.2.4	53.6750	56.0199	-.1016	.7441
B2.2.5	54.3750	54.8045	-.0087	.7299
B2.2.6	54.1250	53.6506	.0248	.7345
B2.2.7	54.3000	55.2410	-.0379	.7318
B2.2.8	54.0500	53.1769	.1405	.7160
B2.2.9	54.1000	54.7590	.0031	.7274
B2.2.10	54.1000	54.7077	-.0224	.7360
B2.3.1	53.6750	52.4301	.2379	.7086
B2.3.2	53.4250	50.3532	.4505	.6939
B2.3.3	53.3000	48.4718	.7116	.6781
B2.3.4	53.7000	48.3179	.4550	.6885
B2.3.5	53.7250	49.1788	.3866	.6951
B2.3.6	53.1750	51.2250	.4476	.6968
B2.3.7	53.5750	48.3532	.4737	.6873
B2.1.1	54.0000	50.1026	.3662	.6978
B2.1.2	53.6500	48.6436	.4081	.6927
B2.1.3	53.4000	48.8615	.5065	.6868
B2.1.4	53.4250	48.5583	.5226	.6851
B2.1.5	53.1750	47.8917	.7044	.6754
B2.1.6	53.3500	47.3615	.6735	.6740

Reliability Coefficients

N of Cases = 40.0

N of Items = 21

Alpha = .7156

Table 4.6 Reliability: Discipline

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B3.1.1	66.1750	101.5327	-.1708	.8444
B3.1.2	66.2500	101.9872	-.2068	.8439
B3.1.3	66.1000	101.3231	-.1530	.8458
B3.1.4	65.9000	101.6308	-.1706	.8458
B3.1.5	65.6250	99.5224	-.0647	.8434
B3.1.6	65.9000	103.2718	-.2496	.8494
B3.1.7	65.9500	104.1513	-.2954	.8508
B3.2.1	64.9000	94.7590	.2443	.8288
B3.2.2	64.7500	92.6026	.4799	.8216
B3.2.3	65.2500	89.2179	.6132	.8156
B3.2.4	65.5750	90.7122	.5337	.8188
B3.2.5	65.7000	91.8051	.4560	.8215
B3.2.6	65.7250	87.3840	.6328	.8133
B3.2.7	65.6500	85.9769	.7167	.8097
B3.2.8	66.4250	95.4301	.1880	.8310
B3.2.9	65.1750	90.0968	.5884	.8170
B3.3.1	65.0500	89.5359	.6194	.8158
B3.3.2	64.8750	89.8558	.6948	.8149
B3.3.3	65.0500	86.1513	.7636	.8088
B3.3.4	65.2250	86.1276	.7774	.8085
B3.3.5	65.4000	86.8103	.7214	.8105
B3.3.6	65.4250	87.3788	.6779	.8122
B3.3.7	65.3000	83.9077	.7822	.8056
B3.3.8	65.5250	88.5122	.5891	.8155
B3.3.9	65.4000	86.0410	.6954	.8103
B3.3.10	65.4500	86.5103	.6792	.8112

Reliability Coefficients

N of Cases = 40.0

N of Items = 26

Alpha = .8302

4.3.3 Correlations

The correlation table indicates how the themes or factors are related to each other. Significant relationships are where $p < 0.05$. Direct relationships are where the Pearson r value is positive. Indirect relationships are indicated by a negative r value. Strong relationships are where r is greater than 0.7

Table 4.7 Significant Correlations

Correlations										
		B1.1	B1.2	B1.3	B2.1	B2.2	B2.3	B3.1	B3.2	B3.3
B1.1	Pearson r	1	.863**	.815**	-.693**	.729**	-.571**	.707**	-.362*	-.544**
	p	.	.000	.000	.000	.000	.000	.000	.022	.000
	N	40	40	40	40	40	40	40	40	40
B1.2	Pearson r	.863**	1	.715**	-.614**	.659**	-.485**	.722**	-.224	-.505**
	p	.000	.	.000	.000	.000	.001	.000	.165	.001
	N	40	40	40	40	40	40	40	40	40
B1.3	Pearson r	.815**	.715**	1	-.723**	.661**	-.704**	.736**	-.518**	-.692**
	p	.000	.000	.	.000	.000	.000	.000	.001	.000
	N	40	40	40	40	40	40	40	40	40
B2.1	Pearson r	-.693**	-.614**	-.723**	1	-.471**	.796**	-.528**	.720**	.838**
	p	.000	.000	.000	.	.002	.000	.000	.000	.000
	N	40	40	40	40	40	40	40	40	40
B2.2	Pearson r	.729**	.659**	.661**	-.471**	1	-.496**	.584**	-.164	-.348*
	p	.000	.000	.000	.002	.	.001	.000	.313	.028
	N	40	40	40	40	40	40	40	40	40
B2.3	Pearson r	-.571**	-.485**	-.704**	.796**	-.496**	1	-.571**	.816**	.820**
	p	.000	.001	.000	.000	.001	.	.000	.000	.000
	N	40	40	40	40	40	40	40	40	40
B3.1	Pearson r	.707**	.722**	.736**	-.528**	.584**	-.571**	1	-.450**	-.571**
	p	.000	.000	.000	.000	.000	.000	.	.004	.000
	N	40	40	40	40	40	40	40	40	40
B3.2	Pearson r	-.362*	-.224	-.518**	.720**	-.164	.816**	-.450**	1	.820**
	p	.022	.165	.001	.000	.313	.000	.004	.	.000
	N	40	40	40	40	40	40	40	40	40
B3.3	Pearson r	-.544**	-.505**	-.692**	.838**	-.348*	.820**	-.571**	.820**	1
	p	.000	.001	.000	.000	.028	.000	.000	.000	.
	N	40	40	40	40	40	40	40	40	40

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.4 Analysis of Statistical Data relating to Correlations between classroom climate and academic achievement

The table below shows significant correlations exist between matric pass rate and all the dimensions except B3.2. The correlations are significant since $p < 0.05$.

Correlations with B1.1, B1.2, B1.3, B2.2 and B3.1 are inversely proportional. This means that schools with low pass rates tended to have higher scores for B1.1, B1.2, B1.3, B2.2 and B3.1. Directly proportional correlations are with B2.1, B2.3

Table: 4.8 Correlations – Classroom Climate Variables and Academic Achievement

Matric Pass Rate			
	Pearson r	p	N
Matric pass rate	1	.	40
B1.1 Seating arrangements	-.651**	.000	40
B1.2 Educator-Learner Ratio	-.810**	.000	40
B1.3 Educator-Learner Interaction	-.577**	.000	40
B2.1 Group work	.520**	.001	40
B2.2 Medium of Instruction	-.451**	.004	40
B2.3 Teaching Strategies	.447**	.004	40
B3.1 Classroom Behaviours	-.659**	.000	40
B3.2 Classroom Management Strategies	.272	.089	40
B3.3 Extrinsic Motivation	.536**	.000	40

** Correlation is significant at the 0.01 level (2-tailed)

4.4.1 Hypothesis One: Organization of learning space

Hypothesis one is accepted because there is a positive correlation between organization of learning space in classrooms and academic achievement of Secondary school learners.

According to the analysis of data, the educator respondents indicated that the physical space was limited and there were too many learners in their classes. This had an adverse effect on every class activity and learners academic achievement.

4.4.1.1 Seating Arrangements

Analysis of data indicates that, due to the very limited classroom space, it is impossible to create a classroom climate that is conducive to learning and teaching. Due to the limited space, the ideals of individualized attention would be difficult to attain. The educator respondents data reiterates that frequent educator-learner interaction is an unattainable ideal in classrooms with large educator-learner ratios (i.e. overcrowded classes). Furthermore, the limitation of space drastically affects educators methods of teaching. Due to the overcrowded conditions and the resultant limited space, the educator respondents reported that their learners' desks or tables were arranged in rows. The educator respondents indicated that this desk arrangement results in them using a mass audience lecturing method.

In order for educators and learners to be actively involved in the learning situation, spacious venues with fewer learners are required. Educators and learners would then be able to interact with each other and the educators would be able to reach all the learners easily and quickly. Limited space in overcrowded classes is clearly detrimental to the learning situation. The data indicates that the learners' achievement of academic success would be more easily attainable in classrooms where the physical space is not limited (i.e. sufficient space for educators and learners to move easily); where enough individual learner space is available and where major distractions are minimized thereby contributing to an effective classroom climate that enhances academic achievement.

If there were adequate classroom space and fewer learners per classroom, all the learners would be afforded equal opportunities to become more involved in the classroom activities. In this way the learners' academic achievement could be

improved upon. Analysis of research data indicates that classes with more than 35 learners produced poor academic achievements.

4.4.1.2 Educator-Learner Ratio

In smaller classes in terms of number, where the educator : learner ratio was less than 1:30, there was more educator – learner interaction which contributed to the establishment of a positive classroom climate that enhanced academic achievement. Overcrowded classrooms negatively affects learning because learners have little contact with educators and there is little or no opportunity for individual attention. The limited space in the overcrowded classes could not allow the learners to become actively involved in the learning material. The educator respondents also indicated that the classroom climate in overcrowded classes where there were more than 35 learners per class, was hindering academic achievement due to minimal learner involvement.

Resolution number 8 of 1996 (Department of Education, 1996), suggests an educator: learner ratio, in secondary schools, of 35 learners per educator by the year 2000. There was an average of 45 learners per class, which reflected an average educator: learner ratio of 1:45 in cramped classrooms with limited physical space. These classes were overcrowded. In all the overcrowded classes, the desks were arranged in rows in order to fit as many desks in a classroom as possible. All the desks faced forward and there were no open spaces between the desks, nor was there enough space in the overcrowded classes for the educator to arrange the desks in a suitable way for learners to participate in learning activities or engage in group discussions. This correlates with Kohn's (1996: 55), findings on classroom climate not conducive to learning and teaching. The climate in these overcrowded classes appeared to be very institutionalised and unsocial.

In overcrowded classrooms the physical space per learner is limited to such an extent that some of the learners can not move freely in their shared desks. When entering or leaving the classroom, not all the learners can move freely from the back to the front of the classroom as there are too many desks and learners, which result in restricted movement. This causes learners to push each other around and cause an increase in the noise level. In classrooms where the educator-learner ratio is greater than 1:35, the educators work with the class as a whole, all learners do the same work at the same time and the learners have very little or no direct contact with

the educator. This contributes to a negative classroom climate that hinders achievement of academic success in Secondary schools.

Research indicates that the small classes support the establishment of a positive classroom climate. Small classes create a climate that provides every learner with enormous opportunities for exposure and recognition and this has a positive effect on his academic achievements.

Small classes encourage a closer educator-learner relationship, reduce the educator's workload and create a greater opportunity for educator-learner activities (Green & Stevens 1988: 11). Educators of small classes are more confident about their class management because learners are fewer and quieter, their workload is lighter and educator interaction reaches all learners. Educators are able to spend enough time with each learner and to keep track of individual progress. In this way the small class encourages individualised teaching and more concern for the learners. Learners pay more attention to their work because each is more likely to be involved or to get a turn more often during every lesson. Educators of small classes are more likely to assign learners enough homework because they will have time and resources to attend to it. In a small class the learners' ability to pay attention to their studies is enhanced because of the less hectic instructional atmosphere that makes them develop a positive attitude that promotes academic achievement.

Learners in overcrowded classes, where they cannot always hear the educator, may experience a lack of concentration, which could lead to poor academic achievement. Learners may also experience problems in understanding the learning material. All learners should be able to easily read what is written on the board and be able to copy it down. In overcrowded classes this is a problem that the learners cannot cope with. It can lead to learners becoming frustrated and bored, which, in turn, has adverse disciplinary implications for the class as a whole.

4.4.1.3 Educator-Learner interaction

The lecture commonly eliminates the feedback the educator might get from his learners as he lectures, since he cannot see their faces, respond to their questions,

or sense the classroom climate; eliminates the question and answer or critique periods, where the learner could solicit elaboration, expansion, and clarification of points raised; eliminates the feeling of a close contact between the learner and the educator; eliminates the dynamic quality of an educator who is grappling with an issue, who is willing to change his mind in mid-lecture, and who is willing to speculate in anticipation of learner questions (Hyman, 1974).

For classroom interaction to simulate a free conversation, the following characteristics of naturalness in conversation would have to be met:

- The climate must not be an institutional one
- The learners should be free to converse.
- Responsibility for controlling and monitoring the progress of the discussion must be shared by all learners.
- Conversations are open-ended and participants jointly decide on the topic (Seedhouse, 1996:18)

In overcrowded classes where participation is almost non-existent, the creation of a positive classroom climate seemed to be an impossibility. The high noise and disruption levels in overcrowded classes, together with a poor classroom management system, appeared to be a good recipe for a classroom climate where disrespect rules. Learners also need to feel worthy and to be given the opportunity to interact with the educators during the lessons. Educators who spent time with individual learners also enquire about the learner's overall well-being. In overcrowded classes this is not possible and the adverse effects thereof are clear from the limited success in academic achievements.

One would expect that because learners are unique, the needs of individual learners should be considered and individual attention given to those who need it. The educators support towards learners, is very important to the learning process. A positive educator-learner interaction implies the educator moves around the class to guide and assist learners experiencing difficulties. This builds a positive classroom climate where learners feel happy, safe and secure. In such environments learners thrive. Learning cannot take place in an environment where young people are always in fear of being ridiculed by educators or their peers.

According to analysis of research data, the educator respondents indicated that when teaching in classrooms with more than 30 learners they experienced the following problems that inhibits educator-learner interaction which is necessary to promote academic achievement of learners:

- educators cannot engage in face to face conversation with individual learners;
- classroom is not open, flexible and democratic;
- teaching occurs with learners asking or answering very few questions and the educator teaches at the front, centre of the classroom;
- all learners cannot be involved in the learning process and the educator cannot move around the class to assist and guide learners experiencing difficulties.

Tlale (1991:18), states that "educators who express negative expectations, usually find that these expectations are fulfilled." Negative commands damage the self-concept and confidence of the learners and stop them from learning.

Research data indicates that all the learners do not receive adequate individual attention from the educator in the overcrowded classes. The educators do not spend equal time with all the learners who experience some difficulty with the learning material.

Clearly, overcrowded classes are not conducive to attaining the required learning outcomes. The question is seriously posed by the researcher whether learners, who originated from the previous dispensation and have fallen behind academically, will be able to attain the admirable ideals of academic success in these overcrowded classrooms.

4.4.2 Hypothesis two: Learner Involvement

Hypothesis 2 is accepted because there is a significant relationship between learner involvement and academic achievement of secondary school learners.

A classroom climate conducive to learning and teaching was clearly lacking in all the classrooms with poor academic achievement. The learner involvement in all these classes was almost non-existent as the learners hardly took part in the lessons. Learners did not ask many questions and were not asked to perform any tasks which involved group-work, demonstrations, practicals or any constructive face-to-face conversation.

Some learners in the overcrowded classes merely sit and do not appear to be interested in or enthusiastic about the lesson. The educators do not ask the learners to pay attention to the activities in the class, but rather leave them alone. Some learners in these classes arrive late for their lessons and the educators ignore their tardiness.

It is disconcerting that often many learners are uninvolved in the subject matter in their classes. Where already disadvantaged learners are concerned, it is certainly not the ideal for them to feel either ostracised or depersonalised when they have to work by themselves or in groups. It is feared that when learners in overcrowded classes are uninvolved in the learning material, the outcomes and ideals of success in education will in all probability not be achieved.

The researcher found that, for learners to become actively involved in their classes, they need to be able to hear the educator and to see what is written on the board, they should be actively engaged in group work, they should understand the medium of instruction and work ethic which encourages discussions and involvement of learners with learning material. Thus academic achievement is enhanced when a positive climate prevails in classrooms. This could not always be obtained in the overcrowded classes and the learners' academic achievement was adversely affected as indicated by the analysis of research data.

4.4.2.1 Group Work

Many educators previously regarded their role as a transmitter of knowledge, an instructor or evaluator. Others interpreted their role to include managing learners and their behaviour. A smaller number of educators facilitated learning by organising hands-on activity-based learning opportunities. Educators should attempt to get each learner to improve his or her skills, knowledge, values and attitudes. Educators can facilitate learning although they are not directly involved in the learning. Tema (1997:7), describes the role of a facilitator well in the statement: "The educator's role can therefore be compared to that of a soccer coach. He does not offer the same coaching to all the players but provides help that is appropriate to each player, that is, meets the need of the individual player. The coach does not play the game on behalf of the player but attempts to get each player to improve his/her skill."

Educators have to provide a supportive classroom climate orchestrating existing resources in the classroom, school and community. Educators play a key role in the success of learners' learning. The creation of a specific context in which learning outcomes are achieved is important. Educators play an essential role in enhancing academic achievement by creating an enriching classroom climate. Thus group work is recommended to promote effective teaching and learning.

However, group work should be planned well and should serve a specific purpose to ensure that learners will be actively involved in meaningful activities. Group work is not reflected in the way in which the tables, chairs or desks are placed, but rather in the learning activity that the learners are involved in. Groups should not remain static or permanent. The traditional role of educator as a transmitter of knowledge changes to that of a facilitator of learning in order to provide activities where learners can develop their skills and knowledge in order to attain the necessary outcomes. Educators and learners together have to provide for enriched practical learning experiences in the classroom to enhance academic achievement. In education, therefore, change is associated with the incessant striving towards the provision of better quality education for learners. Education should strive ceaselessly towards the optimisation of all its processes, so that these can make a meaningful contribution to all contexts of life with which learners will be associated after school. If education were allowed to stagnate, the status quo to remain unchanged and learners not successfully prepared for a changing world, education would become irrelevant and a nation's whole future would be threatened. According to analysis of research data; learners that did not achieve academic success were not encouraged to engage in group discussions; they did not work co-operatively in groups or engage in problem-centred discussions.

Uninvolved learners are much more susceptible to negative influences. The old saying that the devil makes work for idle hands is applicable here. Involved learners are sometimes given leadership positions that are necessary for their development. Giving learners a responsibility such as being a leader of a group, produces several benefits including improvement in discipline, self-esteem and learning. Thus group work promotes learner involvement in lessons which enhances academic achievement and promotes a positive classroom climate.

4.4.2.2 Medium of Instruction

Seedhouse (1996:16), states: "Recent communication approaches have suggested that one goal of English second language teaching should be to replicate genuine or natural rather than typical or traditional classroom communication. There is a growing body of classroom-based research which supports the conclusion drawn here, that there...are comparatively few opportunities for genuine communicative language use in second language classroom".

Seedhouse (1996:16), confirms that this orthodoxy is still popular. Research studies show that even educators who are committed to communicative language teaching can fail to create opportunities for genuine interaction in the second language classroom. According to Seedhouse (1996), the main assumption of this orthodoxy is that:

- Most educators produce interaction which features examples of the IRF cycle (educator initiation – learner response – educator follow-up) and these are typical of traditional classroom interaction, but rarely occur in genuine or natural communication.

Learners with a language proficiency problem require more individual attention from the educator. However, research data indicate that in overcrowded classes learners did not receive adequate attention and therefore often failed to understand what the lesson was about. This reduces learners' opportunity to achieve academic success.

In order for learners with a language proficiency problem to achieve well academically, they need more opportunity to ask questions and obtain the relevant answers from their educators. During the analysis of data it became evident that not enough individual attention was given to all the learners. This is a serious problem that needs to be tackled. Ideally, all learners should leave school having achieved academic success in the secondary school. This aim is clearly not possible in overcrowded classes where the medium of instruction is not understood and learners are even more neglected.

The educator respondents indicated that there was a large number of learners in overcrowded classrooms with an English language proficiency problem. All the educator respondents reported that these learners did not always understand what was required of them and found that miscommunication became a barrier between the learners and

their educators. The educator respondents indicated that they did not have the necessary time in overcrowded classes to spend with individual learners who experience a language proficiency problem. This obviously contributed to the poor academic results obtained from this group of neglected learners.

According to respondents, there were some learners who clearly did not understand their (the educators') instructions because they did not understand the medium of instruction well enough. It is difficult to teach learners with language proficiency problems in overcrowded classes. These learners merely fall further behind and do not receive sufficient individual attention from the educators in their overcrowded classes. Learners need to understand what is expected of them in class situation and be able to communicate with fellow learners and educators in an acceptable manner. If learners do not understand the medium of instruction, they cannot effectively contribute to the lesson or make themselves understood. These learners could become even more academically and socially neglected and possibly lose interest in school and eventually underachieve in the Grade 12 examinations. The problem of language proficiency in classes is inevitable because the medium of instruction is mostly the learners' second or third language.

Research data indicates that learners who did not achieve academic success experienced language problems; they were not offered bridging classes in the language of instruction and educators did not explain lessons in learners' mother tongue while teaching. Thus explanations by the educator were not sufficient to enable learners to understand subject taught and this contributed to limited participation of learners in discussions during lessons. Problems associated with overcrowded classrooms were exacerbated in English second language classroom because learners did not clearly understand the medium of instruction and they could not contribute effectively to the lesson or make themselves clearly understood. Research data indicates that the medium of instruction plays a significant role in influencing academic achievement of secondary school learners.

4.4.2.3 Teaching Strategies

Due to the monotony created by the lecturing method that was adopted by the educators of overcrowded classes, learners find it difficult to concentrate throughout the whole lesson. The already disadvantaged learners, who stem from the previous

dispensation, require individual attention to ensure their progress. However, this is not the case in overcrowded classes as learners are often left to their own devices that are not sufficient for the attainment of academic success. In overcrowded classes where there is a lack of individual attention from educators, neglected learners are even further neglected. This could lead to an increase in the failure rate with a resultant soaring dropout rate. Overcrowded classrooms are detrimental to the future of our youth, who are the leaders of the future.

The educator respondents reported that they mostly used the mass lecturing method when teaching in overcrowded classes. This teaching method, together with too little individual learner attention, adversely affects learner academic achievement in secondary schools.

The educator respondents found it very difficult to move to the learners at the back of the classroom or to move between the desks in their overcrowded classes. They could not assist these learners by means of individual attention. According to the educators, due to very little personal contact with the learners in their overcrowded classes, it became "difficult to engage learners actively with the learning material".

The use of the mass lecturing method in classes clearly reduced two-way communication between the educators and their learners. The educators did all the talking and the learners were required to listen for long periods of time. Therefore, the learners are not actively involved, which contributes to their high levels of frustration and boredom, which, in turn, may lead to disruptive behaviour. In order for the learners to receive education that is in line with the ideals of outcomes-based education and where they (the learners) are actively involved, mass lecturing is not the desired teaching method. For obvious reasons group work is clearly not possible in overcrowded classes.

Tlale (1991:7), explains that rigid teaching strategies can cause or reinforce underachieving behaviour, because a rigid formal and inflexible curriculum and teaching methods do not allow children to satisfy their need for autonomy, neither does it allow them to develop initiative.

Du Toit (1994:56), describes inflexible educators as those who follow pre-planned strategies that allow little or no latitude for learners who need a different style of teaching or work at a different speed. Such inflexibility is usually found where educators have little

knowledge or understanding of the material or are not well prepared. Thus, they find it difficult to anticipate which aspects of the lesson presentation they should emphasise to make the lessons run more smoothly. Whatever the reasons are, a rigid, inflexible way of teaching stifles learning as learners are not free to ask questions or participate in the learning situation. Moreover, the continued use of only one type of teaching methodology in the presentation of content, makes learning boring and uninteresting. Lack of variation results in boredom and if a learner has to sit for long hours in class listening to one educator after another, all using the same methods day in and day out, it removes the fun and stimulation from learning. Educators in classrooms with non-conducive teaching and learning climates lacked to engage learners in self-discovered learning; discussion and problem-solving activities thus fostering academic underachievement. Inflexible educators who adhere to pre-planned schedules without allowing room for individual differences in terms of speed or comprehension and learning styles, stifles learning and reinforces underachievement.

Research suggests that teaching is a dynamic process of learning that leads to a new level of understanding or mastery and a heightened awareness of the context in which educators work (Kordomenos, Wanner & Hay, 1991:32). The process of staff training should have an empowering effect on them and gives them a sense of control over the curriculum, teaching and the learning process (Chrispeels, 1992:130). In this way the school becomes a more relevant and effective environment for learners (Stedman, 1987:220). Thus a positive climate for teaching and learning is created which leads to improved academic achievement by learners. By the creation of a positive classroom climate it is meant that a climate or atmosphere in the classroom is created that will maximise teaching and learning. This means that educators are given maximum opportunities to teach and learners are given maximum opportunities to learn. It further means that the school will be made a happy place for learners to learn and a good place for educators to teach. This can only happen if a safe and orderly atmosphere prevails. Such an atmosphere greatly enhances learner achievement (Coyle 1992:392). The fact that a positive classroom climate should be created implies that it does not come automatically. That is why Lewis (1989:220), says that if classrooms are dismal places to work and learn, it is because people created them as such. One way of ensuing a positive classroom climate is making sure that learners are actively involved in class activities. Research data indicates that learners obtaining high

scores are learners who are found to be actively involved in co-operative learning activities, educators stimulated self discovered learning, varied teaching strategies were used while educators asked probing questions and provided regular feedback during lessons.

The school's prosperity depends on a spirit of high expectations and a focus on excellence. It depends on the maintenance of high standards of achievement and diligence, that is to say, the maintenance of high academic standards. For this reason learning tasks in the classroom should set and maintain high but realistic academic standards if it is to foster a work ethic among the learners and educators and if it is to prosper. The learners should feel so challenged by the standard of work that they feel obliged to study and learn seriously. They should perceive and reinforce norms that high achievement is expected of all of them (Brookover, 1982:29). Unchallenging classroom activities can only lead to laxity and complacency. Educators should be concerned with academic standards and the quality of the individuals it will send out into the world. In this way they will be contributing to the establishment of a positive classroom climate to enhance academic achievement.

He should prepare his lessons well since good preparation improves the quality of instruction and reduces boredom and restlessness on the part of the learners. A well-prepared lesson makes the learners love the educator and his subject, enjoy their stay at school and study seriously. Thus many disciplinary problems can be averted if educators prepare their lessons properly. The educator should adhere to sound instructional practices like giving his class regular homework, evaluating them regularly and giving prompt feedback, improving his teaching methods, taking the uniqueness of each learner into account, showing commitment, etcetera. He should show interest in the learners' learning and success and accept responsibility for promoting their academic achievement. The educator should also help build the learners' self-esteem by providing praise and reinforcement generally. When educators promote the appropriate attitude, interest and the learners' positive self-concept, learners can achieve at rates commonly reserved for the academically gifted (Bloom, 1990: 116).

Educators should set and maintain high but realistic academic standards if it is to foster a work ethic among its learners. The learners should perceive and reinforce norms that high achievement is expected of all of them (Brookover, 1982 : 29). The educators can ensure the maintenance of high academic standards if they have well co-ordinated academic programmes which are strictly followed throughout the entire school year so as to promote the creation of a positive classroom climate.

4.4.3 Hypothesis three: Discipline

Hypothesis 3 is accepted because there is a significant positive correlation between discipline in classrooms and academic achievement of learners: Discipline.

The educator respondents at schools that underachieved indicated that the noise levels in classes were very high. This is not conducive to learning and concentration. All the educators in these classes taught from the front of the classrooms and did not move between the learners due to a lack of space caused by too many desks in the classroom. Mostly they (the educators) remained in the centre front of the classroom. Lecturing as method of instruction occurred in all the overcrowded classes. This results in one-way communication and learners obviously become bored. This lack of learner participation is not stimulating for the learners and often results in higher noise levels and disciplinary problems.

The classroom discipline of the underachieving schools left much to be desired. Classroom discipline clearly lacked in these classes where the educators reported learners fail to follow clear, consistent rules which reinforce educator authority. This, contributes to a classroom climate that is non-conducive to teaching and learning, and cannot lead to the successful attainment of academic achievement. A better quality education cannot be envisaged in this way.

4.4.3.1 Classroom Behaviour

Chrispeels (1992:123), argues that classroom variables such as safety and orderly disciplined learning environment, norms of collegiality, high expectations and learner involvement in classroom activities creates an ethos which is significant in contributing to academic success. An atmosphere conducive to learning fosters a

climate of order and respect in which educators and learners can thrive. This encourages a sense of esprit de corps (Bennett, 1987:10).

On the other hand McCurdy (1989:31), states that “some classrooms are cheerful and hum with excitement and purpose. Others seem to lack enthusiasm. Some classrooms are alive with expectancy. Others appear morbid. Some people who work and study in classes see each new person as an opportunity for improving their *understanding of the world around them*. Others fear that today will be worse than yesterday. These feelings of satisfaction and productivity contribute to a positive classroom climate.”

The educator respondents in underachieving schools indicated that a high level of noise and disruption occurred in their overcrowded classes. This disruptive noise level made communication between learners and educators difficult and interfered with their ability to concentrate during the lessons. The educator's dedication and commitment to effective teaching plays a decisive role towards the establishment of a positive classroom climate. Learners would not like to miss a lesson presented by a dedicated and effective educator. It gives learners a great joy to be taught by such an educator. In fact, learners and parents will always choose a school where there is effective teaching. Ineffective teaching on the other hand may lead to boredom in the classroom. For some learners boredom creates disciplinary problems, encourages absenteeism and disruptions and promotes taking time off task (Berliner, 1989:15). The learner's ability and responsibility to learn are greatly enhanced by a positive classroom climate.

It is obvious that in order for learners to become actively involved in the learning material, a need exists for a classroom climate that will be conducive to learning and teaching. It was found that in overcrowded classes the high noise level often resulted in a classroom climate that reduced the learning opportunities of the learners. Also learners, who are defiant, always wanting their own way, do not accept the authority of elders and lack self-discipline cannot learn. They are either ignored or continually punished. Learners talk out of turn making unnecessary noise and refuse to carry out educators' instructions. These are some of the behavioural problems, which educators often have to deal with. Educator respondents reported that such disruptive behaviour seriously interferes with the activities of the lesson.

4.4.3.2 Classroom management strategies

According to the literature study of this research, contributing factors to poor classroom management include high numbers of uninterested learners, cramped classrooms and a high level of noise and disruptions. Disruptive and noisy learners made classroom management virtually impossible.

Good classroom management is necessary for the smooth running of lessons. In overcrowded classes, where space is limited and where too many learners are confined in a small classroom, this is an impossible goal to achieve. Without good classroom management, a classroom climate that is conducive to learning and teaching will prevail. Uncontrolled, poorly managed, overcrowded classrooms add to the frustration of learners and educators and withhold the possibility for quality teaching and the effective transmission of knowledge, thus contributing to poor academic achievement.

According to Du Toit (1994:56), "inadequate, affective guidance can result from the educators using derogatory remarks, unsympathetic criticism, or even ignoring the learner." "Educators play a vital role in creating classroom climate that is conducive to learning and teaching" (Henderson and Milstein, 1995:152).

Henderson and Milstein (1995:152), stated that a close association exists between learners' achievement, and the climate of the class. He continued to say that "the manner in which reprimands are given determine the educator-learner relationship to a large extent." Positive educator-learner relationships enhance a positive classroom climate. According to research data educator respondents reported that learners displaying serious disruptive behaviour patterns were not counselled. This implies that there is a need for educational support services at school from Psychological, Guidance and Special Education Services (PGSES) which should be provided by the Department of Education.

Distractions are interruptions, diversions or things that draw attention away from the lesson disrupts teaching and learning. Thus minimizing distractions means reducing interruptions to the teaching and learning process to the smallest possible amount or degree. This implies protecting instructional and learning time and thus promoting a positive classroom climate to enhance academic

achievement. Educators must ensure that effective use is made of instructional time in class. This can only be achieved if interruptions, disruptions or diversions which interfere with teaching and learning are kept to the absolute minimum or where possible, are totally eliminated. If anything which impinges on the programme of the class and thus affecting the learners engagement is curbed, it will not only have a positive effect on the teaching and learning process, but will certainly create a positive learning climate in the classroom.

The educator is undoubtedly the most meaningful person in the classroom. But there are some emotional considerations that cause barriers between the educator and a learner. As Starr (1970:188), states that in the face of many uncertainties, the educator may feel a desperate need for exercising rigid control within the classroom to ensure that at least the outward appearance of constructive effort is maintained. It is equally unfortunate when educators, bedevilled by pressures and anxieties, become contemptuous of learners. The more intense the experience of social threat, the stronger the blocking of the cognitive capabilities are. In a threatening situation a person takes longer to complete an intellectual task and he/she will also make more mistakes than in a comparable, non-threatening situation. It is therefore important to understand what happens to learners who are more often confronted with a threatening interpersonal situation than a safe learning space (Pretorius, 1998:165).

The educators should watch out for little things that can collectively erode instructional time. One of the major resources available to the learners for improving their academic achievement is time. The more time learners spend on their work, the more they learn. Educators should also respect school time by being punctual for all lessons and by teaching until the end of each period every time. They should also not allow their lessons to be interrupted. Educators can save time by ensuring that they go to school well-prepared for every lesson because good preparation makes the educator use academic time profitably and thus foster a positive classroom climate that enhances academic achievement of learners.

4.4.3.3 Extrinsic Motivation

The researcher came to the conclusion that in order to motivate learners to achieve academically it is imperative that each individual learner be regarded as important in the class situation. However, in overcrowded classes, where the educator-learner ratio is more than 1:35 learners often merely become part of a too large group and inevitably lose their individuality.

To promote academic achievement, learners need to show a high level of interest in the syllabus content. When learners are interested in the learning material, they easily become involved in the learning situation and are able to contribute to a positive classroom climate. Learners who show interest in the learning situation increase the enthusiasm of the other learners in the class. The interest level of the learners need to be stimulated and to be kept high in order for them to achieve academic success.

Overcrowded classes are clearly not conducive to the achievement of this goal. The neglected learners from the previous dispensation could well become even more neglected learners within the current overcrowded classrooms. This issue is of a serious nature and there is an urgent need for it to be tackled and rectified. The educator respondents at schools that achieved 100% pass rate reported the following:

- Learners are encouraged to seek extra class-work so that they can get better grades.
- Learners are encouraged to improve on previous academic work and they are provided with frequent verbal support or praise.
- Educators value learner effort and take a personal interest in each learner.
- Educators listen to learners problems and a supportive relationship exists between educator and learner.

Du Toit (1994:59), in the clearly states that, the climate classroom can improve or decrease learners' ability to learn. Therefore a democratic climate where learners enjoy greater freedom to participate and a system that motivates learners to learn is *more beneficial for learning than an autocratic climate where learners are not expected to participate very much and where there is little encouragement to learn.*"

An interesting line of research, involving numerous studies, explores issues related to the comparative effectiveness incentives of delayed and immediate rewards. All complex cultures use systems of delayed rewards. The entire promotion system within our own society is a delayed reward system, which raises the issue of whether such delayed rewards are effective and for whom they are effective. Early research in the field established the fact that in order for delayed rewards to be effective as immediate rewards, they have to be larger. Travers (1982), has summarized much of the research related to the matter of the kinds of individuals who respond well to delayed rewards. He finds that the bulk of the research shows that these individuals are more likely to be future-oriented and achieve high scores on measures of ego control, achievement motivation, and intelligence. They also tend to be more mature, have a higher level of aspiration, and to be more socially responsible than those who respond best to immediate rewards.

A large amount of sensory input may produce a state of considerable excitement, indeed, a far higher level of excitement and arousal than is needed for effective behaviour. Many primitive native dances slowly work the participants into a frenzy of excitement through a large volume of input including auditory inputs of loud music, visual inputs involving the movement of dancing figures in brightly coloured costumes, and inputs from the muscles and the haptic system produced by the individual's own participation in the dance. Many nightclubs, in a similar way, try to produce high arousal in a clientele that would otherwise fall into a state of somnolence.

Similarly, much needs to be done to identify the conditions that raise or lower the arousal level of learners. The amount of praise and criticism offered to learners may do this.. How praise or criticism is given must also determine whether it produces heightened or lowered arousal. One suspects that the educator who automatically praises every learner may not be raising the level of arousal by so doing. What is effective under one set of conditions in raising the arousal level may not be effective under other conditions.

According to analysis of research data a positive climate is characterised by educators who care about their learners. Educators who demonstrate explicitly that they care about the learners are in a better position to win their co-operation

in academic endeavours. Learners love caring educators because they want to be acknowledged as worthwhile individuals. They love educators who are concerned about their academic progress, have high expectations for them, treat them as if they are competent and are responsive to their needs (Berliner, 1989:15; Townsend-Butterworth, 1992:42). According to Doveton (1991:16), the climate in which learners find themselves whether inside or outside the classroom, plays a role in their achievements.

Classroom climate in which care and acceptance are experienced fosters healthy attitudes. On the other hand, learners who perceive their educators as uncaring are often dissatisfied with their work, remain distant from their educators and disengage from the process of learning (Phelan, 1992:699).

Every school going learner, no matter how hardworking or lazy he may be, has a desire for success. He wants to be successful in whatever he does at school. He wants to achieve success particularly in his academic work and to be promoted annually to the next grade. This desire is justified by the fact that it is through academic achievement that a learner is annually promoted from one standard to the other. Otto, Mcmenemy and Smith (1973:36), put this aptly when they say that the ultimate goal of instruction, is achievement that is at or near the learner's capacity level. Therefore every learner's latent concern is to avoid failure and fulfil his needs for achievement (Mwamwenda, 1995:184). The learner's achievement is also measured by his ability to progress through a series of well-defined skills (Gallagher, 1978:37).

Behr (1990:105), is of the opinion that achievement refers to a more specialized performance in school subjects which depends greatly on the quality of teaching and motivation to learn. Thus extrinsic motivation significantly enhances the classroom climate and promotes academic achievement of secondary school learners.

The establishment of a positive classroom climate enables learners to utilize their innate potential like intelligence to the maximum at school. Experience of success at school is vital to learners because it serves as motivation for further involvement and contributes towards psychological development. Failure, on the

other hand, may lead to withdrawal because of fear for further failure (Masitsa, 1988:12).

Therefore, a learner's need to do well at school is in itself a motivating factor influencing his behaviour and must be encouraged by giving him tasks of which he is intellectually capable, thus encouraging active participation. Self-concept can be a motivation since achievement at school will strengthen it. Every learner likes to feel good about himself and to feel that he is worth and competent enough to perform most of the tasks required of him in the classroom.

Educators should show learners that they have confidence in their ability to achieve academically. Learners are likely to work better if taught in an atmosphere of confidence that they can and will succeed. Insistence on high academic standards could easily make learners link achievement with hard work.

Thus motivation of learners is undoubtedly one major factor that contributes to academic achievement. According to Walberg (1984: 398), large amounts of instruction and high learner ability count little if learners are not motivated. A cordial relationship between the educator and the learner which enables the latter to be free to recognize, express, actualise and experience his own uniqueness serves as motivation to the learner and builds his self-esteem. Learners also feel highly motivated when educators help them set high but achievable goals for themselves and assist them to achieve those goals. Recognition of the learners' achievement in any sphere at school has a tremendous influence on enhancing his motivation. By recognizing the learners' achievement, the educator helps him to establish lifelong habits and values and improve his self-concept. The educator who is interested in and enthusiastic about his subject, and who makes his lessons interesting stands a good chance of having his class motivated. Regular evaluation that is followed by prompt feedback motivates learners because it enables them to know how they perform and to make time for improvement. If educators give learners who make mistakes ample chance to relearn and correct errors they will feel motivated and comfortable to take intellectual risks without fear of being criticized or reprimanded for making mistakes. Thus motivation enhances the learners' zeal and zest to learn or study thereby contributing to a positive classroom climate which promotes academic achievement of secondary school learners.

An inhibitive learning climate where learners do not feel secure; derogatory remarks by educators and negative attitudes towards learners do not promote the realisation of pedagogic essences in the classroom. Research data indicates that the positive classroom climate in schools achieving 100% pass rate were enhanced by mutual respect, trust and acceptance between educator and learners, thereby significantly contributing to learners' academic achievement. In these classrooms a supportive relationship existed between educator and learners.

4.5 Main findings from empirical research

The following is a summation of the main findings that emerged from the empirical research.

1. A positive classroom climate had a significant effect on the learners' academic achievement in the November examinations. Schools which had a positive classroom climate performed significantly better.
2. There is a significant difference between the academic achievement of learners in the final examination whose seating arrangements permitted movement and sitting in clusters than learners who sat in rows with chairs facing forward and with 2 or more learners per square meter. In classrooms that were not overcrowded and where the organization of learning space allowed movement, learners performed significantly better.
3. The educator-learner ratio had a significant effect on the learners' academic achievement in the November examinations. Learners who were taught in classrooms with < 30 learners performed significantly better.
4. There is a significant difference between the pass rate of learners in a classroom where the educator lectures at the front, centre of the classroom and learners in a classroom where educators move around the class to interact with individual learners in the November examinations. The pass rate of learners in classroom with more educator-learner interaction is significantly higher than the pass rate

of learners in classroom where educator stands at the front and lectures.

5. The learners' involvement in group-work had a significant effect on their academic achievement in the November examinations.
Learners who worked co-operatively and engaged in problem-centred discussions performed significantly better than those who did not engage in group-work.
6. There is significant difference between the academic achievement of learners in the November examination who experienced language proficiency barrier with regard to English second language speakers and those who did not experience language proficiency barrier.
Learners who did not experience language proficiency barrier with regard to English second language performed significantly better.
7. There is significant difference between the academic achievement of learners in the final examination who were taught by committed educators who used varied teaching strategies and those who were not taught by committed educators used varied teaching strategies such as: self discovered learning; probing questions; class discussions and a problem-solving approach to teaching and learning. Learners who were taught by committed educators performed significantly better.
8. The learners' behaviour had a significant effect on the learners' academic achievement in the November examinations. Learners who carry out instructions and keep to class rules performed significantly better than disruptive learners who seriously interfere with the activities of the lesson.
9. Minimizing distractions during the learning process had a significant effect on the learners' achievement in the November examinations. Learners in classrooms with minimum distractions to the learning process performed significantly better than learners in classrooms where disruptive behaviour impeded the progress of lessons.
10. Motivation of learners had a significant effect on the learners' academic achievement in the November examinations. Motivated learners performed significantly better than unmotivated ones.

Although a few variables relating to discipline management strategies investigated appear to have no significant effect on the learners' academic achievement there is ample evidence, based on the variables which have a significant effect on the learners' academic achievement, to conclude that the null hypothesis should be rejected. Therefore the researcher comes to this ultimate conclusion: there is a relationship between the establishment of a positive classroom climate and academic achievement. It can be concluded that the establishment of a positive classroom climate is a prerequisite for academic achievement.

4.6 Summary

Drastic measures need to be taken in order to create a positive classroom climate that promotes academic achievement in order to maintain a high quality of education offered in government schools. The researcher is of the opinion that the influence of classroom climate on academic achievement affects almost all other schools in South Africa to a larger or lesser degree.

Chapter 5 makes recommendations to create a positive classroom climate that will improve academic achievement of learners who have been neglected in the past.

In the light of the problem statement of this study, it is imperative that the group of neglected learners from the previous political and education dispensation, who are currently in overcrowded classrooms, are provided with adequate opportunity to achieve academically.

Classroom climate that is conducive to learning and teaching will result in the successful attainment of learners' academic achievements. Organisation of learning space; learner involvement and classroom discipline are factors that either enhance or thwart academic achievement of secondary school learners

Within the limits of this research and from evidence presented in it the following conclusions can be drawn:

There is abundant research evidence to prove that outstanding academic achievement does not come automatically but is brought about by the establishment of a positive classroom climate. This implies that academic

success do not happen by accident. The classroom climate has to be conducive to learning by fostering order and respect and a work ethic among educators and learners. The establishment of a positive classroom climate that enhances academic achievement can only result from a concerted effort and constructive participation of the educators and learners. To be successful all parties involved must share one powerful common vision of achieving academic excellence and do their utmost to translate it into reality.

Without true commitment and courage no one will be able to significantly improve academic achievement. The educators have an important role to play in the establishment of a positive classroom climate that fosters academic achievement.

The findings from the empirical research of this study provide the researcher with substantial evidence to reject the null hypothesis postulated in this study. There is abundant proof that there is a relationship between the establishment of a positive classroom climate and academic achievement. This relationship indicates in no uncertain terms that academic achievement is resultant from the establishment of a positive classroom climate. It can be concluded therefore that the establishment of a positive classroom climate is a prerequisite for academic achievement. The conclusions reached about the relationship between the classroom climate and academic achievement in the empirical study are in line with the conclusions reached in the literature study thus proving that they are beyond all reasonable doubt.

CHAPTER FIVE

5.1 INTRODUCTION

A classroom's climate can define the quality of a school that creates healthy learning places, nurtures learner's dreams and aspirations, stimulates educator's creativity and enthusiasm and elevates all of its members. Beyond the physical nature of schools there are elements that reflect the way people interact and this interaction produces a social fabric that permeates the working and learning condition. Frieberg (1990, 25), argues that the classroom climate is much like tending a garden, it takes continuous effort. Carl Rogers, known as one of the founders of humanistic psychology, spoke to Freiberg about this type of on-going support during a discussion they had several years ago:

"I work every day in my garden. The roses, flowers, and plants do well in southern California climate if you water, provide natural food and till the soil to allow oxygen to reach the roots. I am aware that weeds are always present. It is the constant caring that prevents the weeds from taking over the garden. Person-centred education is much like my rose garden – it needs a caring environment to sustain its beauty (Carl Rogers Personal Communication with Jerome Freiberg 1984). Sustaining a healthy learning environment may take as much effort and care as improving an unhealthy one.

One would expect that the classroom climate under normal conditions would improve each year, but with the entry of new groups of learners and, at times, new educators, the need to both sustain and improve classroom climate is a continuous process and requires a continuous effort. It may be more the little things linked together over time that sustain a healthy climate for learning compared to larger one-time organisational changes.

The aim of this study was to explore the influence of classroom climate on the academic achievement of learners in secondary schools. A number of factors were found to thwart the creation of an optimal classroom climate that fosters

academic achievement in schools. Within the context of this study, these included the following:

- a. Overcrowded classrooms and the lack of educator-learner interaction had a negative impact on the learners' academic achievement and contributed to an inhibitive classroom climate in the secondary schools.
- b. In addition, lack of learner involvement in learning activities impedes academic achievement.
- c. To exacerbate the situation, learners' disruptive behaviour seriously interferes with academic achievement. It was found that underachieving learners lacked extrinsic motivation.

5.2 Recommendations

5.2.1 It is recommended that smaller classes be created at schools.

Small classes, in terms of number of learners, should be created to establish a positive classroom climate that enhances academic achievement. When classes are smaller, the educators will have more space in which to do interesting learning activities and reduce the use of the lecturing method. This will motivate learners to increase their involvement in the classroom situation. In such classrooms the learners' desks could be spaced further apart and the learners and the educators will be able to move more easily amongst them (the desks). The classrooms will be less cramped and the educator will be able to move around the class to guide and assist learners experiencing difficulties. The educator-learner ratio should not exceed 1:30 in classrooms.

5.2.2 Recommendations for Group-work:

Special features of collaborative group-work include:

- Four to eight learners per group.
- All learners in the group work on the same task to find a joint solution or outcome.
- All group members must know that they are all working towards a common solution.

- The task must be clear to all group members.
- The task usually involves a problem-solving activity where a joint outcome has to be negotiated (an agreed solution).
- Debating (such as listening, speaking, sharing) is prominent during group work and this promotes learner involvement (Pretorius, 1998:89).

The classroom events in essence represent social interaction and when designing his lesson, the educator can intentionally structure the social interaction pattern of the lesson. In this regard he can plan:

- A co-operative structure: In this structure the learners work together to achieve common learning objectives. This creates positive interdependence among learners where it is in their own interest to help each other. By helping one another with learning activities, everyone benefits in respect of a better group achievement. Such constructive interaction promotes the learners' academic achievements, personality development and socialisation.

5.2.3 Recommendations for improving classroom discipline

It is important for educators to understand the influence of classroom climate on academic achievement so that they can effectively intervene. In line with international trends, beating and slapping of learners, as well as any form of psychological or emotional abuse are outlawed. Such acts are contraventions of the basic rights to dignity and security, and cannot be allowed. Society does not want a cowering child to emerge from schools they want confident, affirmed youths, ready to take on the world. Thus discipline is ultimately about learners developing a sense of responsibility for their own behavior, respect for the rights of others and self-control.

Learners prefer strict educators who involve them in the management of discipline, are ready to allow them to determine the consequences of their behaviour and to make them responsible for the consequences of their behaviour. In brief, learners prefer participative decision-making. One of the real obstacles to effective discipline is the fact that classes are too large for educators to provide learners with individual attention. Educators regard the ability to control a class as a matter of prime

importance (Mabeba & Prinsloo, 2000).

There are a variety of ways in which instructional and learning time can be protected which the educator should seriously encourage or if need be enforce. Educators should be punctual for their lessons and should teach until the end of the period every time. Beginning class promptly will ensure that the lesson is given in full, learners are given ample chance to ask questions and as such to master what is being taught.

Psychologists agree that human behaviour is a function of the interaction of a person and his environment. Therefore a positive classroom climate should have a positive effect on the learner's academic achievement. Researchers (Hoyle, English & Steffy, 1990:15), support this statement by stating that without a climate that creates a harmonious and well-functioning class, a high degree of academic achievement is difficult if not downright impossible to obtain. They go on to say that recent research evidence indicates that the most effective schools are distinguished, not by elaborate facilities or a high level of financial support, but by an outstanding social climate.

Fontana (1992:49), argues in this respect that it is therefore important for every school to be "aware of the needs of its individual learners". Ideally a school operates in a caring, constructive and positive fashion and, hopefully, in classrooms with a positive climate. Such classrooms are less likely to experience problems of antisocial behaviour by learners than the classes that adopt a more punitive measure and less learner-orientated activities. According to Lazerson (1985:118), for educators, transmission of knowledge "means being able to teach under conditions that give them the time, the incentive, and the freedom to explore subject matter. This means smaller classes." The ideals of high learner academic achievement and positive classroom climate are almost impossible to attain in an overcrowded classroom, where the educator cannot deal with each learner individually.

The climate in the classroom and around it must have a positive influence on the learners if they are to succeed academically. In endorsing this point of view

Wirsing (1991:11), maintains that the classroom's climate for learning is the product of the collective efforts of the educators and learners. The talents and abilities of these groups should be orchestrated to produce positive classroom climate that support learning for excellence.

As Van Wyk (1993:75-76), puts it, learners and educators are two of the most important partners in the education relationship based on mutual understanding, acceptance and trust. The educator's participation in the education event should be characterised by purposeful and active involvement and practice. The educators act in loco parentis in their relation with learners. They should handle the ideas and ideals of the learners entrusted to their care with care. They should, also be intensely interested in the learners work. Learners are entitled to educators who know both the subject that they teach and how to teach them, and who recognize the learners' right to develop self-confidence and self-reliance so as to create a classroom climate that enhances academic achievement (Piek, 1991:79). The secondary school is the educational passage leading from the primary school with its general education to a tertiary educational institution. On the one hand it builds on primary education and on the other it lays a foundation for tertiary education. Educators should be serious about their work and go to school fully prepared for their lessons daily.

Problems faced by learners in information age societies require a level of support that provides resilience when they face personal and educational challenges. The classroom can be an important source of building resilience or one more barrier to a productive life. Educators play an important role in creating the necessary conditions for learning. Schools want learners to acquire social skills, adequate self-concept and positive attitudes towards learning so as to achieve positive academic outcomes. However it is the classroom climate that influences learner's motivation to achieve academically (Grosin, 1993). Educators should exemplify an attitude of commitment in order to be successful. They should ensure that the classroom has clear and consistent rules and policies that reinforce educator authority and promote academic success. It must be remembered that good seeds will not grow in a poor climate.

There should be clearly stated guidelines as to what the school stands for, the direction it wishes the learners to follow and its wants and dislikes. Learners who find themselves in such a situation will find it difficult to deviate from acceptable behaviour specifically in the classroom.

Motivation of learners in the classroom should be given serious attention. This should be done in a variety of ways with a view to building the learners self-esteem, boosting their morale and thus making them feel positive about the school and their academic achievements.

Each school should try to acquire some bursaries or prizes for learners whose academic performance is exceptional or who make good academic progress. This will undoubtedly serve as an incentive and motivation to all learners to improve their academic achievements.

The following are guidelines for the educator in maintaining adequate order:

- Make balanced, calm decisions because the learner needs security.
- Display goodwill (sympathy and compassion)
- Introduce neatness and elegance (an educator after all portrays a certain culture).
- Avoid threats when an issue cannot be resolved.
- Avoid the notorious last warning.
- Do not abuse or humiliate.
- Remain calm, do not lose your temper (and then hit out at them).
- Avoid irony and sarcasm as they destroy communication.
- Reward and punishment have an optimal effect if the educator/learner relationship is characterised by personal warmth and affection.
- Rules for learner behaviour must be explained as clearly as possible.
- Constructive learner behaviour, which promotes learning activities in the classroom, must be rewarded (for example, through praise, recognition, attention, high marks).

The educator has to create a teaching climate that generates success rather than failure. Achievement is improved by rewarding a learner, not by accusing him. Approval by the significant others increases self-evaluation. Learner performance improves when the educator in marking written work gives favourable comments. The sensitive educator emphasises the learners' achievement rather than his mistakes and failures. Continual emphasis on failure leads to lower expectations and not to higher achievements. Success and not failure, proves to the learner that he is school competent, thus the following suggestions can improve the classroom climate:

- Consult the learners. The learners will rather be motivated to faithfully obey a rule that they have helped establish (agreed during a class discussion).
- Ignore minor disturbances: The learners' misbehaviour is often a sign that he is begging for attention.
- Praise and reward acceptable behaviour: This ensures that the learner gets the attention he seeks and also strengthens his acceptable behaviour.
- Disciplinary measures: A disapproving glance, a gesture, a reprimand and even punishment can be effective, but the educator must exercise self-control. Detention or extra work (detention work) could cause negative feelings towards the school. Avoid ridiculing or humiliating the learner – it can only destroy his self-concept. Punish only severe misbehaviour or when other disciplinary measures have failed.

5.2.4 It is recommended that more in-service training be offered to educators.

Educators attending in-service training require strategies that will help them to cope with the problems of over-crowdedness. These strategies should deal with serious issues, such as learner discipline, and how to reduce the existing language proficiency barrier. In this way, effective in-service training offered to educators will contribute to classroom climate conducive to achieving academic success.

The researcher suggests that in-service educator training should provide guidelines for the following:

- Problem solving strategies in overcrowded classrooms so as to maximize learner involvement in lessons.
- Recommendations for the reduction of language proficiency barrier with regard to English second language speakers.
- Recommendations for establishing a supportive relationship between educator and learner.

5.2.5 Recommendations to School Governing Bodies

The language of learning and teaching is about accessing learning, accessing information and communicating effectively about learning. By not transforming their staff component sufficiently, school-governing bodies fail to appreciate that learners learn differently and that an educators style of instruction risk being to the benefit mainly of those from the same cultural background as the educator. This undermines the quality of education the other learners receive. The establishment of bridging classes for language will assist learners who experience language proficiency barrier with regard to English second language speakers.

5.3 Implications of the recommendations

The recommendations flowing from this research appeal for the creation of positive classroom climate to achieve academic success in Secondary Schools.

Unless there is concerted effort from the educators, learners, parents, communities, education department and the state to seriously rectify the situation prevailing in schools, the failure of particularly matric learners will escalate alarmingly. This will go hand in hand with the lowering of the standards of education. It has already been made abundantly clear that the establishment of a positive classroom climate cannot be left to chance. There must be a deliberate, well-planned and orderly way of fostering academic excellence at schools. It goes without saying that the, educators and learners should know the

role they are supposed to play towards the establishment of a positive classroom climate. However, the achievement of this optimal classroom climate to foster academic achievement depends largely on the commitment of professional educators.

If the citizens of this country are serious about improving the quality of education, they must seriously commit themselves to improving the learning climate in the classroom. Nothing better defines what people are and what they will become than the education of their children. Central to the improvement of the lives of all citizens of a country is the level of education that they enjoy and the quality of that education. Therefore only when educators can truly say their classroom climates are enhancing academic achievement, can they say their learners are no longer at risk in Secondary Schools.

5.4 Suggestions for future research

- It is recommended that further qualitative research should be undertaken on a broader spectrum on the issues of classroom climate on academic achievement
- Schools used in this study were from one district in Amajuba in Kwa-Zulu Natal. A bigger sample could be obtained from several districts in the various provinces so that findings could be generalised for South Africa.
- A study of factors influencing educator motivation in schools may be undertaken.
- The relationship between integrated quality management at schools and academic achievement needs to be investigated.
- The role of the school in encouraging positive parental involvement is an important area of research.
- The availability of learning support services in the Community for learners from disadvantaged backgrounds.

- Implications for the potential contribution of Psychological Guidance, Special Educational Services (PGSES) in supporting schools to achieve academic success.

5.5 Limitations of the study

- The research could not cover all possible factors that may influence academic achievement e.g. influence of the home environment, peers, curriculum and educator training on academic achievement.
- The research was confined to Amajuba District in Newcastle, therefore the findings cannot be generalized to all provinces.

5.6 Concluding remarks

In this research the concern has been to clarify the relationship between the classroom climate and academic achievement. It was postulated at the beginning of this research that the classroom climate has an enormous influence on academic achievement. This hypothesis has been duly corroborated by the findings of this research. This research has proved that a considerable number of black secondary school learners in particular, find themselves in classrooms where the learning climate is inhibitive and this accounts for their poor academic performance in matric. Many attempts made to rectify the situation did not bear fruit because they did not address the real problem, but its symptoms. There is enough research evidence here to demonstrate that the establishment of a positive classroom climate is a sine qua non for academic achievement. This justifies the common agreement among researchers about the importance of a positive classroom climate that fosters optimal organisation of learning space, active involvement of learners in classroom activities and discipline as a determinant of academic achievement in Secondary Schools.

The researcher is optimistic that the findings, recommendations and guidelines embodied in this thesis could provide invaluable assistance in solving the problem of poor academic achievement. Surely, the point of departure for solving this problem is to make doubly sure that the schools, parents, communities, education department and the state work in collaboration. All parties must demonstrate their commitment and willingness to have the problem solved. Their

primary aim should be to ensure that all obstacles which inhibits the establishment of a positive classroom climate are eliminated. Thus the establishment of a positive classroom climate requires teamwork and comradeship. Optimal classroom climate implies that conducive conditions for learning and teaching have been established and this will enhance academic achievement of secondary school learners. When this has been done, everything possible should be done to establish a positive climate to enhance academic success for the learner at the school; home and in the community.

Research by Westhuizen (1999), indicate that a lack of a culture of teaching and support services lies at the root of the high failure rate in the Grade 12 examinations. The institution of a support service from parents, educators, principals and District Managers to the Grade 12 learners appears to be a high priority if these results are to improve. More importantly, educators should focus on their basic task of teaching and receive support from other stakeholders in order to execute their task successfully. As a result of budgetary constraints, the delivery of adequate resources may be long in coming. While the provision of resources should receive attention as a matter of urgency, experience shows that certain schools achieve good results with the barest of resources while other schools perform poorly in the midst of abundant resources.

It is perhaps when each focal group in the school accepts responsibility for the results, both in failure and success, that strategies for improvement stand a chance of success. For as long as the "blame-it-on-someone-or-something-else" syndrome persists in the minds of the focal groups, no improvement can be expected in the Grade 12 results. The provision of support service and intensive teaching of all learner groups may still lead to the realisation of their dreams and the dreams of the nation. What happens within classrooms is at the heart of all education. However progressive policy might be, however large the government's education budget, and however many more young people enjoy their constitutional rights to basic education than was ever the case under apartheid (or colonially), the research indicates that the quality of the classroom experience determines all successes and failure.

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Annexure A

P.O. Box 24292
Newcastle
2940

14/09/2005

The SEM
Ward: Mpumelela
District: Amajuba
Region: Ukhahlamba

Mr. P.R. Bhagwandass

Sir

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SELECTED SCHOOLS

The research I am currently conducting focuses on "Influence of classroom climate on the academic achievement of Secondary School learners (Grade 12 learners)". This research is towards an M.Ed (Ed.Psychology) degree and is being conducted through the University of Zululand.

A questionnaire has been developed which I will administer to the Heads of Department at the following pre-selected schools:

Panorama Combined School
Hope Combined School

Charlestown High
Siyalungelwa High

The questionnaire will be administered during non-teaching time and its completion will not exceed 15 minutes. The information received will be dealt with in the strictest confidence and anonymity is assured. The principals of the schools will be contacted to make prior arrangements.

I request your permission to distribute the questionnaire to the Heads of Departments during the course of this 2005 academic year. Your co-operation will be highly appreciated.

Yours faithfully


Mrs. J. Chrisenduth

Telefax: 034 3152556

Phone: [Home] - 034 3171085
[Work] - 034 3183383

Annexure B: Response from SEM



**ISIFUNDAZWE SAKWAZULU-NATALI
PROVINCE OF KWAZULU-NATAL
PROVINSIE VAN KWAZULU-NATAL**

**UMNYANGO WEMFUNDO
DEPARTMENT OF EDUCATION
DEPARTEMENT VAN ONDERWYS**

**UKHAHLAMBA REGION : AMAJUBA DISTRICT
NEWCASTLE CIRCUIT**

IKHELI : 9288 SECTION 5	ISIKHWAMA SEPOSI: PRIVATE BAG X5011	UCINGO: 034-3291151/2/7/9
ADDRESS: HOSPITAL ROAD	PRIVATE BAG: MADADENI	TELEPHONE:
ADRES: MADADENI, 2951	PRIVAATSAK: 2951	TELEFOON:
E-MAIL: ShaamB@kznedu.kzntl.gov.za		FAX: 034-3291159/61
ENQ: V.S. ZULU	DATE: 2005/09/21	

**Ms J. Chrisenduth
P.O. Box 24292
Newcastle
2940**

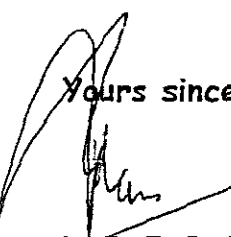
Dear Madam

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT
SELECTED SCHOOLS**

Your letter dated 14/09/2005, refers.

Kindly note that this office has no objection if the Principals and SGB of the relevant schools are amenable to your request. Please seek written permission from the aforementioned role-players and submit copies of same to this office for final approval.

Yours sincerely


**P.R.B. BHAGWANDASS
WARD MANAGER**

**Annexure C: Permission from Principals
Panorama**

P.O. Box 24292
Newcastle
2940

9 November 2005

The Principal

Dear Sir/Madam

RE: Questionnaire to be completed by Educators teaching Grade 12

I, Jayshree Chrisenduth, am currently conducting a research on factors influencing Grade 12 results in Kwa-Zulu Natal schools. As part of my research I am required to administer a questionnaire to Grade 12 Educators which they may complete in $\pm$ ten (10) minutes.

Complete confidentiality is assured as no names of schools or personnel will be used in the research. Educators will remain anonymous as no identification is required.

I kindly request your permission to administer the questionnaire to ten of the Grade 12 educators. The SEM of Phumelela Ward has been informed.

Thanks for your co-operation.

Kind regards

Chrisenduth

J. Chrisenduth (Mrs)

Cell: 082 4871 617 or 034 3171085 (A/H)

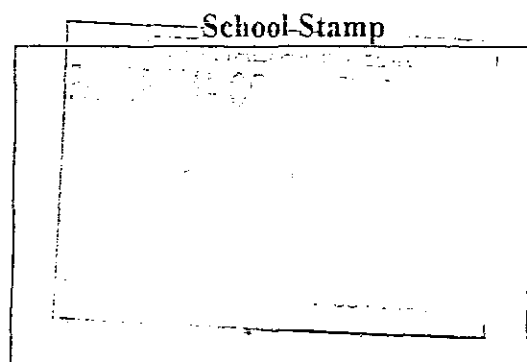
.....
Please complete the following consent form that is required by the SEM.

I, J.C. Naudi principal of PANORAMA COMB.
School do /do not grant permission to Mrs. J. Chrisenduth to administer the
questionnaire to Grade 12 educators.

J.C. Naudi
Principal

9/11/2005

Date



Annexure C; Hope High

P.O. Box 24292
Newcastle
2940

9 November 2005

The Principal

Dear Sir/Madam

RE: Questionnaire to be completed by Educators teaching Grade 12

I, Jayshree Chrisenduth, am currently conducting a research on factors influencing Grade 12 results in Kwa-Zulu Natal schools. As part of my research I am required to administer a questionnaire to Grade 12 Educators which they may complete in $\pm$ ten (10) minutes.

Complete confidentiality is assured as no names of schools or personnel will be used in the research. Educators will remain anonymous as no identification is required.

I kindly request your permission to administer the questionnaire to ten of the Grade 12 educators. The SEM of Phumelela Ward has been informed.

Thanks for your co-operation.

Kind regards

Chrisenduth

J. Chrisenduth (Mrs)

Cell: 082 4871 617 or 034 3171085 (A/H)

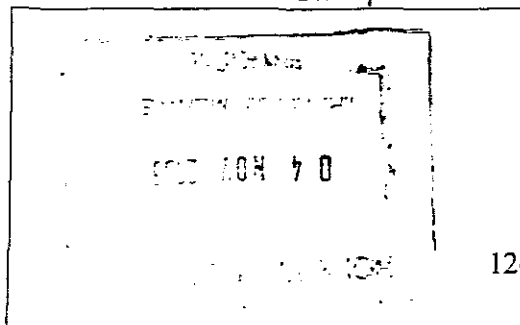
.....
Please complete the following consent form that is required by the SEM.

I, Van de Merwe principal of HOPE COMB.
School do /do not grant permission to Mrs. J. Chrisenduth to administer the questionnaire to Grade 12 educators.

Van de Merwe
Principal

2005/11/09
Date

School Stamp



7 November 2005

The Principal

Dear Sir/Madam

RE: Questionnaire to be completed by Educators teaching Grade 12

I, Jayshree Chrisenduth, am currently conducting a research on factors influencing Grade 12 results in Kwa-Zulu Natal schools. As part of my research I am required to administer a questionnaire to Grade 12 Educators which they may complete in $\pm$ ten (10) minutes.

Complete confidentiality is assured as no names of schools or personnel will be used in the research. Educators will remain anonymous as no identification is required.

I kindly request your permission to administer the questionnaire to ten of the Grade 12 educators. The SEM of Phumelela Ward has been informed.

Thanks for your co-operation.

Kind regards

Chrisenduth

J. Chrisenduth (Mrs)

Cell: 082 4871 617 or 034 3171085 (A/H)

.....
Please complete the following consent form that is required by the SEM.

I, S.T. SHABALALA principal of SIYALUNGELWA
School do / do not grant permission to Mrs. J. Chrisenduth to administer the
questionnaire to Grade 12 educators.

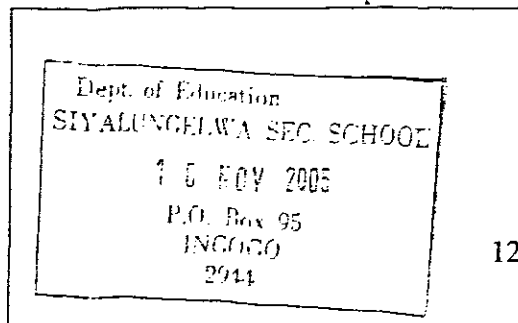
S.T. Shabalala

Principal

18/11/2005

(Date)

School Stamp



Annexure C: Charlestown High

P.O. Box 24292
Newcastle
2940

9 November 2005

The Principal

Dear Sir/Madam

RE: Questionnaire to be completed by Educators teaching Grade 12

I, Jayshree Chrisenduth, am currently conducting a research on factors influencing Grade 12 results in Kwa-Zulu Natal schools. As part of my research I am required to administer a questionnaire to Grade 12 Educators which they may complete in $\pm$ ten (10) minutes.

Complete confidentiality is assured as no names of schools or personnel will be used in the research. Educators will remain anonymous as no identification is required.

I kindly request your permission to administer the questionnaire to ten of the Grade 12 educators. The SEM of Phumelela Ward has been informed.

Thanks for your co-operation.

Kind regards

J. Chrisenduth

J. Chrisenduth (Mrs)

Cell: 082 4871 617 or 034 3171085 (A/H)

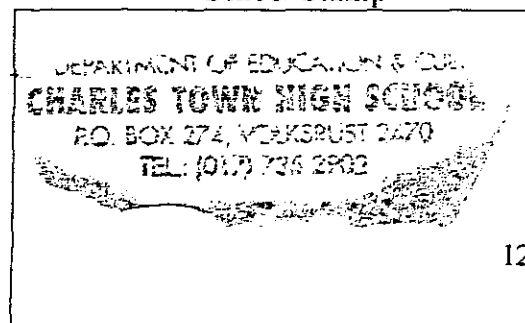
.....
Please complete the following consent form that is required by the SEM.

I, STEPHEN NGWENYA principal of CHARLESTOWN HIGH.....
School do /do not grant permission to Mrs. J. Chrisenduth to administer the questionnaire to Grade 12 educators.

S. Ngwenya
Principal

18/11/2005
Date

School Stamp



QUESTIONNAIRE

Instructions:

The information provided on this questionnaire is completely confidential. Reports will be made with aggregate data, and no one person will be identified with his or her data. Complete confidentiality is assured. This is not a test but a questionnaire. Kindly complete the questionnaire as accurately as possible. No names of schools or personnel will be released.

Section A

Demographic Data

- 1. School**
- 2. Subject**
- 3. Number of learners per class (2004)**

	Grade 12	Number of learners per class
3.1	A	
3.2	B	
3.3	C	
3.4	D	
3.5	E	

4. Medium of Instruction

(Place a tick ✓ in the appropriate space)

4.1	English	
4.2	Zulu	
4.3	Afrikaans	
4.4	Other	

5. Educator's First Language (Mother Tongue)

(Place a tick ✓ in the appropriate space)

5.1	English	
5.2	Zulu	
5.3	Afrikaans	
5.4	Other	

6. Academic Information

6.1 What has been the matriculation pass rate in 2004?

6.2 Percentage pass rate per subject

	Subject	H.G.	S.G.
6.2.1	English (Sec. Language)		
6.2.2	Afrikaans		
6.2.3	Zulu		
6.2.4	Mathematics		
6.2.5	Physical Science		
6.2.6	Biology		
6.2.7	Geography		
6.2.8	Accounting		
6.2.9	Business Economics		
6.2.10	Economics		

Section B

The following are statements about the classroom climate at your school. Please indicate the extent to which each statement characterizes activities in the classroom by circling the appropriate response by using the following key:

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

- | | | | | |
|--|---|---|---|---|
| 1.1.1 Educator assigns seats to learners in class | 1 | 2 | 3 | 4 |
| 1.1.2 Learners' seats are not changed. | 1 | 2 | 3 | 4 |
| 1.1.3 Desks are arranged in rows and chairs facing forward | 1 | 2 | 3 | 4 |
| 1.1.4 Learners are not permitted to move about the room | 1 | 2 | 3 | 4 |
| 1.1.5 The number of learners per square meter is 2 (i.e. 2:1) or more | 1 | 2 | 3 | 4 |
| 1.1.6 Learners do not sit in clusters of four or five desks | 1 | 2 | 3 | 4 |
| | | | | |
| 1.2.1 The educator works with the class as a whole | 1 | 2 | 3 | 4 |
| 1.2.2 All learners in the class do the same work at the same time | 1 | 2 | 3 | 4 |
| 1.2.3 There is insufficient space for learners to carry out practical activities | 1 | 2 | 3 | 4 |
| 1.2.4 The educator-learner ratio is more than 1:30 | 1 | 2 | 3 | 4 |
| 1.2.5 Learners do not have direct contact with educators | 1 | 2 | 3 | 4 |
| | | | | |
| 1.3.1 Educator teaches without learners asking or answering questions. | 1 | 2 | 3 | 4 |
| 1.3.2 Educator does not encourage discussions | 1 | 2 | 3 | 4 |
| | | | | |
| 1.3.3 Educator does not involve all learners in the learning processes | 1 | 2 | 3 | 4 |
| 1.3.4 Educator does not move around class to talk to individual learners | 1 | 2 | 3 | 4 |
| 1.3.5 Educator does not move around class to guide and assist learners experiencing difficulties | 1 | 2 | 3 | 4 |
| 1.3.6 Educator teaches at the front, centre of the classroom | 1 | 2 | 3 | 4 |

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

1.3.7 Educator does not engage in face to face conversations with individual learners

1 2 3 4

1.3.8 Classroom is not open, flexible, democratic with < 30 learners

1 2 3 4

2.1.1 Learners work co-operatively in groups

1 2 3 4

2.1.2 Learners share ideas in a lesson/group

1 2 3 4

2.1.3 Learners are given time to report their group's findings

1 2 3 4

2.1.4 Learners are encouraged to engage in group discussions

1 2 3 4

2.1.5 Learners are allowed to give their own views

1 2 3 4

2.1.6 Problem-centered discussions are encouraged

1 2 3 4

2.2.1 How would you rate the educator (yourself) in English?

	Poor	Fair	Good	Excellent
Read	1	2	3	4
Write	1	2	3	4
Speak	1	2	3	4

2.2.2 How would you rate the educator (yourself) in Zulu?

	Poor	Fair	Good	Excellent
Read	1	2	3	4
Write	1	2	3	4
Speak	1	2	3	4

2.2.3 Learners experience language problems in the subject taught

1 2 3 4

2.2.4 Educators do not have bridging classes for language

1 2 3 4

2.2.5 Explanation by educator is not sufficient to enable learners understand subject taught

1 2 3 4

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

2.2.6 Educators do not explain lessons in learners mother tongue when teaching	1	2	3	4
2.2.7 Learners do not take part in discussions during lessons	1	2	3	4
2.2.8 Learners feel embarrassed to answer questions because of a poor command of spoken language	1	2	3	4
2.2.9 Learners have adaptation problems in class because of the language barrier	1	2	3	4
2.2.10 Educators find it difficult to pronounce the names of culturally different learners	1	2	3	4
2.3.1 Educators stimulate self-discovered learning	1	2	3	4
2.3.2 The educators ask a lot of probing questions during lessons.	1	2	3	4
2.3.3 Varied teaching strategies are used	1	2	3	4
2.3.4 Learners given time to practice/master new skills in individual and group work	1	2	3	4
2.3.5 Learners actively participate in discussions and ask questions	1	2	3	4
2.3.6 Learners are given regular feedback	1	2	3	4
2.3.7 Educators teach problem-solving and negotiation skills	1	2	3	4
3.1.1 Learners engage in making offensive or insulting remarks to educators or other learners to lead to confrontation	1	2	3	4
3.1.2 Learners make unnecessary noise (non-verbal) by banging objects/doors, scraping chairs, moving clumsily.	1	2	3	4
3.1.3 Learners talk out of turn by calling out, making remarks, interrupting and distracting others	1	2	3	4
3.1.4 Learners fail/refuse to carry out instructions or to keep class rules	1	2	3	4
3.1.5 Learners display unpunctuality by being late to lessons, late in from play-time/break.	1	2	3	4
3.1.6 Learner behaviour is disruptive and seriously interferes with the activities of the lesson	1	2	3	4
3.1.7 There are many noisy, badly behaved learners	1	2	3	4

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

3.2.1 The educator acts according to code of conduct when learners break the rules and endeavours to understand the learner's behaviour	1	2	3	4
3.2.2 Educator quickly corrects learners when they break a rule	1	2	3	4
3.2.3 The learning environment is orderly and serious	1	2	3	4
3.2.4 Learners are involved in the management of discipline	1	2	3	4
3.2.5 Learners are allowed to determine consequences of behaviour	1	2	3	4
3.2.6 Learner's follow clear, consistent rules which reinforce educator authority	1	2	3	4
3.2.7 Learners displaying disruptive behaviour are counselled individually by educators	1	2	3	4
3.2.8 District psychological services provides counselling for learners displaying serious disruptive behaviour patterns	1	2	3	4
3.2.9 Disruptive learners are not ignored	1	2	3	4
3.3.1 Learners are encouraged to seek extra class-work so that the learner can get better grades	1	2	3	4
3.3.2 Learners are encouraged to improve on previous academic work	1	2	3	4
3.3.3 Educators provide learners with positive feed-back and frequent verbal support/praise	1	2	3	4
3.3.4 Educators handle incorrect answers in a positive way and value learner effort.	1	2	3	4
3.3.5 Educators enhance learner's social skills and social interaction.	1	2	3	4
3.3.6 Educators encourage educational/occupational aspirations of learners	1	2	3	4
3.3.7 The educator takes a personal interest in each learner and listens to their problems	1	2	3	4
3.3.8 Learners follow the educator's directions without excessive delay or complaints.	1	2	3	4
3.3.9 There is a supportive relationship between educator and learner	1	2	3	4
3.3.10 There is mutual trust, respect and acceptance between educator and learner	1	2	3	4

Section C

1. In your opinion discuss factors that impacted either positively or negatively on the matriculation results in 2004 at this school.

2. Please feel free to make any other comments regarding Grade 12 learners academic performance at this school.

I am most grateful for your time and want to assure you that all the information will be dealt with in the strictest confidence

Thank you for your co-operation

Annexure E: Statistics

INTERPRETATION

PAGES: 136 – 139

Factor analysis was computed to determine the underlying groupings/themes.

Three sets of factor analyses were computed.

For the 1st factor analysis, items 1.1.1 to 1.3.8 were input. The Rotated component matrix indicates which items correlate highly. Component 1 comprises items from 1.3. Component 2 comprises items from 1.2 and Component 3 comprises items from 1.1. In summary, the factor analysis indicates that items 1.1.1 to 1.3.8 can be grouped into 3 themes – the first theme relates to 1.1, the second to 1.2 and the third to 1.3. You need to assign meaningful names to each theme. For example, Factor / Theme 1.1 can be called "Classroom setting"

For the 2nd factor analysis items 2.1.1 to 2.1.6, 2.2.2 to 2.3.7 were input. Again, the rotated component matrix indicates 3 themes relating to 2.1, 2.2 and 2.3. Again assign meaningful names to the themes.

For the 3rd factor analysis, items 3.1.1 to 3.3.10 were input. Again the rotated component matrix indicates 3 themes relating to 3.1, 3.2 and 3.3

I've named the themes

B1.1, B1.2, B1.3 and
B2.1, B2.2, B2.3 and
B3.1, B3.2, B3.3

PAGES: 140 – 142

The purpose of the reliability tests was to test the reliability of the data. Cronbach's alpha was calculated for items in question 1, then question 2 and finally question 3. In all 3 calculations, the value of alpha is above 0.7. This indicates a high degree of internal consistency and stability amongst the items that were input.

PAGES: 143 – 149

Frequency tables or measures of central tendency (mean, std dev, etc)

PAGE: 150

Measures of central tendency for the themes. The scores for the themes were created by averaging the items relating to a theme.

PAGE: 151

The correlation table indicates how the themes or factors are related to each other. Significant relationships are where $p < 0.05$. Direct relationships are where the Pearson r value is positive. Indirect relationships are indicated by a negative r value. Strong relationships are where r is greater than 0.7

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	698.259
	df	171
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.993	31.544	31.544
2	4.427	23.299	54.843
3	3.732	19.645	74.487

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component		
	1	2	3
B1.3.5	.903	.228	.192
B1.3.4	.903	.257	.210
B1.3.1	.880	.161	.197
B1.3.3	.820	.184	.276
B1.3.2	.818	.137	.296
B1.3.7	.685	.332	.346
B1.2.5	.619	.192	.518
B1.1.2	.514	.391	.443
B1.2.4	.171	.820	.208
B1.2.1	-.053	.782	.375
B1.3.8	.419	.711	.124
B1.2.3	.157	.661	.464
B1.2.2	.340	.659	.305
B1.1.1	.464	.655	-.061
B1.1.5	.218	.563	.517
B1.1.3	.341	.102	.822
B1.1.6	.280	.390	.787
B1.1.4	.290	.464	.631
B1.3.6	.490	.382	.627

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.691
Bartlett's Test of Sphericity	Approx. Chi-Square	687.821
	df	210
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.979	28.472	28.472
2	4.821	22.957	51.429
3	2.259	10.758	62.187
4	1.917	9.128	71.315

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component			
	1	2	3	4
B2.1.4	.904	-.179	-.040	.106
B2.1.3	.845	-.253	.141	.096
B2.1.1	.801	-.330	-.019	.002
B2.1.5	.793	-.016	.345	.182
B2.1.6	.781	.010	.300	.163
B2.3.3	.693	-.027	.394	.439
B2.1.2	.675	-.396	.328	.123
B2.3.4	.637	-.377	.449	.240
B2.3.5	.604	-.456	.473	.163
B2.2.8	-.065	.807	-.162	.042
B2.2.3	-.032	.794	.120	-.137
B2.2.7	-.227	.765	-.276	.069
B2.2.9	-.082	.741	-.360	.008
B2.2.6	-.279	.681	.172	.071
B2.2.5	-.146	.655	-.018	-.274
B2.2.10	-.107	.608	-.047	-.464
B2.2.4	-.316	.584	-.002	-.118
B2.3.6	.249	.037	.781	.133
B2.3.7	.540	-.228	.607	.053
B2.3.1	.135	-.044	.052	.875
B2.3.2	.463	-.186	.282	.651

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.657
Bartlett's Test of Sphericity	Approx. Chi-Square	1117.011
	df	325
	Sig.	.000

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	9.098	34.992	34.992
2	4.823	18.549	53.541
3	2.777	10.681	64.222
4	2.763	10.628	74.850
5	1.521	5.849	80.700

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
B3.3.3	.885	-.156	.161	.086	-.017
B3.3.5	.860	-.228	.085	.076	.149
B3.3.7	.860	-.225	.186	.165	.152
B3.3.10	.858	-.330	.061	.143	-.058
B3.2.7	.843	-.148	.040	.168	.127
B3.3.6	.839	-.371	.028	.189	.089
B3.3.9	.802	-.316	.023	.363	-.037
B3.3.4	.794	-.161	.305	.140	.181
B3.3.8	.755	-.435	.039	.227	-.071
B3.2.6	.700	-.279	.031	.378	.151
B3.3.2	.697	-9.3E-05	.248	.295	-.172
B3.3.1	.606	-.043	.265	.418	-.460
B3.2.3	.527	-.192	.333	.345	.278
B3.1.3	-.202	.859	-.058	-.160	.124
B3.1.4	-.234	.835	.078	-.243	.054
B3.1.2	-.251	.815	-.122	-.025	-.246
B3.1.1	-.099	.780	-.358	.011	-.280
B3.1.6	-.416	.753	.201	-.166	.142
B3.1.7	-.538	.676	.239	.058	.015
B3.2.1	.054	.002	.877	-.125	-.153
B3.2.2	.313	-.014	.848	-.041	-.172
B3.2.9	.386	-.097	.584	.350	.249
B3.2.5	.330	-.163	.012	.790	.110
B3.2.4	.434	-.068	-.064	.780	.166
B3.1.5	-.071	.474	.493	-.606	.040
B3.2.8	.204	-.026	-.194	.237	.856

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B1.1.1	40.0750	194.8404	.5997	.9547
B1.1.2	40.2250	190.2301	.7483	.9525
B1.1.3	40.0000	191.2308	.6614	.9539
B1.1.4	40.3000	189.0872	.7493	.9524
B1.1.5	40.4750	191.3327	.6953	.9533
B1.1.6	40.6000	187.4256	.7808	.9519
B1.2.1	39.8000	197.6000	.5697	.9550
B1.2.2	39.9250	193.1481	.7197	.9529
B1.2.3	40.2500	192.3462	.6882	.9534
B1.2.4	40.6000	188.9641	.6468	.9545
B1.2.5	40.8250	193.1224	.7391	.9527
B1.3.1	41.1750	194.5071	.7174	.9531
B1.3.2	41.3000	199.8051	.7162	.9538
B1.3.3	41.1750	196.7122	.7351	.9531
B1.3.4	41.0750	188.8917	.7980	.9517
B1.3.5	41.1500	190.9513	.7703	.9522
B1.3.6	40.5500	186.2538	.8298	.9511
B1.3.7	40.6750	188.0712	.7748	.9520
B1.3.8	40.6750	189.6609	.7042	.9532

Reliability Coefficients

N of Cases = 40.0

N of Items = 19

Alpha = .9554

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B2.2.3	53.7000	51.6000	.1931	.7138
B2.2.4	53.6750	56.0199	-.1016	.7441
B2.2.5	54.3750	54.8045	-.0087	.7299
B2.2.6	54.1250	53.6506	.0248	.7345
B2.2.7	54.3000	55.2410	-.0379	.7318
B2.2.8	54.0500	53.1769	.1405	.7160
B2.2.9	54.1000	54.7590	.0031	.7274
B2.2.10	54.1000	54.7077	-.0224	.7360
B2.3.1	53.6750	52.4301	.2379	.7086
B2.3.2	53.4250	50.3532	.4505	.6939
B2.3.3	53.3000	48.4718	.7116	.6781
B2.3.4	53.7000	48.3179	.4550	.6885
B2.3.5	53.7250	49.1788	.3866	.6951
B2.3.6	53.1750	51.2250	.4476	.6968
B2.3.7	53.5750	48.3532	.4737	.6873
B2.1.1	54.0000	50.1026	.3662	.6978
B2.1.2	53.6500	48.6436	.4081	.6927
B2.1.3	53.4000	48.8615	.5065	.6868
B2.1.4	53.4250	48.5583	.5226	.6851
B2.1.5	53.1750	47.8917	.7044	.6754
B2.1.6	53.3500	47.3615	.6735	.6740

Reliability Coefficients

N of Cases = 40.0

N of Items = 21

Alpha = .7156

Reliability

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
B3.1.1	66.1750	101.5327	-.1708	.8444
B3.1.2	66.2500	101.9872	-.2068	.8439
B3.1.3	66.1000	101.3231	-.1530	.8458
B3.1.4	65.9000	101.6308	-.1706	.8458
B3.1.5	65.6250	99.5224	-.0647	.8434
B3.1.6	65.9000	103.2718	-.2496	.8494
B3.1.7	65.9500	104.1513	-.2954	.8508
B3.2.1	64.9000	94.7590	.2443	.8288
B3.2.2	64.7500	92.6026	.4799	.8216
B3.2.3	65.2500	89.2179	.6132	.8156
B3.2.4	65.5750	90.7122	.5337	.8188
B3.2.5	65.7000	91.8051	.4560	.8215
B3.2.6	65.7250	87.3840	.6328	.8133
B3.2.7	65.6500	85.9769	.7167	.8097
B3.2.8	66.4250	95.4301	.1880	.8310
B3.2.9	65.1750	90.0968	.5884	.8170
B3.3.1	65.0500	89.5359	.6194	.8158
B3.3.2	64.8750	89.8558	.6948	.8149
B3.3.3	65.0500	86.1513	.7636	.8088
B3.3.4	65.2250	86.1276	.7774	.8085
B3.3.5	65.4000	86.8103	.7214	.8105
B3.3.6	65.4250	87.3788	.6779	.8122
B3.3.7	65.3000	83.9077	.7822	.8056
B3.3.8	65.5250	88.5122	.5891	.8155
B3.3.9	65.4000	86.0410	.6954	.8103
B3.3.10	65.4500	86.5103	.6792	.8112

Reliability Coefficients

N of Cases = 40.0

N of Items = 26

Alpha = .8302

Table 1

School		
	Frequency	Percent
A	10	25.0
B	10	25.0
C	10	25.0
D	10	25.0
Total	40	100.0

Table 2

Subject		
	Frequency	Percent
Acc	4	10.0
Afrik	4	10.0
Biol	4	10.0
Bus Eco	4	10.0
Econ	4	10.0
Eng	4	10.0
Geog	4	10.0
Maths	4	10.0
P Sc	4	10.0
Zulu	4	10.0
Total	40	100.0

Table 3

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Grade 12A	39	6	49	27.79	11.462
Grade 12B	12	20	43	32.08	7.267
Grade 12C	2	23	33	28.00	7.071
Grade 12D	1	25	25	25.00	
Grade 12E	0				
Valid N (listwise)	0				

Table 4

Language		
	Frequency	Percent
English	32	80.0
Zulu	4	10.0
Afrikaans	4	10.0
Total	40	100.0

Table 5

Statistics		
Matric pass rate		
N	Valid	6
	Missing	34
Mean		85.83
Median		100.00
Mode		100
Std. Deviation		26.866
Minimum		33
Maximum		100

Table 6

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
English HG	4	72	100	91.00	13.216
Afrikaans HG	3	31	100	77.00	39.837
Zulu HG	5	0	100	79.20	44.308
Mathematics HG	3	16	100	72.00	48.497
Phys Science HG	3	11	100	53.67	44.613
Biology HG	4	50	100	73.00	21.323
Geography HG	4	4	100	44.75	40.244
Accounting HG	5	7	100	53.00	44.113
Bus Economics HG	4	10	100	53.00	44.677
Economics HG	3	73	100	91.00	15.588
Valid N (listwise)	0				

Table 7**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
English SG	3	73	100	91.00	15.588
Afrikaans SG	3	100	100	100.00	.000
Zulu SG	2	36	43	39.50	4.950
Mathematics SG	4	26	100	62.75	30.434
Phys Science SG	4	71	100	85.75	12.285
Biology SG	4	78	100	89.50	9.000
Geography SG	3	29	100	76.33	40.992
Accounting SG	4	29	100	79.75	34.160
Bus Economics SG	3	56	100	82.67	23.438
Economics SG	1	100	100	100.00	
Valid N (listwise)	0				

Table 8

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B1.1.1	6	15.0%	9	22.5%	14	35.0%	11	27.5%
B1.1.2	6	15.0%	15	37.5%	8	20.0%	11	27.5%
B1.1.3	6	15.0%	11	27.5%	7	17.5%	16	40.0%
B1.1.4	8	20.0%	14	35.0%	7	17.5%	11	27.5%
B1.1.5	10	25.0%	14	35.0%	8	20.0%	8	20.0%
B1.1.6	13	32.5%	14	35.0%	4	10.0%	9	22.5%

Table 9

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B1.2.1	2	5.0%	10	25.0%	13	32.5%	15	37.5%
B1.2.2	4	10.0%	8	20.0%	16	40.0%	12	30.0%
B1.2.3	7	17.5%	12	30.0%	12	30.0%	9	22.5%
B1.2.4	17	42.5%	8	20.0%	4	10.0%	11	27.5%
B1.2.5	14	35.0%	15	37.5%	8	20.0%	3	7.5%

Table 10

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B1.3.1	22	55.0%	13	32.5%	2	5.0%	3	7.5%
B1.3.2	22	55.0%	15	37.5%	3	7.5%	0	.0%
B1.3.3	21	52.5%	12	30.0%	7	17.5%	0	.0%
B1.3.4	23	57.5%	9	22.5%	3	7.5%	5	12.5%
B1.3.5	24	60.0%	9	22.5%	3	7.5%	4	10.0%
B1.3.6	13	32.5%	11	27.5%	8	20.0%	8	20.0%
B1.3.7	14	35.0%	14	35.0%	4	10.0%	8	20.0%
B1.3.8	14	35.0%	15	37.5%	2	5.0%	9	22.5%

Table 11

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B2.1.1	8	20.0%	11	27.5%	18	45.0%	3	7.5%
B2.1.2	6	15.0%	9	22.5%	14	35.0%	11	27.5%
B2.1.3	3	7.5%	5	12.5%	21	52.5%	11	27.5%
B2.1.4	3	7.5%	6	15.0%	20	50.0%	11	27.5%
B2.1.5	0	.0%	7	17.5%	17	42.5%	16	40.0%
B2.1.6	2	5.0%	6	15.0%	20	50.0%	12	30.0%

Table 12

	Poor		Fair		Good		Excellent	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
How would you rate yourself in English Reading	0	.0%	0	.0%	24	60.0%	16	40.0%
How would you rate yourself in English Writing	0	.0%	0	.0%	28	70.0%	12	30.0%
How would you rate yourself in English Speaking	0	.0%	1	2.5%	28	70.0%	11	27.5%
How would you rate yourself in English Reading	10	25.0%	4	10.0%	6	15.0%	20	50.0%
How would you rate yourself in English Writing	12	30.0%	2	5.0%	5	12.5%	21	52.5%
How would you rate yourself in English Speaking	11	27.5%	4	10.0%	6	15.0%	19	47.5%

Table 13

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B2.2.3	6	15.0%	11	27.5%	12	30.0%	11	27.5%
B2.2.4	7	17.5%	11	27.5%	8	20.0%	14	35.0%
B2.2.5	14	35.0%	14	35.0%	9	22.5%	3	7.5%
B2.2.6	15	37.5%	9	22.5%	6	15.0%	10	25.0%
B2.2.7	12	30.0%	15	37.5%	10	25.0%	3	7.5%
B2.2.8	7	17.5%	14	35.0%	17	42.5%	2	5.0%
B2.2.9	9	22.5%	12	30.0%	17	42.5%	2	5.0%
B2.2.10	12	30.0%	12	30.0%	8	20.0%	8	20.0%

Table 14

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B2.3.1	2	5.0%	12	30.0%	21	52.5%	5	12.5%
B2.3.2	1	2.5%	8	20.0%	22	55.0%	9	22.5%
B2.3.3	0	.0%	7	17.5%	22	55.0%	11	27.5%
B2.3.4	6	15.0%	9	22.5%	16	40.0%	9	22.5%
B2.3.5	7	17.5%	7	17.5%	18	45.0%	8	20.0%
B2.3.6	0	.0%	4	10.0%	23	57.5%	13	32.5%
B2.3.7	6	15.0%	4	10.0%	21	52.5%	9	22.5%

Table 15

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B3.1.1	15	37.5%	12	30.0%	12	30.0%	1	2.5%
B3.1.2	15	37.5%	14	35.0%	11	27.5%	0	.0%
B3.1.3	15	37.5%	11	27.5%	11	27.5%	3	7.5%
B3.1.4	9	22.5%	17	42.5%	9	22.5%	5	12.5%
B3.1.5	7	17.5%	14	35.0%	10	25.0%	9	22.5%
B3.1.6	9	22.5%	18	45.0%	7	17.5%	6	15.0%
B3.1.7	8	20.0%	23	57.5%	2	5.0%	7	17.5%

Table 16

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B3.2.1	1	2.5%	6	15.0%	15	37.5%	18	45.0%
B3.2.2	0	.0%	4	10.0%	16	40.0%	20	50.0%
B3.2.3	3	7.5%	6	15.0%	23	57.5%	8	20.0%
B3.2.4	3	7.5%	15	37.5%	18	45.0%	4	10.0%
B3.2.5	5	12.5%	14	35.0%	19	47.5%	2	5.0%
B3.2.6	8	20.0%	11	27.5%	17	42.5%	4	10.0%
B3.2.7	8	20.0%	8	20.0%	20	50.0%	4	10.0%
B3.2.8	20	50.0%	12	30.0%	7	17.5%	1	2.5%
B3.2.9	1	2.5%	9	22.5%	20	50.0%	10	25.0%

Table 17

	Strongly disagree		Disagree		Agree		Strongly Agree	
	Count	Table %	Count	Table %	Count	Table %	Count	Table %
B3.3.1	0	.0%	10	25.0%	16	40.0%	14	35.0%
B3.3.2	0	.0%	5	12.5%	19	47.5%	16	40.0%
B3.3.3	2	5.0%	7	17.5%	16	40.0%	15	37.5%
B3.3.4	2	5.0%	10	25.0%	17	42.5%	11	27.5%
B3.3.5	5	12.5%	6	15.0%	23	57.5%	6	15.0%
B3.3.6	6	15.0%	4	10.0%	25	62.5%	5	12.5%
B3.3.7	6	15.0%	5	12.5%	18	45.0%	11	27.5%
B3.3.8	6	15.0%	8	20.0%	21	52.5%	5	12.5%
B3.3.9	6	15.0%	6	15.0%	20	50.0%	8	20.0%
B3.3.10	7	17.5%	4	10.0%	23	57.5%	6	15.0%

Table 18

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
B1.1	40	1.00	4.00	2.5458	.84983
B1.2	40	1.40	4.00	2.5450	.80764
B1.3	40	1.00	3.75	1.8531	.81938
B2.1	40	1.17	4.00	2.9000	.74229
B2.2	40	1.00	3.88	2.3469	.74059
B2.3	40	1.43	4.00	2.8893	.64009
B3.1	40	1.00	3.71	2.1643	.76320
B3.2	40	1.56	3.78	2.6889	.52611
B3.3	40	1.20	4.00	2.8800	.76400
Valid N (listwise)	40				

Table 19 Correlations

Correlations										
		B1.1	B1.2	B1.3	B2.1	B2.2	B2.3	B3.1	B3.2	B3.3
B1.1	Pearson r	1	.863**	.815**	-.693**	.729**	-.571**	.707**	-.362*	-.544**
	p		.000	.000	.000	.000	.000	.000	.022	.000
	N	40	40	40	40	40	40	40	40	40
B1.2	Pearson r	.863**	1	.715**	-.614**	.659**	-.485**	.722**	-.224	-.505**
	p	.000		.000	.000	.000	.001	.000	.165	.001
	N	40	40	40	40	40	40	40	40	40
B1.3	Pearson r	.815**	.715**	1	-.723**	.661**	-.704**	.736**	-.518**	-.692**
	p	.000	.000		.000	.000	.000	.000	.001	.000
	N	40	40	40	40	40	40	40	40	40
B2.1	Pearson r	-.693**	-.614**	-.723**	1	-.471**	.796**	-.528**	.720**	.838**
	p	.000	.000	.000		.002	.000	.000	.000	.000
	N	40	40	40	40	40	40	40	40	40
B2.2	Pearson r	.729**	.659**	.661**	-.471**	1	-.496**	.584**	-.164	-.348*
	p	.000	.000	.000	.002		.001	.000	.313	.028
	N	40	40	40	40	40	40	40	40	40
B2.3	Pearson r	-.571**	-.485**	-.704**	.796**	-.496**	1	-.571**	.816**	.820**
	p	.000	.001	.000	.000	.001		.000	.000	.000
	N	40	40	40	40	40	40	40	40	40
B3.1	Pearson r	.707**	.722**	.736**	-.528**	.584**	-.571**	1	-.450**	-.571**
	p	.000	.000	.000	.000	.000	.000		.004	.000
	N	40	40	40	40	40	40	40	40	40
B3.2	Pearson r	-.362*	-.224	-.518**	.720**	-.164	.816**	-.450**	1	.820**
	p	.022	.165	.001	.000	.313	.000	.004		.000
	N	40	40	40	40	40	40	40	40	40
B3.3	Pearson r	-.544**	-.505**	-.692**	.838**	-.348*	.820**	-.571**	.820**	1
	p	.000	.001	.000	.000	.028	.000	.000	.000	
	N	40	40	40	40	40	40	40	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Kruskall – Wallis Anova

The purpose of the Kruskal-Wallis Anova was to compare the dependent variable (dimensions or pass rate) between the schools.

Kruskall Wallis Anova (dependent variable = B1.1, B1,2 B3.3)

The p-values indicate a significant difference in B1.1 to B3.1 between schools ($p < 0.05$). Then examine the report of means to see how the schools differ. Std deviation refers to spread of values around the mean. Values close to one would indicate the std deviation is high – meaning that there is a spread of scores from 1 to 4 around the mean ie everyone did not answer the same

Test Statistics^{a,b}

	Chi-Square	df	p
B1.1	16.196	3	.001
B1.2	25.145	3	.000
B1.3	10.276	3	.016
B2.1	12.276	3	.006
B2.2	16.008	3	.001
B2.3	8.438	3	.038
B3.1	16.953	3	.001
B3.2	3.079	3	.380
B3.3	7.724	3	.052

a. Kruskal Wallis Test

b. Grouping Variable: SCHOOL

Report

		SCHOOL				
		Hope	Charlestown	Siyalungelwa	Panorama	Total
B1.1	Mean	2.2833	1.9000	2.5333	3.4667	2.5458
	N	10	10	10	10	40
	Std. Deviation	.63367	.60451	.62262	.70185	.84983
B1.2	Mean	2.0400	1.9400	2.6000	3.6000	2.5450
	N	10	10	10	10	40
	Std. Deviation	.56411	.54201	.41096	.33993	.80764
B1.3	Mean	1.4500	1.4500	1.8750	2.6375	1.8531
	N	10	10	10	10	40
	Std. Deviation	.42979	.39816	.63738	1.05648	.81938
B2.1	Mean	2.9500	3.4667	2.9333	2.2500	2.9000
	N	10	10	10	10	40
	Std. Deviation	.61388	.42164	.47920	.87929	.74229
B2.2	Mean	2.0375	1.7625	2.7500	2.8375	2.3469
	N	10	10	10	10	40
	Std. Deviation	.59526	.48752	.51031	.76841	.74059
B2.3	Mean	3.2000	3.1571	2.8000	2.4000	2.8893
	N	10	10	10	10	40
	Std. Deviation	.61795	.32611	.60309	.67947	.64009
B3.1	Mean	1.5143	2.0000	2.1571	2.9857	2.1643
	N	10	10	10	10	40
	Std. Deviation	.41074	.62452	.30454	.78953	.76320
B3.2	Mean	2.8111	2.7556	2.7778	2.4111	2.6889
	N	10	10	10	10	40
	Std. Deviation	.55691	.40164	.45058	.63947	.52611
B3.3	Mean	3.0700	3.2600	3.0100	2.1800	2.8800
	N	10	10	10	10	40
	Std. Deviation	.77179	.27568	.45570	.94139	.76400

Kruskall Wallis Anova (dependent variable = Matric pass rate)

The pvalue is less than 0.05 indicating a statistical difference in pass rate between the 4 schools.

Test Statistics^{a,b}

	Chi-Square	df	p
Matric pass rate	35.750	3	.000

- a. Kruskal Wallis Test
- b. Grouping Variable: SCHOOL

Report

Matric pass rate

SCHOOL	Mean	N	Std. Deviation
Hope	100.00	10	.000
Charlestown	100.00	10	.000
Siyalungelwa	85.60	10	7.589
Panorama	33.00	10	.000
Total	79.65	40	28.156

Correlation

The table below shows significant correlations exist between matric pass rate and all the dimensions except B3.2

The correlations are significant since $p < 0.05$.

Correlations with B1.1, B1.2, B1.3, B2.2 and B3.1 are inversely proportional. This means that schools with low pass rates tended to have higher scores for B1.1, B1.2, B1.3, B2.2 and B3.1

Directly proportional correlations are with B2.1, B2.3

Correlations

	Matric pass rate		
	Pearson r	p	N
Matric pass rate	1		40
B1.1	-.651**	.000	40
B1.2	-.810**	.000	40
B1.3	-.577**	.000	40
B2.1	.520**	.001	40
B2.2	-.451**	.004	40
B2.3	.447**	.004	40
B3.1	-.659**	.000	40
B3.2	.272	.089	40
B3.3	.536**	.000	40

** . Correlation is significant at the 0.01 level (2-tailed).