

# **The relationship between funding in education and quality education**

**by**

**Jean Wilhelm van Rooyen**

Submitted in partial fulfilment of the requirements for the degree

**Philosophiae Doctor**

in the

Department of Education Management and Policy Studies  
Faculty of Education  
**University of Pretoria**

**Supervisor**

**Professor Doctor J. L. Beckmann**

October 2011

## Contents

List of Figures .....	5
List of Tables .....	6
DECLARATION OF ORIGINALITY .....	9
ACKNOWLEDGEMENTS .....	10
ABSTRACT.....	11
KEY CONCEPTS .....	12
ACRONYMS .....	13
CHAPTER 1: INTRODUCTION .....	14
1.1 Statement of purpose.....	14
1.2 Significance and <i>situatedness</i> of this study .....	14
1.3 Rationale .....	15
1.3.1 From a personal perspective .....	15
1.3.2 From a ‘practical / school / systems’ perspective.....	16
1.3.3 Based on literature .....	17
1.4 Research questions .....	18
1.5 Theoretical framework.....	19
1.6 Conceptual framework.....	20
1.7 Literature Review.....	24
1.7.1 Quality education.....	24
1.7.2 Funding of public education in South Africa .....	29
1.7.3 Democratisation of education in South Africa .....	34
1.7.4 The economics of education – linking funding and quality education...36	
1.8. Research design.....	40
1.8.1 Epistemology .....	40
1.8.2 Research approach .....	41
1.8.3 Methodology.....	41
CHAPTER 2: QUALITY EDUCATION .....	47
2.1 Introduction .....	47
2.2 Quality education .....	49
2.3 Quality education in the South African context.....	54
2.3.1 Progress in International Reading Literacy Study (PIRLS) .....	59
2.3.2 Trends in International Mathematics and Science Study (TIMSS) .....	60
2.3.3 Programme for International Student Assessment (PISA) .....	60
2.3.4 The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ).....	61
2.3.5 Annual National Assessments (ANA) .....	61
2.3.6 The National Senior Certificate Examination (NSCE).....	63
2.3.7 Class size as factor in quality education .....	69
2.4 European Commission’s model on quality education.....	74
2.4.1. Attainment. ....	75
2.4.2. Success and transition.....	75
2.4.3. Monitoring of school education.....	76
2.4.4. Resources and structures.....	76
2.5 The role of the teacher .....	77
2.6 Conclusion and synthesis.....	79
CHAPTER 3: LEGAL FRAMEWORK FOR THE FUNDING OF EDUCATION IN SOUTH AFRICAN PUBLIC SCHOOLS .....	81
3.1 Introduction.....	81

3.2	Organisation of the South African education system.....	83
3.2.1	Macro (education system) level.....	83
3.2.2	Micro (institutional/school) level .....	85
3.3	The funding of public education .....	88
3.3.1	General background.....	88
3.3.2	Public funds .....	89
3.3.3	Private funds .....	95
3.4	Responsibilities regarding the financial management of public schools .....	98
3.4.1	The management of funds in public schools .....	98
3.4.2	The management of facilities in public schools .....	101
3.4.2.1	Property rights .....	101
3.4.2.2	Responsibilities of the SGB with regard to the management of facilities at a public school .....	104
3.5	Conclusion .....	105
CHAPTER 4: ACCOUNTABILITY REGARDING THE FINANCIALMANAGEMENT OF EDUCATION .....		107
4.1	Introduction.....	107
4.2	Conceptualisation.....	109
4.2.1	Rights.....	109
4.2.2	Responsibility / duty / obligation.....	110
4.2.3	Accountability.....	111
4.2.4	Liability.....	112
4.3.	Primary responsibilities regarding the provision of education in South Africa 114	
4.3.1	The state .....	117
4.3.2	The school.....	117
4.3.3	The parent .....	119
4.3.4	The School Governing Body .....	120
4.3.5	The principal.....	122
4.3.6	The educator .....	123
4.4	The funding of education in South Africa .....	125
4.5	Accountability in the South African education system.....	126
4.6	Liability.....	128
4.6.1	Academic performance.....	129
4.6.2	Funding levels of education.....	130
4.6.3	Vicarious liability of the state.....	130
4.7	Conclusion .....	131
CHAPTER 5: RESEARCH DESIGN .....		134
5.1	Introduction.....	134
5.2	Epistemology .....	134
5.3	Theoretical and conceptual frameworks .....	143
5.4	Research approach .....	143
5.5	Methodology .....	147
5.5.1	Research paradigm.....	148
5.5.2	Case studies .....	150
5.5.3	Sampling .....	152
5.6	Data collection .....	157
5.6.1	Questionnaire.....	157
5.6.2	Semi-structured interviews .....	158
5.7	Data analysis .....	159



5.8	Trustworthiness, Validity and Reliability .....	159
5.10	Ethics.....	162
5.11	Storage of data .....	163
5.12	Limitations .....	163
5.13	In closing.....	164
CHAPTER 6: DATA ANALYSIS AND INTERPRETATION.....		165
6.1	Introduction.....	165
6.2	Section A: Demographic and other information.....	165
6.2.1	<i>Enrolment</i> .....	165
6.2.2	<i>Drop-out rate</i> .....	167
6.2.3	<i>University entrance</i> .....	168
6.2.4	<i>Distinctions</i> .....	169
6.2.5	<i>Subject averages</i> .....	170
6.2.6	<i>Demographic information about the School Management Team (SMT)</i> 173	
6.2.7	<i>Demographic information about the Grade twelve teachers</i> .....	176
6.2.8	<i>Demographic information about the SGBs</i> .....	179
6.2.9	<i>Demographic information about the Finance Committees (FCs)</i> .....	180
6.2.10	<i>Budget information</i> .....	181
6.2.11	<i>Additional funding per subject in preparation for the NSCE</i> .....	184
6.2.12	<i>Activities funded in preparation for the NSCE</i> .....	184
6.3	Section B: Performance in the National Senior Certificate Examination .....	185
6.3.1	<i>Management of the academic programme</i> .....	185
6.3.2	<i>Management of academic performance with special reference to grade twelve</i> .....	186
6.3.3	<i>Correlation between funding levels and academic performance of the school as a whole</i> .....	190
6.3.4	<i>Correlation of funding levels and academic performance of selected subjects in the National Senior Certificate Examination.</i> .....	194
6.3.5	<i>Reasons for the success in the National Senior Certificate Examination – supplementary comments derived from probing questions</i> .....	196
6.4	Section C: Indicators of Quality Education.....	202
6.5	Summary.....	208
CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS.....		211
7.1	Introduction.....	211
7.2	Reflection on and integration of literature review .....	212
7.2.1	Quality education.....	213
7.2.1.1	Indicators of quality education .....	214
7.2.1.2	Performance levels.....	215
7.2.1.3	Class size .....	216
7.2.1.4	Technology .....	217
7.2.1.5	Teacher / educator.....	217
7.2.1.6	Role of money.....	218
7.2.1.7	Managing academic performance.....	218
7.2.2	Legislative framework.....	219
7.2.3	Accountability.....	222
7.2.4	To summarise.....	223
7.3	Findings.....	224
7.3.1	The relationship between funding and the quality of education.....	225

7.3.2	Factors impacting on the quality of education in the research sample.	225
7.3.2.1	The teacher / educator .....	226
7.3.2.2	Management of academic performance.....	227
7.3.2.3	The use of technology.....	228
7.3.2.4	Class size .....	229
7.3.3	The role of money.....	229
7.3.4	Staff development.....	230
7.4	Conclusions based on assumptions .....	231
7.5	Recommendations for improvement of practice and further investigation....	233
7.5.1	Recommendations for improvement of practice.....	233
7.5.2	Recommendations for further investigation .....	233
7.6	Final impression.....	234
	LIST OF REFERENCES.....	235
	Printed sources .....	235
	Case law: .....	246
	Web-based sources.....	248
	ANNEXURE 1 .....	250
	ANNEXURE 2 .....	251
	ANNEXURE 3 .....	253
	ANNEXURE 4: RESEARCH DATA PER SAMPLE SCHOOL .....	263
	Case study 1: Sample school I .....	263
	Case study 2: Sample school II.....	281
	Case study 3: Sample school III .....	296
	Case study 4: Sample school IV .....	312
	Case study 5: Sample school V.....	330
	Case study 6: Sample school VI .....	346
	ANNEXURE 5 .....	361

## List of Figures

<b>Figure 1.1:</b>	<i>Conceptual framework</i>	22
<b>Figure 1.2:</b>	<i>The Educational Production function</i>	23
<b>Figure 1.3:</b>	<i>Management as the integration of needs, resources and actions</i>	25
<b>Figure 1.4:</b>	<i>Leadership – the driving force (van Rooyen and Rossouw, 2007:19)</i>	26
<b>Figure 1.5:</b>	<i>Continuum of categories of self-managing public schools in South Africa</i>	35
<b>Figure 2.1:</b>	<i>Education Rights Circle Diagram (<a href="http://www.right-to-education.org/node/231">http://www.right-to-education.org/node/231</a> Accessed 20 August 2011).</i>	50
<b>Figure 2.2:</b>	<i>Number of students writing the National Senior Certificate Examination</i>	68

<b>Figure 2.3:</b> <i>Pass rate for the National Senior Certificate Examination</i>	68
<b>Figure 3.1:</b> <i>Structure of SA Education system 1994 to 2009</i>	84
<b>Figure 3.2:</b> <i>Structure of SA Education system after 2009 elections<sup>1</sup></i>	84
<b>Figure 3.3:</b> <i>The organisation of a South African public school</i>	87
<b>Figure 5.1:</b> <i>The Research Process (Adapted from Fraenkel &amp; Wallen, 2006: 19)</i>	144

## List of Tables

<b>Table 1.1:</b> <i>National table of targets for school allocation (2007 – 2009)</i>	33
<b>Table 2.1:</b> <i>Excerpts from the table on key activities that the Department will embark on. (DoE 2003a: 30)</i>	57
<b>Table 2.2:</b> <i>2011 Results for the Annual National Assessments.</i>	62
<b>Table 2.3:</b> <i>National Senior Certificate Examination results</i>	66
<b>Table 2.4:</b> <i>Class size projects in the USA (Adapted from <a href="http://ed.gov/pubs/ReducingClass/Class_size.html">http://ed.gov/pubs/ReducingClass/Class_size.html</a> - accessed on 24/05/2011).</i>	69
<b>Table 2.5:</b> <i>Sixteen indicators of the Quality of School Education. (European Commission 2000:6)</i>	74
<b>Table 3.1:</b> <i>The national table of targets for school allocation (2007 to 2009)</i>	93
<b>Table 3.2:</b> <i>The national table of targets for school allocation (2010 to 2012)</i>	93
<b>Table 4.1:</b> <i>The responsibilities of the principal of a public school.</i>	122

<b>Table 4.2:</b> <i>The responsibilities of educators.</i>	124
<b>Table 5.1:</b> <i>Key contributors to our understanding of <b>knowledge</b> as concept</i>	138
<b>Table 5.2:</b> <i>Common Types of Qualitative Research (Merriam, 1998: 12)</i>	146
<b>Table 5.3:</b> <i>Probability methods.</i>	153
<b>Table 5.4:</b> <i>Quota methods.</i>	154
<b>Table 5.5:</b> <i>Selective methods</i>	154
<b>Table 5.6:</b> <i>Convenience methods.</i>	155
<b>Table 5.7:</b> <i>Ethnographic methods.</i>	155
<b>Table 6.1:</b> <i>Total enrolment of the sample schools</i>	166
<b>Table 6.2:</b> <i>Grade 12 enrolment of the sample schools</i>	167
<b>Table 6.3:</b> <i>Drop-out rate for Grades 8 to 12</i>	168
<b>Table 6.4:</b> <i>University entrance admissions</i>	169
<b>Table 6.5:</b> <i>Distinctions in the NSCE</i>	170
<b>Table 6.6:</b> <i>Overall averages in NSCE</i>	171
<b>Table 6.7:</b> <i>English averages in NSCE</i>	172
<b>Table 6.8:</b> <i>Mathematics averages in NSCE</i>	172
<b>Table 6.9:</b> <i>Physical science averages in NSCE</i>	172
<b>Table 6.10:</b> <i>Demographics of the Principals</i>	174
<b>Table 6.11:</b> <i>Demographics of the Deputy Principals</i>	175
<b>Table 6.12:</b> <i>Demographics of the HODs</i>	176
<b>Table 6.13:</b> <i>Demographics of the all Grade 12 teachers/educators combined</i>	177
<b>Table 6.14:</b> <i>Demographics of the Grade 12 English teachers/educators</i>	177

<b>Table 6.15:</b> <i>Demographics of the Grade 12 Mathematics teachers/educators</i>	178
<b>Table 6.16:</b> <i>Demographics of the Grade 12 Physical Science teachers/educators</i>	179
<b>Table 6.17:</b> <i>Demographics of SGB members</i>	180
<b>Table 6.18:</b> <i>Demographics of the Finance Committee members</i>	181
<b>Table 6.19:</b> <i>The annual budgets for 2007 to 2009</i>	182
<b>Table 6.20:</b> <i>Academic budget as a percentage of the annual budget.</i>	184
<b>Table 6.21:</b> <i>SGB appointed staff as a percentage of the Annual budget.</i>	184
<b>Table 6.22:</b> <i>Average class size</i>	191
<b>Table 6.23:</b> <i>Availability of technology</i>	192
<b>Table 6.24:</b> <i>Budget for staff development</i>	193
<b>Table 6.25:</b> <i>Attainment as indicator of quality education.</i>	203
<b>Table 6.26:</b> <i>Success &amp; transition as indicators of quality education</i>	205
<b>Table 6.27:</b> <i>Monitoring as indicator of quality education</i>	206
<b>Table 6.28:</b> <i>Resources &amp; structures as indicators of quality education</i>	208
<b>Table 7.1:</b> <i>Academic performance levels</i>	215

**DECLARATION OF ORIGINALITY**

Full names of student:           **Jean Wilhelm van Rooyen**

Student Number:               **6804160**

**Declaration**

1. I understand what plagiarism is and am aware of the university’s policy in this regard.
2. I declare that the thesis, “*The relationship between funding in education and quality education*” is my own original work. Where other people’s work has been used, this has been acknowledged and referenced in accordance with Departmental requirements.
3. I have not used work previously produced by another student or any other person to hand in as my own.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

SIGNATURE STUDENT: .....

SIGNATURE SUPERVISOR: .....

## ACKNOWLEDGEMENTS

It is with deep gratitude that I express my sincere appreciation to the following:

- Professor JL Beckmann, as supervisor, colleague and critical friend, for his sustained support and guidance during my studies. I also wish to thank him sincerely for editing the language.
- My wife Rika, our children, family and friends for their support and encouragement.
- My colleagues that, through their critical engagement, shaped my thinking over the years.
- All the respondents that participated in the study.
- My Creator and Saviour for every blessing in my life.

## ABSTRACT

My entire career in lecturing and research in the field of financial management in education, have led to me becoming more and more intrigued by questions related to the amounts of money being spent on education and the performance of learners in the Senior Certificate Examination in public secondary schools in South Africa. The South African education system has changed dramatically since 1994 and is aimed at restoring the injustices of the past by providing equitable quality education. Despite many reforms our system is not rendering acceptable results as is evident from our participation in international and national tests (TIMSS, PIRLS, SACMEQ and ANA)<sup>2</sup>. Internationally UNESCO is driving the *Educational for All* campaign in an attempt to address issues related to quality education.

The purpose of this research was to investigate the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa. The results of the sample schools in the National Senior Certificate examination was used as indicator of the quality of education provided. Towards this end, I have done multiple case study research in six schools selected using purposive and convenience sampling techniques. Semi-structured interviews and document analysis were used to collect data.

I found that there is a definite link between funding and the quality of education provided. This manifests itself in allowing schools to reduce class size by appointing additional teaching staff, access to technology and staff development. However, all the schools in the sample indicated that the crucial factor determining their success was their teachers! In addition to the role of the teachers, I found that structures created for and the manner in which academic performance was managed and parental involvement also played determining roles. Contrary to what was expected, the use of technology as teaching aid, although convenient, was not playing a decisive role.

The research led to a much better and deeper understanding of the intricate relationship between funding and the quality of education, but additional investigation is required in order to highlight this matter even further to allow for the informed improvement of efforts to raise the quality of education in South Africa and the world.

---

<sup>2</sup> See paragraphs 2.3.1 to 2.3.5 in Chapter two

## KEY CONCEPTS

- Accountability
- Democratisation
- Financial management in education
- Funding of education
- Indicators of quality education
- National Senior Certificate Examination
- Private funds
- Public Funds
- Quality education
- School fund

## ACRONYMS

ANA	Annual National Assessment
CCEM	Commonwealth Council of Education Ministers
DoE	Department of Education
DoBE	Department of Basic Education
GDP	Gross Domestic Product
NSCE	National Senior Certificate Examination
NSSF	National Norms and Standards for School Funding
PFMA	Public Finance Management Act
PIRLS	Progress in International Reading Literacy Study
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SASA	South African Schools Act
SGB	School Governing Body
SMT	School Management Team
TIMSS	Trends in International Mathematics and Science Study
UNESCO	United Nations Educational, Scientific and Cultural Organisation

## CHAPTER 1: INTRODUCTION

### 1.1 Statement of purpose

The broad purpose of this research was to analyse the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa. This broad statement of purpose is refined and qualified in paragraph 1.2

### 1.2 Significance and *situatedness* of this study

The persistent deep-rooted concern about the quality of education in South Africa amongst all stakeholders is evident from opinions expressed by different political leaders, educationists and economists (Bengu (1996), Asmal (2000), Pandor (2004), Motshekga (2009), Crouch (2005 & 2010) and van den Bergh (2011)). The new government has been spending large amounts of money on education since the 1994 elections. However, there has not been a corresponding improvement in the quality of education.

This study will investigate aspects of the above-mentioned problem. It will lead to new insights into, and a better understanding of the complexities involved in the intricate relationship between funding of education and the quality of education. It should also afford education managers and school governors insight into the utilisation of the funds at their disposal in their quest to provide quality education and to serve the best interests of the children in their care.

The title situates the dissertation in the arena of the international debate on the balance between quality and funding (education). However, both the statement of purpose and the main research question (*What is the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa?*) represents a very focussed look within the general broad debate. It is **not about equity**, nor is it about underperforming, failing or dysfunctional schools. It is also **not about the funding of education by the state**

in terms of its Section 34 obligation of SASA. This investigation takes a look at the use of available funds from within selected top performing schools in achieving sustained high levels of academic performance. Funding in the context of this dissertation is about the utilisation of available school funds, irrespective of its source.

Being a qualitative study, the purpose of the research is thus to investigate the principal as professional manager's view on and understanding of the role and contribution of funding in the outstanding performance of these top performing schools.

The research sample was purposefully selected and structured to provide a representative profile of two independent schools (presumably with parents of a high SES), two so-called former Model C schools (also with assumed high SES profiles since both are in quintile five) and two so-called transformed schools; previously white, now predominantly black; one from quintile five (high SES) and the other from quintile four (presumably with a lower SES). All six schools had to have a 100% pass rate in the NSC examination for three consecutive years. The assumptions on the schools communities' SES are based on the structure of the national quintiles as defined in the National Norms and Standards for School Funding, as amended.

Because this was a qualitative multiple case study investigation, identifying the contributing factors AND establishing a better / deeper understanding of the intricate matrix of factors determining the academic performance in the sample schools, in my opinion qualifies as contributing to the existing body of knowledge in the field.

## **1.3 Rationale**

### **1.3.1 From a personal perspective**

During my career, I have been involved in educational institutions at micro, meso and macro levels. Providing quality education has always been a priority of mine, both from a professional perspective, as well as from a managerial perspective. Having been a member of school management teams and tertiary institutions at various levels

for many years has sharpened my focus on the necessity to provide quality education in order to achieve individual as well as national excellence. Because of my involvement in lecturing and research in the field of financial management in education, I have become more and more intrigued by questions related to the amounts of money being spent on education and the performance of learners in the Senior Certificate Examination in public secondary schools in South Africa.

### **1.3.2 From a ‘practical / school / systems’ perspective**

South Africa inherited a very diverse and fragmented education system at the onset of the new democracy in 1994. Not only were there fifteen<sup>3</sup> different education departments that had to be merged administratively, but the quality of education rendered by these former departments of education was of vastly different standards and quality. The challenge to provide quality education is still facing South Africa today. As Crouch (2005:18) puts it *“There is little doubt that the biggest two problems South Africa faces are the extreme inequality in actual learning achievement and the relatively low level in this achievement across all groups.”*

The administrative restructuring has been concluded very successfully. There have been numerous major accomplishments regarding the provisioning of schools, enhancing enrolment rates and improving the standard of education, especially as measured in the annual National Senior Certificate Examinations (See Table 2.3 and Figure 2.3). However, the performance of South African schools in the Trends in International Mathematics and Science Study (TIMSS), Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) and Progress in International Reading Literacy Study (PIRLS) tests leave much to be desired (Colditz, 2011: 1/2).

The funding of public education in South Africa will be discussed in greater detail later. However, the following serves as a broad introduction to the funding of public education in South Africa. South Africa has, on average, been spending 21% of the

---

<sup>3</sup> Davies – personal communication

annual budget (almost 6% of GDP) on education since 1994<sup>4</sup> (DoE, 2005b: Table A1). The budget for the 2011 financial year provides for R189.5 billion that constitutes 18.5% of the national budget (RSA, 2011b:2). This represents 5.3 % of GDP (RSA, 2011c:144).

According to the South African Schools Act, Act 84 of 1996 (hereinafter referred to as *SASA*), South African public schools are funded by the state from public funds, allocated to the nine provincial departments of education, according to the criteria embedded in the National Norms and Standards for School Funding (in future to be referred to as *NNSSF*). These Norms and Standards provide for five categories of schools referred to as quintiles one to five (quintile one being schools in the poorest communities and quintile five being schools in the least poor (richest) communities). The law obliges school governing bodies to augment the public funds received from the state (*SASA*, s36(1)). Parent communities are involved in the governance of public schools through statutory school governing bodies elected for a three-year term of office (*SASA*, s31). If a parent community so decides at an annual general meeting, a public school may charge school fees towards this purpose (*SASA*, s39(1)). *SASA* was amended in 2006 to provide for *no-fee schools*. These were schools from poorer communities, representing approximately 40% of public schools in a province and which are in quintiles one and two of the *NNSSF*. In 2007 quintile 3 schools were added to this category. No-fee schools may not charge school fees and are thus fully dependent on the state subsidy for funding and meeting their financial obligations for operational purposes.

### 1.3.3 Based on literature

A vast volume of literature exists on the quality of education and it is receiving continued attention throughout the world as a primary objective of individual governments as well as international organisations such as the United Nations Educational, Scientific and Cultural Organisation (hereafter *UNESCO*) and the Commonwealth Council of Education Ministers (*CCEM*); especially the 16 th *CCEM* Conference held in Cape Town in December 2006.

---

<sup>4</sup> Information made available by Mr Riaan Cilliers of the Department of Basic Education

The assumption that more funding should lead to better quality education has not been proven conclusively. This is a continuing international debate. Apart from his own contribution, Gustafsson (2003:80 to 85) gives a chronological exposition of critical moments in this debate as represented by the work of Coleman et al (1966), Jencks et al (1972), Cooley and Leinhardt (1978), Hanushek (1981, 1989 and 1996) and Hedges, Laurie and Greenwald (1994). Ball, Cohen and Raudenbush contributed to this debate in their individual capacities, but also in their joint work published in 2003. In the South African context, significant contributions were made by van den Berg (numerous contributions since 2001), Wildeman (2000, 2003 and 2008), Fiske and Ladd (2004), Fleisch (2004), Christie (2007) and Motala (2007/2008). Research, especially in the USA, has led to conflicting views about the validity of this hypothesis. Hanushek (1996: 43) postulates that *“The effectiveness of school spending has been hotly debated for at least the past quarter century”*. There are researchers who completely reject this viewpoint while others claim that there is a relationship between funding at school level and career mobility as well as earning levels. Research in Texas suggests that how the money is spent, has a major impact on the performance levels of learners at school (Burtless, 1996:9 & 10). A more detailed discussion of this debate is contained in paragraphs 2.2 and 2.3 of chapter two.

## 1.4 Research questions

The main question that will be investigated is:

*What is the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa?*

There are any number of sub-questions that can be asked, but for the purposes of this study they will be limited to the following:

- Which factors have a direct impact on the performance levels of public secondary schools in the National Senior Certificate examinations?

- To what extent are the funds available to public schools spent on aspects that contribute to improving the quality of education in the research sample?
- To what extent does spending more funds on developing the skills of educators in the research sample improve the quality of education as reflected in the Senior Certificate Examinations?

The term ‘*extent*’, in the context of this dissertation, is used to indicate a degree to which an aspect applies, plays a role, or is significant. This interpretation is based on the meanings attached to the concept in different dictionaries listed below<sup>5</sup>

## 1.5 Theoretical framework

This research project is embedded to the fields of education law and financial management in education as subsets of the broader field of education management and leadership and the provisioning of quality education (see Figure 1.1).

Education management as a field of study focuses on the integration of the educational needs of society, the resources required to provide education and the actions that need to be undertaken in the process (see Figure 1.3). Education leadership is the driving force guiding the process of providing education at all levels of the education system (see Figure 1.4). Education law provides the regulatory framework within which the provision of education takes place. The quality of

---

<sup>5</sup> <http://www.merriam-webster.com/dictionary/extent> - accessed on 02/02/2012:

*a* : the range over which something extends : SCOPE <the *extent* of her jurisdiction> *b* : the point, degree, or limit to which something extends <using talents to the greatest *extent*> *c* : the amount of space or surface that something occupies or the distance over which it extends : MAGNITUDE <the *extent* of the forest>

<http://www.thefreedictionary.com/extent> accessed on 02/02/2012

**a.** The range, magnitude, or distance over which a thing extends: *landowners unaware of the extent of their own holdings.*

**b.** The degree to which a thing extends: *prosecuted to the fullest extent of the law.*

Sykes (1982: 367) ...*width or limits of application, scope* ...

Sinclair & Hanks (1989: 273) 4 ... when you are discussing how true a statement is ...

education provided is the result of a complex range of variables that makes up the education production process .

## 1.6 Conceptual framework

A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to a system analysis project. The framework is built from a set of concepts linked to a planned or existing system of methods, behaviours, functions, relationships, and objects. A conceptual framework might, in computing terms, be thought of as a relational model. The *educational production function* is, in principle, similar to any production function. The latter is a mathematical relation that describes how resources (inputs) can be transformed into outputs. In education, the production function likewise indicates *a mathematical relation describing how educational resources (inputs) can be transformed into educational outputs (outcomes)* (Cohn & Geske 1990:160).

The educational production function is described in terms of inputs, outputs and the process by which inputs are transformed into outputs (outcomes). It is thus concerned with the input – output process (see Figures 1.1 and 1.2).

### The input – output process

The outputs of the educational process are functions of a number of types of inputs. They include student characteristics, the entire cluster of school related factors collectively referred to as physical and human resources, family and community influences. The school-related factors are of particular interest to economists because they include the factors that can be manipulated by education authorities through resource allocation.

From a sociological perspective education is the actions societies undertake to prepare their children for their social responsibilities when they become adult members of society. The social structures created for this purpose are manifested in a public education system and in public schools. The quality of education from this perspective

will depend on the degree to which the education system succeeds in preparing children for their social responsibilities as adults. If society at large and parents in particular perceive the quality of education to be of an acceptable standard, they are likely to have no qualms to contribute to the funding of education.

From a political perspective education systems are used to communicate the political agenda of the ruling party. Quality education from this perspective varies with the broad agenda of the government of the day while also taking into account the sociological perspectives in as much as they may pose a political threat to, or present an advantage to the government. Funding education is an obligation for which all modern states have to provide. It therefore stands to reason that the government of the day will at least fund education to the extent that it serves their political objectives. That is over and above any sociological and economic considerations.

From an economical perspective, there are two angles to be considered. In the first instance education is of extreme importance in that it provides qualified manpower to the labour market and industry (human capital). The contribution that can be made to the economy in this regard is directly proportional to the quality of the education provided. A second consideration is from a cost perspective. Economists are very keen to know what the return on the investment made in education is. All parties with an interest in the provisioning of education thus have a real interest in the link between the funding levels of education and the quality of education.

There is no single or simple explanation of what quality education is. It means different things to different people.

**Cost** is defined as expenses (expenditure) incurred in the production of a commodity or the rendering of a service. Cost thus refers to all resources used in the production process, while expenditure refers only to those resources paid for in money.

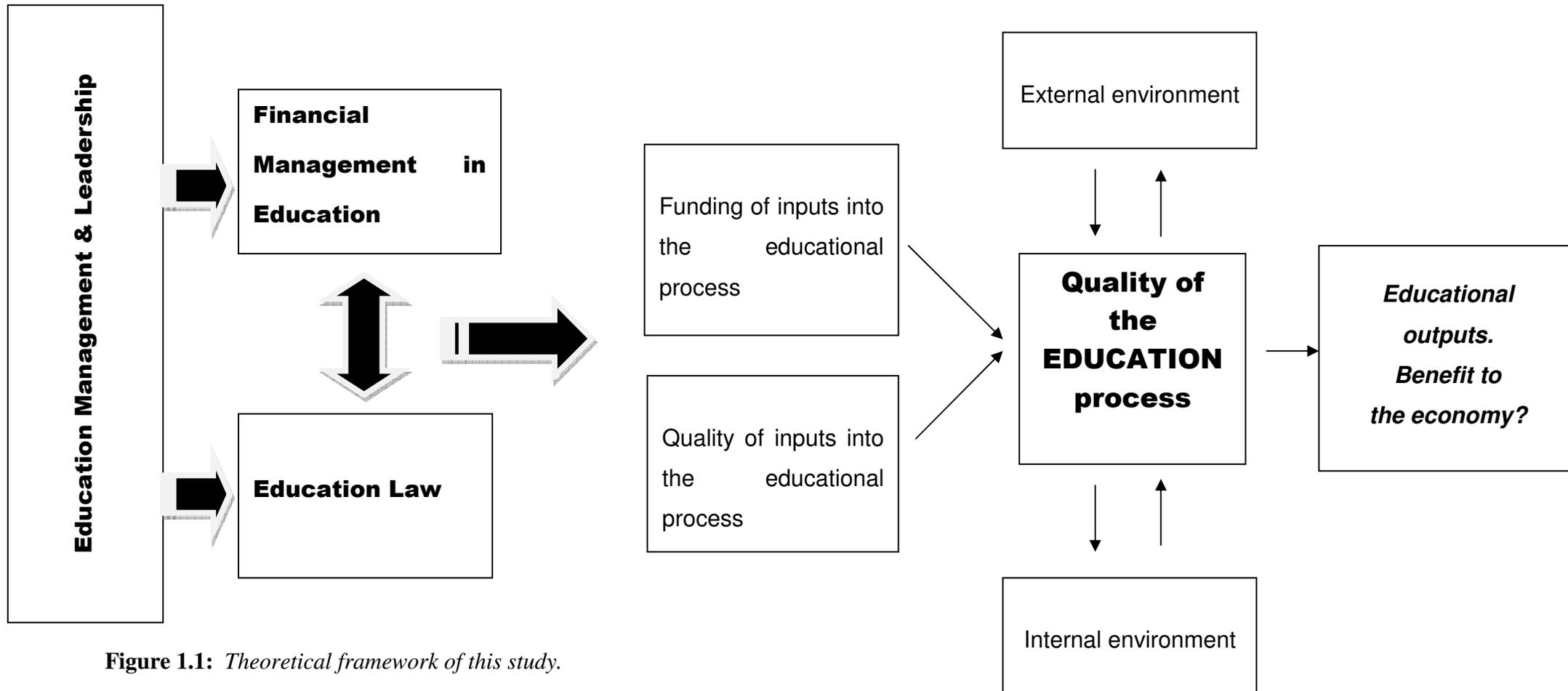
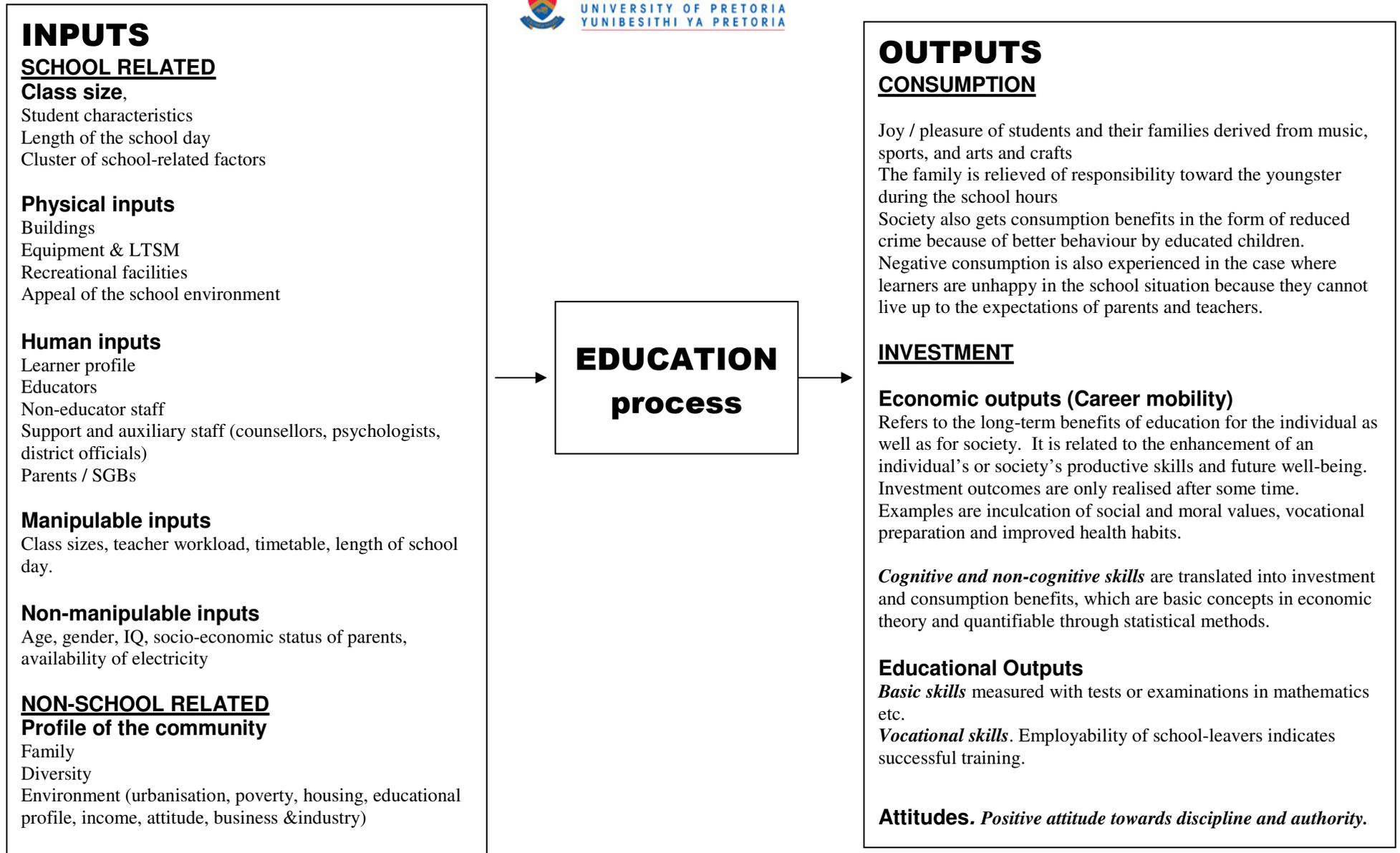


Figure 1.1: Theoretical framework of this study.



**Figure 1.2:** Conceptual framework (The Educational Production function)

## 1.7 Literature Review

### 1.7.1 Quality education

Since the Second World War, educational policy has faced two challenging priorities; the first was making equality education (*a school for everyone*) a reality and the second with which the world is still battling, is quality education (*a better school for everyone*) (De Groof, 1995: 7) . Every parent has the best interests of his/her child at heart specifically when it concerns the education of their children. This concern is manifested in the United Nations International Convention on the Rights of the Child (18 November 1989). Article 3 formulates the best interests of the child as ‘*All actions concerning the child shall take full account of his/her best interests*’.

The discussion of the provisioning of the quality of education from the sociological, political and economic perspectives (paragraph 1.6 above) highlighted different foci. There is no single or simple explanation of what quality education is. The concept is discussed in detail in paragraph 2.3 of Chapter 2 and developments in this area are discussed in chronological order. This discussion starts with the United Nations International Convention on the Rights of the Child (18 November 1989) before moving on to the work of Katarina Tomasevski and her well-known model of the four ‘A’s: *Availability, Accessibility, Acceptability* and *Adaptability* that played a huge role in the onset to the Education for All movement by UNESCO. It started with the World Conference on Education held in Jomtien, Thailand in 1990. This was followed by the conference held in Amman in Jordan in 1996. The World Education Forum held in Dakar, organised by UNESCO in Senegal in 2000 culminated in the six Millennium Development Goals formulated at the end of the conference. In 2004, UNESCO suggested that there are two dimensions to the concept of quality education, namely *quantity* (number of years) and *quality* (both cognitive/intellectual and non-cognitive skills, i.e. norms, values

## NEEDS

Awareness  
Vision  
Goal  
Aim  
Objective  
Action plan



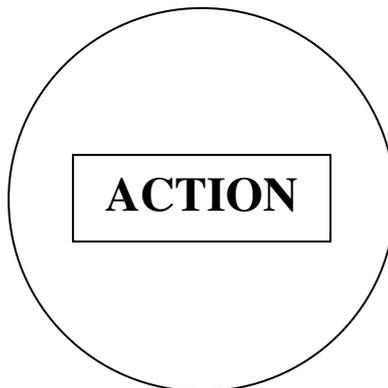
## RESOURCES

Intellectual  
  
Physical resources  
  
Environment  
  
Money



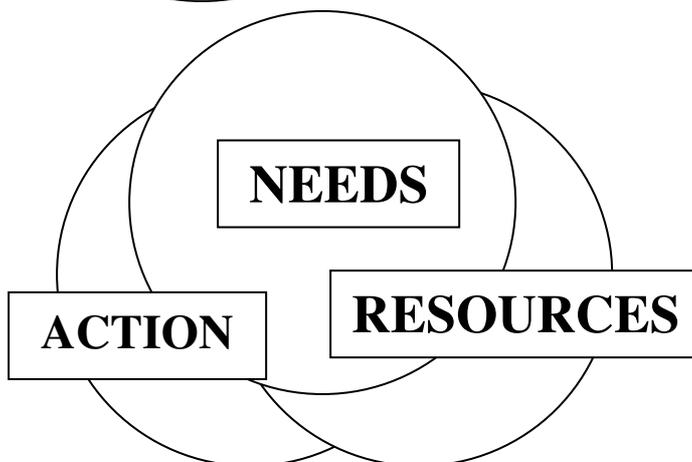
## ACTION

Critical thinking  
(Mental action)  
  
Physical action  
  
Buying / Selling  
(Trade)



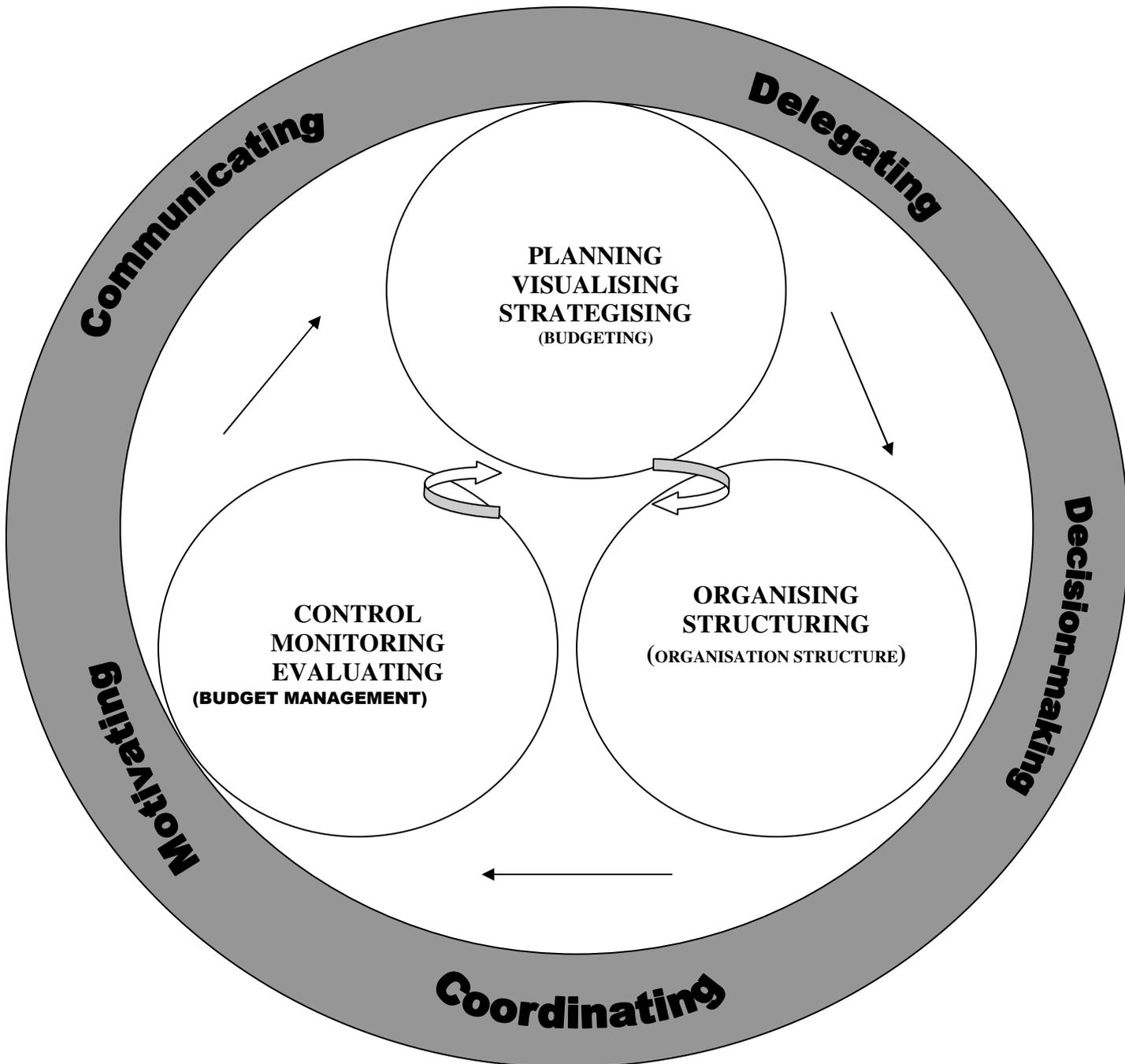
## RESULT

The degree of integrating of the three aspects is indicative of the **degree of success!**



**Figure 1.3:** *Management as the integration of needs, resources and actions*

## Leading / Directing



MANAGEMENT AREAS			
Human Resource Management	Curriculum Management	Financial Management	Managing Facilities

Figure 1.4: Leadership – the driving force (van Rooyen and Rossouw, 2007:19)

and behavioural aspects) of the education a person receives go hand in hand (UNESCO, 2004a: 77,78).

The onset of the new democratic era in South Africa brought huge changes to a very diversified education system; ten new education departments were formed (one national and nine provincial departments of education), new structures had to be devised and the TIRISANO document was introduced in 1999 by the then Minister of Education, Prof Kader Asmal, as a blue print business plan for the new education system. It was introduced as a five year plan to undo the discrepancies of the previous forty years. Unfortunately this was too ambitious and did not fully materialise.

Two major publications were released in 2003 as part of the on-going process to improve the quality of South African education, namely, the *Review to the Minister on Financing, Resourcing & Costs of Public Education in Public Schools* and the *Plan of Action: Improving access to free & quality basic education for all*. The former did a critical analysis of the funding levels, indicating that the quality of education in South African schools is worryingly low relative to what South Africa spends on schooling. The latter resulted in a programme of planned changes in the education system that was to be implemented from 2003 to 2005. In her 2005 budget speech, Ms Naledi Pandor, then Minister of Education in South Africa, identified six core issues that (in her opinion) would enhance the quality of education in South Africa (*Reaching untapped potential / School fees and no fee-schools / School governing bodies and language policy in schools / Higher education enrolment planning / Further education and skills for a modern economy and Access to adult education for adult learners*).

However, South Africa has been performing dismally in international tests and surveys on the quality of the education provided by our education system. Beckmann and Fuessel (2011:1/2) postulate that '*Studies to measure the achievement of the goals of EFA and the FW abound at both the international and national levels.*' They refer to the following international studies: PISA

(the Programme for International Student Assessment), PIRLS (the Progress in International Reading Literacy Study), TIMSS (the Trends in International Mathematics and Science Study), SACMEQ (The Southern and Eastern Africa Consortium for Monitoring Educational Quality) and ANA (Annual National Assessment) as an example of a national intervention. Van der Berg et al (<http://www.polity.org.za/article/low-quality-education-as-a-poverty-trap-april-2011-2011-04-20> - accessed on 5/11/2011) contend that the education outcomes of the South African schooling system are still appallingly low and that there are no indications that this state of affairs is improving despite radical interventions since 1994.

This dissertation requires that attention be given to the National Senior Certificate examination, written at the end of twelve years of schooling. This examination was first written in South Africa in the Cape of Good Hope in 1858 (<http://www.education.gov.za/Examinations/tabid/338/Default.aspx> accessed on 20 May 2011). It has since developed into an important indicator of the academic achievement of the individual learner as well as of the quality of the education offered in individual schools, school districts, provinces and at national level. The qualification and the examination have both undergone various changes over the years. Different departments of education in the pre-1994 dispensation offered separate examinations of varying standards. The name of the qualification changed from the Senior Certificate in Education in the pre-1996 era to the Further Education and Training Certificate or FETC in the period 1996 to 2008. In 2008 the name of this examination was changed to the National Senior Certificate Examination and the name of the qualification became the *National Senior Certificate in Education* (Loock, 2011). Control of this important qualification and examination was also handled by different entities over time. The Joint Matriculation Board (JMB) operated from 1918 to 1992 when it was dissolved and its records were transferred to the Matriculation Board. The functions of moderation, examination and certification were transferred to the South African Certification Council (SAFCERT) established by an Act of Parliament in 1986. SAFCERT operated until a new Council, constituted in June 2002 – now known as Umalusi – was created. The name is derived from the Nguni word “uMalusi” meaning

“shepherd” or, in the African context, “guardian of the family assets”. This body is still performing this function.

### 1.7.2 Funding of public education in South Africa

Worldwide, it is generally accepted that the funding of public education is the responsibility of the government of the day. De Groof (1995:7) puts the issue into perspective when he says:

*It cannot be denied that the recent attention being given to quality in education is related to economic factors. It seems natural that society should call politicians to account regarding whether the considerable resources being pumped into the education system are indeed being put to proper use. Moreover, economic considerations are only one reason for the current questioning: even with unlimited resources, we would still be obliged to continue asking questions regarding whether we are offering citizens of the society of the future the very best that is in our power.*

A perception exists in the minds of many people that basic education in the new democratic South Africa would be free (Various newspaper reports; Burger, Cape Times, Argus). This can partly be attributed to the expectations created by the Freedom Charter (1955: 4) that reads ‘*Education shall be free, compulsory, universal and equal for all children;*’ ... Another contributing factor was speculation in the media during the run-up to the 1994 elections. There is, however, no factual basis for these expectations when one reads Section 29 (1) of the South African Constitution. The ideal of free education proved to be impossible with the limited resources available to the government and in light of the many competing socio-economic priorities.

There are three key role players in the provision of education in South Africa, namely the state, the parents and the school. Section 15 of SASA determines that *every public school is a juristic person, with legal capacity to perform its functions in terms of this Act.* In legal terms this means that a public school may own property, may enter into contracts and that the school can litigate or

be litigated against . This means that the school has the legal capacity to take the necessary actions to enable it to provide education to the learners enrolled at that school. The parents of a public school are represented by the school governing body (SGB) in this matter. School governing bodies are duly elected representatives of the parent community of a public school. Section 16 of SASA states that

- (1) *Subject to this Act, the governance of every public school is vested in its governing body and it may perform only such functions and obligations and exercise only such rights as prescribed by the Act.*
- (2) *A governing body stands in a position of trust towards the school*<sup>6</sup>.

Section 34 of SASA spells out the state's responsibility regarding the funding of education in public schools in South Africa:

34. (1) *The state must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in education provision.*
- (2) *The state must, on an annual basis, provide sufficient information to public schools regarding the funding referred to in subsection (1) to enable public schools to prepare their budgets for the next financial year.*

It is evident from the above that the state has a clear constitutional and legal responsibility to pay for basic education in public schools in South Africa from public funds obtained through taxation. Section 35 of SASA provides further information on what is meant in Section 34 (2) when it spells out the basis for the national norms and standards for the funding of public schools, which serve as the basis for the equitable funding of public schools throughout South Africa.

---

<sup>6</sup> This is a fiduciary relationship. The SGB must act in the best interests of the school and every child in all matters pertaining to the school.

Parents' responsibility regarding the funding of education is regulated by Section 36 of SASA which reads as follows:

36 *A governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the state in order to improve the quality of education provided by the school and all learners at the school.*

The detailed responsibilities of SGBs regarding the financial management of a public school are spelt out in Sections 37 to 44 of SASA. The first responsibility is to supplement the financial resources that the state provides (S36(1) of SASA) and this responsibility is borne by all public schools. SGBs (of schools in quintiles 4 and 5) may also charge school fees and parents at such schools are liable to pay such school fees subject to the provisions of the Act. From the above it is clear that parents of a given school community have the responsibility to pay school fees to supplement the funding of a public school. Section 40 of SASA spells out this obligation in detail and also provides for possible exemption from paying school fees:

- 40 (1) *A parent is liable to pay school fees determined in terms of section 39 unless or to the extent that he or she has been exempted from payment in terms of this Act.*
- (2) *A parent may appeal to the Head of Department against a decision of a governing body regarding the exemption of such parent from payment of school fees.*
- (3) *In deciding on appeal referred to in subsection (2), the Head of Department must follow due process, which safeguards the interests of the parent and the governing body.*

It is thus evident that the funding of public schools in South Africa is the joint responsibility of the state (from public funds) on the one hand and the parent community (through the school governing body) of a public school (from private funds) and other stakeholders on the other hand. This is in line with the ideal of democratising education set out in the Constitution of 1996 as well as the original relationship between the parent (community) and the state on the other hand in the provision of education to children. It is also highlighted in part 2 of *The Reconstruction and Development of The Education and Training Programme* and part 4 of *The Funding of The*

Education System of the White paper on Education and Training of 1995. It is however, not in line with the ideals of the Freedom Charter and the Dakar agreement to provide free education at least at primary school level.

It is important to keep in mind that when either public or private funds are paid into a public school's bank account, they become part of the school fund of the school as juristic person and that the SGB has discretionary powers over the spending of the school fund subject to the provisions of Sections 37 to 44 of SASA.

Since 1995 education has received 21.4% of the annual national budget allocation. This represents almost 5.6% of GDP (gross domestic product) and the average allocation per learner for the period 1995 to 2004 amounts to R3,832.62. The 2004 allocation per learner amounted to approximately R5,721.38. All these figures are in line with major first world countries like the USA where they are currently spending 967.74 USD (R6 309) per learner in the USA. This represents approximately 6% of the GDP in the USA. It is however, disconcerting that South Africa fares badly in the TIMMS ratings. Countries are listed in descending order of their performance/position pertaining to maths and science education. *“South Africa had the lowest performance score in mathematics and science compared to the other TIMSS participants”* (Reddy, 2006:112).

The National Norms and Standards for School Funding (NNSSF for short, emanating from Section 35 of SASA) provide that public schools in South Africa are put into one of five quintiles as a basis for operational costs funding from public funds by the state. These categories are determined by applying a complex set of criteria, *inter alia* taking into account the quality of the physical facilities and the poverty level of the community around the school. Based on the NNSSF and a school's number of learners an annual per capita subsidy is then paid to public schools.

SASA determines that the finances of all public schools are managed by the SGB of the school. The annual subsidy to Section 20 schools is not paid into

the school's bank account but it is administered by the provincial department of education. The annual subsidy of schools that has applied for and has been allocated or who have been allocated Section 21 status without applying for it is, however, paid into the school's bank account and is managed by the SGB.

<http://www.education.gov.za/EMIS/StatisticalPublications/tabid/462/Default.aspx> - accessed 20/11/2011.

**Table 1.1: National table of targets for school allocation (2008 – 2010)**

A		2008		2009		2010	
		B	C	B	C	B	C
<i>NQ1</i>	30.0%	R775	100	R807	400	855	100
<i>NQ2</i>	27.5%	R711	100	R740	100	784	100
<i>NQ3</i>	22.5%	R581	100	R605	100	641	100
<i>NQ4</i>	15.0%	R388	67	R400	67	428	67
<i>NQ5</i>	5.0%	R129	22	R134	22	147	22
<b>Overall</b>	100%	R517	89	R538	89	571	89
<b>No-fee threshold</b>		R581		R605		641	

Column A reflects the pro-poor funding approach expressed as a percentage [pro-poor referring to the fact that national quintile 1 (Poor) schools get more funds than national quintile 5 schools (from more affluent communities). Column B represents the target per learner school allocation amount for each year. Column C reflects the maximum percentage of learners that could be funded to the no-fee threshold level.

With the promulgation of the Education Laws Amendment Bill in 2006, provision was made for no-fee schools. Section 39(9) of SASA provided that national quintiles 1 and 2 (40% of the public school learners nationally) should be used by the MEC for Education to identify specific schools in the province that may not charge school fees to be contemplated as no-fee schools. Legislation signed on 26 January 2006, provides that schools in quintile 1 (the poorest 20%) are forthwith so-called no fee schools that will in future receive a 100% budget allocation from the state. These schools will thus be charging no schools fees in future. In 2009 national quintile 3 schools were also

declared as no fee schools (that means that 60% of South African public schools are now no fee schools). In addition to all their other responsibilities, the SGBs of all public schools have the responsibility to manage the school fees paid by the parents (private funds).

### 1.7.3 Democratisation of education in South Africa

With the establishment of the new democracy in South Africa, the government embarked on the road to democratise education in South Africa. Nieuwenhuis & Mokoena (2005: 127) put it this way:

*... democratisation as set out in the constitution of South Africa is based on the ideal of developing power and authority at community level. Running parallel with the ideal of democratisation and devolution of powers are the imperatives of redress, educational transformation and restructuring, to be managed by central government and provincial authorities.*

The premise of democratising education and giving parents and governors decision making powers regarding the financial management of schools has been referred to as the self-management of schools. The idea is to create public schools in a system that will provide high quality education to all students and will be professionally rewarding to teachers and other professionals. Caldwell and Spinks (1988: 5) define a self-managing school as:

*[O]ne for which there has been significant and consistent decentralisation to the school level of authority to make decisions related to the allocation of resources. This decentralisation is administrative rather than political, with decisions at school level being made within a framework of local, state or national policies and guidelines. The school remains accountable to a central authority for the manner in which resources are allocated.*

Looking at the preceding paragraphs it becomes evident that public schools in the South African context can also be described as self-managing schools. In South Africa and across the world we find schools at various stages of self-management. Figure 1.5 depicts a continuum of the progression of a school

on the road to becoming a self-managing school. Discretionary powers, for the purposes of this study, refer to the authority to decide on policy, curriculum, human as well as physical resources and financial matters regarding the provisioning of quality education by all the stakeholders (parents, staff and learners in secondary schools) in a specific school community.

The efforts in South African to democratise education, based on the ideal of developing power and authority at community level, manifested in the establishment of SGBs with different levels of discretionary powers regarding the management of funds at school level. This creates a variety of possible levels of self-management in South African public schools:

**Category 1 (C1):** Section 20 schools not charging school fees receiving a full subsidy from the state.

**Category 2 (C2):** Section 20 schools charging school fees receiving a proportional subsidy from the state.

**Category 3 (C3):** Section 21 schools charging school fees receiving a proportional subsidy from the state.

**Category 4 (C4):** Section 21 schools charging school fees receiving a small subsidy from the state.

Even category one schools has discretionary powers regarding financial decision making and this ability increases as you move towards category four schools.

C1	C2	C3	C4
<i>No discretionary powers</i>		<i>Full discretionary powers</i>	

**Figure 1.5:** *Continuum of categories of self-managing public schools in South Africa*

#### 1.7.4 The economics of education – linking funding and quality education

It all started with the so-called 1966 Coleman Report, where Coleman and his co-workers found that family background characteristics and community level variables accounted for variance in student achievement at the school level, while school resource variables, such as pupil /teacher ratios, per pupil expenditures, or teacher characteristics accounted for no or little variance. As mentioned in paragraph 1.2.3, Coleman's work sparked an international debate which is still continuing. Gustafsson (2003:19) explains that whereas research traditionally concentrated on the effects of resources on results in an educational production function approach (where input factors are related to output in statistical models), recent meta-analytic integrations from different studies indicate positive effects of resources such as per pupil expenditure, class size, teacher education and teacher experience. Motala (2001) in Wildeman (2003: 281) also warns against a simplistic approach to the relationship between investment in education and human capital development.

Hanushek (1996: 69) poses the question, "*What is the best way to improve schools?*" Few people, who have thought about school policies, would recommend just "throwing" extra resources into existing schools. The USA has been doing this for a number of years without any significant improvement in student performance. Central in all policy discussions is usually not whether to spend more or less on schools resources, but how to get the most *out of marginal expenditures*. *The issue is to get productive value from current and added spending*. Existing evidence simply shows that the typical school system today does not use resources well. It is tautological to claim that we will get good performance if we spend the money wisely. The current knowledge base does not suggest that all added funds will, on average, be spent wisely.

School personnel (the whole spectrum) have little at stake in student outcomes. Whether students perform particularly well or particularly poorly, the career progression and rewards of virtually all school personnel remains

unaffected. In essence US schools are unlikely to improve in either student outcomes or costs unless much stronger incentives for improved student performance are instituted. The policy focus is fraught with uncertainties, because little is known about how best to structure the various incentives. Improved performance incentives are central to school reform designed to improve student outcomes (*Ibid.*).

The Larry Hedges, Laine & Greenwald school of thought - formal statistical procedures (meta-analysis) does show a positive link (Burtless, 1996:9). They argue for using formal statistical procedures (meta-analysis) to combine the results of the studies included in Hanushek's survey. They then conclude that the data show systematic positive relations between resource inputs and school outcomes. Moreover, the median relation (regression coefficient) is large enough to be of practical importance. They suggest that a 500 USD (approximately 10%) increase in the average spending per pupil would increase student performance by 0.7 standard deviations; a meaningful amount.

Ronal Fergusson (*ibid.*) has used exceptionally rich information about the instructional qualifications of Texas teachers to argue that higher literacy skills among instructors, reductions in class size, and more experienced teaching staff all lead to improvements in average student scores on standardised tests. Ferguson's findings are in agreement with Hanushek's in one respect: they both agree that individual teachers make a difference. Hanushek (Burtless, 1996: 10) categorically states that "*teachers and schools differ dramatically in their effectiveness*". He also suggests that additional resources can make a difference to student achievement. However, he interprets the statistical evidence to show that, on average, additional resources are not effectively used by most schools to produce improved student outcomes.

The case of fifteen schools in Austin, Texas during 1989 to 1993 discussed by Murmane & Levy in Burtless (1996: 27) where each school was given an additional allowance for five years in an effort to improve the quality of education resulted in thirteen of them showing no significant improvement.

The thirteen schools falling into this category simply used the money to acquire the services of additional staff thus lowering the teacher: learner ratio. The two schools that did show a significant improvement used some of the money to employ a limited number of additional staff. The bulk of the money was however spent on staff development for existing staff. It is important to note that one principal also made a point of getting the parents involved in the process.

Card & Krueger did extensive research regarding the labour market effects of school quality to explore a positive relationship between additional funding for education at school level and the career performance of individuals from these schools subsequent to them joining the labour market (Burtless 1996: 281). Betts, Heckmann, Layne-Farrar & Todd were all able to show a positive link between funding at school level and subsequent earnings in the labour market (Burtless 1996: 119).

Carnoy postulates that countries face different sets of economic and political conditions. Each situation demands its own particular strategy for educational expansion and improvement. The experience of the 80s and 90s in the United States provides three major guidelines for educational strategies:

- (i) *The state, whether it be national, regional or local will continue to be responsible for educational expansion and improvement; i.e. it means that education will continue to be largely financed publicly and that the public sector will continue to regulate education, set standards, decide how to allocate resources among levels of education, and initiate and guide educational improvement programmes. The degree, to which it does so successfully, will enhance the legitimacy of the state (central / regional / local. The degree to which it fails to deliver high quality education in an equitable fashion, the state will lose even more power.*
- (ii) *There is much more political and even financial space for governments to condition the way globalisation is brought into education than is usually admitted. Testing and standards are good*

*examples of this space, decentralisation and school autonomy are others.*

- (iii) *A well-organised public administration is key to education improvement in the globalised economy. Economic growth and effective education in the global environment require physical capital investment, innovativeness and technical capacity, but also ultimately depend on efficient, honest government (Carnoy, 1999: 82 – 84).*

## **Summary**

Teachers will continue to be fundamental to educational delivery, and the quality of education will depend largely on the quality of teaching and teacher effort. Just as in the rest of the global economy, where knowledgeable workers are increasingly the key to the production of value, the knowledge industry (education) logically will also depend increasingly on the quality of its human capital (teachers). Obviously parents are also important in any education strategy, but most parents expect teachers to teach their children. If teachers are crucial, education policy makers will need to get a much clearer picture of who their teachers are, how they view their role in the system, and the type of incentives, regulations and training that will increase their effort and improve their capacity to transmit knowledge to students.

Through the ages knowledge has been a very important basis of power. In today's information age it is even more so. It therefore comes as no surprise that there is a growing emphasis on the quality of education. From the above it is clear that although quality education means different things to different people and that there are different angles of approach to this phenomenon, there is increasing pressure to compare standards in quality of education on a worldwide basis.

It is also evident that the debate on whether increased funding actually leads to a commensurate increase in the quality of education also does not have simple answers to the question. How the money is spent seems to be more important than what the money is spent on. One thing that all schools of thought do

agree on is that the teacher is one factor in the equation that definitely makes a difference in the quest for quality education. It would therefore appear as though spending money on the teaching skills and the motivation levels of teachers could lead to a positive improvement in the quality of education.

It would further appear that although it is the ideal that increased funding of education should improve the quality of education, it does not necessarily have the desired effect - this is therefore more theory than praxis. It does not, however, imply that we must give up hope or that all the efforts are in vain. Every time we try, we improve the quality of education.

## 1.8. Research design

### 1.8.1 Epistemology

**Epistemology** or **theory of knowledge** is the branch of philosophy that studies the nature and scope of knowledge. The Oxford Dictionary (1982: 349) defines it as the *theory of or the method or grounds of knowledge*). The term "epistemology" is based on the Greek words "*επιστημη*" or "*episteme*" (knowledge) and "*λογος*" or "*logos*" (account/explanation).

Much of the debate in this field has focused on analyzing the nature of knowledge and how it relates to similar notions such as truth, belief, and justification. It also deals with the means of production of knowledge, as well as skepticism about different knowledge claims. In other words, epistemology primarily addresses the following questions: "What is knowledge?", "How is knowledge acquired?", and "What do people know?" Although approaches to answering any one of these questions frequently involve theories that are connected to others, there is enough particular to each that they may be examined separately. It has also been referred to as *how we know* as opposed to ontology that investigates what reality is.

There are many different topics, stances, and arguments in the field of epistemology. Recent studies have dramatically challenged centuries-old assumptions, and the discipline therefore continues to be vibrant and dynamic. My epistemological view and how it relates to my research is discussed in detail in paragraph 5.2 in chapter five.

## **1.8.2 Research approach**

The research is approached from the interpretivist paradigm and a qualitative approach was followed. My reasons for adopting this paradigm and a qualitative approach to my research are explained in paragraph 5.4 in chapter five.

## **1.8.3 Methodology**

### **1.8.3.1 *Research method***

I decided to use case studies as my research method. This research is my first step to investigate the complex relationship between the funding of education and the quality of the education that ensues. The purpose of my current investigation was to obtain an understanding of this complex relationship by looking at a representative sample of schools that provide quality education. The case studies would provide me with a ‘snap shot’ of the relationship between the funding of education and the quality of the education that ensues. My findings will then serve as the basis for further investigation.

### **1.8.3.2 *Sampling***

For the purposes of this dissertation I am focussing on education provided to learners at school level, thus I will be excluding adult basic education, further education and training and higher education and training.

Records of the results of the National Senior Certificate examination results obtained from the Department of Basic Education were used as a data base

from which the schools for my sample were selected. A combination of purposive and convenience sampling techniques was used to identify the schools for the research project. Six schools were purposefully selected to investigate the relationship between the funding of schools and the quality of the education they provide.

Six Gauteng schools, who maintained a 100% pass rate for three consecutive years, were selected for my research. Two are independent schools, two are public schools from socio-economically privileged communities and two are so-called transformed<sup>7</sup> public schools from varying socio-economic backgrounds.

The sampling process is discussed in detail in paragraph 5.5.3 in chapter five.

### **1.8.3.3 Data collection**

Data was collected on each of the sample schools for the period 2007 to 2009. Three categories of data were collected. The first category of data had to enable me to create a profile of the school. The second category of data had to shed light on factors enabling the sample schools to maintain their level of academic performance. The third category of data had to serve as triangulation for the data obtained in the previous two categories.

A multipurpose research instrument (attached as ANNEXURE 3) was designed to achieve the objectives of the previous paragraph. It consists of three sections.

#### Section A dealt with

- demographic information about the school,
- demographic information about the School Management Team (SMT),
- demographic information about the members of the Finance Committee,
- demographic information about the staff that taught the grade 12 learners for the period under investigation,

---

<sup>7</sup> Transformed refer to schools whose student profile have changed from monoculture white to ethnically integrated.

- information regarding the school's budget for the period under investigation.

Section B served as the basis for a semi-structured interview with the school principal on

- information regarding special programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- an opinion on programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- evidence to substantiate the information provided in the two preceding bullets above

The interviews were recorded digitally and transcribed. Copies of the interview transcripts were sent to the respondents to sign off (member checking).

Section C of the instrument contained a matrix based on the sixteen indicators of the quality of school education developed by the European Commission in 2000, and was used to probe the quality of education in the sample schools by asking the respondents to react the different criteria in an open-ended manner.

#### **1.8.3.4 Data analysis**

The Senior Certificate examination results of the sample schools for the period under review obtained from the provincial departments of education were analysed to form a basis for comparison between sample schools and the national data base on the National Senior Certificate examination (NSCE).

The data obtained from Section A of the research instrument was analysed by using an Excel spread sheet. The transcripts of the semi-structured interviews obtained from Section B of the research instrument were analysed by using coding to create tables of data for further analysis and crystallisation. The data

obtained from Section C of the research instrument was analysed by making use of a combination of the methods used above.

The analysed data forms the basis for the discussions, tables and figures contained in Chapter six of this dissertation

### **1.8.3.5 Reliability, Validity**

Research data needs to be *authentic, believable, valid and reliable* (Charles & Mertler, 2002: 40, 41)

Authenticity and believability are determined by the tests of external and internal criticism. *External criticism* has to do with determining whether the data comes from legitimate sources. This test is one of analysis and judgement and uses no statistical calculations. *Internal criticism* has to do with data accuracy and lack of bias. Data for this study will be collected from the sample schools and the provincial Departments of Education as primary sources. The principal and the officials concerned will have to sign off the information provided to ensure accuracy and authenticity. The methods used for data analysis will ensure accuracy and at the same time limit bias.

Validity The sampling methods as well as the methods used for collecting and analysing the data in this study were geared at ensuring that the data depicted or deal directly with the topic under consideration to guarantee validity.

*Triangulation* was with regard to information provided by schools as well as the results in the NSCE to build coherent justification for themes.

Despite the fact that a comprehensive / representative sample has been selected, no claims of completeness will be made. Because it is a qualitative study, the data obtained and the interpretation thereof will only reflect my understanding of the problem. Every effort will however be made to ensure authenticity and believability by applying both external (using legitimate sources) and internal criticism (respondents scrutinised the reports on their respective schools for accuracy and authenticity).

### **1.8.3.6      *Limitations***

My lack of experience as a researcher was the biggest limiting factor in my research. It resulted in a much time being wasted and having to redo a number of aspects of my investigation. My close involvement in the research process necessitated a constant awareness to guard against subjectivity and bias.

The fact that I did case study research balanced the size of the sample as a limiting factor because the purpose of the research was to develop an understanding of the relationship between funding and the quality of education.

Obtaining data was not too difficult. What was more important was to use the data in such a way that the anonymity of the sample schools and the respondents was always safeguarded. Because I used official and primary sources of information, the reliability of the data is secure.

### **1.8.3.7      *Ethics***

The established official procedures prescribed by the University of Pretoria and the Faculty of Education's policy documents were adhered to. Permission was obtained from the Faculty's Ethics Committee before I embarked on the process of collecting the data. A copy of the original ethical clearance certificate issued by the Faculty's Ethics Committee is included as ANNEXURE 1 to this dissertation.

### **1.8.3.8      *Proposed structure of the research report:***

Chapter 1 - Introduction

Chapter 2 - Quality education

Chapter 3 - Legal framework for the funding of education in South African public schools

Chapter 4 - Accountability regarding the financial management of education

Chapter 5 - Methodology

Chapter 6 - Research findings

Chapter 7 - Conclusions and recommendations

## CHAPTER 2: QUALITY EDUCATION

### 2.1 Introduction

The National Centre for Public Policy and Higher Education on the quality of education in New Jersey, summarises the challenge to all countries of the world when they phrase it this way:

*‘To sustain our quality of life, it is imperative that our children are taught to understand the basic systems that support us: the economy, the environment, government, and society.’*

([http://www.njstatelib.org/Research\\_Guide/Public\\_Policy/Index.php](http://www.njstatelib.org/Research_Guide/Public_Policy/Index.php) accessed on 23 March 2010)

The debate on public education in South Africa is not new. The current education system has its roots in the Freedom Charter of the ANC (1955: 4) that reads that education shall be free, compulsory, universal and equal for all children. The second important international initiative that impacts on education in South Africa is the Dakar declaration of 2000, to which South Africa was a co-signatory; where it was agreed that all education at primary school level should be free by 2015.

The right to education in the democratic South Africa derives from Section 29(1) of the Constitution of 1996. It is important to take note of the ruling of the South African Constitutional court on this matter in where Judge Nkabinde J, (*The Governing Body of the Juma Masjid Primary School and another v Essay NO and Others (Centre for Child Law and Another as Amici Curiae)* 2011 (7) BCLR 651 (CC)) for a unanimous court stated the following:

*‘It is important, for the purposes of this judgment to understand the nature of the right to a “basic education” under Section 29(1)(a). Unlike some of the other socio-economic rights this right is*

*immediately realisable. There is no internal limitation requiring that the right be “progressively realised” within “available resources” subject to “reasonable legislative measures”. The right to a basic education in Section 29(1)(a) may be limited only in terms of a law of general application which is “reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom”. ...’*

It is, however, important to note that no mention of quality education is made anywhere in the Constitution. It is further important to note that as far as the South African Schools Act (hereafter SASA) is concerned, quality education is never defined per se. It is however, mentioned four times, that is (i) in its preamble, (ii) Section 8(2), (iii) Section 20(1)(a) and (iv) in Section 36(1). The preamble to the SASA, reads that *‘this country requires a new national system for schools which will redress past injustices in educational provision, provide an education of **progressively high quality for all learners** (my emphasis) and in so doing lay a strong foundation for the development of all our people’s talents and capabilities’*. Section 8(2) refers to the code of conduct for learners, stating that it must be aimed at *‘... establishing a disciplined and purposeful school environment, dedicated to the **improvement and maintenance of the quality** of the learning process (my emphasis)’*.

The other two sections refer to responsibilities of the school governing body. Section 20(1)(a) says that the school governing body must *‘promote the best interests of the school and strive to ensure its development through the provision of **quality education for all learners** at the school(my emphasis)’* and Section 36(1) compels the school governing body to *‘... take all reasonable measures within its means to supplement the resources supplied by the State in order to **improve the quality of education** (my emphasis) provided by the school to all learners at the school’*.

Although quality education is not defined in legislation or case law, it can be assumed that all education offered in public schools aspires to be of a high standard. This chapter will investigate the phenomenon of quality education.

## 2.2 Quality education

As previously indicated in paragraph 1.7.1 of Chapter 1, educational policy has faced two challenging priorities since the Second World War; the first was making equality education (*a school for everyone*) a reality and the second with which the world is still battling, is quality education (*a better school for everyone*) (De Groof, 1995: 7).

Every parent should have the best interests of his/her child at heart specifically when it concerns the education of their children. In fact internationally this concern is manifested in the United Nations International Convention on the Rights of the Child (18 Nov 1989) where the following is spelt out:

***Article 3: Best Interests of the Child:***

*All actions concerning the child shall take full account of his/her best interests. The state shall provide the child with adequate care when parents, or others charged with that responsibility, fail to do so.*

***Article 18: Parental responsibility:***

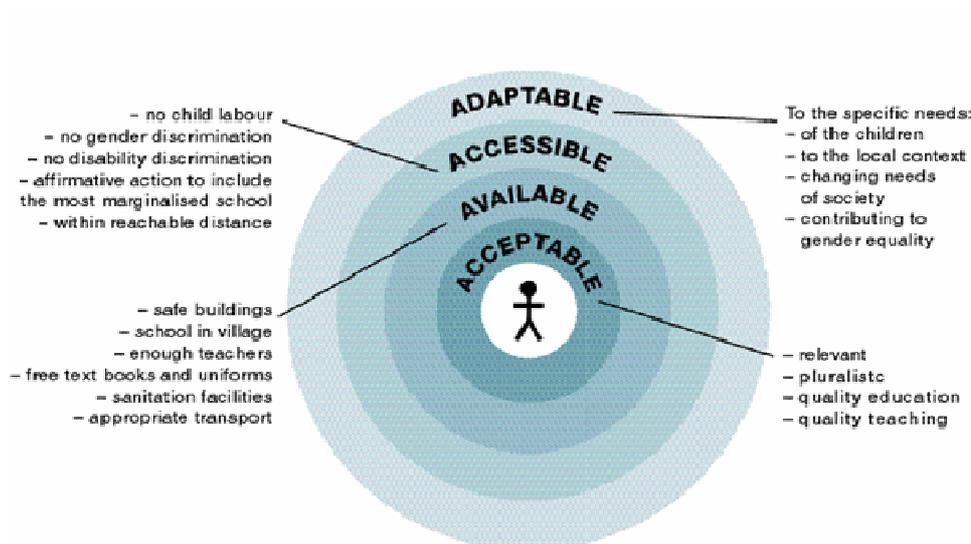
*Parents have joint primary responsibility for raising the child, and the State shall support them in this. The State shall provide appropriate assistance to parents in child-raising.*

***Article 28: Education***

*The child has a right to education, and the State's duty is to ensure that primary education is free and compulsory, to encourage different forms of secondary education accessible to every child and to make higher education available to all on the basis of capacity. School discipline shall be consistent with the child's rights and dignity. The State shall engage in international cooperation to implement this right. (UNESCO - <http://www2.ohchr.org/english/law/crc.htm> - accessed on 20/03/2006)*

The White Paper on Education and Training of 1995 in paragraph 3 of Chapter 7 spells out the intention of the South African government to entrench into the relevant legislation “*a number of conventions which deal partly or wholly with rights to education and the rights of the child, including the Convention Against Discrimination in Education (UNESCO, 1960), the International Covenant on Economic, Social and Cultural Rights (UN, 1966), and the Convention on the Rights of the Child (UN, 1989)*”. The initial challenge of equality education (a school for everyone) was strongly advocated by the late Katerina Tomasevski, a world-renowned advocate for the right to education and former UN Special Rapporteur on the Right to Education. She developed the now well-known model of the four As regarding the provision of education. De Groof & Lauwers (2005:37/38) refer to this model in the UN’s document General Comments No 13 (08/12/99) when they say that education in all its forms and at all levels should exhibit the following interrelated and essential features:

- *Availability*
- *Accessibility*
- *Acceptability*
- *Adaptability*



**Figure 2.1:** *Education Rights Circle Diagram* (<http://www.right-to-education.org/node/231> Accessed 20 August 2011).

Skelton (2011: 6/7) argues that ‘*Acceptability* – which may also be referred to by another A-word, “*adequacy*” is the major theme in a current case

regarding Rivonia Primary School. The case was heard in the South Gauteng High Court on 2 and 3 October 2011 but judgement has not been passed yet<sup>8</sup>. This case engages the question of class size, thereby raising the issues of adequacy and quality.

Adams (1993: 12/13) identifies multiple definitions of quality as a concept in use and concludes as follows:

- *Quality has multiple meanings*
- *Quality may reflect individual values and interpretations*
- *Quality often is multidimensional; it may subsume equity and efficiency concerns*
- *Quality is dynamic; it changes over time and context*
- *Quality may be assessed by either quantitative or qualitative measures*
- *Goals of quality may conflict with efficiency, equity, or other goals*
- *Quality is grounded in values, cultures and traditions: it may be specific to a specific nation, province, community, school, parent or individual student*
- *Different stakeholder groups often have different definitions of quality; thus 'winners' and 'losers' may be associated with any particular definition*

He also presents a list of characteristics of education quality without giving a specific definition (Adams, 1993:13):

- *Quality is definable in context*
- *Under some assumptions quality can be measured 'objectively'*
- *Quality often supplements, complements, or is integrated into interpretations of efficiency and equity*
- *Quality is not necessarily associated with high costs*
- *Given similar missions, goals and comparable contexts, educational quality can be elevated across educational settings*

---

<sup>8</sup> Judgement was passed on 7 December 2011. Judge Mbha ruled against the applicants, but they have applied for leave to appeal in the Supreme Court of Appeal. The issue of adequacy only featured indirectly in this case thus far.

- *Even if there is lack of agreement on what quality is, there often is agreement that it is a goal.*

The quest for the improvement of education quality has been recognised as the most critical challenge facing most developed and developing nations. Critical moments in this process were the United Nations International Convention on the Rights of the Child in 1989 and the work of Katarina Tomasevski in 1995. Other critical moments listed by Beckmann & Fuessel (2011:1) were:

*‘The education for all movement to ensure education for all by 2000 took off at the World Conference on Education held in Jomtien, Thailand in 1990. It was followed by a Mid-Decade Conference held in Amman in Jordan in 1996 and the World Education Forum held in Dakar, Senegal in 2000...’*

The 2000 World Conference on Education for All in Dakar, concluded that good quality education is essential for supporting economic development and addressing poverty, equipping learners with requisite skills and knowledge, supporting people to transform their lives and the society in which they live, and to achieve the six Millennium Development Goals. The latter is contained in the ***Dakar Framework for Action Education for All: Meeting Our Collective Commitments***. They are:

1. Expanding and improving comprehensive *early childhood care and education*, especially for the most vulnerable and disadvantaged children.
2. Ensuring that by 2015 all children, have access to *free and compulsory primary education of good quality*.
3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and *life skills programmes*.
4. Achieving a fifty percent improvement in levels of *adult literacy* by 2015, especially for women, and equitable access to basic and continuing education for all adults.

5. Eliminating gender disparities in primary and secondary education by 2005 and achieving *gender equality* in education by 2015, with focus on ensuring girls' full and equal access to (and achievement in) basic education of good quality.
6. Improving all aspects of the *quality of education* and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially literacy, numeracy and essential life skills. (UNESCO, 2000:15)

UNESCO (2004a:77,78), postulates that there is ample evidence that the quantity (number of years) and the quality (both cognitive/intellectual and non-cognitive skills, i.e. norms, values and behavioural aspects) of the education a person receives go hand in hand. Their research concludes that the complexity of the drive for quality education for all is typified by the following:

- An analysis of country-specific schools systems found that different school systems within a country have produced either high or low levels of achievement.
- Debates within the education community regarding adequate teaching practices are not settled.
- Recent experimental studies on the education production function found that sufficient resources are necessary if education of acceptable quality is to be attained
- Adequate incentive structures for teachers appear to be a natural complement to resource policies, but that they can also produce contrary side effects that either reduce their impact on cognitive skills or affect other educational outcomes negatively.

Motha (2010: 8/9), quoting various authors on this matter (Myers, 1994; Dahlberg, Moss & Pence 1999; and Pigozzi 2008), contends that quality education is influenced by many factors and multiple environments which influence outcomes. UNESCO (2004a:17) contends that most attempts to define quality in education are characterised by two principles namely that, (i)

the cognitive development of the learner is the major explicit objective of all education systems and (ii) education has a role in promoting the values and attitudes of responsible citizenship.

## 2.3 Quality education in the South African context

This discussion has its roots in the national strategy for human resource development (hereafter HRD). The conventional interpretation of this concept focuses on skills development with a view to enhance economic growth. Such a narrow definition of HRD however, sits *at odds with South Africa's development discourse ... the strategic priorities and interventions that make up the strategy are explicitly designed to respond to economic, social and wider development imperatives*. Apart from purely economic considerations these strategies thus also include issues related to *values, good citizenship and wider development objectives* (RSA, 2009: 10/11).

Part of the education for all (EFA) debate is issues related to access and exclusion. Much progress has been made in this regard in South Africa since 1994. Perry and Arends (2003: 322/323) indicate that by 2001, access to schooling have improved to such an extent that 97% of the 7 to 13-year-old and 77% of the 14 to-year-old cohorts were respectively attending primary and secondary schools and that the number of students writing and passing the NSCE have increased significantly. *Of particular note is the high level of participation by female learners*. Despite progress made in South Africa, Wildeman (2003: 298) indicated that *while public schools have benefitted from the targeting of a broader majority of poor learners, funding for the ECD and ABET subsectors were still subject to policy and funding reviews*.

Motala (2008: 53) argues that this is not a simple matter and that two conceptions of educational access prevail in education policy and research, namely structural access and meaningful access. Although this falls outside the immediate context of this dissertation it is important to take note thereof in the context of the broader debate. South Africa has made major inroads regarding the first, i.e. getting all children of school going age into a classroom. It is a completely different story however, when we look at

meaningful access in terms of quality education. This matter is dealt with extensively later in this paragraph.

Motala (2008:51) further argues that factors featuring in the exclusion debate in South Africa (and elsewhere for that matter) present in terms of two broad themes. The first include economic and social factors (indirect cost of education, family structure, gender and HIV/AIDS). The second include school-related factors (discrimination, racism, sexism, poor quality teachers) and personal factors (health, support for and motivation of learners themselves).

In South Africa the following documents are of particular importance regarding efforts to raise the quality of education; the TIRISANO document, the 3 March 2003 Review to the Minister on *Financing, Resourcing & Costs of Public Education in Public Schools* and the 14 June 2003 Plan of Action: *Improving access to free & quality basic education for all*.

The TIRISANO document, announced in 1999 by the then Minister of Education, Prof Asmal, represents a five-year plan to improve the quality of education in South Africa. The implementation plan for TIRISANO provided for the running of five programmes from 2000 to 2004. These programmes focused on:

- ❑ Programme 1: HIV/AIDS
- ❑ Programme 2: School effectiveness and educator professionalism
- ❑ Programme 3: Literacy
- ❑ Programme 4: Further and higher education
- ❑ Programme 5: Organisational effectiveness of the national and provincial departments

These programmes were aimed at streamlining the functionality of the ten newly established departments of education (one national and nine provincial departments).

The 3 March 2003 Review to the Minister on *Financing, Resourcing & Costs of Public Education in Public Schools* states that there is considerable evidence indicating that the quality of education in South African schools is worryingly low relative to what South Africa spends on schooling (Department of Education (hereafter DoE), 2003b :101). This document explains the potential impact of a series of recommendations in terms of four critical areas namely:

- ❑ *Adequacy of state allocations to schools* – This item relates to the funding of schools on an equitable basis and has been addressed through subsequent amendments to the Schools Act and the National Norms and Standards for School Funding in 2005 with the introduction of the concept of *no fee schools*<sup>9</sup> in National quintiles 1 and 2 (approximately 40% of schools)<sup>10</sup>.
- ❑ *Translation of monetary inputs into school resources* – This item relates to the phenomenon where funds are made available for the creation of infrastructure and learner support materials, but where the money is either not spent or not spent well. The case of the Department of Education in the Eastern Cape is an example where the Department of Basic Education (hereafter DoBE) had to put the department under administration in February 2011 because of the problems listed above.
- ❑ *Translation of school resources into learner performance* – This item relates to the poor performance of South African students in international surveys to assess the quality of education. This matter is discussed in more detail in paragraphs 2.3.1 to 2.3.5.
- ❑ *School fees and other private inputs demanded by schools* – This item relates to the fact that school governing bodies, irrespective of the quintile ranking of the school, are obliged to supplement the funding provided by the state in terms of Section 36(1) of the South African Schools Act. (DoE, 2003b: 105 – 111)

---

<sup>9</sup> A public school that may not charge school fees because of the poverty index of the parent community and the state of the school's facilities

<sup>10</sup> All the schools in South Africa are ranked into five groups referred to as the *National Quintiles* based on a poverty ranking determined by the average household income and the state of the school facilities (Quintile 1 being the poorest and quintile 5 the least poor).

The 14 June 2003 Plan of Action: *Improving access to free & quality basic education for all*, resulted in the planned changes in the education system set out in Table 2.1 below.

**Table 2.1:** *Excerpts from the table on key activities that the Department will embark on (DoE, 2003a: 30).*

<i>Year</i>	<i>System changes</i>
<b>2003</b>	<ul style="list-style-type: none"> <li>• Finalisation of DoE's monitoring and evaluation framework insofar as it relates to schools</li> <li>• Setting up of an Education Complaints Office (ECO)</li> </ul>
<b>2004</b>	<ul style="list-style-type: none"> <li>• Finalisation of measures that will bring about easier access by non-section 21 schools to their school allocations</li> <li>• Improved capital investment plans</li> <li>• A fully operational Budget Monitoring and Support Office in the DoE providing support to the provincial education budgeting process</li> <li>• Formulation of a long-term plan by government and the textbook industry on the supply of affordable textbooks to the education system</li> <li>• Release of the first major sector review focusing on schools</li> </ul>
<b>2005</b>	<ul style="list-style-type: none"> <li>• Release of first district-level learner performance reports to the public</li> </ul>

The systemic changes envisioned in the table above have met with varying degrees of success. Ms Pandor, Minister of Education in South Africa in her budget speech in parliament (2005: 3) was of the opinion that *'Improving the quality of education in South Africa is a national priority that requires involvement and engagement throughout all levels of our society' and that 'teachers are at the heart of quality education'*.

She identified six core issues that, in her opinion, would enhance the quality of education in South Africa:

- Reaching untapped potential
- School fees and no fee-schools
- School governing bodies and language policy in schools
- Higher education enrolment planning
- Further education and skills for a modern economy

- Access to adult education for adult learners

The four ministers of education since 1994 have all contributed in specific ways to the continuous process of improving the quality of education in South Africa. Minister Sibusisu Bengu (1994 to 1999) restructured the system and contributed largely to address the issues of access and enrolment. Minister Kader Asmal's (1999 to 2004) major contribution was the TIRISANO document as a blue print development plan. Minister Pandor (2004 to 2009) created awareness of the lack of performance in international benchmarking and Minister Angie Mothsekga (2009 to present) has been instrumental in establishing the *Action plan to 2014: Towards the realisation of schooling 2025*. The successes in access, enrolment, and improved facilities are all cause for pride and gratitude when compared to the pre-1994 dispensation. These successes are representative of the will to improve the quality of and reflect the priority attached to education by the South African Government. However, the legacy of the previous dispensation is still very visible in many schools in rural areas, where to date, schools do not have access to electricity and running water and especially in the low standards of education as discussed in the paragraph that follows. The problems that still exist and the failure to resolve many of these are complex. Some can be attributed to the magnitude of the inheritance from the apartheid era, but I consider the following to be factors that contribute to and exacerbate the situation:

- lack of project management skills (coordination of objectives, time, cost and quality) manifesting in;
- lack of detailed planning; resulting in un-operationalised or un-operationalisable plans;
- inability to coordinate efforts;
- inexperience of officials; and
- suboptimal use/abuse of available funding.

Beckmann and Fuessel (2011:1/2) postulate that '*Studies to measure the achievement of the goals of EFA and the FW abound at both the international and national levels.*' They refer to the following international studies: PISA

(the Programme for International Student Assessment), PIRLS (the Progress in International Reading Literacy Study), TIMSS (the Trends in International Mathematics and Science Study), SACMEQ (The Southern and Eastern Africa Consortium for Monitoring Educational Quality) and ANA (Annual National Assessment) as an example of a national intervention.

Colditz (2011: 1/2) refers to the recently published research report published by Van der Berg et al (2011) that contends that education outcomes of the South African schooling system are still appallingly low and that, according to the report, there are no indications that this state of affairs is improving despite radical interventions since 1994.

What follows is a very brief exposition of what these studies entail and how they apply to the South African context. For the purposes of my research, however, I also include (in paragraph 2.3.6) a discussion on the National Senior Certificate examination (hereafter NSCE).

### **2.3.1 Progress in International Reading Literacy Study (PIRLS)**

This study was developed to assist in improving the teaching of reading and the acquisition of reading skills around the world. It is endorsed by the International Association for the Evaluation of Educational Achievement (IEA), an association with more than 60 member countries founded in 1959. In these studies the focus is on (i) the purpose of the reading, (ii) the process of comprehension and (iii) on reading behaviours and attitudes.

Their first study was conducted in 2001 and the second in 2006. The next study is scheduled for 2011. South Africa only took part in 2006 and *South Africa's Grade 4s & Grade 5s came last in a study of 40 countries that took part in the Progress in International Reading Literacy Study (PIRLS) 2006* (<http://edulibpretoria.wordpress.com/2007/11/30/results-from-pirls-2006-international-report-is-shocking/> - accessed on 28/11/2011). It was initially decided that South Africa would in future rather take part in the SACMEQ

research (see 2.3.4), but that position has subsequently been changed and in 2011 a representative sample of Grade 5 learners from across the country participated in the study (School Management & Leadership, Vol. 4 Number 9 & 10, 2010:16).

### **2.3.2 Trends in International Mathematics and Science Study (TIMSS)**

The *Trends in International Mathematics and Science Study* (hereafter TIMSS) is an international assessment of the mathematics and science achievement of fourth and eighth grade students worldwide. This survey has been conducted every four years since its inception in 1995. Like PIRLS, TIMSS was developed by the International Association for the Evaluation of Educational Achievement (IEA) to allow the participating nations to compare students' performance (<http://timss.bc.edu/>, accessed on 16/03/2010). South Africa took part in the 1999 and 2003 surveys and twice came last out of all the African countries, even behind African countries such as Ghana and other developing nations that spent far less of their budgets on education than South Africa. So in 2007 the education department, then under Minister Naledi Pandor, decided to withdraw from the study. This decision has since been reversed by the current Minister of Basic Education, Angie Motshekga, so in 2011 South African learners in grades four and eight again participated in the next TIMSS study (Scott, 2010).

### **2.3.3 Programme for International Student Assessment (PISA)**

The *Programme for International Student Assessment* (hereafter PISA) is a survey undertaken every three years by the Organisation for Economic Co-operation and Development (OECD). It was conducted for the first time in 2000. Through these surveys 15-year-olds (near the end of compulsory education) in the principal industrialised countries, are assessed on how far students have acquired the knowledge and skills essential for full participation in society. <http://www.pisa.oecd.org/pages/0,3417,>

[en\\_32252351\\_32235907\\_1\\_1\\_1\\_1\\_1,00.html](en_32252351_32235907_1_1_1_1_1,00.html) accessed on 20/08/2010. South Africa has never taken part in PISA.

### **2.3.4 The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)**

The Southern and Eastern Africa Consortium for Monitoring Educational Quality (hereafter SACMEQ) is an international non-profit developmental organisation of 15 Ministries of Education in Southern and Eastern Africa that decided to work together to share experiences and expertise in developing the capacities of education planners to apply scientific methods to monitor and evaluate the conditions of schooling and the quality of education, with technical assistance from UNESCO International Institute for Educational Planning (IIEP). SACMEQ has completed two major education policy research projects on the reading and mathematical ability of learners; SACMEQ I in 1995 and SACMEQ II (Moloi, M., & Strauss, J.) in 2005. The report on a third a project (SACMEQ III) that commenced in 2007, was published in 2010 (<http://www.sacmeq.org/about.htm>, accessed on 5/4/2011). Again, South Africa did not do well. Spaul (2011:26) in his concluding paragraph of analysis of the results, puts it this way:

*‘The motif that runs through much of the analysis above is that South Africa is still a tale of two schools: One which is functional, wealthy, and able to educate students; with the other being poor, dysfunctional, and unable to equip students with the necessary numeracy and literacy skills they should be acquiring in primary school. While the constitution promises equal access to education, it cannot promise an equal quality of education.’*

### **2.3.5 Annual National Assessments (ANA)**

The Annual National Assessments (hereafter ANA) are standardised national assessments for languages and mathematics in the intermediate phase (grades

4 – 6) and in literacy and numeracy for the foundation phase (grades 1 – 3). The question papers and marking memoranda (exemplars) are supplied by the national Department of Basic Education and the schools manage the conduct of the tests as well as the marking and internal moderation.

(<http://www.education.gov.za/Curriculum/AnnualNationalAssessment/-tabid-/424/Default.aspx> accessed on 26/09/2011).

Table 2.2 below gives a brief exposition of the 2011 results for the ANA including comments that explain the results.

**Table 2.2:** 2011 Results for the Annual National Assessments.

Grade	Literacy	Numeracy	Comments
3	National average performance 35%.  (47% of learners achieved above 35% in Literacy)	National average performance 28%.  (34% of learners achieved above 35% in numeracy)	Provincial performance in these two areas is between 19% and 43%, the highest being the Western Cape, and the lowest being Mpumalanga.
6	National average performance 28%.  (30% of learners achieved above 35% in Languages)	National average performance 30%.  (31% of learners achieved above 35% in Mathematics)	Provincial performance in these two areas ranges between 20% and 41%, the highest being the Western Cape, and the lowest being Mpumalanga.

In her statement on the release of the Annual National Assessments Results for 2011, Mrs Angie Motshekga, Minister of Basic Education said:

*‘We have taken an unprecedented step in the history of South Africa to test, for the very first time, nearly 6 million children on their literacy and numeracy skills in tests that have been set nationally. This is a huge undertaking but one that is absolutely necessary to ensure we can*

*assess what needs to be done in order to ascertain that all our learners fulfil their academic and human potential. ANA results for 2011 inform us of many things, but in particular, that the education sector at all levels needs to focus even more on its core business – quality learning and teaching.’*

It is evident from Table 2.2 that the 2011 ANA the South African education system is failing to provide the learners with education that will enable “*all our learners (to) fulfil their academic and human potential*” and that the “*core business – quality learning and teaching*” is not being achieved adequately.

## **2.3.6 The National Senior Certificate Examination (NSCE)**

### **2.3.6.1 Background**

The National Senior Certificate (NSC) examination commonly known as “matric” is the exit level examination of the formal school system in South Africa. It ends twelve years of formal schooling and the results obtained in the NSCE are one of the key indicators for the departments of education, schools and parents alike, to indicate the state of health of the education system. This examination was written for the first time 152 years ago when the first formal examination was conducted in South Africa under the University of the Cape of Good Hope in 1858 (<http://www.education.gov.za/Examinations/tabid/338/Default.aspx> accessed on 20 May 2011).

In the period immediately preceding the 1994 democratic elections in South Africa, students wrote a national examination at the end of their twelve year school career within the context of the then different departments of education serving the different population groups in South Africa under the apartheid regime and the 1983 Constitution. At that stage it was still referred to as the Senior Certificate Examination. These included the education departments serving the House of Representatives (for people from Indian descent), House of Delegates (for people with a so-called coloured background), the Department of Education and Culture (for the people from a so-called white

background) and the Department of Education and Training, serving all the so-called black peoples of South Africa.

With the establishment of the new education system after the 1994 elections, the timetable for the NSCE was coordinated nationally but the respective provincial departments of education in the nine different provinces still set their own papers. One national examination at the end of grade twelve was written for the first time for the entire country in 2003. During the period 1996 to 2008, this qualification was referred to as the Further Education and Training Certificate or FETC. In 2008 the name of this examination was changed to the National Senior Certificate Examination and the name of the qualification became the *National Senior Certificate in Education*. This was the first time that students were examined on Curriculum 2005 (Loock, 2011).

In order to obtain a National Senior Certificate a learner must (DoBE 2009:5)

- (a) Complete the programme requirements for Grades 10, 11 and 12 separately and achieve the distinct learning outcomes and attain the associated assessment standards of all three years; and*
- (b) Comply with the internal assessment requirements and Practical Assessment Tasks where applicable for Grades 10, 11 and 12 and the external examination requirements of Grade 12 as contemplated in the National Protocol for Assessment (Grades R– 12) and the Subject Assessment Guidelines of the various subjects listed in Annexure A of this document.*

The Matriculation Board is an advisory committee on minimum admission requirements to Higher Education South Africa (HESA). The Matriculation Board is responsible for setting minimum admission requirements to degree study on the basis of the senior certificate, the Matriculation Board has a long history that dates back to statutory responsibilities vested in the Joint Matriculation Board (JMB). The JMB operated from 1918 to 1992 when it was dissolved and its records were transferred to the Matriculation Board. The functions of moderation, examination and certification were transferred to the South African Certification Council. SAFCERT concentrated on quality

assuring the Senior Certificate. The Council was established by an Act of Parliament in 1986, to introduce efficient administration to make standards uniform for qualifications to have credibility or legitimacy. An indication of how difficult it was for all concerned at the time to deal with even the most elementary changes is the fact that even though the South African Certification Council Act was passed in 1986, the first meeting of the Council was only held two years later in March 1988. The first executive officer was appointed a year later in 1989. The Council only became effectively operational in November 1992. It was in that year, 1992, that the first Senior Certificate Examinations were conducted under the auspices of this Council (<http://www.hesa-enrol.ac.za/mb/abus.htm> accessed on 20/08/2011) (Asmal: 2002).

The functions of the South African Certification Council (SAFCERT) were incorporated into those of the new Council, constituted in June 2002 – now known as Umalusi – while the function of determining minimum thresholds to degree study was taken over by the Matriculation Board. The name Umalusi is derived from the Nguni word “uMalusi” meaning “shepherd” or, in the African context, “guardian of the family assets”. UMALUSI is tasked to take care of some of the nation’s most valued possessions – general and further education and training. It will encourage and support, but also be firm on growth in quality through powerful and effective learning (<http://www.umalusi.org.za/Inveloper.asp?iP=2&iVdate=22/10/2011&iS={4CCABC8F-183A-4015-A076-6C898BC190DB}> accessed on 22/10/2011). Beckmann (2011: 17) mentions that the pass rate in the NSCE fluctuated between 47% and 75% since 1994 and that the average pass rate varied as much as 30% between provinces. He is of the opinion that the fluctuations could, in all probability be ascribed to different interventions, curriculum changes as well as attempts to influence the results.

### **2.3.6.2 Results**

As indicated in the beginning of paragraph 3.6.1, the results in the NSCE are an important indicator of the success of the education system and the quality of the education provided at schools in the system. As the Minister of Basic

Education, Ms Angie Motshekga, put it on releasing the 2010 NSCE results: ‘*The Grade 12 National Senior Certificate examination is one of the instruments for measuring how government is doing in discharging its responsibility of improving quality of education.*’ During this same opportunity she mentioned that ... ‘*Over the years, our country has endeavoured to achieve a national pass rate of at least 70%*’. (<http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=15519&tid=26422> – accessed on 22/10/2011).

Table 2.3 gives an overview of the NSCE results since the ‘90s and Figures 2.2 and 2.3 respectively depict the *number of students that sat for the examination* and the *pass rate* for the period 1999 to 2010 graphically.

**Table 2.3:** *National Senior Certificate Examination results*

Year	Students	Pass rate
1995	-	53.4%
‘96	-	53.4%
‘97	-	47.4%
‘98	552 384	49.3%
’99	511 159	48.9%
2000	489 941	57.8%
’01	449 371	61.7%
’02	443 824	68.9%
’03	440 267	73.2%

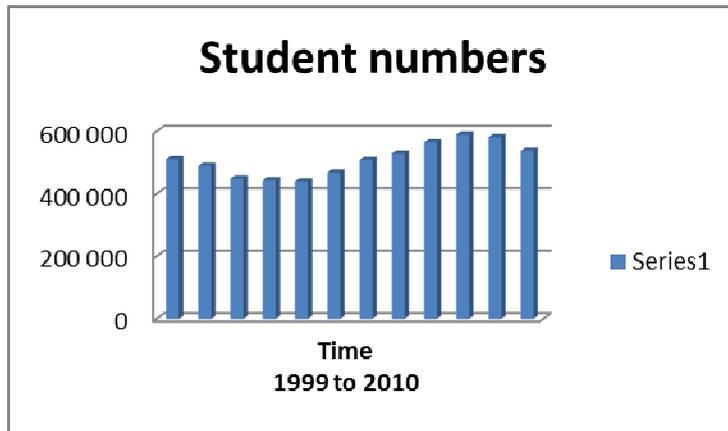
'04	467 985	70.7%
'05	508 363	68.3%
'06	528 525	66.5%
'07	564 775	65.2%
'08	589 912	62.5%
'09	581 573	60.6%
'10	537 543	67.8%
<b>AVERAGE</b>	<b>512 740</b>	<b>60.98%</b>

Looking at Table 2.3, it is interesting to note that the expressed target of a 70% overall pass rate was achieved only twice during the period 1999 to 2010 namely in 2003 and 2004. During 2002 (68.9%), 2005 (68.3%), 2006 (66.5%) and in 2010 (67.8%) the overall pass rate approached the target of 70% but fell slightly short of the benchmark. It is further interesting to note that the overall pass rate is 60.98% and that since the year 2001 the pass rate has been consistently above the 60% mark

The dysfunctionality of the pre 1994 plethora of education systems in South Africa also manifested itself in the pass rate in the NSCE. Beckmann (2011: 11) quotes *The Star* newspaper of 8 January 1990 reporting that the former Department of Education and Training (for Black students) only had a pass rate of 36,4%. A 70% pass rate may not be First World standard, but does reflect a vast improvement in the overall quality the education system is providing.

When the improvement in the pass rate is considered in conjunction with the issue of drop-out as discussed in paragraph 2.4.2 below, it is evident that,

although nowhere near ideal, these represent positive signs that the quality of education as manifested in the results of the NSCE is steadily improving.



**Figure 2.2:** *Number of students writing the National Senior Certificate Examination*



**Figure 2.3:** *Pass rate for the National Senior Certificate Examination*

From the histograms in Figures 2.1 and 2.2 it appears as if there is an inverse proportionality between the number of students that sit for the NSCE and the pass rate. Attempting to interpret this observation would be mere speculation and merits an investigation on its own,

The six sample schools that I selected purposefully for my research had to have a pass rate of 100% for three consecutive years since 2007. Looking at the pass rates portrayed in Table 2.3, this is no mean feat. If a 70 % pass rate is the benchmark of acceptability, a 100% pass rate definitely represents

education of a high quality. To have done so for three consecutive years constitutes excellence.

### 2.3.7 Class size as factor in quality education

Class size is an inherited problem in South Africa. In the pre-1994 dispensation and even today, class size varies tremendously in amongst and even within provinces. Learner: educator ratios were initially addressed through the development of national norms for the provisioning of educators to schools. The official learner: educator ratio for primary schools is 1: 40 and 1: 35 for secondary schools. These norms were meant as targets for the year 2000, and would have been phased in over a period of five years Wildeman (200: 3).

A great deal of research using a variety of methods and approaches was done over the past 30 years especially in the USA. Table 2.4 summarizes some of the major initiatives in the USA this regard.

**Table 2.4:** *Class size projects in the USA (Adapted from [http://ed.gov/pubs/ReducingClass/Class\\_size.html](http://ed.gov/pubs/ReducingClass/Class_size.html) - accessed on 24/05/2011).*

Date	Initiative	Sate	Focus
1984	<i>Prime Time</i> Project	Indiana	Reduced class size to 18 in first-, second-, and then kindergarten and third-grade classrooms. Results were mixed. Tests of student achievement found that for students in the smaller classes, the reading scores for first-graders showed the greatest improvement, with smaller gains in mathematics.
1985	Project STAR (Student Teacher Achievement Ratio)	Tennessee	<i>STAR</i> was a 4-year longitudinal study of kindergarten, first-, second-, and third-grade classrooms in Tennessee which began in 1985. <i>STAR</i> compared classes of 13-17 students with classes of 22-26 students both with and without an additional instructional aide in the larger classes. Participating teachers did not receive any professional training focusing on teaching in reduced size classes. The evidence from student



			testing in <i>STAR</i> showed that the students in the smaller classes outperformed the students in the larger classes, whether or not the larger class teachers had an aide helping them.
1989	Lasting Benefits Study	Tennessee	<p>In 1989, the <i>Lasting Benefits Study</i> began a follow-up study to examine whether the effects of the smaller class size experience persisted when students were returned to normal size classes. The study is still on-going. To date, the research findings include:</p> <ul style="list-style-type: none"> <li>• <i>In fourth grade, students from the smaller classes outperformed the students from the larger classes in all academic subjects.</i></li> <li>• <i>In fourth grade, students from the smaller classes were better behaved than students from the larger classes (i.e., student classroom effort, initiative, and disruptiveness).</i></li> <li>• <i>At least through eighth grade, a decreasing but still significant higher academic achievement level for the students from the smaller classes persists.</i></li> </ul>
1990	Project Challenge	Tennessee	In <i>Project Challenge</i> , Tennessee sought to put the <i>Project STAR</i> findings to use by implementing smaller class sizes in 16 of the state's poorest school districts. Beginning in 1990, the state phased in smaller classes at the kindergarten through third-grade levels in districts with the lowest per capita income and highest proportion of students in the subsidized school lunch program. The results of this effort were evaluated by examining the effect on the ranking of the school districts according to student performance on a state-wide achievement test. The <i>Project Challenge</i> districts moved from near the bottom of school district performance in Tennessee to near the middle in both reading and mathematics for second grade.
1990	Burke County Project	Burke County, North Carolina	Burke County pilot-tested and then phased in a class size reduction project in the county school district. In 1995-96, 1,193 first-graders and 1,125 second-graders participated in the initiative. The program's goal has been to reduce class size to 15 students in all first-, second-, and third-grade classes. The Burke County project also included professional development activities covering instruction and assessment, and so the effects are not necessarily



			<p>simply a function of reducing class size. Evaluation of the initiative has produced the following findings:</p> <ul style="list-style-type: none"> <li>• <i>Compared to a matched group of students in classes that had not been phased into the smaller class initiative, students in the smaller classes outperformed the comparison group in first, second, and third grades on both reading and mathematics achievement tests.</i></li> <li>• <i>Based on independent observations of classroom activity, the percentage of classroom time devoted to instruction in the smaller classes increased from 80 percent to 86 percent compared to the larger classes, while the percentage of time devoted to non-instructional activities such as discipline decreased from 20 percent to 14 percent.</i></li> </ul>
1996/7	SAGE (Student Achievement Guarantee in Education Programme)	Wisconsin	<p>The <i>SAGE</i> Program's objective is to phase in class size reduction in kindergarten through third grade in school districts serving students from low-income families. The <i>SAGE</i> Program reduced class sizes in kindergarten and first grade in 1996-97, added class size reductions in second grade in 1997-98, and added third grade class size reductions in 1998-1999. Its aim is to reduce class size in the appropriate grade levels to a student/teacher ratio of 15 to 1 or less. <i>SAGE</i> program classroom arrangements in the first two years of implementation were several, including regular classrooms with 1 teacher and 15 students, 2 teacher teams with 30 students, and 4 other types of arrangements reflecting the constraints of existing classroom settings and teacher assignments. In the 1997-98 school year there were 30 schools from 21 school districts participating in the <i>SAGE</i> program, and 14 schools in 7 districts providing comparison student background and achievement data for an evaluation study of the program that is on-going.</p> <p><i>SAGE</i> and comparison school students' academic learning was measured at the beginning and end of the first-grade year, and again at the end of the second-grade year. The students' scores were compared to those of students in</p>



			<p>matching comparison schools serving similar populations of students, with the following results:</p> <ul style="list-style-type: none"> <li>• <i>SAGE first-grade students performed consistently better than comparison students in mathematics, reading, language arts, and total scores for the Comprehensive Test of Basic Skills.</i></li> <li>• <i>The achievement gap lessened between white and African-American students in the SAGE smaller classes in the first grade, in contrast to a widening of the gap between white and African-American students in the larger classes of the comparison schools.</i></li> <li>• <i>Second-grade SAGE students' academic achievement remained higher than that of the comparison school second-graders, but the difference did not increase substantially.</i></li> </ul> <p>These findings are consistent with the findings in <i>Project STAR</i>, but there are two important qualifications to make regarding the <i>SAGE</i> project data. First, these are second year evaluation data from an on-going study, and so the findings of this research may change substantially as the program is phased in and additional data analyses are performed. Second, the <i>SAGE</i> project class size reductions were accompanied by other program initiatives: participating schools were also required to implement a rigorous academic curriculum, provide before and after school activities for students and community members, and implement professional development and accountability programs.</p>
--	--	--	---

An analysis of the existing research in an article titled *Reducing Class Size, What Do We Know?* ([http://ed.gov/pubs/ReducingClass/Class\\_size.html](http://ed.gov/pubs/ReducingClass/Class_size.html) - accessed on 24/05/2011)., the author arrives at the following three conclusions:

1. *A consensus of research indicates that class size reduction in the early grades leads to higher student achievement. Researchers are more cautious about the question of the positive effects of class size*

*reduction in 4th through 12th grades. The significant effects of class size reduction on student achievement appear when class size is reduced to a point somewhere between 15 and 20 students, and continue to increase as class size approaches the situation of a 1-to-1 tutorial.*

- 2. The research data from the relevant studies indicate that if class size is reduced from substantially more than 20 students per class to below 20 students (16 to 18), the related increase in student achievement moves the average student from the 50<sup>th</sup> percentile up to somewhere above the 60<sup>th</sup> percentile. For disadvantaged and minority students the effects are somewhat larger.*
- 3. Students, teachers, and parents all report positive effects from the impact of class size reductions on the quality of classroom activity.*

The relationship between class size and student achievement is very complex. A mere reduction of the number of students does not necessarily lead to improved performance. Hanushek (1986 to 1999) and Monk's work (1994/5) in this regard is of particular importance. Variables that need to be factored in are student-teacher ratios, number of teachers per class, students' socio-economic status, students' motivation, teachers' academic background, experience and commitment. The literature on this phenomenon from the USA focuses primarily on the junior phases of schooling (kindergarten to grade 6).

A complete analysis of class size as a factor impacting on the quality of education merits a full research project on its own. Since my research is focused on the academic performance of grade twelve students from secondary schools in South Africa, the exposition above sufficiently proves an existing relationship between class size and academic performance to state that I will have to factor it in in my research.

## 2.4 European Commission’s model on quality education

In a Council resolution of 26 November 1999, Ministers of Education of the European Union identified the quality of education as one of the priority issues for consideration. This led to a number of initiatives that paved the way for the pilot project on quality evaluation in school education which was implemented in 101 secondary schools across Europe in 1997/98. Based on the results of the pilot scheme, the Commission adopted a proposal for a recommendation of the European Parliament and the Council on ‘European cooperation in quality evaluation in school education’ in January 2000. The Education Ministers from the 26 participating countries invited the Commission to establish a working committee of national experts from the 26 European countries (designated by the Ministers) to identify a limited number of indicators or benchmarks for school standards to assist national evaluation of systems in assessing the quality of school education.

This resulted in the identification of sixteen criteria and the publication of two reports by the working committee. These indicators cover four broad areas: attainment levels; educational success and transition; monitoring of school education; and educational resources and structures (European Commission 2000:5/6). They are summarized in Table 2.5 below.

**Table 2.5:** *Sixteen indicators of the Quality of School Education (European Commission 2000:6).*

Attainment	Success & transition	Monitoring education	Resources and structures
1. Mathematics 2. Reading 3. Science 4. ICT 5. Foreign Language 6. Learning to learn 7. Civics	8. Drop-out rates 9. Completing upper Secondary Education 10. Participation in Tertiary Education	11. Evaluating & Steering School Education 12. Parent participation	13. Education & Training of Teachers 14. Participation in Primary Education 15. Number of student per computer 16. Education expenditure per student

### 2.4.1. Attainment.

In this area there are seven indicators of attainment which are seen by the European Commission as critical for all European countries. Criteria 1 to 3 (Mathematics, Reading and Science) are standard indicators used to probe the quality of education in schools as has been discussed earlier in this chapter. Performance regarding criteria 1 to 3 as well as 4 and 5 (Information and Communication Technology ('ICT') and Foreign languages) are fairly easy to measure. Criteria 6 and 7 (Learning to Learn and Civics), however, are much more difficult to measure and the content thereof will definitely vary greatly from country to country in Europe and in South Africa, as well.

The concept 'Civics' in the context of the European Commission (2000: 32) report refers to *'the way ... young people are prepared for citizenship, and how they learn to take part in public affairs'*.

### 2.4.2. Success and transition.

Criteria 8, 9 and 10 ('drop-out rate from school', 'completion of upper secondary education' and 'participation in tertiary education') are closely related and all three of them have serious implications for education planners and policy makers in the short, medium and long term.

Van der Berg in Beckmann & Prinsloo (2007: 11) is quoted as echoing other educational and economic statisticians in regard to drop-outs, that statistics in this regard are hard to come by. He also refers to the fact that a ministerial committee has just been appointed to investigate the issue. Crouch (2005), is also quoted by Beckmann & Prinsloo (2007: 3) stating that *'compared to other middle-income countries, it would be entirely unreasonable to classify South Africa's drop-out problem as 'huge.'* Although there are some drop-outs, South Africa does *'a little better than other middle income countries, and certainly better than its SADC neighbours'* He is of the opinion that drop-outs do not show earlier than the last grades due to the fact that the only

*‘meaningful measurement and accountability’* in the system is faced at the end of Grade 12.

### **2.4.3. Monitoring of school education.**

Criteria 11 and 12 (‘evaluation and steering of school education’ and ‘parental participation’). Criterion 11 applies to all levels of an education system and provides management information that should form the basis for informed decisions on the quality and effectiveness of the education provided by the system, province, district and or institution (that is, from the South African perspective). Both criteria are concerned with stakeholder participation where heads of schools, teachers, students and parents are key stakeholders, consumers of information and active players in school improvement. These two criteria proved to be important factors in the academic performance in the schools under investigation.

### **2.4.4. Resources and structures.**

This category (criteria 13 to 16) relates to infrastructure which impacts directly on school performance and pupil success. These are ‘educational expenditure per student’, ‘education and training of teachers’, ‘participation rates in pre-primary education’ and ‘number of students per computer’. These criteria can be used to identify issues which need to be investigated further, and to suggest alternative routes in policy making.

I include the sixteen criteria developed by the European Commission’s working group in my research for three reasons: (i) to be used for the purposes of triangulation in validating my findings (ii) to ascertain whether these criteria render another or new findings regarding the quality of the education offered at the sample schools, and (iii) to test the sixteen criteria’s applicability for the South African context in assessing the quality of education offered at our schools.

## 2.5 The role of the teacher

Searches of literature on the role of the teacher in the delivery of quality education have rendered a number of intriguing views on this matter. De Groof (1995:7) refers to the crucial role of the teacher in the development of both the equality and the quality of education when he quotes the International Labour Organisation the United Nations Educational, Scientific and Cultural Organization (point 4, The Statute of Teachers, ILO, Geneva, 1984, p.6):

*One of the guiding principles of the Statute of Teachers correctly assumes that “advance in education depends largely on the qualifications and ability of the teaching staff in general and on the human, pedagogical and technical qualities of the individual teachers”.*

The 15<sup>th</sup> Conference of Commonwealth Education Ministers held in Edinburgh in October 2003 was of the opinion that

*‘the continuing professional development (CPD) of teachers has been identified as a key element in ensuring quality in education systems. It is important for teachers to recognise that CPD is a pre-requisite for their professional careers and as part of the battle against ignorance. Ministers have agreed on the importance of improving teacher quality, and identified the issues of teacher selection, training, retention and on-going professional development as vital.’*

[http://www.thecommonwealth.org/Internal/177944/177947/178139/education\\_action\\_areas/](http://www.thecommonwealth.org/Internal/177944/177947/178139/education_action_areas/) - accessed on 20 May 2010).

Having done a recent review of available literature on the role of teachers, schools, and communities in quality education, Leu (2005:1) identifies three trends namely that:

- (i) there is a persistent tug for the attention of policy makers between quality and quantity;*
- (ii) decentralising authority and responsibility to the schools and community levels; and*

(iii) *recognition of the key role of teachers in promoting the quality of student learning. The link between quality education and the professional ability of teachers is endorsed by a number of sources.*

The Center for American Progress proposes ‘*a federal education agenda that builds the capacity of public schools to provide a high-quality education for all students by greatly strengthening America's teaching workforce. Recent research provides convincing evidence that teacher quality plays a critical role in whether and how much students learn from year to year. Unfortunately, teachers are too seldom treated as an important resource in America's schools, let alone our most precious one*’ (<http://www.americanprogress.org/projects/progressivepriorities/education.html> - accessed on 20 March 2006).

A number of authors suggest that teachers with higher verbal ability and (at the secondary level) with greater subject matter knowledge are associated with greater student learning (Ehrenberg & Brewer, 1995; Ferguson, 1991; Ferguson & Ladd, 1996; Monk, 1994; Monk & King, 1995; Strauss & Sawyer, 1986).

Dr Tom Boasberg, reading a paper entitled *School reform* during the Edward Kennedy Memorial Lecture at the University of Pretoria on 8 April 2011, summarized his presentation by saying:

- *By far the greatest impact on student achievement is the quality of teachers*
- *Second is the quality of the principal (school leader)*
- *Intense focus on*
  - *Recruitment*
  - *Development*
  - *Retention*
  - *Reward*
  - *Replacement*
- *Develop clear and student focused criteria of excellence in teaching and school leadership*

- *Systems of personalized coaching, feedback, and development for educators on classroom practice.*

It is imperative to take note of the preceding chronological line of arguments on the important role that the teacher plays in determining the quality of education offered in classrooms. This aspect will form a pertinent part of the questioning during the interviews conducted with the respondents in my research.

## **2.6 Conclusion and synthesis.**

In this chapter the debate on the quality of education was introduced by discussing the right to education. This was done by examining the Convention on the Rights of the Child, the 1996 South African Constitution and the South African Schools Act, 84 of 1996. The discussion then proceeded to *include* the work of Katerina Tomasevski on the so-called 4As (Availability, Accessibility, Acceptability and Adaptability).

A discussion of what the concept quality education means followed and covered the historical development of the education for all philosophy from the Jomtien conference in Thailand in 1990 to the Dakar agreement in 2000. This led to the realisation that the quest for quality of education should (i) provide for learning that accommodates the learner as an individual, family and community member, and as part of a world society; (ii) welcome the learner and be adaptable to meet learning needs; and (iii) acknowledge the diversity of experiences reflecting the learner's prior and current situation, as well as the characteristics and skills that the learner brings to the learning environment UNESCO (2004b:4). It includes both the cognitive (knowledge base) and non-cognitive (cultural and value systems) dimensions of the child.

I then discussed quality education from the South African perspective and referred to specific initiatives undertaken in this regard as well as the lack of performance in terms of national and international benchmarking.

A brief discussion of the national senior certificate examination as an indicator of the quality of education in the South African education system was followed by discussions of class size and the role of the teacher as factors impacting on the quality of education.

Using the arguments in the preceding discussions as a frame of reference, I suggest the following can be regarded as non-negotiable for providing quality education in any education system:

- *Motivated, well qualified teachers facilitating teaching and learning in a constructive manner*
- *Schools that provide the minimum infrastructure required for an environment conducive to effective teaching and learning*
- *Functional teaching and learning support material*
- *Sufficient funding to finance the above*
- *High standards of management and governance at micro, meso and macro levels in the education system ensuring the efficient and effective realisation of educational objectives at the respective levels in the organisation*
- *Sound articulation between the education system on one hand and the economy on the other hand (economy is used here in its broadest context to include all sectors of the economy of any country. As per definition of economy, this should include balancing the needs of the country and the available resources).*

These assumptions will be used to speak to the findings of my research in Chapter 7.

Chapters 3 and 4 will be used to discuss the *legal framework for the funding of public education* and the *accountable funding of education* in the South African education system respectively.

## CHAPTER 3: LEGAL FRAMEWORK FOR THE FUNDING OF EDUCATION IN SOUTH AFRICAN PUBLIC SCHOOLS

### 3.1 Introduction

With the advent of the new democratic dispensation in South Africa following the first democratic elections in 1994, the new government was faced with the dilemma of integrating fifteen different departments of education into a single education system: There were ten from the so-called homelands, four from the four independent republics (the so-called TBVC countries: Transkei, Bophuthatswana, Venda and Ciskei) and the four departments within the Republic, namely those of the House of Assembly's Department of Education and Culture (catering for white learners), the House of Representative's (catering for Asian/Indian learners), House of Delegates' (catering for Coloured learners) and the Department of Education and Training (catering for Black learners).

The integration was complex and also affected the funding of the education system. The new system had to cater for the diverse needs of South African society: Approximately forty five-million people with eleven official languages and eight major religious groupings.

The legal framework for the funding of education in South African public schools can be traced back to the White Paper on Education and Training of 1995 published by the Department of Education (hereafter DoE) and the three principles contained therein, namely:

- Access
- Equality
- Equity and redress (DoE, 1995: Chapter 4 par 5, 6 and 7)

It is further underpinned by the preamble to the South African Constitution of 1996 in which the following founding values are entrenched in Section 1:

*The Republic of South Africa is one, sovereign, democratic state founded on the following values:*

- (a) *Human dignity, the achievement of equality and the advancement of human rights and freedoms.*
- (b) *Non-racialism and non-sexism.*
- (c) *Supremacy of the constitution and the rule of law.*
- (d) *Universal adult suffrage, a national common voter's roll, regular elections and a multi-party system of democratic government, to ensure accountability, responsiveness and openness*

In addition to the adoption of the Constitution of 1996, the creation of an entirely new education system led to a comprehensive set of legislation to regulate the new education system. What follows is a list of important laws promulgated to structure the system:

- The National Education Policy Act, Act 27 of 1996
- The South African Schools Act, Act 84 of 1996
- The Further Education and Training Act, Act 98 of 1998
- The Higher Education Act, Act 101 of 1997
- The Employment of Educators Act, Act 76 of 1998
- The Adult Basic Education and Training Act, Act 52 of 2000
- The South African Qualifications Authority Act, Act 58 of 1995
- The South African Council for Educators Act, Act 31 of 2000
- Education White Paper 6 of 2001.
- The National Norms and Standards for School Funding of 1998 as amended in 2006.

Although they are all important for the effective functioning of the education system, not all of these have a direct bearing on the funding of public school education. In the sections below the legal framework for the funding of

education in public schools will be discussed with special reference to education offered in South African public schools. Before we do so it is also important to devote some time to a discussion of the structure of the education system that has evolved since 1994 and to explain why it is necessary to consider the legal framework in this dissertation.

## **3.2 Organisation of the South African education system**

### **3.2.1 Macro (education system) level**

Immediately after the 1994 elections an education system was created that provided for a structure that is depicted in Figure 3.1. After the 2009 general elections in South Africa, the structure of the education system was changed to what is contained in Figure 3.2.

#### **Legend to figures 3.1 and 3.2:**

DoE = Department of Education (Prior to 2009)

PED = a Provincial Department of Education

ECD = Early Childhood Education (Preschool /Kindergarten)

GET = General Education and Training band (Grades 1 to 12)

ABET = Adult Basic Education and Training (for adults who did not have the opportunity to complete a basic education and to acquire basic skills training)

FET = Further Education and Training (for learners who want to pursue career focussed training following the completion of Grade 9)

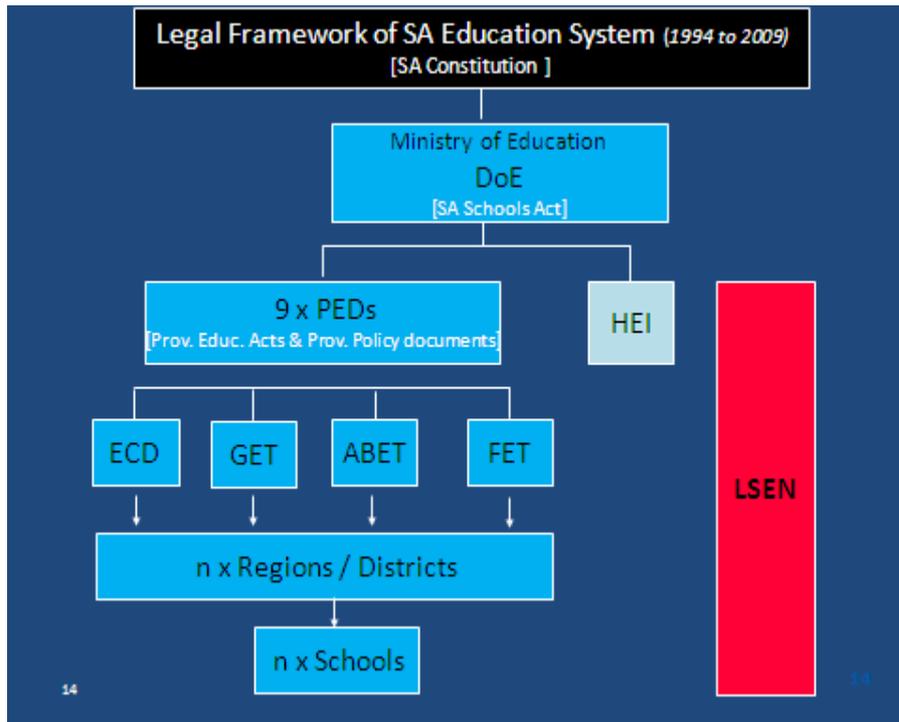
HEI = Higher Education Institutions (tertiary education offered at Universities and Universities of Technology)

LSEN = Learners with special education needs

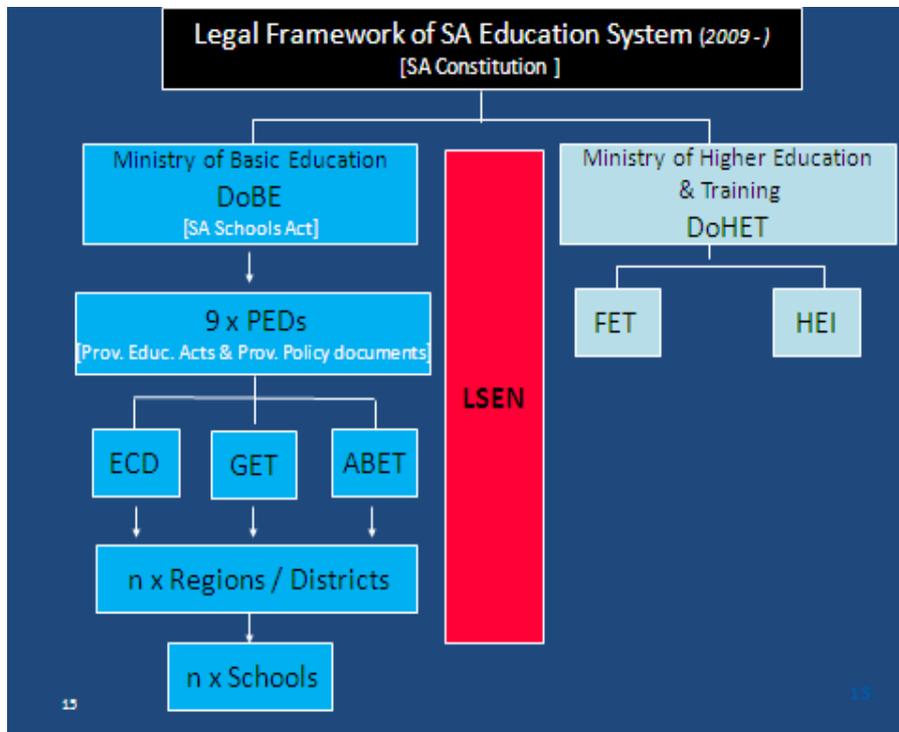
DoBE = Department of Basic Education (post 2009)

DoHE = Department of Higher Education and Training (post 2009)

**Figure 3.1:** Structure of SA Education system 1994 to 2009



**Figure 3.2:** Structure of SA Education system after 2009 elections<sup>11</sup>



<sup>11</sup> Figure 3.3 below depicts the organisation of a public school. Figures 3.2 and 3.2 depict the macro education structure established in terms of the Constitution of 1996.

### 3.2.2 Micro (institutional/school) level

For the purposes of this study I will focus on the legal framework for the funding of South African public schools. I define public education as education offered to all children at an institution, funded in whole or in part from taxes by the government (whether national, regional, or local). SASA defines a “*public school*” as a school contemplated in Chapter 3 of the Act.

Section 16 (1) and (2) of SASA provide that

*16. Governance and professional management of public schools*

*(1) Subject to this Act, the governance of every public school is vested in its governing body and may perform only such functions and obligations and exercise only such rights as prescribed by the Act.*

*(2) A governing body stands in a position of trust towards the school.*

This spells out both the responsibility of a school governing body (SGB) as well as its fiduciary role regarding the management of the finances of a public school. The SGB thus acts as the agent of the public school.

This relationship emanates from the fact that public schools in South Africa are juristic persons. Section 15 of SASA reads as follows in this regard:

*15. Status of public schools*

*Every public school is a juristic person, with legal capacity to perform its functions in terms of this Act.*

Legal capacity means that the public schools have

- capacity to be bearers of rights and duties;
- may own property;
- may enter into contracts;
- the right to sue other juristic persons;
- the right to remedial action if it can prove damage;

- the capacity to be held liable for unlawful acts (delicts) (<http://www.businessdictionary.com/definition/legal-capacity.html>-, accessed on 20 August 2011)

This has enormous implications for the financial management of public schools in terms of accountability and liability. It is appropriate here to refer to the ruling of the High Court in the case between Schoonbee and the MEC of Mpumalanga (*Schoonbee and Others v MEC for Education, Mpumalanga and Another 2002 (4) SA 877 Case No 33750/01(T)*) with regard to the collective accountability of the SGB for the financial management of public schools. This matter is discussed in more detail in paragraph 4.5 of chapter four.

The management of the finances of public schools vests in the school governing body. This is different from many other countries (e.g. England, Finland, the Netherlands, Sweden and the USA) where it is the responsibility of a local authority.

Public school governing bodies are elected for a three year term of office in terms of Section 28 of SASA and their functions are described in Sections 20 and 21 of SASA in as much as they apply to a specific school. That is, all public schools have the functions described in Section 20 of SASA, but only schools that qualify and have applied therefore are allocated one or more of the functions described in Section 21 of the SASA.<sup>12</sup> The organisation of a public school is depicted in Figure 3.3.

**Legend to Figure 3.3:**

SMT = School Management Team (normally the principal, deputy principal and heads of departments / may also include other senior staff)

P = Principal

DP = Deputy principal

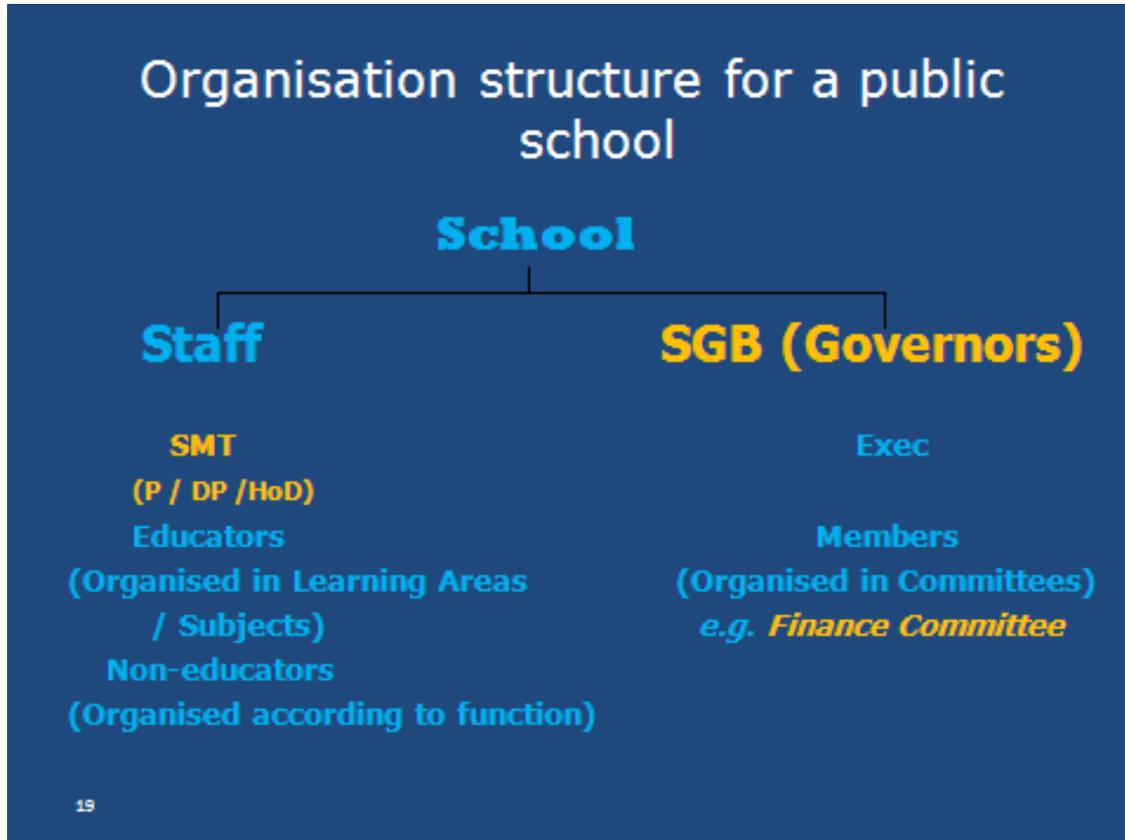
HoD = Head of Department

---

<sup>12</sup> Public schools may also be allocated the functions enumerated in section 21 without having made an application in this regard - see SASA section 21(6).

SGB = School governing body

Exec = Executive committee of the SGB (normally the chairperson, deputy chair, secretary, treasurer, chairpersons of SGB committees and the school principal)



**Figure 3.3:** *The organisation of a South African public school*

It is important to note that the composition of school governing bodies is prescribed in Sections 23 and 24 of SASA and that Section 29 of SASA determines the internal structures of a SGB. It is further important to note that Section 30 of SASA provides for SGBs to form committees to address the needs of the specific school:

30. *Committees of governing body*
- (1) *A governing body may -*
- (a) *establish committees, including an executive committee; and*

(b) *appoint persons who are not members of the governing body to such committees on grounds of expertise, but a member of the governing body must chair each committee.*

(2) *A governing body of an ordinary public school which provides education to learners with special education needs must establish a committee on special education needs.*

This means that a school governing body is at liberty to form any committee to provide for effective governance according to its needs. It further means that there are no directives that prescribe the composition or the structure of any committee or sub-committee of a SGB, other than it must be chaired by a member of the governing body (*S30(1)(b) of SASA*). This is particularly important when it comes to the creation of a Finance Committee (hereafter the FC). SGBs can therefore appoint the most knowledgeable persons in a community to serve on the FC and its subcommittees for the school community they serve as long as the FC is chaired by a member of the governing body.

### **3.3 The funding of public education**

#### **3.3.1 General background**

The legal basis for the South African education system is derived from Section 29(1) of the Constitution of 1996 that articulates the right of every individual to a basic education:

29 *Education*

(1) *Everyone has the right-*

(a) *to a basic education, including adult basic education; and*

(b) *to further education, which the state, through reasonable measures, must make progressively available and accessible.*

It is important to note that the Constitution is silent on the meaning of the concept “*basic education*”. As far as can be ascertained, there has been no court pronouncement on this. The Constitution also makes no reference to the quality of such basic education. It is also silent on whether or not such education is free.

We find the second anchor for the provisioning of public education in Section 12 of SASA which reads as follows:

*12. Provision of public schools*

*(1) The Member of the Executive Council must provide public schools for the education of learners out of funds appropriated for this purpose by the provincial legislature.*

Two important aspects are addressed in this quote namely (i) that the state must provide public schools and (ii) that these schools must be funded from funds made available to provincial departments of education by the provincial legislature. It is therefore wrong to assume that funds for schools are provided to the provincial education departments by the national Department of Basic Education.

Sections 13 and 14 of SASA deal with the property on which public schools are erected - whether it is on state or private land. It also needs to be noted that, where public schools are erected on private land, an agreement needs to be drawn up between the state represented by the Member of the Executive Council for education in a specific province and the owner of the land. This constitutes a contractual arrangement and may have financial implications.

Public education is funded from two sources, namely public money provided by the state and private money provided by individuals and or organisations - often parents from the community.

### **3.3.2 Public funds**

It is interesting to note that SASA does not define the concepts “public funds” or “public revenue”. The common understanding of these two concepts and the interpretation, which is used for this research project, is that it refers to monies paid to the state by individual citizens and or organisations in the form of taxes.

Section 34 of SASA clearly outlines the state's obligation to fund public schools:

*34. Responsibility of State*

*(1) The State must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in education provision.*

*(2) The State must, on an annual basis, provide sufficient information to public schools regarding the funding referred to in subsection (1) to enable public schools to prepare their budgets for the next financial year.*

Section 34 also refers to three other important dimensions to this responsibility to fund public schools, namely

1. that this obligation is of such a nature that it must enable learners to exercise their individual rights to education as described in Section 29(1) of the Constitution of 1996;
2. that it must enable the education system to effect redress of past inequities; and
3. that the state must provide management information for three consecutive years that will enable SGBs to budget for the next financial year.

Section 35 of SASA provides the mechanism or method through which the state must address this obligation to give effect to the obligation contained in Section 34 of SASA.

*35. Norms and standards for school funding*

*(1) Subject to the Constitution and this Act, the Minister must determine national quintiles for public schools and national norms and standards for school funding after consultation with the Council of Education Ministers and the Minister of Finance.*

*(2) The norms and standards for school funding contemplated in subsection (1) must -*

- (a) *set out criteria for the distribution of state funding to all public schools in a fair and equitable manner;*
- (b) *provide for a system in terms of which learners at all public schools can be placed into quintiles, referred to as national quintiles for learners, according to financial means;*
- (c) *provide for a system in terms of which all public schools in the Republic can be placed into quintiles referred to as national quintiles for public schools, according to the distribution of learners in the national quintiles for learners: and*
- (d) *determine the procedure in terms of which the Member of the Executive Council must apply the criteria contemplated in paragraph (a).*

This section of SASA contains a number of important aspects that need to be kept in mind with regard to the funding of education. Before discussing these, it is important to note that public funds regulated by Section 35 of SASA are for the operational budget of the school and exclude the salaries of state employed educators.

In the first instance Section 35(2)(b) provides for the creation of quintiles for individual learners. This has not been done yet. The reason is that the National Norms and Standards for School Funding (NNSF) provides in paragraph 87 (RSA, 2006: 27) that “...*The national quintile for learners is always the same as the national quintile for the public school in which the learner is enrolled*”. This is clearly not in line with the original intention.

Second, the criteria used as basis for the decision to allocate any given school to a given quintile are explained in paragraph 101 on pages 31/32 of the NNSF. It reads that

*“ The PED [Provincial Education Department] must assign to each school a school poverty score that will allow the PED to sort all schools from poorest to least poor. ... The principles governing the determination of the school poverty score are the following:*

- (a) *The score should be based on the relative poverty of the community around the school, which in turn should depend on individual*

*household advantage or disadvantage with regard to income, wealth and/or level education.*

*(b) The score should be based on data from the national Census conducted by Stats SA, or any equivalent data set could be used as a source.”*

These criteria are vague and problematic in the sense that income, wealth and level of education are privileged information and in many schools the learners do not attend school in the vicinity where they live but commute to school by bus. Despite the good intentions of the NNSSF, there are many instances where schools have been allocated to an inappropriate quintile and learners are consequently disadvantaged because the incorrect funding formula is used to calculate the state subsidy to a given school.

Schools do, however, have a right of appeal when paragraph 107 on page 33 is read in conjunction with the preceding paragraph 101. A dispute may be lodged with the PED concerned and the procedures in resolving the matter “... *should not exceed six months in duration*”.

The amount of subsidy that a public school receives is based on the national table of targets for school allocation. This table of targets is published annually by 1 August (par. 119 on page 38 of the NNSSF) by the Minister of Basic Education and by 30 September by the provincial Members of the Executive Councils (MECs). This is in line with the medium term expenditure framework budgeting process of the National Treasury (MTEF) and provides for a three year window period.

The latest information in this regard is depicted in Tables 3.1 and 3.2. Based on the budget needs of a province, provincial governments have discretionary powers with regard to the amounts paid over to public schools. This amount is calculated by multiplying the tenth school day enrolment with the amount allocated to a given quintile for the financial year concerned.

**Table 3.1:** *The national table of targets for school allocation (2007 to 2009)*

A		2007		2008		2009	
		B	C	B	C	B	C
NQ1	30.0	R738	100%	R775	100%	R807	100%
NQ2	27.5	R677	100%	R711	100%	R740	100%
NQ3	22.5	R554	100%	R581	100%	R605	100%
NQ4	15.0	R369	67%	R388	67%	R404	67%
NQ5	5.0	R123	22%	R129	22%	R234	22%
Overall	100%	R492	89%	R517	89%	R538	89%
No fee threshold		R554		R581		R605	

**Table 3.2:** *The national table of targets for school allocation (2010 to 2012)*

A		2010		2011		2012	
		B	C	B	C	B	C
NQ1	30.0	R855	100%	R905	100%	R960	100%
NQ2	27.5	R784	100%	R829	100%	R880	100%
NQ3	22.5	R641	100%	R678	100%	R720	100%
NQ4	15.0	R438	67%	R453	67%	R480	67%
NQ5	5.0	R147	22%	R156	22%	R165	22%
Overall	100%	R571	89%	R604	89%	R633	89%
No fee threshold		R784		R829		R880	

It has been reported in the media on several occasions that district office officials responsible for the payment of these allocations to public schools, have not paid over these amounts timeously leading to financial problems at public schools. This has led to litigation in at least one instance where such officials had to be coerced into making such payments. Urgent application

was made to the High Court of the Free State to hear the matter between *Ebenhaeser Intermediêre Skool* and *Taaibos Gekombineerde Skool* versus the Premier of the Free State (as first defendant), the MEC for Education in the Free State (as second defendant), and the Head of Department for Education in the Free State (as third defendant) on 4 June 2009. The application was that the High Court of the Free State force payment of monies of this nature to the respective schools. The matter did not go to Court as the responsible parties agreed to make urgent payment of the amounts owed to the two schools.

It is important to note that in terms of Section 37 (1), (2) and (3) of SASA, an SGB (as agent) for the school is required to establish a school fund, to open a bank account in the name of the public school as juristic person and to pay all monies received (irrespective of its source – own phrasing) into the school fund. Once money has been allocated to a public school and or paid into the school's bank account, such money legally becomes school funds to be managed at the discretion of the SGB as agent and accounting authority of the public school. It is further important to note the significance of Section 37 (4) of SASA in this regard where it reads:

*37(4) Money or other goods donated or bequeathed to or received in trust by a public school must be applied in accordance with the conditions of such donation, bequest or trust.*

The legal requirements of this section can be applied to all monies and or assets received by a public school. That is, the government has certain requirements that have to be met regarding the allocation made in terms of Section 36 of SASA. School fees, money raised through special projects as well as donations paid by parents or other benefactors are all subject to the provisions contained in the school budget, the objectives communicated regarding the fundraising project or conditions agreed to regarding donations and sponsorships. These conditions create an imperative to account to the parties concerned regarding financial management and expenditure. This is dealt with in more detail in chapter four.

### 3.3.3 Private funds

SASA is also silent on the definition of private funds. For the purpose of this dissertation private funds are considered to be funds that emanate from natural or juristic persons other than the state. However, before I discuss the funding of education from private funds, it is important to take note of the content of Section 20 (1) (a) of SASA regarding the responsibilities of the SGB of all public schools in South Africa:

20. *Functions of all governing bodies*

(1) *Subject to this Act, the governing body of a public school must -*

(a) *promote the best interests of the school and strive to ensure its development through the provision of quality education for all learners at the school;...*

Reference is made to two very important aspects. The concept of “best interests” as it relates to the school (and therefore to the best interests of the child) is mentioned and should play a major if not decisive role in all matters related to the funding and management of the finances of public schools. The best interests of the child are dealt with in paragraph 2.2 of chapter two on quality education. The second very important aspect relates to the matter of the quality of education. This concept is also not defined or explained anywhere in SASA. However, it is again contained in Section 36 that deals with the responsibility of the governing body regarding fundraising. It reads:

36. *Responsibility of governing body*

(1) *A governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education provided by the school to all learners at the school.*

The above provisions provide for the individual learner’s right not only to a basic education as contained in Section 29(1) of the Constitution but also to quality education. This matter is also discussed in more detail in paragraph 2.1 of chapter two.

Section 36 of SASA places an obligation on the SGB of every public school to find additional sources of funding to supplement those of the government. There are a number of possible sources of funding from private funds. The first and most convenient is to charge parents school fees for the education of their children when attending a specific public school. School fees are defined in Section 1 of SASA as meaning:

*“school fees” means school fees contemplated in section 39 and includes any form of contribution of a monetary nature made or paid by a person or body in relation to the attendance or participation by a learner in any programme of a public school;*

As indicated in the definition of school fees, SASA has provided for this possibility in Section 39.

39. *School fees at public schools*

- (1) *Subject to this Act, school fees may be determined and charged at a public school only if a resolution to do so has been adopted by a majority of parents attending the meeting referred to in section 38 (2).*
- (2) *A resolution contemplated in subsection (1) must provide for -*
  - (a) *the amount of school fees to be charged;*
  - (b) *equitable criteria and procedures for the total, partial or conditional exemption of parents who are unable to pay school fees;*

This implies that the SGB has to draw up a draft budget in terms of Section 38, give thirty days written notice of an annual general meeting (AGM) convened to consider the budget and make a copy of the budget available for public scrutiny fourteen days before such a meeting. At the AGM the parents have to decide by a majority vote whether school fees will be charged and to what amount if such a decision was taken. The requirement of Section 39(1)(b) also needs to be addressed and communicated to the entire parent community. The levying and collection of school fees are regulated by SASA in Sections 39, 40 and 41. Parents are liable for the payment of school fees if a decision to that effect was taken as discussed above. Such a decision must also provide for possible exemption from the payment of school fees and for procedures and criteria regarding exemption. Parents may be forced to pay

school fees by process of law taking into account the extent that they qualify for exemption and may only be sued if the requirements of Section 41 as set out in subsections 41(2) to 41(6) have been met. These include:

- the fact that the exemption from payment of school fees must be calculated according to the regulations contemplated in Section 39(4) as per s41 (2);
- the exemption from payment of school fees in terms of this Act is calculated retrospectively from the date on which the parent qualifies for the exemption as per s41(3);
- a public school may act in terms of subsection (1) only after it has ascertained that –
  - the parent does not qualify for exemption from payment of school fees in terms of this Act – s 41(4)(a);
  - deductions have been made in terms of regulations contemplated in Section 39(4), for a parent who qualifies for partial exemption – s41(4)(b); and
  - the parent has completed and signed the form prescribed in the regulations contemplated in Section 39(4) – s41(4)(c):
- Despite subsection (4), a public school may act in terms of subsection (1) if –
  - that school can provide proof of a written notification to the parent delivered by hand or registered post that the parent has failed to apply for exemption contemplated in Section 39 – s41(5)(a); and
  - despite the notice contemplated in paragraph (a), the parent fails to pay the school fees after a period of three months from the date of notification – s41(5)(b);
- the dwelling in which a parent resides may not be attached by a public school – s41(6).

However, if the school is listed as a no-fee school in terms of Sections 39 (7), (8), (9) and (10) of SASA no school fees may be charged. At the moment all

public schools in quintiles 1 to 3 (or about 60% of public schools) are no-fee schools.

Irrespective of whether they or not they levy school fees all public schools have a number of other possibilities to explore to raise addition funds as required by Section 36(1) of SASA. They include creative entrepreneurial fundraising projects, sponsorships and donations as well as endowments. The only avenue that is not open to the so-called ‘*no fee schools*, is to charge school fees.

### **3.4 Responsibilities regarding the financial management of public schools**

Whenever the financial management of public is mentioned, the general perception is that it relates to the raising of funds (primarily through school fees), drawing up a budget and managing expenditure based on the school budget.

This viewpoint, however, constitutes an error in thinking as the responsibilities entail much more. When referring to the responsibility of a SGB regarding the management of the finances of a public school as contained in legislation, all the provisions should be considered. This includes responsibility for the immovable property (land and buildings), movable property as well as the school fund. What follows is an exposition of these responsibilities.

#### **3.4.1 The management of funds in public schools**

The process of funding public schools was discussed in detail in paragraph 3.3 above. At this point it is important to emphasise that:

- The school is a juristic person (S15 of SASA)
- The SGB acts as agent of the school as juristic person from a fiduciary position (S16(2) and S21(1)(a) of SASA)

- The school should have an established school fund
- All monies received should be paid into the school's bank account except in the case of public schools without Section 21 functions, where the allocation from public funds is managed on behalf of the school, by the provincial department of education through its local district offices.

The responsibility of managing the funds of a public school should be an integral part of the strategic plan of the school. This includes establishing a vision and mission for the school. Translating the mission statement into achievable goals and objectives is only possible if financial planning is an integral part of such plans.

Financial planning can be equated to the budgeting process. A budget has been defined as:

- an expression of the school's mission statement in monetary terms;
- an estimate or plan for spending income;
- a plan for the allocation and expenditure of resources to achieve the objectives of a school (Bisschoff & Mestry, 2003: 122); and
- is a document that, on one hand, serves as a financial overview of the organisation and, on the other hand, serves as an instrument that reflects the income and expenditure of every project or division / department (Berkhout & Berkhout, 1992: 47)

The SGB's obligation to draw up a budget is contained in Section 38 of SASA. Specific legal requirements in this regard are:

- The budget has to be drawn up annually for the next financial year.
- The financial year of all public schools commences on the first day of January and ends on the last day of December of each year (S.44 of SASA).
- It must meet the prescriptions of the Member of the Executive Council as published in a *Provincial Gazette*

- A draft budget must be submitted to an annual general meeting (AGM) of parents convened on 30 days *written* (my emphasis) notice
- The draft budget must be available for scrutiny by parents at least 14 days prior to the meeting
- The draft budget is approved by the SGB after it has been accepted by the majority of parents present and voting at the said AGM
- Although not a legal requirement, it is customary to provide the district office with a copy of the approved budget for the next financial year.

Once the budget has been approved, the SGB is in a position to start managing the finances of the public school at the onset of a new financial year. The utilisation of school funds are regulated by Sections 37(4), (6) and (7) of SASA that read as follows:

**37. School funds and assets of public schools**

*(4) Money or other goods donated or bequeathed to or received in trust by a public school must be applied in accordance with the conditions of such donation, bequest or trust.*

*(6) The school fund, all proceeds thereof and any other assets of the public school must be used only for -*

*(a) educational purposes, at or in connection with such school;*

*(b) educational purposes, at or in connection with another public school, by agreement with such other public school and with the consent of the Head of Department;*

*(c) the performance of the functions of the governing body; or*

*(d) another educational purpose agreed between the governing body and the Head of Department.*

*(7) (a) Money from the school fund of a public school may not be paid into a trust or be used to establish a trust.*

*(b) If a trust was established from a school fund of a public school or if such money was paid into a trust prior to 1 January 2002, such trust or payment is invalid and the money must be paid back into the school fund.*

*(c) A governing body of a public school may not collect any money or contributions from parents to circumvent or manipulate the payment*

*of compulsory school fees and to use such money or contributions to establish or fund a trust, and if such money or contributions of parents were paid into a trust prior to 1 January 2002, the trust must pay such money or contributions into the school fund.*

Over and above expenditure related to the provision of education in public schools regulated in Section 37 of SASA, the SGB of a public school may employ both educators and non-educators in addition to the staffing establishments paid for by the state from public funds subject to the conditions set out in sub-sections 20(4) to 20(11) of SASA. This means that a public school can through its SGB assume the role of an employer and thus become subject to the provisions of the Labour Relations Act, No 66 of 1995, the Employment of Educators Act, No. 76 of 1998, the Basic Conditions of Employment Act, Act 75 of 1997 and the Public Service Act (Proclamation No. 103 of 1994).

In addition to expenditure referred to in the previous two paragraphs, the SGB of a public school may apply to the employer of members of staff, employed in terms of the Employment of Educators Act, (Act No. 76 of 1998), or the Public Service Act, (Proclamation No. 103 of 1994), for permission to pay additional remuneration to members of staff. Such payments must, however, comply with the requirements of Section 38A of SASA.

### **3.4.2 The management of facilities in public schools**

#### **3.4.2.1 Property rights**

Before discussing the legal framework pertaining to the management of facilities at a public school, let me explain what I mean when I refer to *facilities*. For the purposes of this dissertation, the management of facilities at a public school is deemed to refer to and include the land on which the school buildings are situated, the school buildings themselves, sporting facilities and all assets (movable and immovable) of the school.

In this context assets are deemed to be anything of monetary value, owned and or used by the school in the provisioning of education at that public school. The concepts movable and immovable assets are used in the generally accepted sense of these two words that is used to distinguish between assets that can be moved from one place to another or not.

In this sense immovable assets would normally refer to fixed property such as land and buildings. This provides for the possibility that a public school may from school funds (i) erect buildings in addition to the existing school buildings on land owned by the state or private owner and (ii) buy additional land and erect buildings on such land for educational and or entrepreneurial purposes.

Movable assets would include furniture and equipment owned and used by the school for educational and related purposes.

Any discussion in this regard is premised on the fact that a public school as juristic person has property rights and the legal capacity to deal with such property. The discussion of Sections 37(5), 52 and 55 of SASA that follow, will show their relevance in this regard.

Section 37(5) refers to the fact that all assets, acquired on or after the commencement of the Act<sup>13</sup>, ‘... *are the **property** of the school*’ of the school as juristic person (my emphasis).

Section 52(1) deals with the *status of public schools* and provides that any school (excluding private / independent schools) that was deemed to be, and functioned as a public school prior to the promulgation of the SASA, will be a public school (with legal capacity in terms of S.15 of SASA) after the promulgation of the Act. Sections 52(2) and (3) of SASA are important as far as *assets and liabilities as well as funds and other movable assets* are concerned. Section 52(2) determines that the assets and liabilities which

---

<sup>13</sup> 1 January 1997.

vested in a public school immediately prior to the commencement of SASA, vest in the public school in question and section 52(3) determines that funds and other moveable assets used by, or held for or on behalf of, a public school which in law were the property of the State, remain at the disposal of the school, and devolve on the school on a date and subject to conditions determined by the Minister.

As far as *immovable property (land and buildings)* is concerned, Section 55 of SASA deals with this in detail. Crucial elements thereof are mentioned briefly. Section 55(1) relates to the fact that immovable property of schools which were previously declared to be state-aided schools under Section 29(2A) of the Education Affairs Act, 1988 (House of Assembly) (Act No. 70 of 1988), devolved back upon the State on a date determined by the Minister after the promulgation of SASA. Section 55(5) determines that all costs payable as a result of the transfer of the immovable property back to the state, had to be paid in full or in part from funds appropriated by Parliament for that purpose and Section 55(6) that these transfers were to be free from transfer duty, stamp duty, other fees or costs contemplated to be paid in respect of the transfer of said property. It is, however, important to note that the rights of third parties with claims against the school in respect of the immovable property affected by the transfer contemplated in this section are not extinguished by the transfer and that rights of the state are also protected in this regard in terms of Section 55(7).

Schools affected by the above section were, in terms of Section 55(9), not allowed to let, sell or otherwise alienate the immovable property, or grant to any person any real right thereon or servitude thereon without the written consent of the Member of the Executive Council. Any immovable property belonging to the State which was used by such a school and not transferred or endorsed into the name of the school remained the property of the State in terms of Section 55(12) of SASA and immovable property which was transferred into the name of these schools devolved upon the state, if such a school was subsequently closed in terms of SASA or any other applicable law.

### 3.4.2.2 Responsibilities of the SGB with regard to the management of facilities at a public school

These responsibilities emanate from and are governed by Section 20 of SASA that addresses the functions of the governing bodies of all public schools. Sub-sections 20(1)(a), (1)(g), (1)(k) and 20(2) are deemed to be of particular importance regarding the management of facilities of public schools as will be shown in the paragraphs that follow.

Section 20(1)(a) emphasises the relationship between the public school, as a juristic person, and the SGB as being a fiduciary one in that the SGB stands in a position of trust to the school. The fact that it has an obligation to promote *the best interests of the school* includes a responsibility with regard to the assets of the school.

Section 20(1)(g) determines that the SGB must ...

(g) **administer and control the school's property, and buildings and grounds occupied by the school, including school hostels,** *(my emphasis) but the exercise of this power must not in any manner interfere with or otherwise hamper the implementation of a decision made by the Member of the Executive Council or Head of Department in terms of any law or policy;*

To administer and control the school's property, buildings and grounds means that the SGB has to manage (administer and control) all property; that is all assets as discussed above as well as the buildings and land associated with the school, in such a manner that quality education can be offered at that public school (see S.20(1)(a)).

Section 20(1)(k) of SASA determines that the facilities of a public school must be made available, under fair conditions (determined by the Head of Department) for educational programmes not conducted by the school, at the request of the Head of Department.

In terms of the obligation of SGBs to raise additional funds as provided in Section 36 of SASA it is important to take note of Section 20(2) of the same act. School governing bodies may in terms of Section 20(2) of SASA, ... *“allow the reasonable use of the facilities of the school for community, social and school fund-raising purposes, subject to such reasonable and equitable conditions as the governing body may determine, which may include the charging of a fee or tariff which accrues to the school”*.

### **3.5 Conclusion**

This chapter has explained the legal framework regulating the funding of education and the management of funds and facilities of public school in the South African education system. It started by providing background information to the period immediately prior to the 1994 democratic elections, explaining the principles and values that guide the funding of education and then proceeded to explain what is meant by public education. The legislation relevant to education is listed and those that have specific relevance to the management of finances in education were pointed out and discussed. This chapter also contains an exposition of the organisational structures related to the management of finances in education at macro (system) and micro (school/institutional) levels. The majority of the chapter is dedicated to a discussion of the legal frameworks regulating the funding and the management of school funds as well as property rights and the management of facilities as complimentary aspect of the provisioning of education at a public school.

Schools have to (i) function within the parameters of the law and (ii) manage the funds of the school, as a legal person, in an accountable manner. Providing quality education requires that a school establish a functional organisation structure, manage the professional matters in such a manner that effective teaching and learning can take place and use the available funds to obtain optimal return on investment for all stakeholders concerned.

Chapter four will address the issue of accountability in the management of the finances of public schools.

## CHAPTER 4: ACCOUNTABILITY REGARDING THE FINANCIALMANAGEMENT OF EDUCATION

### 4.1 Introduction

In chapters two and three the provision of quality education and the legal framework that regulates the funding of such education were discussed. In this chapter the accountable management of finances associated with public schools will be addressed.

The democratisation of South Africa, the drafting of the South African Constitution and the ensuing changes taking place in the South African education system have been matters of interest and discourse in all spheres of life. Constitutional lawyers and academics working in this field have studied our Constitution with keen interest. Educationists have likewise studied the evolving of our education system from fifteen separate, disparate systems into a single system based on the blueprint of the TIRISANO document released by the former minister of Education, Prof Kader Asmal, in 1999. Our Constitution is unique in the sense that the Bill of Rights is contained in chapter two as an integral part of the Constitution. The creation of a Constitutional Court in the South African judicial system marks further significant progress towards guarding against the violation of the rights of all it citizens.

The Bill of Rights emphasises and guarantees the claiming and safeguarding of individual rights in the South African society at large and in our education system. However, there needs to be a corresponding emphasis on the accompanying duties / obligations when claiming a right with an ensuing responsibility to account for individual actions or lack thereof.

The South African Education system has undergone major changes since 1994. Some of its successes include:

Creating a single department of education out of the fifteen it inherited from the apartheid era and improving access to primary and secondary schooling, with near universal enrolment in primary schooling and 91% enrolment in secondary schooling. This translates to an average enrolment figure of 98% achieved by 2006. The participation rate among girls is also among the highest in the world (<http://www.education.gov.za/EMIS/emisweb/03stats/2003%20Stat%20at%20a%20Glance.pdf> - accessed May 2006).

Access to school education was further improved by exempting poor learners from paying school fees, and outlawing discrimination against, and exclusion of, learners who cannot afford school fees. Increasing access to free education for was taken forward with the introduction of no-fee schools in January 2007. Improving the performance of learners throughout the schooling system and especially in the Grade 12 Senior Certificate examination has apparently happened as the improvement of the pass rate from 54% in 1996 to 67% in 2006 suggests. Improving the qualifications of educators, with the proportion of under-qualified educators being reduced from 36% in 1994 to 18% in 2006 was an important step forward as was establishing more equitable learner:educator ratios, from an average of 43:1 in 1996 to 35:1 in secondary schools and 40:1 in primary schools. Spending an average of 22% of the national budget on education since 1994 was commendable. This represents 5.8% of GDP on average (<http://www.education.gov.za/EMIS/emisweb/03stats/2003%20Stat%20at%20a%20Glance.pdf> - accessed May 2006).

Despite the successes of since 1994 there are a number of serious challenges that still need to be addressed. These include:

- Creating physical infrastructure (provision of classrooms, water, sanitation and electricity) in the remote rural areas
- The quality of education

- Accountability in education

This dissertation focused on some of the dimensions related to the matters mentioned in the last two bullets. Before doing so, it is necessary to provide background information to these matters and to define a number of concepts relevant to this discussion

## 4.2 Conceptualisation

### 4.2.1 Rights

We, in South Africa, are privileged to have a negotiated constitution. As part of the process we had the privilege of drafting our Constitution in modern terms, including a bill of rights. The *Bill of Rights* is enshrined in Chapter 2 of the South African Constitution (henceforth referred to as *the Constitution*). According to Burns (1999: 15) Section 8(1) of the Constitution provides that the bill of rights applies to all law, and binds the legislature, the executive, the judiciary and all organs of state. One such right is the Right to Education (Section 29 of the Constitution).

When referring to a *right* in the context of this dissertation, it is viewed as a *claim derived from and justified by the law* (Hiemstra & Gonin, 1992: 454/455). Joubert and Prinsloo (2001: 30) define rights as *something one is entitled to, the ability to claim something*. It is further interesting to note that the bill of rights in the South African Constitution is not limited to the interpretation that it only has *vertical application* that is it that the rights conferred on persons are intended to protect the individual against the power of the state. It also has *horizontal application* and the rights also govern relationships between individuals and may be invoked by them in private law disputes (Burns, 1999: 17,18). This is articulated in Section 8(2) of the Constitution that reads: *A provision of the bill of rights binds a natural juristic person, if, and to the extent that, it is applicable, taking into account the nature of the right and the nature of any duty imposed by the right.*

It is further important to note that no right is absolute and that according to Burns (1999: 7,8) rights are by their very nature subject to constraints such as: *Inherent limitations*: an individual's rights are limited by the rights of others, that is, when balancing conflicting rights, the courts must weigh them against each other.

A *general limitation clause*: even in modern democratic societies, the exercise of fundamental rights must be limited at certain times and a general limitation clause, which applies to all rights, has been included in the constitution (Section 36 of the South African Constitution).

*Specific limitations*: over and above the limitations of the general limitation clause, there are a number of rights which are subject to specific additional limitations. For example the right to freedom of expression is subject to specific limitations, namely the prohibition of propaganda for war, incitement of imminent violence or advocacy of hatred.

*Internal modifiers*: such as the qualifiers *peaceful* and *unarmed* which apply to the right to assembly and demonstration.

#### 4.2.2 Responsibility / duty / obligation

The concepts *responsibility / duty / obligation* are used interchangeably in this dissertation. These concepts are related and refer to the legal principle '*obligationum substantia ... in eo consistit .. ut alium nobis obstringat ad dandum aliquid, vel faciendum vel praestandum*' meaning that the nature of obligations ... consists in that they impose a duty upon another to give, to do or be responsible for something (Hiemstra & Gonin, 1992: 247). Joubert and Prinsloo (2001:30) define duties as '*what one is bound to or ought to do, an obligation to perform*'. Kerzner (1998:236) defines responsibility as the assignment for the completion of a specific event or activity. Bisschoff & Mestry (2003:50) view responsibility as *the duty that rests on a person to carry out his or her task to the best of his or her ability*.

Again referring to Section 8(2) of the Constitution, it is evident that every right listed in the bill of rights has (a) corresponding duty(ies) in order to claim that right.

In the context of my dissertation, I will primarily be using the word responsibility. But in doing so, I will be including the concepts duty and obligation into the meaning. For the purposes of my dissertation I attach the following meaning to these related concepts. I view duty and responsibility as the task/action(s) that need to be performed to achieve a specific objective, whereas obligation refers to the imperative to perform, that rests on the individual/structure from the moment that responsibility is either accepted / placed upon the individual/structure.

### 4.2.3 Accountability

For the purposes of this dissertation I refer to *accountability* as the obligation on an individual to account for actions taken and being held to account for these actions by a party / person legally entitled to require such account. Hiemstra & Gonin (1992: 479) refer to this as *having to account for, justify, being answerable, the duty to account*'. Sinclair & Hanks (1989: 6) define being accountable in terms of being *accountable to someone for something that you do, you are responsible for it and you must be prepared to justify your actions to that person*. Stoner & Wankel (1986: 307) define it as *the requirement that organization members to whom responsibility and authority are delegated be held answerable for results*. Maile (2003:210) postulates that to be *accountable is to be responsible, explicit about obligations and answerable for one's actions*. Bisschoff & Mestry (2003: 50) define *accountability as reporting on the control and use of resources, by those accountable for their control and use to those to whom they are accountable*.

It is important to note that, both from a legal and managerial perspective accountability has **no direct bearing** on the quality of the action whether it is excellent, good, bad, improper or illegal. It simply refers to the inalienable right of persons (both natural and juristic) with the delegated or original authority, to require information on the actions or performance of another person.

For the purposes of this dissertation I will distinguish between professional accountability and executive accountability. When I refer to **professional accountability** I am referring to accountability that emanates from the professional responsibilities delegated to principals and educators working in public schools in South Africa in terms of the Employment of Educators Act, No 76 of 1998, the SACE Act, No 31 of 2000, the South African Schools Act, No 84 of 1996 and the Personnel Administrative Measures, Government Notice 222 of 1999, that regulate the professional aspects of an educator's task. **Executive accountability** on the other hand refers to accountability resting with the state pertaining to obligations regarding the provision of education in public schools in the South African Constitution and the South African Schools Act. In this regard, Beckmann and Prinsloo (2004:134) argue that the wording of Section 1(d) of the South African Constitution (... , *to ensure accountability, responsiveness and openness*) elevates accountability beyond a management task to a national goal, ideal and value. They further argue that there is an intimate link between accountability and that the socio-economic embeddedness of education needs to be borne in mind (*Op cit.*, 2004: 144). Although my research primarily focuses on the professional accountability of role players in providing quality education in schools, the executive accountability of the State in providing the overarching structure and infrastructure should be kept in mind.

#### 4.2.4 Liability

For the purposes of this dissertation, I refer to **liability** as the obligation on a person to accept responsibility for, and to act on his / her actions or lack thereof. A very important argument in this regard is made by Oosthuizen (1998: 73):

*The question of the liability or non-liability of an educator (or a school) in a specific case is largely dependent on these two principles.*

*The basic point of departure of South African law is that **damage lies where it falls** (my emphasis). This means that when someone sustains damage he must in fact bear his own damages. This principle, however, is subject to one notable exception and that he is when*

*damages are caused by the **unlawful** and **negligent** or **intentional act** of another (my emphasis), the legal duty to bear the damage is transferred to the latter, who unlawfully and negligently (or intentionally) caused the damage. This transfer of the duty to bear the damage is referred to as liability.*

Neethling *et al.* (2006: 338) define **vicarious liability** as *the strict liability of one person for the delict of another. The former is thus indirectly or vicariously liable for the damage cause by the latter. This liability applies where there is a particular relationship between the two persons. Three such relationships are important, namely that of employer-employee, principal-agent and motor car owner - motor car driver.*

In the case of education in a public school, it will be mainly the employer-employee relationship that may apply in certain circumstances. In such an instance, *where an employee (servant), acting within the scope of his employment, commits a delict, his employer (master) is fully liable for the damage. Fault is not required on the part of the employer, and therefore this is a form of strict liability* (Neethling *et al.*, 2006: 338). They proceed to discuss the three requirements for an employer's vicarious liability for the delict of his employee (*Op cit*: 339 -341): (1) There must be an *employer-employee relationship* at the time when the delict is committed; that is there must be a contract of service and the employer must be able exercise control from a position of authority over the employee. A contract or mandate where another independent party renders a service on behalf of the employer, but is not subject to his control does not constitute vicarious liability. (2) The *employee must commit a delict* and (3) the *employee must act within the scope of his employment when the delict is committed.*

Section 60 of SASA regulates the vicarious liability of the state as the employer in the provision of education in public schools. The implications thereof are manifested in a number of court cases that are referred to in paragraph 4.5.3.

### 4.3. Primary responsibilities regarding the provision of education in South Africa

In this paragraph I will discuss the responsibilities and obligations of the different role players in education before I discuss how these responsibilities make them accountable to different structures in society.

Education in South Africa is underpinned by Section 29(1) of the South African Constitution, Act 108 of 1996 (hereafter referred to as the Constitution) and the South African Schools Act, Act 84 of 1996 (hereafter referred to as SASA).

Section 29 of the Constitution guarantees every person's right to a basic education (it is important to note that Section 29 of the Constitution does **NOT** state that education is free or compulsory).

*29. (1) Everyone has the right -*

- a. to a basic education, including adult basic education; and*
- b. to further education, which the state, through reasonable measures, must make progressively available and accessible.*

For the purposes of this dissertation I am focussing on education provided to learners at school level, thus I will be excluding adult basic education, further education and training and higher education and training.

The role players in this regard are: the state (as represented by different state organs and individuals in state structures tasked with the provision of education in public schools), parents, the school governing body as the duly elected representatives of the parents, educators, the principal and learners. Different role players have different responsibilities in the provision of education in the South African education system. Before discussing these responsibilities it is necessary to have a look at how these role players are defined in SASA.

SASA provides the following definitions of the different categories of stakeholders in Section 1:

**“education department”** means the department established by section 7(2) of the Public Service Act, 1994 (Proclamation No. 103 of 1994), which is responsible for education in a province. It is important to distinguish between the roles of the provincial departments of education as the providers of infrastructure and funding of education and the national department of education (1994 to 2009 and since then the Department of Basic Education) with more of a policy making and managerial / supervisory / oversight / enabling role.

**“educator”** means any person, excluding a person who is appointed to exclusively perform extracurricular duties, who teaches, educates or trains other persons or who provides professional educational services, including professional therapy and education psychological services, at a school. It was fashionable after 1994 and because the term was used in SASA, to refer to this category of people as educators. Then, and even more so now the term teacher, is again being used to describe persons fitting this description and fulfilling this role. I will be using the terms interchangeably throughout the dissertation. The Employment of Educators Act, Act 76 of 1998 in Section 1(v) defines **“educator”** as *“any person who teaches, educates or trains other persons or who provides professional educational services, including professional therapy and education psychological services, at any public school, further education and training institution, departmental office or adult basic education centre and who is appointed in a post on any educator establishment under this Act;”*

**“governing body”** means a governing body contemplated in Section 16(1). This category of role players represents the democratisation of public education in the South African education system; they are the voice of the community in educational matters concerning a specific public school. The

terms governing body and school governing body are used interchangeably and are abbreviated as SGB / SGBs. They fulfil the functions that are given to them in SASA

**“Head of Department”** means the head of an education department. As per the definition of an education department this implies that this definition refers to the head of a provincial department of education.

**“learner”** means any person receiving education or obliged to receive education in terms of this Act. As with the concepts educator / teacher, the term learner became official with the promulgation of SASA. It has, however, been common practice to use the term *student* as a synonym for the word *learner*. I will again be using the terms interchangeably throughout the dissertation.

**“member of staff”** means a person employed at a school. This category has a wide meaning; it can refer to persons representing different categories of people with vastly different roles. It can include educators / teachers and non-educator / teaching staff employed by the state or employed by the SGB in a school.

**“parent”** means -

- (a) the parent or guardian of a learner;
- (b) the person legally entitled to custody of a learner; or
- (c) the person who undertakes to fulfil the obligations of a person referred to in paragraphs (a) and (b) towards the learner’s education at school.

Parents have a very important function. In the first instance, they have a moral obligation to have their children educated. This is also entrenched in Section 3 of SASA compelling parents to send their children to school from the ages of seven to fifteen. Secondly, over and above their duty to care for their children they also have a financial obligation by either paying taxes or school fees or both.

*“principal” means an educator appointed or acting as the head of a school.* The principal as head teacher has a dual role in that he / she is responsible for the professional management of the school AND also serves on the SGB *ex officio*, resulting in a role as governor as well. Paragraph 4.2 of the Personnel Administrative Measures (hereafter PAM) contains a detailed job description of the position of principal.

### 4.3.1 The state

The *state* is democratically elected and derives its authority from the South African Constitution. As such the state is responsible for a number of functions bestowed on it by the Constitution. One of which, is the provision of education via its education system in terms of Section 29(1) of the Constitution. For the argument in my dissertation, the following are important responsibilities in this regard: (i) providing public schools (both ordinary schools and schools for learners with special educational needs) in terms of Sections 12, 13 and 14 of SASA; (ii) making provision for independent schools in terms of Chapter 5 of SASA; (iii) funding public schools in terms of Sections 34 and 35 of SASA; (iv) conducting governing body elections every three years; (v) annually conducting the National Senior Certificate examination and certifying candidates that qualify; and (vi) the staffing and remuneration of persons in schools and provincial departments of education to make the provision of education and the administration thereof possible.

### 4.3.2 The school

The concept school is defined in SASA as *a public school or an independent school which enrolls learners in one or more grades from grade R (reception) to grade twelve.*

Schools in the South African education system are of two types namely public schools and so-called independent schools. An *independent school means a school registered or deemed to be registered in terms of Section 46*; whereas a *public school means a school contemplated in Chapter 3*. In terms of Section

15 of SASA, the status of public schools is described as *a juristic person, with legal capacity to perform its functions in terms of this Act.*

Public schools in South Africa are divided into two groups on two grounds. In the first instance, public schools can be divided on the basis of the school phases they cater for; namely, pre-schools, primary schools that provide education to learners from grades 1 to 7 and secondary schools that provide education to learners from grades 8 to 12. Secondly public schools can be divided on the basis of the students they serve, namely main stream education offered in ordinary public schools and schools that provide education to learners with special educational needs. The Education Laws Amendment Bill of 2011 provides for a possible third type of public school in Section (3)(a)(iii)

*“a public school that provides education with a specialised focus on talent, including sport, performing arts or creative arts”.*

This dissertation deals with the accountable funding and the provision of quality education in public secondary schools and independent schools that have grade twelve learners that sit for the National Senior Certificate examination.

Three important responsibilities of a public school come to the fore. Firstly the school is there to enable learners to enjoy the right to education as enshrined in S.29(1) of the Constitution and as alluded to in S.20(1)(a) of SASA. It is assumed that this education must be of a high quality.

Secondly public schools should provide a safe environment in which education can take place in terms of Sections 12(1) & (2) and 24(a) of the Constitution and the common law right to psycho-physical integrity. Section 12(2)(b) that deals with the security in and control over their bodies, is of particular importance when dealing with children in terms of the duty of care of educators (the younger the children are, the bigger this responsibility). Part of the safety and security of the child, as a person, also relates to the physical environment in which they are educated. This is catered for in the provision of

Section 24(a) of the Constitution when it determines that the environment may not be *harmful to their health or well-being*. Again, in as much as this is true for every adult member of the South African society, it places a bigger responsibility on the school to ensure that these rights are catered for, because of the age of the children attending the school.

Thirdly schools have a duty to provide information in terms of S.59 of SASA. This duty relates to the right of both parents and learners to information that affects their academic progress and well-being as well as the accountable use of funds made available to a school in the provision of education. This applies equally to all types of schools that one may encounter. This right to information is, however, subject to the qualifiers in both Section 32 of the Constitution and Section 59(1) of SASA, that such information must be *required for the exercise and protection of such person's rights*.

The responsibilities of a school mentioned above are by no means exhaustive, but were included in my discussion because they relate directly to my research. The responsibilities related to the provision of a quality education and the accountable use of funds towards that purpose flow logically from the research question. The responsibility to provide a safe and secure environment in which education can be provided is a prerequisite to comply with the former.

### **4.3.3 The parent**

The concept *Parent* is defined in detail and in broad terms in chapter 1 of the SASA. Parents have a duty of care towards their children. This includes that they must be fed, clothed and they must be protected against possible harm. Children also have a fundamental right to be educated as guaranteed in Section 29(1) of the South African Constitution. These are all in line with the rights of the child as discussed in Chapter 2 paragraph 2.2.

In terms of SASA parents have to send children to school to be educated. Section 3(1) of the South African Schools Act (SASA) spells out this responsibility of parents regarding school attendance of learners in detail. The parent has to ensure that *every learner for whom he or she is responsible to attend a school from the first school day of the year in which such learner reaches the age of seven years until the last school day of the year in which such learner reaches the age of fifteen years or the ninth grade, whichever occurs first.* In addition, and still related to the child's right to education, parents have to pay for the education of their children (Sections 36,39,40 and 41 of SASA). This is done by paying taxes (Income, Value Added Tax (VAT) etc.) to local, provincial and central government; thus providing public funds that the state must use to fund education as per Sections 34 and 35 of SASA. Another financial responsibility of parents linked to the education of their children emanates from Sections 36 and 39 of SASA in terms of which the funding by the state must be supplemented from private funding.

The obligation of the learner is to attend school, to study and to perform to the required standards in order to obtain a qualification in line with his/her ability and field(s) of interest.

#### **4.3.4 The School Governing Body**

The collective interests of parents in the functioning of public schools are vested in the school governing body (hereafter SGB). The **SGB** is elected in terms of Section 28 of SASA. The introduction of school governing bodies in the South African education system as manifested in SASA is a mechanism to democratise and decentralise decision making in education. The role of school governing bodies is described in Section 16(1) and (2) of SASA that read as follows:

16. *Governance and professional management of public schools*

- (1) *Subject to this Act, the governance of every public school is vested in its governing body and may perform only such functions and obligations and exercise only such rights as prescribed by the Act.*
- (2) *A governing body stands in a position of trust towards the school.*

The school governing body is therefore tasked with the governance of a public school as the agent of the school as a juristic person and the relationship is a fiduciary one. The responsibilities of all school governing bodies of public schools are spelt out in Section 20 of SASA. Some schools also qualify for some or all of the additional functions contained in Section 21 of SASA. Further responsibilities permeate the rest of SASA for example to determine the language policy of the school (S6), to determine the admission policy of the school (S 5(5)) and to adopt a code of conduct for learners (S8).

The following functions, emanating from Section 20 of SASA, are important from the perspective of this dissertation:

- To promote the best interests of the school and to ensure that quality education is provided to all learners at the school by supporting the principal and other staff of the school in the performance of their professional functions.
- Determine times of the school day consistent with any applicable conditions of employment of staff at the school.
- Administer and control school's property, buildings and the grounds occupied by the school.
- Recommend to the Head of Department the appointment of educators at the school.
- At the request of the Head of Department, allow the reasonable use of the facilities of the school for educational programmes not conducted at the school.
- May allow the reasonable use of the facilities of the school for community, social and school fund-raising purposes by charging a fee or tariff which accrues to the school.
- Presenting the annual budget to the AGM.

Any one or more of the following five functions, emanating from Section 21 of SASA may apply to a public school, depending on whether the school has applied for these functions OR whether any one or more of these functions

have been allocated to the school by the Member of the Executive Council in terms of Section 21(6). These functions are likewise important from the perspective of this dissertation:

- To maintain and improve the school’s property, buildings and the grounds occupied by the school.
- To determine the extra-mural curriculum of the school and the choice of subject options.
- To purchase textbooks, educational materials or equipment for the school.
- To pay for services to the school.
- To provide an adult basic education and training class or centre on a needs basis

### 4.3.5 The principal

According to Section 16 (3) of SASA, the principal of a public school is responsible for the professional management of the school (under the authority of the Head of Department). This responsibility was broadened with the promulgation of the Education Laws Amendment Act, Act 31 of 2007. Section 16A now provides a great amount of detail of what functions are associated with the position of the principal. Section 16A needs to be read in conjunction with paragraph 4.2 of the *Personnel Administrative Measures* (hereafter referred to as the PAM). I will again only refer to functions that are deemed to be relevant for my dissertation. For this purpose I have integrated the contents of Sections 16 and 16A of SASA and the PAM (paragraph 4.2) to arrive at five categories of responsibilities. These are listed in Table 4.1.

**Table 4.1:** *The responsibilities of the principal of a public school.*

Category	Responsibilities
Academic	<ul style="list-style-type: none"> <li>• To provide quality education to all the learners attending the school</li> <li>• To create a structure and to support and manage the academic performance of learners on an individual basis as part of an academic improvement plan</li> </ul>

	<ul style="list-style-type: none"> <li>To annually report to the relevant stakeholders on the academic performance of the school</li> </ul>
Administrative	<ul style="list-style-type: none"> <li>Creating and managing an effective administrative infrastructure</li> <li>Creating and maintain an effective (and up-to-date) regulatory framework for the school</li> <li>Creation and implementation of effective policies and procedures emanating from the regulatory framework, related to all aspects that impact on the effective functioning of the school</li> <li>The effective administration of the school's property and finances</li> <li>Creating and maintaining of an effective records system</li> <li>The effective utilisation of all facilities at the disposal of the school by regular inspection and maintenance of all resources and facilities of the school</li> </ul>
Human resource management (HRM)	<ul style="list-style-type: none"> <li>To develop a comprehensive HR short and medium term plan based on the actual needs of the school</li> <li>The timeous appointment of staff to address the needs of the school</li> <li>Manage the performance of individual staff members</li> <li>Create and manage an individualised HR development plan</li> </ul>
Communication	<ul style="list-style-type: none"> <li>Develop a comprehensive and effective communication strategy</li> <li>Keep all stakeholders informed on a regular basis</li> </ul>
Governance	<ul style="list-style-type: none"> <li>Regular attendance of SGB meetings</li> <li>Keep SGB informed</li> <li>Be an active and involved member in all functions of the SGB</li> </ul>

#### 4.3.6 The educator

**Educators** have been allocated seven roles:

- learning mediator,
- designer of learning programmes and materials,
- leader, administrator and manager,
- scholar, researcher and lifelong learner,
- assessor,
- community developer with a pastoral role (perhaps better phrased as community, citizenship and pastoral role), and
- context/phase/subject/learning area specialist.

(<http://www.saqa.org.za/show.asp?include=structure/nsb/nsb5/delineatin.html>

- accessed on 14 June 2008)

For the purposes of my dissertation, I will refer to the roles and responsibilities from the context of my investigation, which may not necessarily be

transferable to other contexts. Table 4.2 represents an integration of the duties of educators (teachers) based on paragraph 4.5 of the PAM.

**Table 4.2:** *The responsibilities of educators.*

Category	Role(s) that apply	Responsibilities
Academic	<ul style="list-style-type: none"> <li>• learning mediator,</li> <li>• designer of learning programmes and materials,</li> <li>• leader, administrator and manager,</li> <li>• scholar, researcher and lifelong learner,</li> <li>• assessor,</li> <li>• context/phase/subject/learning area specialist.</li> </ul>	<ul style="list-style-type: none"> <li>• To properly prepare for every lesson he/she will teach in a creative manner based on recent information</li> <li>• To teach every class to the best of his / her ability catering for the individual learning needs of every child in his/her care</li> <li>• To plan, co-ordinate, control, administer, evaluate and report on learners' academic progress.</li> <li>• To assist the principal in overseeing learner counselling and guidance, careers, discipline and the general welfare of all learners.</li> <li>• To continually improve their subject knowledge and teaching skills</li> </ul>
Administrative	<ul style="list-style-type: none"> <li>• designer of learning programmes and materials,</li> <li>• leader, administrator and manager,</li> </ul>	<ul style="list-style-type: none"> <li>• To establish an effective administrative system related to student administration</li> <li>• To create a system to effectively manage the administrative aspect of all teaching and learning activities that the educator/teacher is responsible for</li> <li>• Create and manage an administrative system for all stock and facilities utilised in the teaching and learning processes in the classroom.</li> </ul>
Human resource management (HRM)	<ul style="list-style-type: none"> <li>• leader, administrator and manager,</li> <li>• scholar, researcher and lifelong learner,</li> <li>• context/phase/subject/learning area specialist</li> </ul>	<ul style="list-style-type: none"> <li>• To review his/her professional practice on a regular basis</li> <li>• To continually improve his/her teaching, learning and management</li> <li>• To contribute to the professional development of colleagues by sharing knowledge, ideas and resources.</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• learning mediator,</li> <li>• leader, administrator and manager,</li> <li>• community developer with a pastoral role</li> </ul>	<ul style="list-style-type: none"> <li>• To conform with the general communication strategy of the school</li> <li>• Keep all stakeholders informed on a regular basis</li> <li>• To communicate with learners about their academic performance and progress</li> <li>• To meet parents and discuss with them the conduct and progress of their children.</li> <li>• To participate in departmental committees, seminars and courses in</li> </ul>

		<p>order to contribute to and/or update one's professional views/standards.</p> <ul style="list-style-type: none"> <li>• To maintain contact with sporting, social, cultural and community organisations.</li> <li>• To have contacts with the public on behalf of the principal.</li> </ul>
--	--	--

## 4.4 The funding of education in South Africa

This is discussed in detail in chapter three. The following constitutes a summary of the responsibilities of the different role players in the provision of education in public schools in the South African education system and how these responsibilities relate to the funding of education. The corresponding accountability for each one of the responsibilities listed below is discussed in paragraph 4.5 below.

- The **state** has the responsibility to provide public schools and to fund such schools in terms of facilities, staff and operational costs;
- the **parent** has the responsibility to send learners (of school going age) in his/her care to school and to pay school fees to the extent that it applies in the specific school that the learners are attending;
- the **SGB** has the responsibility to govern the school in terms of the functions assigned to it in SASA, including all the functions listed in S20 and those from S21 of SASA that may apply, to generate funds (private funding) to augment the state's funding (S36 of SASA) as well as the financial management of the school fund as prescribed in S37 to 44 of SASA
- the **school** has the responsibility to provide quality education in a safe environment conducive to teaching and learning;
- the **principal** is responsible for the professional management of the school in terms of S.16 and 16A of SASA as well as the measures spelt out in paragraph 4.2 of the PAM;
- the **educator** has the responsibility to fulfil the seven roles contained in the Norms and Standards for Educators, those duties and responsibilities contained in S4.5 of the PAM as well as the duty of

care under the common law principle of *in loco parentis* while the learner is at school;

- the *learner* has the responsibility to attend school, to learn and to perform according to the best of his / her ability.

## 4.5 Accountability in the South African education system

I will now discuss accountability as it applies to educators in terms of (i) professional accountability regarding providing quality education through effective teaching and learning in the classroom, (ii) professional accountability regarding the effective utilisation of physical resources to enhance the quality of the education provided in the classroom and (iii) professional accountability regarding the effective utilisation of available funds to ensure the provision of quality education in the classroom.

Accountability includes a number of different dimensions of the task of being an educator; the duty of care, the teaching task linked to the curriculum, the utilisation of supportive structures and equipment and the management of facilities and finances. A very important dimension of this discussion is the accountability of school principals regarding academic output as a manifestation of his or her human resource management function. Vicarious liability and Section 60 of the South African Schools Act are discussed as additional dimensions to the accountability debate in education. In all instances reference will be made to the liability implications of not conforming to / performing to the expected standards inherently linked to the respective areas of responsibility in an accountable manner.

Having looked at the specific duties / responsibilities of the different role players in the South African education system, I will now discuss their respective accountability in term of these responsibilities.

The *state* and its respective structures involved in the provision of education in public schools are accountable to the citizens of the country among others for

(i) the provision of schools and facilities from public funds; (ii) the quality of the education provided in public schools; and (iii) the safety and security of learners while attending school for educational purposes. The *parent* is accountable to (i) the state for sending learners in his / her care to school and (ii) to the SGB for paying school fees to the extent that they are applicable.

The *SGB* is accountable to (i) the parent community who elected them, (ii) to the state for all the functions legally assigned to them in terms of Sections 20 and 21 of SASA with regard to the governance of the school, (iii) to the state for the management of the public funds granted to the school for a given financial year, irrespective of whether the school has Section 21 status or not, (iv) to the parent community for the management of public funds paid into the school fund; (v) and all other private donors for the management of public funds paid into the school fund; (vi) all stakeholders for the drafting, approval and accountable management of the school's budget; and (vii) to both the state and the parent community for having the financial statements of the school audited and providing feedback to the parent community at the annual general meeting called for that purpose and to the state as specified in S43(5) of SASA.

It is important to note at this stage that the Public Finance Management Act, Act 1 of 1999 (hereafter the PFMA) does not apply directly to schools and school funds (see Sections 13, 22, 36 and Schedule 4 of the PFMA). In line with the preceding references in the PFMA and in terms of the findings of the court case between *Schoonbee and Others v The MEC for Education in the Mpumalanga and Another*, that neither the principals of public schools nor the SGBs are Accounting Officers as defined in the PFMA. The SGB members are collectively accountable for the financial management of a public school's assets.

The *school* is accountable for those actions undertaken as a juristic person to such parties as may be involved in such actions.

The *principal* is accountable to (i) the provincial department of education in whose employ he/she is for the effective professional management of the school in fulfilling its primary function, namely to provide quality education to the learners enrolled at the school, (ii) the SGB for duties / responsibilities formally delegated to him / her by the SGB in as much as it falls within their authority to delegate such tasks/responsibilities to the principal; and (iii) the parent community that the school serves for providing quality education in the school and to keep the community informed about the functioning of the school.

*Educators* employed at a public school are accountable to (i) their immediate supervisor for all the duties and responsibilities listed in paragraph 4.5 of the PAM, (ii) every parent of every learner that they teach for taking reasonable care of the children under the *in loco parentis* principle and (iii) every parent of every learner that they teach to provide for teaching and learning opportunities that will culminate in quality education.

*Learners* are accountable to (i) themselves to make optimal use of the opportunities created for them by all the stakeholders to obtain a quality education in preparation of becoming a useful contributing member of the South African society (ii) their parents that afford them the opportunity to go to school and (iii) the state that has the best interests of every learner at heart.

## 4.6 Liability

I defined and discussed the concept liability and vicarious liability in paragraph 4.2.4 above.

It falls beyond the scope of this discussion to attempt to address every possible example of negligence, damage and liability that can be encountered in the process of providing education in public schools. However, if one looks at the South African education system, two conspicuous aspects cannot be ignored.

#### 4.6.1 Academic performance

The academic performance, or lack thereof, of the South African education system is discussed in detail in paragraph 2.3 of Chapter 2 of this dissertation. In addition to what was previously discussed, the Centre for Evaluation and Assessment of the University of Pretoria (hereafter referred to as CEA) had the following comments on the second Progress in International Reading Literacy (PIRLS) study. PIRLS 2006 is the second, after PIRLS 2001, in a five-year cycle of assessment that measures trends in children's reading literacy achievement and policy and practices related to literacy (<http://www.iea.nl/iea/hq/index.php>). PIRLS aims to provide trends and international comparisons on:

- *The reading achievement of Grade 4 learners.*
- *Learners' competencies in relation to goals and standards for reading education.*
- *The impact of the home environment and how parents foster reading literacy.*
- *The organization, time and reading materials for learning to read in schools.*
- *Curriculum and classroom approaches to reading instruction (CEA, 2006:3).*

According to Campbell, Kelly, Mullis, Martin and Sainsbury (2001), PIRLS focuses on three aspects of reading literacy namely:

- *Processes of comprehension.*
- *Purposes for reading.*
- *Reading behaviours and attitudes.*

A study undertaken by the Department of Education during 2003 on literacy levels among grade 3 learners showed that 61% of children cannot read or write at the appropriate level for their age. This is supported by the fact that up to 18.5% of learners in some provinces already fail at this level and have to repeat grade 3. ... The implication of poor literacy levels among young

learners is that they not only leave primary school illiterate, but that the trend continues as they enter secondary school (CEA, 2006: 8).

This information as well as numerous other studies (see the 2003 TIMMS report as well as the work by Professor Servaas van der Berg of the University of Stellenbosch (van der Berg, 2009) reveals that there is something seriously amiss with the levels of competence of learners leaving our education system. The quality of education provided by our education system is cause for major concern.

#### **4.6.2 Funding levels of education**

Since 1995, the South African Government has on average been spending 22% of the national budget on education. This translates into approximately 5.5% of GDP (which compares very favourably with the  $\pm 6\%$  of GDP in the USA). Taking the backlogs from the apartheid era that had to be addressed into account, it still is a matter of grave concern that the amount of money invested in education does not render a corresponding result reflected in the quality of the education of the South African education system (<http://www.education.gov.za/EMIS/emisweb/-03stats/2003%20Stat%20at%20a%20Glance.pdf>, accessed 20 May 2006).

The question that begs answering is; *who should be held liable for the poor return on investment of our education system?*

#### **4.6.3 Vicarious liability of the state**

The following examples from case law illustrate different dimensions of the vicarious liability that the state may incur in terms of Section 60 of the South African Schools Act.

In *Knouws v the Administrator of the Cape Province* (1981), the state was liable for damages caused by negligence on the part of the school when a girl was injured by a lawnmower.

In *South View High School v Financial Services of South Africa (Pty) Ltd*, the state was liable for debt incurred by the school to an amount of R684 848.

In the initial case of *Bastian Financial Services (Pty) Ltd v General Hendrik Schoeman Primary School*, the state was held liable for the termination of a lease contract for a photocopying machine. However, the ruling was repealed by the South African Supreme Court of Appeal.

In the *MEC for Education, Western Cape Province v Edith Strauss*, the state was held liable for injuries that Strauss sustained while coaching learners to throw the discus.

In *TM Jacobs v The Chairman of the Governing Body of Rhodes High School and Others*, Judge Moosa ruled that the plaintiff be granted damages amounting to R1 393 356.69. He deducted 20% from this amount, because in the apportionment of fault he found that that Ms Jacobs was guilty of contributory negligence. The State will have to pay the balance of 80 % of this amount in terms of S60 of SASA on behalf of the defendants.

## 4.7 Conclusion

The state is accountable to the broad South African society for the quality of the education provided through the South African education system. This argument rests on the preamble to the Constitution where it states:

*We, the people of South Africa (my emphasis), ...adopt this Constitution as the supreme law of the Republic so as to- ... Lay the foundations for a democratic and open society in which government is based on the will of the people (my emphasis) and every citizen is equally protected by law; Improve the quality of life of all citizens and free the potential of each person (my emphasis); ...*

It would appear from the track record of the past fifteen years that the Department of (Basic) Education is making serious efforts to address this. Public revenue is paid to the state with the assumption that services of high quality will be rendered (this includes education). If the state or its structures offer poor quality education, this could constitute an infringement of the right to quality education of all learners and it also raises questions regarding accountability for return on investment.

If the poor quality of education on offer is attributable to the school, the principal and educator staff could become liable for damages both regarding the quality of education as the learner's right to quality education and regarding the poor return on investment for the amounts provided from public and private funds to fund the provision of education.

Barring learners from attending school and excluding them from specific educational programmes or activities and withholding their results constitute an infringement of their right to education. Parties guilty of such actions could thus be liable for damage inflicted on the learner(s) involved.

The unavailability of sufficient funds for the normal functioning of a school to enable it to offer education of an acceptable standard could equally constitute an infringement of the right of a learner to quality education. Non-payment of government subsidies to schools by government officials for any reason could qualify as such an infringement irrespective of the reason for such non-payment.

If such non-payment of government subsidy is attributable to SGBs not conforming to the requirements of SASA to submit audited financial statements to the provincial department of education within six months of the end of a financial year, they should be held accountable for such neglect. Such lack of action would then also constitute a contributing factor to the infringement of a learner's right to education. Such a transgression on the part of the SGB does, however, not constitute substantive reason to limit the right to education of learners attending a public school by allowing the non-

payment of the government subsidy to a public school by government officials.

In conclusion I argue that if we are serious about the provision of quality education in South Africa in order to produce citizens that can make a meaningful contribution to the economy of our country and to be competitive on the global market, we should be much more serious about dealing with matters of accountability and liability. In the interest of excellence in education, lawyers and educators should work together to litigate and let damage lie where it falls when the right to a quality education of learners is infringed!

Chapter five will address aspects of the research design of this dissertation.

## CHAPTER 5: RESEARCH DESIGN

### 5.1 Introduction

Chapters one to four set the scene for and provided the background to this dissertation. In chapter one I referred to the rationale for the research, listed the research questions, and gave an introductory overview of the literature study as well as a short version of the methodology that I used to obtain the data for this dissertation. Chapters two, three and four elucidated the three themes associated with my research topic namely, quality education, the legal framework for the funding of education in South African public schools and accountability regarding the financial management of education. In chapter five I provide a more detailed account of the methodology used in my dissertation.

### 5.2 Epistemology

For the purposes of my dissertation I am not going to provide a detailed discussion of the concept epistemology. I will give a brief explanation and then contextualise the concept in terms of my work.

Epistemology is the branch of philosophy that studies the nature and scope of knowledge. The term "epistemology" is based on the Greek words "*episteme*" (knowledge) and "*logos*" (account/explanation). The Concise Oxford Dictionary (1982: 349) defines it as the *theory of or the method or grounds of knowledge*. Epistemology is a branch of philosophy that investigates the origin, nature, methods, and limits of human knowledge. The first theories of knowledge stressed its absolute, permanent character, whereas the later theories put the emphasis on its relativity or situation-dependence, its continuous development or evolution, and its active interaction with the world and its subjects and objects. The broad understanding of knowledge seems to have moved from a static, passive view of knowledge towards a more and more adaptive and active one.

As the study of knowledge, epistemology is concerned with the following questions: What are the necessary and sufficient conditions of knowledge? What are its sources? What is its structure, and what are its limits? Epistemology has primarily concerned itself with propositional knowledge, that is, knowledge in the sense that '*something is true*'. as opposed to, other forms of knowledge, for example, knowledge about '*how to*'. There is a vast array of views about propositional knowledge, but one virtually universal presupposition is that knowledge is true belief. (<http://www.rep.routledge.com/article/P059> - accessed on 2/11/2011; <http://dictionary.reference.com/browse/epistemology> - accessed on 2/11/2011; <http://plato.stanford.edu/entries/epistemology/> - accessed on 2/11/2011; <http://pespmc1.-vub.ac.be/EPISTEMI.html> - accessed on 2/11/2011).

Thus, a central question in epistemology is: what must be added to true beliefs to convert them into knowledge? In order to formulate my own epistemological stance, I will first have to define the concepts reality, truth, belief and knowledge because they are of cardinal importance in explaining epistemology. However, debates about what these concepts mean have been going on for centuries. What follows is an effort to explain these concepts in very simple terms and to formulate an epistemological stance before proceeding to explain my methodology in more detail.

### ***Reality.***

Consulting a variety of other sources, I found the following to be a composite set of descriptors of reality. It is referred to as:

- that which exists objectively and in fact;
- a real event, entity, or state of affairs;
- the quality or state of being, real, as they actually exist in distinction from mere appearance, which is not imagination, fiction, or pretence;
- something that exists independently of ideas concerning it, i.e. is neither derivative nor dependent but exists necessarily, from which all other things derive, and is not merely an idea;

- the totality of all things possessing actuality, existence, or essence; that is absolute, self-sufficient, or objective, and not subject to human decisions or conventions.

(<http://www.thefreedictionary.com/reality>;<http://dictionary.reference.com/browse/reality>;  
<http://www.merriam-webster.com/dictionary/reality>;  
<http://www.brainyquote.com/words/re/reality210450.html>;  
<http://oxforddictionaries.com/definition/reality> - all accessed on 2/11/2011)

I found the explanation of reality on the <http://en.wikipedia.org/wiki/Reality> - website (accessed on 2/11/2011) as *'the state of things as they actually exist, rather than as they may appear or might be imagined. In a wider definition, reality includes everything that is and has been, whether or not it is observable or comprehensible. A still more broad definition includes everything that has existed, exists, or will exist'* particularly useful with the three levels of focus on the phenomenon. I especially relate to the latter as reality in its broadest context, but would like to add the qualifier *as we / man understands it at the moment.*

### ***Truth.***

I similarly compiled a composite set of descriptors for truth from a variety of sources. It is described as a *'statement, judgment, proposition, or idea proven to be or accepted as true; conformity to fact or actuality; a verified or indisputable fact, proposition, principle, or the like'*. (<http://www.merriam-webster.com/dictionary/truth> - accessed on 2/11/2011; <http://dictionary.cambridge.org/dictionary/british/belief> - accessed on 2/11/2011; <http://www.thefreedictionary.com/Truth> ; <http://www.merriam-webster.com/dictionary/truth> - accessed on 2/11/2011)

<http://plusroot.com/dbook/23TruthDef.html> - accessed on 2/11/2011, contains a noteworthy, slightly different view of the concept, namely *'an intellectual, relational, unified, reliable, universal aspect of reality that we humans can discern in a limited but useful manner'*. The opposite of being the truth is that something is false, untrue or a lie. The purpose of referring to something being the truth appears to substantiate the factuality of whatever claim is being made

on one hand and on the other it appears to represent an insight into / grasp of reality.

### ***Belief.***

From an epistemological perspective, the concept is referred to in the contexts of conviction, credibility, mental acceptance of and conviction of the truth or validity of something. Consulting a series of sources I was able to compile the following list of descriptors associated with belief in the context described above:

- a state or habit of mind in which trust or confidence is placed in some person or thing;
- acceptance that something exists or is true, especially one without proof;
- something one accepts as true or real;
- a firmly held opinion;
- any cognitive content held as true;
- an opinion or something that a person holds to be true;
- the state of believing;
- conviction or acceptance that certain things are true or real;
- the feeling of being certain that something exists or is true.

(<http://www.thefreedictionary.com/belief>;  
<http://dictionary.reference.com/browse/belief>;  
<http://www.brainyquote.com/words/be/belief135832.html>; ;  
<http://www.merriam-webster.com/dictionary/belief>;  
<http://oxforddictionaries.com/definition/belief>;  
<http://www.definitions.net/definition/belief>;  
<http://www.yourdictionary.com/belief>;  
<http://dictionary.cambridge.org/dictionary/british/belief> - all accessed on 3/11/2011)

My understanding and future use of the concept can be formulated as *belief* being an *opinion* or *conviction* (not based on immediate, positive personal knowledge) that a person holds with confidence in the truth or existence of something, that is not immediately susceptible to rigorous examination of evidence to prove it right / wrong.

### ***Knowledge.***

If epistemology is a branch of philosophy that investigates the origin, nature, methods, and limits of human knowledge, we should have a clear

understanding of what *knowledge* is. Table 5.1 depicts the contributions of key role players to our understanding of the concept of knowledge in chronological order.

**Table 5.1:** *Key contributors to our understanding of knowledge as concept*

Proponent	Date	View
Socrates	469 – 399 BC	In his use of critical reasoning, by his unwavering commitment to truth, and through the vivid example of his own life, fifth-century Athenian Socrates set the standard for all subsequent Western philosophy. <i>Knowledge is a matter of recollection, and not of learning, observation, or study.</i> ( <a href="http://www.philosophypages.com/ph/socr.htm">http://www.philosophypages.com/ph/socr.htm</a> - accessed on 4/11/2011); ( <a href="http://en.wikipedia.org/wiki/Plato">http://en.wikipedia.org/wiki/Plato</a> - accessed on 4 /11/2011)
Plato	423- 347 BC	<i>Justified true belief – ‘in order to know that a given proposition is true, one must not only believe the relevant true proposition, but one must also have justification for doing so’.</i> This has been rephrased by Nonaka and Takeuchi to read "Justified true belief that increases an entity's capacity for effective action". ( <a href="http://en.wikipedia.org/wiki/Justified_true_belief">http://en.wikipedia.org/wiki/Justified true belief</a> - accessed 4/11/2011). ( <a href="http://www.businessdictionary.com/definition/knowledge.html">http://www.businessdictionary.com/definition/knowledge.html</a> - accessed on 4/11/2011)
Aristotle	384 – 322 BC	Aristotle believes that all philosophers try to overcome ignorance, and pursue knowledge for its own sake and not merely for the practical utility of it. Aristotle, who has been called the father of formal logic, shows us that the importance of logic, as a tool, in the quest for knowledge is as he says that, " <i>the philosopher, who examines the most general features of primary being must investigate also the principles of reasoning.</i> " According to Aristotle, scientific knowledge ( <i>episteme</i> ) must be expressed in statements that follow deductively from a finite list of self-evident statements (axioms) and only employ terms defined from a finite list of self-understood terms (primitives). [Stanford Encyclopedia of Philosophy] – Aristotle, along with many other classical Greek thinkers, believed that the appropriateness of any particular form of knowledge depends on the <i>telos</i> , or purpose, it serves. The purpose of a theoretical discipline is the pursuit of truth through contemplation; its <i>telos</i> is the attainment ( <a href="http://www.infed.org/biblio/knowledge.htm">http://www.infed.org/biblio/knowledge.htm</a> - accessed on 4/11/2011). ( <a href="http://www3.isrl.illinois.edu/~unsworth/Kings.5-00/primitives.html">http://www3.isrl.illinois.edu/~unsworth/Kings.5-00/primitives.html</a> - accessed on 4/11/2011); ( <a href="http://library.thinkquest.org/18775/aristotle/knowar.htm">http://library.thinkquest.org/18775/aristotle/knowar.htm</a> - accessed 4/11/2011)
René Descartes	(1596– 1650)	Descartes defines knowledge in terms of doubt. While distinguishing rigorous knowledge ( <i>scientia</i> ) and lesser grades of conviction ( <i>persuasio</i> ), Descartes writes: ' <i>I distinguish the two as follows: there is conviction when there remains some reason which might lead us to doubt, but knowledge is conviction based on a reason so strong that it can never be shaken by any stronger reason</i> '. (1640 letter, AT 3:64–65) ( <a href="http://plato.stanford.edu/entries/descartes-epistemology/">http://plato.stanford.edu/entries/descartes-epistemology/</a> - accessed on 4/11/2011)
John Locke	(1632- 1704)	<i>"Knowledge then seems to me to be nothing but the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas."</i>  Locke's definition of knowledge as the perception of the agreement (or disagreement) of ideas clearly indicates two fundamental criteria for acquiring knowledge: first, we have to have the requisite ideas, and then we also have to perceive the connection between them. Failure on either of these respects will leave us short of the certainty

		<p>characteristic of genuine knowledge. (<a href="http://www.philosophypages.com/locke/g04.htm">http://www.philosophypages.com/locke/g04.htm</a> - accessed on 4/11/2011). Locke views us as having sense organs that, when stimulated, produce “ideas of sensation.” These ideas of sensation, in turn, are turned into “ideas of reflection” By our minds. Thus, ideas come to us via our senses, which in turn can be turned into new ideas via reflection. These two routes that ideas take are derived from <i>experiences</i> — we can have no knowledge beyond our ideas. There are two kinds of <i>material</i> ideas: simple and complex. Simple ideas have one attribute, such as the sky is blue or lemons are sour. Complex ideas are compounds of simple ideas. There are building blocks to ideas — they come to us via our senses, and in turn we can reflect upon them to form complex ideas.</p> <p>Locke further divides knowledge into three types: (i) <i>Intuitive knowledge</i> involves direct and immediate recognition of the agreement or disagreement of two ideas. It yields perfect certainty, but is only rarely available to us. (ii) <i>Demonstrative knowledge</i> is when we perceive the agreement or disagreement indirectly through a series of intermediate ideas. For example, I know that A is greater than B and B is greater than C, thus I know demonstratively that A is greater than C. (iii) <i>Sensitive knowledge</i> is when our sensory ideas are caused by existing things even when we do not know what causes the idea within us. (<a href="http://www.nwlink.com/~donclark/history_knowledge/locke.html">http://www.nwlink.com/~donclark/history_knowledge/locke.html</a> - accessed on 4/11/2011).</p>
Immanuel Kant	(1724 – 1804)	<p>His central thesis—that <i>the possibility of human knowledge presupposes the active participation of the human mind</i> — is deceptively simple, but the details of its application are notoriously complex (<a href="http://www.philosophypages.com/ph/kant.htm">http://www.philosophypages.com/ph/kant.htm</a> - accessed on 4/11/2011). Knowledge is the strongest mode of judgment of truth and is apodeictic<sup>14</sup>: "what I know, I hold to be apodeictically certain, i.e. to be universally and objectively certain", although Kant suggests that we can make this judgment about "a mere empirical truth". [L:78] This kind of knowledge--"or certainty"--is a judgment of truth by "a cognitive ground that is both objectively and subjectively sufficient". There are two kinds of knowledge (certainty), empirical and rational. Rational certainty is mathematical (in which case it is intuitive certainty) or discursive; all rational certainty is apodeictic. By contrast, "empirical certainty" is not apodeictic (And thus not, strictly speaking, knowledge?) but assertoric<sup>15</sup>. Kant comments, "we cannot have rational certainty of everything, but where we can have it, we must prefer it to the empirical". [A320/B377] In the Critique, Kant's first definition of knowledge--as "objective perception"--occurs early in the Dialectic. Kant gives this "definition" in the midst of an appeal not to use the term `idea' loosely, but to follow his terminology for the various kinds of representations; the passage rather confusingly invokes many earlier distinctions. Kant writes: "The genus is representation in general. Subordinate to it stands representation with consciousness. A perception which relates solely to the subject as the modification of its state is sensation, an objective perception is knowledge. This is either intuition or concept....The concept is either an empirical or a pure concept". [A822/B850] Much later in the Dialectic Kant speaks of knowledge in the terms of the Logic, writing "the holding of a thing to be true...has the following three degrees: opining, believing, and knowing....when the holding of a thing to be true is sufficient both subjectively and objectively, it is knowledge....Objective sufficiency is termed certainty". Presumably the "empirical knowledge"--experience--discussed in the Aesthetic and Analytic is different from this, which Kant characterizes (and then presumably goes on to critique) as "the transcendental employment of reason". In the Deduction in B, Kant speaks of the understanding as "the faculty of knowledge"--presumably empirical knowledge of appearances (<a 115="" 577="" 858="" 876"="" data-label="Footnote" href="http://www.philosophy-&lt;/a&gt;&lt;/p&gt; &lt;/td&gt; &lt;/tr&gt; &lt;/table&gt; &lt;/div&gt; &lt;div data-bbox="> <p><sup>14</sup> <b>ap·o·dic·tic</b> - Necessarily or demonstrably true; incontrovertible.</p> </a></p>

<sup>15</sup> An **assertoric** proposition in Aristotelian logic: (Philosophy / Logic) (of a statement) stating a fact, as opposed to expressing an evaluative judgment - <http://www.thefreedictionary.com/assertoric> - accessed 29/11/2011

		<a href="http://dictionary.org/KNOWLEDGE">dictionary.org/KNOWLEDGE</a> -accessed on 4/11/2011).
John Dewey	(1859 – 1952)	In Dewey’s view, traditional epistemologies, whether rationalist or empiricist, had drawn too stark a distinction between thought, the domain of knowledge, and the world of fact to which thought purportedly referred: thought was believed to exist apart from the world, epistemically as the object of immediate awareness, ontologically as the unique aspect of the self. The commitment of modern rationalism, stemming from Descartes, to a doctrine of innate ideas, ideas constituted from birth in the very nature of the mind itself, had effected this dichotomy; but the modern empiricists, beginning with Locke, had done the same just as markedly by their commitment to an introspective methodology and a representational theory of ideas. The resulting view makes a mystery of the relevance of thought to the world: if thought constitutes a domain that stands apart from the world, how can its accuracy as an account of the world ever be established? For Dewey a new model, rejecting traditional presumptions, was wanting, a model that Dewey endeavoured to develop and refine throughout his years of writing and reflection. Dewey argued that organisms interact with the world through self-guided activity that coordinates and integrates sensory and motor responses. The implication for the theory of knowledge was clear: the world is not passively perceived and thereby known; active manipulation of the environment is involved integrally in the process of learning from the start. ( <a href="http://www.iep.utm.edu/dewey/">http://www.iep.utm.edu/dewey/</a> - accessed on 4/11/2011). The terminology problem in the fields of epistemology and logic is partially due, according to Dewey and Bentley to inefficient and imprecise use of words and concepts that reflect three historic levels of organization and presentation. In the order of chronological appearance, these are: Self-Action: Prescientific concepts regarded humans, animals, and things as possessing powers of their own which initiated or caused their actions. Interaction: as described by Newton, where things, living and inorganic, are balanced against something in a system of interaction, for example, the third law of motion states that for every action there is an equal and opposite reaction. Transaction: where modern systems of descriptions and naming are employed to deal with multiple aspects and phases of action without any attribution to ultimate, final, or independent entities, essences, or realities. ( <a href="http://en.wikipedia.org/wiki/John_Dewey">http://en.wikipedia.org/wiki/John_Dewey</a> - accessed on 4/11/2011)
Jean Piaget	(1896 - 1980)	Is considered to be the founder of constructivism . It is a theory of knowledge (epistemology) that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas ( <a href="http://en.wikipedia.org/wiki/Constructivism_(learning_theory)">http://en.wikipedia.org/wiki/Constructivism_(learning_theory)</a> – accessed on 4/11/2011) Piaget emphasized that knowledge and understanding was not simply about ingesting a bunch of facts. That is, to mindlessly regurgitate facts is not real knowledge and not true intelligence -- however much it may impress certain adults. Rather, knowledge was about structures, in essence it is about understanding how the facts fit together, having mental models that allow one to accurately assimilate additional information and from it make useful predictions and conclusions ( <a href="http://www.ndb.com/people/359/000094077/">http://www.ndb.com/people/359/000094077/</a> - accessed on 4/11/2011). Piaget's theory is based on the idea that knowledge acquisition is a process of continuous self-construction. Knowledge is invented and re-invented as the child develops and interacts with its surrounding world (Driscoll, 1994). Central to the theory is the idea that children actively acquire knowledge through their own actions. Fundamental to the theory are principles of cognitive theory rather than those of behavioural theory. Central to the idea of cognitive theory are schemas or schemes, which refer to units of generalized behaviour (or action) that provide the basis for mental operations (Gruber and Voneche, 1977). In addition, Piaget's theory is geared towards knowledge acquisition for children not adults. Within the theory, Piaget describes three types of

		<p>knowledge that children acquire. They are 1.) Physical knowledge - "knowledge about objects in the world, which can be gained through their perceptual properties," 2.) Logical-mathematical knowledge - "abstract knowledge that must be invented," and 3.) Social-arbitrary knowledge - "culture-specific knowledge learned from people within one's culture-group" (Driscoll, 1994). (<a href="http://home.gwu.edu/~mcorry/corry2.htm">http://home.gwu.edu/~mcorry/corry2.htm</a> - accessed on 4/11/2011)</p>
Carl Rogers	(1902 – 1987)	<p>Rogers distinguished between theoretical knowledge and applicable knowledge. The latter addresses more immediate needs and wants of the learner, and may bring about personal change and growth. One has to be open to change, in this light. Participating fully in the learning process and having enough and fit control over its main directions and outcomes, is viewed as a boon. Helping such learning on and up (facilitating it, making steps easier, smoother) includes:</p> <ul style="list-style-type: none"> <li>• Setting a positive climate for learning;</li> <li>• Clarifying the purposes of the learners;</li> <li>• Organizing and making available learning resources;</li> <li>• Balancing intellectual and emotional components of learning;</li> <li>• Sharing feelings and thoughts with learners without dominating</li> </ul> <p>(<a href="http://oaks.nvg.org/carl-rogers.html">http://oaks.nvg.org/carl-rogers.html</a> - accessed on 4/11/2011).</p>
Peter Drucker	(1909 – 2005)	<p>The term <i>knowledge worker</i> was first coined by Peter Drucker ca. 1959, as one who works primarily with information or one who develops and uses knowledge in the workplace. <i>Knowledge workers</i> in today's workforce are individuals who are valued for their ability to act and communicate with knowledge within a specific subject area. They will often advance the overall understanding of that subject through focused analysis, design and/or development. They use research skills to define problems and to identify alternatives. Fueled by their expertise and insight, they work to solve those problems in an effort to influence company decisions, priorities and strategies. What differentiates knowledge work from other forms of work is its primary task of "non-routine" problem solving that requires a combination of convergent, divergent, and creative thinking (Reinhardt et al., 2011). Weiss (1960) said that knowledge grows like organisms, with data serving as food to be assimilated rather than merely stored. Popper (1963) stated there is always an increasing need for knowledge to grow and progress continually, whether tacit (Polanyi, 1976) or explicit. Toffler (1990) observed that typical knowledge workers (especially R&amp;D scientists and engineers) in the age of knowledge economy must have some system at their disposal to <i>create, process and enhance</i> their own knowledge. In some cases they would also need to manage the knowledge of their co-workers. (<a href="http://en.wikipedia.org/wiki/Peter_Drucker">http://en.wikipedia.org/wiki/Peter_Drucker</a>&amp;<a href="http://en.wikipedia.org/wiki/Knowledge_worker">http://en.wikipedia.org/wiki/Knowledge_worker</a> - accessed 4/11/2011)</p>
<a href="#">Edmund Gettier</a>	1963	<p><i>Gettier effect</i> "Is Justified True Belief Knowledge?" What conditions must be satisfied for a belief to become knowledge? For a proposition to count as knowledge it must (a) be believed, (b) it must be true, and (c) the believer must have good reason for their belief (<a href="http://www.facebook.com/pages/Is-Justified-True-Belief-Knowledge/106274476074389">http://www.facebook.com/pages/Is-Justified-True-Belief-Knowledge/106274476074389</a> - accessed 4/11/2011). It was named in honour of the American philosopher Edmund Gettier in 1963. His original article had a dramatic impact. It sparked a period of pronounced epistemological energy and innovation — all with a single two-and-a-half page article. There is no consensus, however, that any one of the attempts to solve the Gettier challenge has succeeded in fully defining what it is to have knowledge of a truth or fact. So, the force of that challenge continues to be felt in various ways, and to various extents, within epistemology. (<a href="http://www.iep.utm.edu/gettier/">http://www.iep.utm.edu/gettier/</a> - accessed on 8/11/2011)</p>

Consulting a series of sources, I was able to identify the following elements inherent to the concept *knowledge*:

- acquaintance with facts, truths, or principles, as from study or investigation;
- acquaintance with or understanding of a science, art, or technique;
- the fact or condition of being aware of something;
- the range of one's information or understanding of what has been perceived, discovered, or learned.
- the circumstance or condition of apprehending truth or fact through reasoning i.e. cognition;
- the state or fact of knowing, familiarity, awareness, or understanding gained through experience, association or study that germinates from the combination of data, information, experience, and individual interpretation;
- human faculty resulting from interpreted information;
- the sum of what is known and resides in the intelligence and the competence of people;
- facts, information, and skills acquired through experience or education;
- the theoretical or practical understanding of a subject; "things that are held to be true in a given context and that drive us to action if there were no impediments" (Andre Boudreau); and
- "Capacity to act" (Karl Sweiby)

(<http://www.businessdictionary.com/definition/knowledge.html><http://www.merriam-webster.com/dictionary/knowledge>; <http://www.thefreedictionary.com/knowledge>;  
<http://www.marcusletter.com/Knowledge%20definitions.htm>; <http://oxforddictionaries.com/definition/knowledge>;  
<http://philosophy.tamu.edu/~sdaniel/Notes/plato.html> – all accessed on 4/11/2011)

### **Concluding thoughts**

Based on the preceding paragraphs, my epistemological view is that knowledge (as man or an individual's current collective understanding of reality, that which he/she believes to be the truth) is an evolving phenomenon that mankind has been trying to and will continue to try to analyse and understand. Knowledge has been passed on for millennia; from parent to child, from teacher/master to student, from one generation to the next. This has taken on the form of verbal narratives, pictures on (cave) walls and written records (from stone tablets to cyberspace). I find the following description insightful: *'Knowledge evolves. We may understand it as accumulated external and explicit information belonging to the community, being leveraged by tacit intrinsic insights which originate within individuals who then may act alone or*

*cooperatively in order to control or integrate with their environment*  
(<http://www.businessdictionary.com/definition/knowledge.html> – accessed on 4/11/2011)

This dissertation is aimed at obtaining a better understanding of the relationship between the funding of education and the quality of education in six diverse schools that are considered to be top performing schools in terms of their academic results in the National Senior Certificate examination in the Gauteng province of South Africa. Collecting and analysing the data from these schools will lead to a better understanding of the phenomenon. The information obtained during the investigation can be considered to be the truth and believable because of the integrity of the respondents and because data will be controlled and triangulation will be used to verify the factual basis of the data collected.

### **5.3 Theoretical and conceptual frameworks**

The theoretical and conceptual frameworks for my dissertation was discussed in full in paragraph 1.6 of chapter one. In essence, this research project speaks to the fields of education law and financial management in education as subsets of the broader field of education management and leadership and the provision of quality education and the education production process.

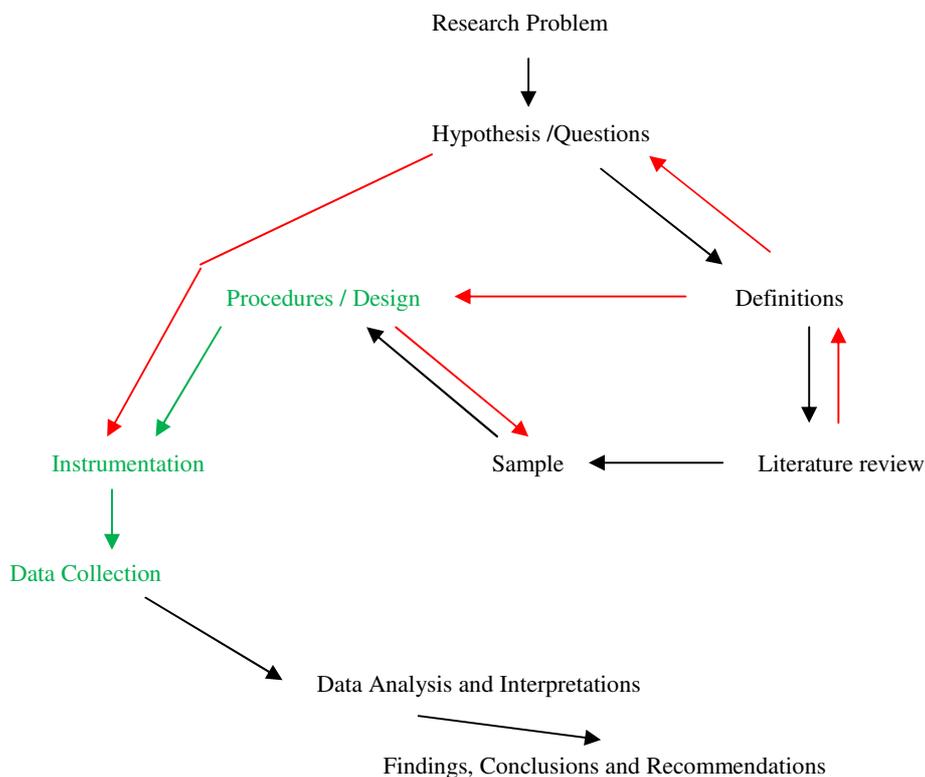
### **5.4 Research approach**

I have adapted the Fraenkel & Wallen' (2006: 19) model (see figure 5.1) to depict my view of the research process. Their exposition of the research process is depicted by the black and red lines. I have however, added three steps in green, that in my opinion form an integral part of the research process.

The decision on which approach to follow when embarking on a research project is guided by a number of factors. Three factors that play a major role, in my opinion, are the research question, the nature of the investigation and the researcher. The research problem, the sample, the location, time and

funding are all dimensions impacting on the nature of the research. The researcher, on the other hand, plays a major role in the sense that his/her research background (original field of study, training and experience as a researcher, personal preference, etc.) will strongly influence his decision on which approach to follow. In this case, I have decided to follow a qualitative approach from an interpretivist paradigm. This decision to adopt a qualitative approach is based on the exposition below and the reason for following the interpretivist paradigm is explained in paragraph 5.5.1.

[Legend: → = Usual sequence  
→ = Most likely departures from the usual sequence  
→ = My changes]



**Figure 5.1:** *The Research Process* (Adapted from Fraenkel & Wallen, 2006: 19)

According to <http://www.alzheimer-europe.org/Research/Understanding-dementia-research/-Types-of-research/The-four-main-approaches> - accessed

on 5/11/2011 - there are four approaches to research. They distinguish between quantitative, qualitative, pragmatic (mixed method) and advocacy / participatory (emancipatory) approaches to research. This is in line with what is found in the vast field of literature on research methodology. The first three approaches are fairly common and encountered in almost every discussion on research methodology. The latter however, is not as common. The focus is on marginalised / vulnerable groups; it seeks to bring change into the lives of the research subjects; the stance is not neutral and often involves a political agenda; research subjects are often involved as co-workers.

My understanding of the differences between the first three approaches is as follows. *Quantitative* research is generally associated with the positivist / postpositivist paradigm where researchers depart from one or more hypotheses where collected data is converted into numerical form so that statistical calculations can be made and conclusions drawn. A *qualitative* approach, on the other hand, is used where researchers want to get a better and deeper richer understanding of the phenomenon in question by analysing data in text form (it is not converted into numerical form and is not statistically analysed). On [http://www.sagepub.com/upm-data/10981\\_Chapter\\_1.pdf](http://www.sagepub.com/upm-data/10981_Chapter_1.pdf) (accessed on 6/11/2011), Cresswell is quoted as saying that *mixed methods* research is a research design with philosophical assumptions that guide the collection and analysis of both quantitative and qualitative data in a single study with a central premise that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach on its own (*my own rephrasing*).

When I considered my research question and the purpose of the research for my dissertation, it became evident that, because I (i) do not have a specific hypothesis about and (ii) want to obtain a better/deeper understanding of the problem, adopting a qualitative approach will serve me best. In order to get an even better grasp of the concept and to substantiate my choice, I consulted a series of sources and was able to identify the following as characteristics that typify the qualitative approach to research:

- a form of systematic empirical inquiry into meaning;
- an inquiry process of understanding a social or human problem;
- based on building a complex, holistic picture, formed with words;
- conducted in a natural setting;
- aimed at gaining a deep understanding and insight into people's attitudes, behaviours, value systems, concerns, motivations, aspirations, culture or lifestyles
- explores issues, attempts to understand phenomena and answer questions;
- through the analysis of unstructured information;
- the meaning emerges from the participants;
- flexible in that it can adjust to the setting (concepts, data collection tools, and data collection methods can be adjusted as the research progresses);
- encompasses a range of philosophies, research designs and specific techniques (including in-depth qualitative interviews; participant and non-participant observation; focus groups; document analyses) and a number of other methods of data collection;
- diverse methodological and theoretical approaches to study design and data analysis such as phenomenology; ethnography; grounded theory; action research; case studies; and a number of others
- results of qualitative research are descriptive rather than predictive;
- originated in the social and behavioural sciences: sociology, anthropology and psychology.

(<http://www.computing.dcu.ie/~hruskin/RM2.htm>;  
<http://www.csulb.edu/msaintg--/ppa696/696quali.htm>;-  
<http://www.qsrinternational.com/what-is-qualitative-research.aspx>;  
[http://wagner.nyu.edu/leadership/publications/files/Qualitative\\_Research.pdf](http://wagner.nyu.edu/leadership/publications/files/Qualitative_Research.pdf);  
<http://www.-qrca.org/displaycommon.cfm?an=1&subarticlenbr=6>;  
[http://www.mrc-bsu.cam.ac.uk/-cochrane/-handbook500/chapter\\_20/20\\_2\\_1\\_definition\\_of\\_qualitative\\_research.htm](http://www.mrc-bsu.cam.ac.uk/-cochrane/-handbook500/chapter_20/20_2_1_definition_of_qualitative_research.htm) –  
*All accessed on 5/11/2011*)

Qualitative research is a complex collection of different research methods complementing each other in trying to construct knowledge by analysing reality. In her discussion of qualitative research Merriam (1998: 5 – 8) identifies five characteristics of qualitative research which are depicted in Table 5.2.

**Table 5.2:** *Common Types of Qualitative Research (Merriam, 1998: 12)*

Type	Characteristic	Example
<i>Basic or generic</i>	▪ Includes description, interpretation, and understanding	▪ Meaning-making in transformational learning

	<ul style="list-style-type: none"> <li>▪ Identifies recurrent patterns in the form of themes or categories</li> <li>▪ May delineate a process</li> </ul>	
<i>Ethnography</i>	<ul style="list-style-type: none"> <li>▪ Focuses on society and culture</li> <li>▪ Uncovers and describes beliefs, values, and attitudes that structure behaviour of a group</li> </ul>	<ul style="list-style-type: none"> <li>▪ A study of twenty successful Hispanic high school students (Cordeiro &amp; Carspecken, 1993)</li> </ul>
<i>Phenomenology</i>	<ul style="list-style-type: none"> <li>▪ Is concerned with the essence or basic structure of a phenomenon</li> <li>▪ Uses data that are the participant and the investigator's first-hand experience of the phenomenon</li> </ul>	<ul style="list-style-type: none"> <li>▪ The role of intuition in reflective practice (Mott, 1994)</li> <li>▪ Practices inhibiting school effectiveness (Aviram, 1993)</li> </ul>
<i>Grounded theory</i>	<ul style="list-style-type: none"> <li>▪ Is designed to inductively build a substantive theory regarding some aspect of practice</li> <li>▪ Is 'grounded' in the real world</li> </ul>	<ul style="list-style-type: none"> <li>▪ A framework for describing developmental change among older adults (Fischer, 1993)</li> </ul>
<i>Case study</i>	<ul style="list-style-type: none"> <li>▪ Is an intensive, holistic description and analysis of a single unit or bounded system</li> <li>▪ Can be combined with any of the above types</li> </ul>	<ul style="list-style-type: none"> <li>▪ A comparative case study of power relationships in two graduate classrooms (Tisdell, 1993)</li> </ul>

It was envisaged that elements of all five types of qualitative research will figure at different stages of dealing with different aspects of the topic during my research project; and it did. However, in the end, it was mainly be a multiple case study of how the relationship between funding and the quality of education manifests itself in the sample under investigation.

## 5.5 Methodology

The design of a research study begins with the selection of a topic and a paradigm. A paradigm is essentially a worldview, a whole framework of

beliefs, values and methods within which research takes place. It is this worldview within which researchers work.

<http://www.computing.dcu.ie/~hruskin/RM2.htm> - accessed on 5/11/2011

### 5.5.1 Research paradigm

Bush (2005(a): 2) is of the opinion that research attempts to produce new knowledge as a basis for insight into the educational process or in order to initiate improvements. Bassey (1999: 38) says '*Research is a systematic, critical and self-critical inquiry which aims to contribute to the advancement of knowledge and wisdom.*' Johnson (1994: 3), on the other hand, is of the opinion that '*Research is a focused and systematic enquiry that goes beyond generally available knowledge to acquire specialised and detailed information, providing a basis for analysis and elucidatory comment on the topic of inquiry*'. I find the latter useful for the purposes of this study, as this is exactly what I will attempt to achieve.

Merriam (1998: 3, 4) postulates that one can follow any one of three research paradigms in education. According to the first paradigm, the *positivist* approach, education is viewed as the object, phenomenon or delivery system to be studied. Knowledge is gained through scientific, objective and thus quantifiable experimental research. 'Reality' is viewed as stable, observable, and measurable. Morrison (2002: 15 – 17) identifies five main features of positivism, viz.:

- *People are the objects of educational research.*
- *Only observable phenomena, not feelings, can be considered valid knowledge.*
- *Knowledge is obtained through the collection of verifiable facts.*
- *Researchers should be objective or value free.*
- *Finding should be capable of generalisation beyond the location of the project.*

In the second paradigm, referred to as the *interpretive* approach, education is seen as a process and school as a lived experience. Knowledge is gained

through the understanding of the meaning of the process or experience. The mode of enquiry is inductive, hypothesis- or theory-generating, as opposed to being deductive or testing as in the case of the positivist approach. Individuals socially construct multiple realities. Morrison (2002: 17 – 21) identifies four main features of interpretivism, viz.:

- *Research is grounded in people's experience.*
- *People understand events in different ways.*
- *Research focuses on the meaning placed on events by participants.*
- *The emphasis is on words rather than numbers.*

The following information that I found at <http://www.qualres.org/HomeInte-3516.html> - (accessed on 15/11/2011) complements the preceding exposition of interpretivism well. The underlined emphases are mine. It is stated that ...

*“the researchers' values are inherent in all phases of the research process. Truth is negotiated through dialogue. Findings or knowledge claims are created as an investigation proceeds. That is, findings emerge through dialogue in which conflicting interpretations are negotiated among members of a community. Pragmatic and moral concerns are important considerations when evaluating interpretive science. Fostering a dialogue between researchers and respondents is critical. It is through this dialectical process that a more informed and sophisticated understanding of the social world can be created. All interpretations are based in a particular moment. That is, they are located in a particular context or situation and time. They are open to re-interpretation and negotiation through conversation”.*

In the third paradigm, **critical research**, education is considered to be a social institution designed for social and cultural reproduction and transformation. Marxist philosophy, critical theory and feminist theory are used as knowledge base for an ideological critique of power, privilege and oppression in educational practice.

As indicated previously, I have approached my research from an interpretivist / interpretive paradigm. I will be developing a hypothesis based on a growing

understanding of the phenomenon obtained from the respondents' lived experiences by conducting multiple case studies.

## 5.5.2 Case studies

Various authors define *case studies* in different ways. Yin (1994) defines a case study as an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Miles and Huberman (1994: 25) view case studies as a phenomenon of some sort occurring in bounded context. They argue that if the phenomenon you are interested in studying is not intrinsically bounded<sup>16</sup>, it is not a case study. According to Cronbach (1975: 123) case studies are differentiated from other research designs by what he calls 'interpretation in context'. Wilson (1979: 448) conceptualises a case study as a process 'which tries to describe and analyse some entity in qualitative, complex and comprehensive terms not infrequently as it unfolds over the period of time'.

A combination of Merriam's view (1998: 29) that case studies are further defined by their special features and Olson in Hoaglin et al (1982:138 – 139)'s list of characteristics of case studies, can be summarised in the following manner:

*Particularistic*, meaning that case studies focus on a particular situation, event, programme, or phenomenon. This specificity of focus makes it an especially good design for particular problems. Case studies concentrate on the way particular groups of people confront specific problems taking a holistic view of the situation. It then suggests to the reader what to do or what not to do in a similar situation. It can examine a specific instance but illuminate a general problem. It may or may not be influenced by the author's bias.

---

<sup>16</sup> The *boundedness* of a topic, is determined by how finite the data collection would be, that is, whether there is a limit to the number of people involved who could be interviewed or whether the amount of time for observation, is finite. If there is no end, actually or theoretically, to the number of people who could be interviewed or to observations that could be conducted, then the phenomenon is not bounded enough to qualify as a case study.

*Descriptive*, meaning that the end product of a case study is a rich, ‘thick’ description of the phenomenon under study. Case studies have also been labelled as being holistic, life-like, bounded, and exploratory. A case study can illustrate the complexities of the situation - the fact that not one but many factors contribute to it. They have the advantage of hindsight yet can be relevant in the present. They show the influence of personalities on the issue. They show the influence of the passage of time on the issue - deadlines, change of legislators, cessation of funding, etc. They include vivid material - appropriations, interviews, newspaper articles, and so on. They obtain information from a wide variety of sources. They could cover many years and describe how the preceding decades led to situation. Case studies spell out differences of opinion on the issue and suggest how these differences have influenced the result. Case studies present information in a wide variety of ways and from the viewpoints of different groups.

*Heuristic*, meaning that case studies illuminate the reader’s understanding of the phenomenon being studied. They bring about the discovery of new meaning: extend the reader's experience, or confirm what is known. A case study can explain the reasons for problem, the background of the situation, what happened, and why. They explain why an innovation worked or failed to work. They also discuss and evaluate alternatives not chosen. Case studies evaluate, summarise, and conclude, thus increasing its potential applicability.

Stake (1981) in Merriam (1998: 31) claims that knowledge gained from case studies is different from other research knowledge in four important ways, namely: it is more concrete; more contextual; more developed by reader interpretation, and based more on reference populations determined by the reader. Adelman et al (1984: 101) have identified the following advantages of case study research. Case study(ies) ...

- *data is ‘strong in reality’.*
- *allow for generalisation.*

- *recognise the complexity of ‘truth’ and allow for alternative interpretations.*
- *produce ‘rich descriptions’ of events.*
- *may be used to promote change.*

Case studies, however, also have several limitations. According to Bush (2005(a): 9), “*the case may focus on a unique institution or phenomenon, which may not be relatable to other schools. This is more likely with a single case study design than with a multiple design although individual cases within the latter may be unique*”. Linked to the above, it is often claimed that the findings of case studies are seldom susceptible to generalisation. It has also been alleged that case study approach lacks ‘scientific rigour’ because each case study depends on the nature of the phenomenon investigated, and the particular circumstances in which it occurs rather than a set of rules that dictates design. Another problem associated with case studies is the fact that researchers may find that they have ‘*differential access*’ to people, documents and events and this may distort findings.

My decision to use a multiple case study design, stems from the fact that this design leads to in-depth understanding and interpretation rather than hypothesis testing. Thus meeting the needs of the research for my dissertation

### **5.5.3 Sampling**

Researchers are interested in generalizing to specific groups. The group you wish to generalize to is referred to as the **population**. When studying any phenomenon, researchers can very seldom study the population in its totality; they have to limit their investigation to a sample of an entire population and then attempt to generalize the commonalities of the group that they investigated as being representative of the entire population. A research population is generally a large collection of individuals or objects that is the main focus of a scientific inquiry. Populations are often defined in terms of demography, geography, occupation, time, care requirements, diagnosis, or

some combination of the above (<http://www.answers.com/topic/target-population>;<http://www.childrensmercy.org/stats/definitions/pop.htm>;<http://www.experiment-resources.com/research-population.html> – All accessed on 8/11/2011).

However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. They therefore restrict their investigation to a representative sample of the population. The concept *research sample* is typified by the following characteristics:

- it is a portion, piece, or segment that is representative of a whole;
- the group you are interested in generalizing to;
- the process of selecting units (e.g., people, organizations) from a population of interest;
- a random (or a wishfully "representative") subset of a population;
- a subset of individuals from within a population to estimate characteristics of the whole population.

(<http://www.thefreedictionary.com/sample>;  
<http://www.socialresearchmethods.net/kb/-sampling.php>;  
[http://en.wikipedia.org/wiki/Sampling\\_\(statistics\)](http://en.wikipedia.org/wiki/Sampling_(statistics)) – All accessed on 8/11/2011)

There are many methods of sampling when doing research. I found the following exposition on [http://changingminds.org/explanations/research/sampling/choosing\\_sampling.htm](http://changingminds.org/explanations/research/sampling/choosing_sampling.htm) (accessed on 8/11/2011) very comprehensive and useful in:

- (i) explaining the different methods of sampling and
- (ii) selecting sampling methods for research purposes.

**Probability methods.** This is the best overall group of methods to use as you can subsequently use the most powerful statistical analyses on the results.

**Table 5.3:** *Probability methods.*

Method	Best when
<i>Simple random sampling</i>	Whole population is available.
<i>Stratified sampling</i>	There are specific sub-groups to investigate (e.g.

(random within target groups)	demographic groupings).
<i>Systematic sampling</i> (every nth person)	When a stream of representative people are available (e.g. in the street).
<i>Cluster sampling</i> (all in limited groups)	When population groups are separated and access to all is difficult, e.g. in many distant cities.

**Quota methods.** For a particular analysis and valid results, you can determine the number of people you need to sample. In particular when you are studying a number of groups and when sub-groups are small, then you will need equivalent numbers to enable equivalent analysis and conclusions.

**Table 5.4:** *Quota methods.*

Method	Best when
<i>Quota sampling</i> (get only as many as you need)	You have access to a wide population, including sub-groups
<i>Proportionate quota sampling</i> (in proportion to population sub-groups)	You know the population distribution across groups, and when normal sampling may not give enough in minority groups
<i>Non-proportionate quota sampling</i> (minimum number from each sub-group)	There is likely to a wide variation in the studied characteristic within minority groups

**Selective methods** where you target particular groups.

**Table 5.5:** *Selective methods*

Method	Best when
<i>Purposive sampling</i> (based on intent)	You are studying particular groups
<i>Expert sampling</i> (seeking 'experts')	You want expert opinion
<i>Snowball sampling</i> (ask for recommendations)	You seek similar subjects (e.g. young drinkers)
<i>Modal instance sampling</i> (focus on 'typical' people)	When sought 'typical' opinion may get lost in a wider study, and when you are able to identify the 'typical' group
<i>Diversity sampling</i> (deliberately seeking variation)	You are specifically seeking differences, e.g. to identify sub-groups or potential conflicts

**Convenience methods.** Good sampling is time-consuming and expensive. Not all experimenters have the time or funds to use more accurate methods. There is a price, of course, in the potential limited validity or reliability of results.

**Table 5.6:** *Convenience methods.*

Method	Best when
<i>Snowball sampling</i> (ask for recommendations)	You are ethically and socially able to ask and seek similar subjects.
<i>Convenience sampling</i> (use who's available)	You cannot proactively seek out subjects.
<i>Judgment sampling</i> (guess a good-enough sample)	You are expert and there is no other choice.

**Ethnographic methods.** When doing field-based observations, it is often impossible to intrude into the lives of people you are studying. Samples must thus be surreptitious and may be based more on who is available and willing to participate in interviews or studies.

**Table 5.7:** *Ethnographic methods.*

Method	Best when
<i>Selective sampling</i> (gut feel)	Focus is needed in particular group, location, subject, etc.
<i>Theoretical sampling</i> (testing a theory)	Theories are emerging and focused sampling may help clarify these.
<i>Convenience sampling</i> (use who's available)	You cannot proactively seek out subjects.
<i>Judgment sampling</i> (guess a good-enough sample)	You are expert and there is no other choice.

Records of the results of the National Senior Certificate examination results obtained from the Department of Basic Education were used as a data base from which the schools for my sample were selected. A combination of stratified, purposive and convenience sampling techniques was used to identify the schools for the research project.

Six schools were selected to investigate the relationship between the funding of schools and the quality of the education they provide. These schools are classified as schools that provide quality education because they have a proven track record of a 100% pass rate in the National Senior Certificate examinations for three consecutive years. The six schools represent three categories of schools. The first category represented independent schools, the second category represented quintile five schools and the third category of schools represented schools from quintiles four and five that are referred to as so-called transformed schools. This makes it a stratified sample.

Independent schools were chosen because the assumption is that they are well funded with good facilities. Quintile five schools are public schools that, by definition, represent schools from strong socio-economic communities with good facilities. The ‘transformed’ schools are schools where the student profiles have changed from monoculture previously white, to a fully integrated multicultural student profile that is now predominantly black. This makes it a purposive sample.

The second set of criteria that was used to select the schools for my research sample related to where the schools are situated. The sample schools all had to be situated in the Gauteng province of South Africa. The schools selected for the sample are all within a radius of fifty kilometres from my research basis to make for easy access for both the initial investigation and possible follow up visits. This makes it convenience sampling.

The socio-economic circumstances of all the schools vary; the independent schools represent a parent community from very strong socio-economic backgrounds, the socio-economic profiles of the four public schools vary from school to school. All the parents of all the schools have high expectations of the schools in terms of academic performance based on the schools’ track record in the National Senior Certificate examination.

The fact that all the schools selected for my sample, had to meet all the criteria set out above, were chosen to come from a specific area within the Gauteng

province of South Africa, makes the sampling method used a combination of purposive, stratified and convenience sampling methods

## 5.6 Data collection

Data was collected on each of the sample schools for the period 2007 to 2009. Three categories of data were collected. The first category of data had to enable me to create a profile of the school. The second category of data had to shed light on factors enabling the sample schools to maintain their level of academic performance. The third category of data had to serve as triangulation by comparing the data obtained in the first two categories with the opinions of respondents based on the criteria developed by the European Union.

### 5.6.1 Questionnaire

A multipurpose research instrument (attached as ANNEXURE 3) was designed to achieve the objectives of the previous paragraph. It consists of three sections.

Section A dealt with

- demographic information about the school,
- demographic information about the School Management Team (SMT),
- demographic information about the members of the Finance Committee,
- demographic information about the staff that taught the grade 12 learners for the period under investigation,
- information regarding the school's budget for the period under investigation.

Section B served as the basis for a semi-structured interview with the school principal on

- information regarding special programmes / efforts to prepare the grade 12 learners for the senior certificate examination,

- an opinion on programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- evidence to substantiate the information provided in the two preceding bullets above

Section C of the instrument contained a matrix based on the sixteen indicators of the quality of school education developed by the European Commission in 2000, and was used to probe the quality of education in the sample schools.

### **5.6.2 Semi-structured interviews**

Section B of the research instrument was used for this purpose. An appointment was made with the principal of each school. I requested to speak with them for ninety minutes. The entire research instrument was e-mailed to the respondents beforehand requesting that:

- Section A be completed to expedite the discussion thereof on the day of the interview;
- Section B be studied prior to the interview; and
- Section C be studied for discussion on the day of the interview.

On arrival the purpose of the research was again communicated to the respondent and a hard copy of the research instrument was given to the respondent for his/her perusal during the interview. The respondent was requested to sign the informed consent letter and permission to record the proceedings was confirmed. I used *Audacity's* free software on my computer to record the discussion digitally. Apart from the digital recording of the discussions, field notes were taken during all the interviews. The digital recordings were transcribed and consolidated with the field notes. Where necessary follow-up phone calls were made to confirm certain information prior to making a copy thereof available to the respondent for his/her approval and permission to use the information pertaining to his/her school for my dissertation. All the respondents were very friendly and open regarding all the information required of them.

Subsequent to dealing with the information required based on Sections A and B of the research instrument, respondents were briefed in detail on Section C. The fact that it was to serve a triangulation function was highlighted and respondents were requested to complete Section C at their leisure before e-mailing it back to me.

## 5.7 Data analysis

The national data base on the National Senior Certificate examination (NSCE) results obtained from the Department of Education was analysed to form a basis for the identification and selection of the sample schools in the Gauteng province of South Africa.

The data obtained from Section A of the research instrument was analysed by using an Excel spread sheet that I designed for this purpose. This instrument is attached as ANNEXURE 5. The transcripts of the semi-structured interviews obtained from Section B of the research instrument were analysed by creating tables of data and then using coding for further analysis and crystallisation of the data. The data obtained from Section C of the research instrument was analysed by making use of a combination of the methods used above. The data was transferred to an Excel spread sheet that I designed to analyse the data. The information obtained from this instrument was then also subjected to a process of coding to analyse the data.

The analysed data forms the basis for the discussions, tables and figures contained in Chapter six of this dissertation

## 5.8 Trustworthiness, Validity and Reliability

Research data needs to be *authentic, believable, valid and reliable* (Charles & Mertler, 2002: 40, 41).

*Authenticity and believability* are determined by the tests of external and internal criticism. *External criticism* has to do with determining whether the data comes from legitimate sources. This test is one of analysis and judgement and uses no statistical calculations. *Internal criticism* has to do with data accuracy and lack of bias. Data for this study was collected from the sample schools and the Department of Education as primary sources. The principal and the officials concerned had to sign off the information provided to ensure accuracy and authenticity. The methods used for data analysis would ensure accuracy and at the same time limit bias.

*Validity*. The sampling methods as well as the methods used for collecting and analysing the data in this study were intended to ensure that the data depict or deal directly with the topic under consideration to guarantee validity.

*Triangulation* was used with regard to both the financial information provided by schools as well as the results in the SCE to build coherent justification for themes.

*Reliability* refers to the extent to which data is consistent.

Creswell (1994: 196) distinguishes eight strategies to examine the accuracy of findings; they are arranged from the most frequently used and easy to implement to those occasionally used and difficult to implement:

- *Triangulate* different data sources of information by examining evidence from the sources and using it
- Use *member-checking* to determine the accuracy of the qualitative findings through taking the final report or specific descriptions or themes back to participants and determining whether these participants feel that they are accurate.
- Use *rich, thick description* to convey the findings. This may transport readers to the setting and give the discussion an element of shared experiences.

- Clarify the *bias* the researcher brings to the study. This self-reflection creates an open and honest narrative that will resonate well with readers.
- Also present *negative or discrepant information* that runs counter to the themes. Because real life is composed of different perspectives that do not always coalesce, discussing contrary information adds to the credibility of an account for a reader.
- Spend *prolonged time in the field*. In this way the researcher develops an in-depth understanding of the phenomenon being studied and can convey detail about the site and the people that lends credibility to the narrative account.
- Use *peer debriefing* to enhance the accuracy of the account. This process involves locating a person (a peer debriefer) who reviews and asks questions about the qualitative study so that the account will resonate with people other than the researcher.
- Use an *external auditor* to review the entire project. As distinct from the peer debriefer, this auditor is new to the researcher/research team and the project and can provide an assessment of the project throughout the process of research or at the conclusion of the study. The role is similar to that of a fiscal auditor, and specific questions exist that auditors might ask.

Despite the fact that a comprehensive / representative sample has been selected, no claims of completeness will be made. Because it is a qualitative study, the data obtained and the interpretation thereof only reflect my understanding of the problem. Every effort was however made to ensure authenticity and believability by applying both external and internal criticism. The first seven of the eight strategies listed above were used to ensure validity and reliability prior to submission for examination purposes. The eighth strategy will come into play when the research report is submitted for examination purposes.

The analysed quantitative data from Section A of the questionnaire formed the basis for an in-depth discussion on these findings indicating trends where possible. The information obtained from Section B of the questionnaire provided rich qualitative data that enriched our understanding of:

- the efforts to improve the school's results in the annual senior certificate examinations as an indicator of the quality of education in that school,
- the impact of the management of the funds of a school on efforts to improve the schools' results in the annual senior certificate examinations as an indicator of the quality of education in that school.

Trustworthiness and validity were ensured by:

- using the data obtained through Section C of the research instrument for purposes of *triangulation*;
- *member-checking* the information obtained through Sections A and B of the research instrument by having the respondents sign off the reports on their respective schools;
- *rich, thick descriptions* to share in the experiences of the respondents;
- preventing *bias* to affect the data and analysis thereof by being constantly aware of the possibility of bias and subjectivity; and
- using my supervisor as a sounding board *for peer-debriefing* and to guard against the possibility of bias and subjectivity;
- finally this dissertation will be subjected to *external auditing* when it is assessed by both the internal and external examiners of my dissertation.

## 5.10 Ethics

The research proposal was subjected to internal scrutiny to a standing Departmental committee before I submitted an application to the Faculty of Education's Ethics Committee for permission to proceed with the field work of my research in line with the established official procedures prescribed by the University of Pretoria and the Faculty of Education's policy documents. Permission was obtained from the Faculty's Ethics Committee before I

embarked on the process of collecting the data. A copy of the original ethical clearance certificate issued by the Faculty's Ethics Committee on completion of the research, is included as ANNEXURE 1 to this dissertation.

All respondents took part in this research on a voluntary basis and they were free to withdraw from the process at any time if they became uncomfortable with the process. This was spelt out verbally beforehand and reiterated before they were requested to sign the letter of informed consent. Throughout the process of application, the collection of data and the subsequent writing of the research report, the identity of all parties and respondents were safeguarded by using aliases and code names for institutions as well as individual respondents, thus guaranteeing anonymity.

## 5.11 Storage of data

All correspondence, collected data and related documentation as well as all digital and electronic records related to the research process in its entirety, will be stored according to the procedures prescribed in the University of Pretoria's regulations in this regard.

The original documents will be stored in the facilities of the Department of Education Management and Policy Studies by my supervisor. A second set of records will be stored at the facilities of the researcher. Both sets of records will be kept for a period of fifteen years. Both a *PDF* and *Word* version of the approved dissertation will also be kept in the University's archives.

## 5.12 Limitations

My lack of experience as a researcher was the biggest limiting factor in my research. It resulted in much time being wasted and having to redo a number of aspects of my investigation. My close involvement in the research theme through my postgraduate teaching necessitated a constant awareness to guard against subjectivity and bias.

The fact that I did case study research balanced the size of the sample because the purpose of the research was to develop an understanding of the relationship between funding and the quality of education and not to test a hypothesis.

Obtaining data was not difficult. What was more important was to use the data in such a way that the anonymity of the sample schools and the respondents were always safeguarded. Because I used official and primary sources of information, the reliability of the data is secure. None of the data was really sensitive as it is all available in the public domain of the specific school communities.

The reliability of the data obtained from the interviews was not in jeopardy as I was able to validate the information by cross checking with information from Sections A and C.

Despite having carefully designed the research instrument, a number of aspects that requires further investigation have emerged from the analysis and interpretation of the data that were not anticipated initially. These are addressed in the recommendations for further investigation in paragraph

## **5.13 In closing**

In this chapter I started out by giving an exposition of my epistemological and theoretical frameworks. I then gave a detailed description of the research approach, research design, data collection and data analyses, culminating in a discussion on trustworthiness and the limitations applicable.

In chapter six I will discuss the analysed data and findings that emanated from the analysis of the data obtained through the processes described in chapter five. This in turn will serve as a basis for the discussion of the findings and recommendations in chapter seven.

## CHAPTER 6: DATA ANALYSIS AND INTERPRETATION

### 6.1 Introduction

The instrument used to analyse the data collected in Sections A and C of the research instrument is attached as ANNEXURE 3. The unprocessed data collected during the research, is attached to this report as ANNEXURE 4. The analysis of the data collected from the respondents based on the questions in Section A of the research instrument is attached to this report as ANNEXURE 5.

In this chapter, I will interpret and comment on the data contained in ANNEXURES 4, 5 and 6. In paragraph 6.2 the data collected based on the questions in Section A of the research instrument will be reported and discussed to understand the profiles of the sample schools. In paragraph 6.3 the responses to the questions contained in Section B of the research instrument will be reported. Paragraph 6.4 contains a discussion of the data based on the respondents' reactions to Section C of the research instrument. Paragraph 6.5 contains a summary of this chapter and sets the scene for Chapter 7.

### 6.2 Section A: Demographic and other information

#### 6.2.1 *Enrolment*

Table 6.1 shows that there is an extreme spread in the number of students enrolled at the sample schools. The two independent schools have a smaller number of students than the public schools. The biggest school had a total enrolment of 1972 students in 2007, while the school with the smallest enrolment had only 193 students in the same year. The average enrolment for the six schools for the period studied was 974.8 students. This was made up of 471.3 male and 503.6 female students.

Enrolment as a factor thus indicates that, with the exception of one independent school, all the other schools are fairly large in South African terms. This provides a fairly broad income base for the schools in question since all the schools charge school fees. It also shows that the sexes are more or less evenly represented in the sample schools.

**Table 6.1:** *Total enrolment of the sample schools*

Enrolment			Sample schools					
		AVG	I	II	III	IV	V	VI
2007	M	469.0	96	269	956	642	481	370
	F	516.0	97	290	1016	666	584	443
	Total	985.0	193	559	1972	1308	1065	813
2008	M	482.3	121	275	956	638	533	371
	F	494.0	115	274	942	641	545	447
	Total	976.3	236	549	1898	1279	1078	818
2009	M	462.5	164	267	864	633	469	378
	F	500.7	141	273	861	632	604	493
	Total	963.2	305	540	1725	1265	1073	871
Overall averages	M	471.3	48.3%					
	F	503.6	51.7%					
	Total	974.8						

This picture is essentially duplicated when the data in table 6.2 is analysed. School I again had the smallest number of learners in 2007 (48) and School III again had the biggest enrolment (437) in grade twelve. The average enrolment for the six schools for the period under investigation was 191.4 grade twelve learners. This was made up of 89.7 male and 101.8 female students. Again the sexes are more or less evenly represented.

The total number of students in a school and in grade twelve specifically impact on the:

- physical facility requirements (classrooms, Information Technology laboratories, library, toilets and sporting facilities)
- staffing requirements and student-teacher ratios

- income base; irrespective of whether the school is funded from private or public funds, or both.

**Table 6.2:** *Grade 12 enrolment of the sample schools*

Enrolment in Gr 12			Sample schools					
		AVG	I	II	III	IV	V	VI
2007	M	84.8	21	57	201	101	91	38
	F	102.0	27	69	236	127	94	59
	Total	186.8	48	126	437	228	185	97
2008	M	92.2	30	50	212	125	88	48
	F	101.8	37	53	190	129	129	73
	Total	194.0	67	103	402	254	217	121
2009	M	92.0	44	56	186	148	92	26
	F	101.5	47	53	186	140	106	77
	Total	193.5	91	109	372	288	198	103
Overall averages	M	89.7	46.8%					
	F	101.8	53.2%					
	Total	191.4						

### 6.2.2 Drop-out rate

In the context of this research project, the term *drop-out rate* is used when referring to the attrition of students enrolled at schools to be educated from grades eight to twelve with the aim of sitting for the National Senior Certificate examination (hereafter referred to as the NSCE). With the exception of School VI, where learners come from less privileged socio-economic situations, all schools show a low drop-out rate. An average drop-out rate of five per cent over the five year period seems to be within reasonable limits. The situation in School VI appears to be improving; according to the respondent this can be attributed to hands-on management by the school and the ethos of the school. All the schools reported that most students that leave school are in the lower grade and that the drop-out rate for grades ten to twelve is negligible. This is consistent with the findings of question 17 in Section C of the questionnaire as discussed and reflected in Table 6.21 of paragraph 6.4. None of the schools offered any specific reason as explanation for the drop-out rates in their schools. The majority of them did not perceive this to be a serious problem. So the drop-out rate does not seem to

constitute a significant problem in terms of the academic performance of any of the schools which formed part of the investigation.

**Table 6.3:** *Drop-out rate for Grades 8 to 12*

Drop out rate Gr 8 -12 (%)	Sample schools						
	<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
2007	5.9	9.3	0	0.0	1.5	4.8	20
2008	5.3	7.2	0	0.0	1.7	4.6	18
2009	4.1	10.1	0	0.0	2.5	3.9	8
Average	5.1	8.9	0.0	0.0	1.9	4.4	15.3

### 6.2.3 *University entrance*

Admission to studies at institutions of higher learning (universities) is not automatic in South Africa; a student has to include specific subject combinations in his or her offering for the National Senior Certificate examination in order to qualify for admission to university baccalaureate studies.

Schools I to IV specifically mentioned that university entrance is an aspect that they actively promote in the school community. School VI is situated in a community with a lower socio economic status (hereafter SES) where this is not such a high priority and although the school has a 100% pass rate, not many students pursue tertiary studies at academic institutions. Many enter the labour market directly or pursue studies of a technical nature after leaving school. Further scrutiny shows three distinct groupings within Schools I to V; School I at 98%, I and III at 84% and IV and V at 75%. Without directly investigating the matter further an interpretation thereof is mere speculation, but I suspect that it is a combination of socio economic status and the ethos of the school. However, this being a qualitative study, I have not factored it in as such because it will require an extensive quantitative investigation of both external SES of the community, SES of the parents as well as internal SES of the student within the school environment (see the work by UW-Madison professors Adam Gamoran and Geoffrey Borman reviewing the 1966 “Coleman Report” 40 years down the line in this regard) to do justice to SES

as a determining factor in academic performance. An important aspect that will have to be factored into such an investigation is the work of Rumberger and Willms (1992) quoted in Wildeman (2008: 64) who argue *that schools that do not have significant proportions of middleclass parents have low levels of school resources and poorer academic outcomes. These authors make the point that the racial and socio-economic composition of schools plays a vital role in determining the academic climate and academic outcomes of schools.* Another dimension that will have to feature in such an investigation is the controversy on the relative effectiveness of public and private schools (Raudenbush and Bryk, 1986: 1). The data in Table 6.4 makes for interesting reading when compared to the international information discussed on page 217.

**Table 6.4:** *University entrance admissions*

University Entrance admission (%)	Sample schools						
	<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
2007	69.5	93	99	75	62	70	18
2008	80.0	88.9	97	90.36	78	81	45
2009	76.0	69.9	98	85.9	86	73	43
Average	75.2	83.9	98.0	83.8	75.3	74.7	35.3

#### 6.2.4 Distinctions

A final score of 80% or more in a subject in the NSCE is referred to as a distinction. A distinction in any given subject indicates that the candidate has mastered the content and possesses a sound knowledge base in that particular field. It is not only a reflection of the student's input in preparing for the examination, but it is also indicative of the quality of the education provided by the teacher that teaches the subject area. Although the total number of distinctions in the NSCE obtained in a given school is often used as a marketing tool, this number, as indicator of the quality of education, could be misleading because the number of candidates that sat for the examination is not taken into consideration. The moment that it becomes part of the equation however, it becomes significant; the average number of distinctions per candidate that sat for the NSCE can now be calculated. The average number of

distinctions per candidate that wrote the NSCE for the period under investigation was 1.5.

It is clear from table 6.5 that Schools II (independent) and III (public) are doing particularly well in this regard. It would thus appear that the average number of distinctions can even be used to distinguish between top performing schools as indicator of the quality of education provided. It is also important to state that although this is a significant indicator of quality, it cannot be used in isolation. Again, School VI's performance is probably attributable to factors related to SES. A more comprehensive view of a number of indicators is required; these could include the difference in funding levels and more stringent admission requirements.

**Table 6.5:** *Distinctions in the NSCE*

NSCE Distinctions		Sample schools					
Total # of distinctions	AVG	I	II	III	IV	V	VI
2007	238.5	74	339	616	229	164	9
2008	321.5	73	376	807	336	292	45
2009	327.0	95	386	800	435	216	30
Average	295.7	81	367	741	333	224	28
<b>Average /Gr 12 Learner</b>	1.5	1.2	3.3	1.8	1.3	1.1	0.3

### 6.2.5 Subject averages

One of the factors used to assess the performance of teachers providing education in grade twelve subjects, is the subject average obtained by the candidates that sat for the NSCE in that subject. The subject average for a given subject is considered to be an important indicator of the ability of the teacher and the quality of education provided by said teacher in that specific subject. The subject average obtained is a determined by a number of factors. These include the teacher's qualifications, experience at his level, dedication, extra time and effort put into preparing candidates for the examination and motivation of students to perform at the best of their ability. When the average

of all the subjects for a given school is calculated, this likewise, serves as a collective indicator of the quality of the performance of a school.

When calculating the overall average obtained by all the candidates in all the subjects in the NSCE, it is interesting to note from Table 6.6 that Schools II, III, IV and V are all either on, or above the total average performance of all the learners that wrote the specific examination. This is consistent with the performance of the schools as indicated by the average number of distinctions per candidate discussed in the previous paragraph.

When this is considered in conjunction with the average number of distinctions referred to in the previous paragraph, a more comprehensive picture regarding the school's performance starts to emerge.

**Table 6.6:** *Overall averages in NSCE*

Subject averages in NSCE		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
2007	60.0	58.9	65.0	65.3	66.8	55.9	48.0
2008	63.6	54.9	75.3	68.9	68.9	64.4	49.0
2009	57.0	52.5	59.8	68.5	56.9	59.6	44.5
Average	60.2	55	67	68	64	60	47

An average of between 53 and 55% in the NSCE in any subject is considered to be within the norm. As discussed in Chapter 2 paragraph 2.3, language, mathematics and physical science, are used as indicators of the quality of education in many international tests (TIMSS, PISA, SACMEQ etc.). In all three these subject areas, the mean average for all the schools is 60% or higher. When looking at these three fields of study that are used as international indicators of quality education and the information contained in Tables 6.7, 6.8 and 6.9, it is again evident that, with the exception of the performance of School VI in physical science, all the schools are performing well in all three subjects. School VI is thus an example where, that although a school may not necessarily be a top performer in all subjects, it is possible to consistently maintain a 100% pass rate. The quality of the education in this

school is also not necessarily lower than in any of the other schools; the lower averages are probably due to socio-economic environmental factors. It will of necessity also impact on student's career choices.

Schools II, III and IV did extremely well in all three subjects. In English, they all had an average of more than 72%. In Mathematics, these three schools all had an average of 68% or more and in Physical Science, they obtained an average of 64% between the three of them. In all three instances, School II was the top performer with averages of 75%, 71% and 66% respectively in English, Mathematics and Physical Science respectively.

**Table 6.7:** *English averages in NSCE*

English		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
2007	66.9	66.9	73.7	70.54	70	68	52
2008	68.4	64.2	76.1	73	81.3	69	47
2009	66.3	61	74.7	72	71.2	63	56
Average	67.2	64	75	72	74	67	52

**Table 6.8:** *Mathematics averages in NSCE*

Mathematics		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
2007	61.7	59.9	71	61.3	60	60	58
2008	68.4	60.5	79.5	72	77.2	63	58
2009	61.6	60.7	63.5	70	67.5	51	57
Average	63.9	60	71	68	68	58	58

**Table 6.9:** *Physical science averages in NSCE*

Physical Science		Sample schools					
Overall average	AVG <sup>17</sup>	I	II	III	IV	V	VI
2007	61.4	69.4	68.5	62.42	63	60	45
2008	60.7	55.5	70.6	67	66.3	63	42
2009	53.9	51.4	59.6	64	56.6	51	41
Average	58.7	59	66	64	62	58	42

<sup>17</sup> No significance can be read into the fact that the averages for this subject have shown a steady decline over the three years under investigation.

### 6.2.6 *Demographic information about the School Management Team (SMT)*

In the South African context, schools are managed by a school management team (hereafter referred to as the SMT). In public schools funded by the state, the SMT normally consists of the Principal, the Deputy Principal(s) and the Heads of Departments. The number and composition of the SMT vary according to the size of the school. In independent schools the composition of the SMT varies from school to school. In most instances it is made up of the principal plus a varying number of senior staff members (both academic and administrative). Both the independent schools in the sample had heads of departments for the different subject areas.

The question on total experience did not include any experience in the private sector; it only referred to the incumbents' experience in teaching. Experience at the current post level referred to the total experience of the incumbent in a given position whereas the question on his/her experience in the current school referred to experience at their present position in this specific school. It does not include experience at lower post levels in the same school.

Qualifications were categorised based on the number of years of training. It was taken as a given that all members of staff referred to in this research project would at least have a four year qualification in order to teach. For the purposes of this research project '*Advanced training*' refers to all additional academic training that members of staff underwent that is education related such as degree studies or educational specialisation. It thus excludes training that cannot be directly linked to teaching a subject, educational support functions and / or the management of schools.

The question on '*Awards*' refers to recognition given to the individual by organisations outside of the school for outstanding performance in his or her field of expertise.

On average principals in the sample schools have approximately 28 years of experience in total and an average of 6 years of experience as principal at their current school. It is interesting to note that they have varying fields of specialisation and that on average they have studied for an additional three years after completing their initial training. Three of them have a Master's qualification in education management. It is further interesting to note that, in four instances, it is their first tenure as principal and that in three instances they have been at the particular school for five years or more. It would appear as though specialisation and experience contribute to the ability of teachers to achieve outstanding results.

**Table 6.10:** *Demographic information about the Principals*

Principal		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
Total exp.	27.7	20	29	29	33	25	30
Exp curr level	6.0	5		2	11	7	5
At this school	6.1	5	8	2	11	5.5	5
Qualifications	4.0	4	4	4	4	4	4
Specialisation		Geogr/Afr/EdMan <sup>18</sup>	Geogr/PhysEd <sup>19</sup>	Hist <sup>20</sup>	Maths <sup>21</sup>	Hist/Ed Man <sup>22</sup>	EdMan <sup>23</sup>
Advanced training	7.0	8	6	8	6	8	6
Awards	0.2	0	0	0	0	1	0

With the exception of School I, all the schools have more than one and in three instances three deputy principals. A profile of all the deputy principals combined is depicted in table 6.11 and is self-explanatory. It is noteworthy that most of the deputy principals have previously been a deputy principal at another school. They have on average undergone 3.1 years of further training and a significant number of them have received awards as recognition for outstanding work in education. Five of the fourteen deputy principals have a

<sup>18</sup> Majored in Afrikaans and Geography. Busy with Master's in Education Management.

<sup>19</sup> Majored in Geography and Physical Education. FDE in Education Management.

<sup>20</sup> Majored in History. B Ed Hons in Education Management.

<sup>21</sup> Majored in Mathematics and Economics. B Ed Hons in Education Management.

<sup>22</sup> Honours in History. Busy with Master's in Education Management

<sup>23</sup> Majored in Mathematics. FDE in Education Management.

Master's degree in varying fields of specialisation; only one of them specialised in education management while the rest of them mostly pursued a qualification in their field of specialisation.

**Table 6.11:** *Demographic information about the Deputy Principals*

Deputy Principal		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
Total exp.	25.5	This school has 1 Deputy Principal	This school has 2 Deputy Principals	This school has 3 Deputy Principals	This school has 3 Deputy Principals	This school has 3 Deputy Principals	This school has 2 Deputy Principals
Exp curr level	9.4						
At this school	6.7						
Qualifications	4.0						
Specialisation	0.0						
Advanced training	7.1						
Awards	2.3						

The two independent schools do not have a formal position of HOD. In these schools, teachers function in subject teams where individual members play varying leadership roles depending on the situation. In the four public schools, depending on the size of the school, the number of official HOD positions, paid for by the state, varies between four and eight. In three of the public schools, persons are appointed as HODs in addition to the HODs on the formal staffing establishment. These appointments are made by the SGB and are funded from public money in the school fund. The combined profile of all the different HODs from the respective schools depicted in Table 6.12 is based on the information pertaining to the HODs forming part of the official staffing establishment of the public schools only. On average the HODs have 22.6 years of teaching experience in total. Although some of the HODs have held similar positions at previous schools, the majority have been holding tenure (7.6 years on average) at the same school since being appointed as HOD. HODs have undergone 3.6 years of further training in addition to the four years of initial training. It is evident that this training mostly consisted of an honours degree as specialisation in their respective fields of study. Most of the

HODs have received recognition for outstanding work in the form of either merit awards (some as many as three times) or receiving the National Teachers' Award at provincial level.

**Table 6.12:** *Demographic information about the HODs*

Heads of Departments		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
Total exp.	22.6	This school has 0 HODs	This school has 0 HODs	This school has 8 HODs	This school has 7 HODs	This school has 6 HODs	This school has 4 HODs
Exp curr level	7.9						
At this school	7.6						
Qualifications	4.0						
Specialisation	0.0						
Advanced training	7.6						
Awards	0.8						

### 6.2.7 Demographic information about the Grade twelve teachers

Table 6.13 depicts the demographics of the grade twelve teachers in the six schools in the sample. Apart from having 20.5 years of teaching experience on average, the grade twelve teachers have been teaching grade twelve students for 14.8 years on average of which a significant nine years are at their current schools. The grade twelve teachers from the sample schools have on average undergone two years of further training. This varies from one English teacher with a Doctorate, four with Master's degrees, three with Honours degrees and five with B Ed honours degrees. A number of others have pursued a Further or Advanced Diploma in Education. This information is depicted in Tables 6.14 for grade twelve English teachers, Table 6.15 for grade 12 Mathematics teachers and in Table 6.16 for grade twelve Physical Science teachers

**Table 6.13:** *Demographic information about all Grade 12 teachers / educators combined*

All Gr 12 Teachers	
Overall average	<b>AVG</b>
Total exp.	20.5
Teaching Grade 12	14.8
At this school	9.0
Qualifications	4.0
Advanced training	6.0
Awards	18.8%

Table 6.14 indicates that the total teaching experience of grade twelve English teachers varies between five and forty one years . The same tendency applies to their experience of teaching English to grade twelve students. They are all well qualified. The teacher from School II has a D Litt et Phil qualification. The teachers from Schools I and V have Master’s degrees in English while the one from School III has an M Ed degree in subject didactics.

**Table 6.14:** *Demographic information about the Grade 12 English teachers / educators*

Gr 12 English Teachers		Sample schools					
Overall average	<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Total exp.	21.5	5	41	20	24	26	13
Exp curr level	12.8	5	30	17	9	3	13
At this school	7.3	5	14	12	9	3	1
Qualifications	4	4	4	4	4	4	4
Specialisation	English	Eng	Eng	Eng	Eng	Eng	Eng
Advanced Training	6.5	8	10	8	4	6	0
Awards	17%	0	0	1	0	0	0

From Table 6.15 it is evident that the total teaching experience of the grade twelve Mathematics teachers varies between 19 and 40 years with an average of 26.2 years. They have been teaching grade twelve Mathematics for between 3 and 30 years at the respective schools. All of them hold B Sc degrees as undergraduate qualifications. None of them hold Master's degrees. Two of the teachers (Schools I and VI) hold Honours degrees in Mathematics. The teachers from Schools II, III, IV and VI hold B Ed Honours degrees and the teacher from School V is a qualified e-teacher (a one year qualification in the didactics of e-learning).

**Table 6.15:** *Demographic information about the Grade 12 Mathematics teachers / educators*

Gr 12 Mathematics Teachers		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
Total exp.	26.2	23	19	20	29	26	40
Exp curr level	22.4	23		8	15	26	40
At this school	10.2	3	4	8	8	8	30
Qualifications	4	4	4	4	4	4	4
Specialisation	Mostly Maths	Maths	Maths	Maths/Phys	Maths	Acc/Maths	Maths
Advanced Training	7	6	8	6	6	5	8
Awards	33%	0	0	1	0	1	0

Table 6.16 shows that the total teaching experience of the grade twelve Physical Science teachers varies between 11 and 28 years with an average of 19 years. They have been teaching grade twelve Physical Science for between 3 and 30 years at the respective schools. All of them, bar one, hold BSc degrees as undergraduate qualifications (the teacher from School V has a four year diploma specialising in physical science). The teacher from School I holds an MSc and the one from School VI holds an Honours (both specialising in Physics). The teacher from School III holds a B Ed Honours degree as a further educational qualification.

**Table 6.16:** *Demographic information about the Grade 12 Physical Science teachers / educators*

Gr 12 Physical Science Teachers		Sample schools					
Overall average	AVG	I	II	III	IV	V	VI
Total exp.	19.0	20	11	21	28	16	18
Exp curr level	15.6	13		21	15	11	18
At this school	9.0	2	2	18	15	8	18
Qualifications	4	4	4	4	4	4	4
Specialisation	Varied	Phys	Phys Sc	Bio/Phys Sc	Phys Sc	Phys Sc	Phys Sc
Advanced Training	6	10	4	6	4	0	11
Awards	0	0	0	0	0	0	0

Looking at the demographic information of teachers / educators in Tables 6.13 to 6.16 and the performance of their respective students, I get the impression that there are possible links between teachers' qualifications, experience and duration of their stay at a school and their impact on quality education as manifested in student performance. It was however, not specifically investigated and will have to be done before any substantive deductions can be made.

### **6.2.8 Demographic information about the SGBs**

Table 6.17 provides information about members of the SGBs of the public schools in the sample only, because the independent schools are owned by listed companies and have a completely different governance structure. The SGB members of the four public schools have a sustained involvement in the schools in the communities they represent. The average SGB member is well qualified with an average of five years of training after leaving school. The parent component of the SGBs is from varying backgrounds. It is, however, noteworthy how prominent backgrounds in law, finances and business are.

When specifically looking at the chairpersons of the schools that form part of this research, we find that, on average, they have 7.5 years of experience as SGB members of which 3.8 years are as chairperson and they have on average 1.8 years of service at the school where they currently serve. They are clearly well experienced, both as members and as chairpersons of SGBs. Therefore they probably play a significant role in serving the best interests of the schools by ensuring that the provisioning of quality education is a priority at the schools where they are involved, provided that there is a healthy working relationship between the SGB chairperson and the school principal.

**Table 6.17:** *Demographic information about SGB members*

SGB Members													
Overall average	AVG	Chr	Dep Chr	Sec r	TR / FO	M1	M2	M3	M4	M5	M6	M7	M8
Total exp.	4.5	7.5	3.0	5.0	4.3	3.3	3.7	3.0	6.7	5.7	9.0	1.0	5.0
Exp curr level	3.7	3.8	3.0	5.0	1.8	1.8	3.7	3.0	6.7	5.7	4.0	1.0	5.0
At this school	3.2	1.8	1.3	1.8	1.5	1.8	3.7	3.0	6.7	5.7	4.0	1.0	5.0
Qualifications	5.1	5	5	5	4	4	5	5	6	6	6	6	6
Specialisation		Maths, Law	Busn, Fin	Varied	Law	Bus/Mark	CA	Adm	Relig	Fin	Bus	Ed Man	Mark

### 6.2.9 Demographic information about the Finance Committees (FCs)

The finance committees play a crucial role in the financial management of public schools. They are not only responsible for drafting the annual budget of the school, but they also play an important part in the effective management of the school's finances. The demographic profile of the Finance Committees (hereafter FCs) shows that the independent schools in the sample do not have finance committees. The financial management at the independent schools is handled by the principal assisted by a bursar that reports to the head office of the corporate that owns the school. The information in table 6.18 thus only refers to the four public schools.

It is clear that the members of the finance committees are well experienced SGB members and it is also evident that they have been members of the school's finance committee for some time at the current school. The fact that the average qualification rating of all the FC members is 5<sup>24</sup>, implies that they are all well qualified. The data obtained from sample schools (Annexure 4) shows that the parent members of the SGBs have a varied academic background, ranging from finance, law and engineering to business. Many of the representatives of the teaching profession have qualifications in education management and normally such a qualification also includes some background in financial management in education. Looking at the academic background and experience of FC members, one can expect that sound financial decision making will be the order of the day in the sample schools.

**Table 6.18:** *Demographic information about the Finance Committee members*

Finance Committee Members										
Overall average	AVG	Chr	Dep Chr	Secr	TR / FO	M1	M2	M3	M4	M5
Total exp.	7.0	6.5	6.8	5.3	5.7	7.3	10.5	7.0	11.5	15.0
Exp curr level	5.0	2.0	5.5	1.7	5.7	4.8	10.5	7.0	11.5	15.0
At this school	4.2	1.8	3.8	1.0	6.3	5.5	7.0	7.0	11.5	2.0
Qualifications	5	5	3	4	2.3	5.7	9.0	6.0	4.0	8.0
Specialisation		Law & Fin	Varied Fin	Fin & Admin	Fin & Bus.	Office Man / Fin	Engineering & Maths	CA Fin	Ed Man	Ed Man

### 6.2.10 Budget information

Table 6.19 depicts information pertaining to the annual budgets of the sample schools. Not much can be read into the total and average budgeted amounts per school over the period under review for the purposes of this research project because variables such as school size and curricula offered vary from school to school. What is more relevant is that the total budget increased by

<sup>24</sup> This is equivalent to five years of training at an institution of higher learning

8.4% on average over the three year period. This is not excessive and more or less in line with inflation. This in turn implies that the annual increase in the budget should be affordable to the parent community.

On average, the four public schools only received 5.4% of their total operational budget from the state. When School VI (Quintile 4) is taken out of the equation and only quintile 5 schools are considered, the state's contribution to the operational budget (excluding the salary component of state employed staff; both teaching and non-teaching) of these three public schools forms only 1.39% of the total annual budget. The annual per capita cost to offer education at the six schools amounts to R22,522. However, when the sample is split into independent and public schools, the picture changes rather dramatically.

The average per capita cost to offer education in an independent school amounts to R50,567 as opposed to R8,501 in the public schools that formed part of the research sample. It is important to remember though, that the figures quoted for public schools do not include the salaries of state employed educators.

**Table 6.19:** *The annual budgets for 2007 to 2009*

Annual Budget Information		Sample schools					
	AVG	I	II	III	IV	V	VI
Total budget (R million) 2007	9.48	5.77		19.67	9.20	10.52	2.87
Total budget (R million) 2008	10.87	8.85		20.90	10.40	11.40	3.3
Total budget (R million) 2009	15.93	9.63	36.80	22.26	11.00	12.69	3.84
Variance %	8.4%	8.1%		6.1%	5.5%	10.2%	12.2%

Public funds %	5.4%	-	-	1.2%	1.6%	1.4%	17.6%
P/C cost in R Overall	22,522	32,998	68,145	11,298	7,954	10,759	3,991
P/C cost in R Indep. Schls	50,567	32,998	68,145	-	-	-	-
P/C cost in R Publ. Schls <sup>25</sup>	8,501	-	-	11,298	7,954	10,759	3,991

Table 6.20 depicts what percentage of the annual budgets of the sample schools is allocated to academic or curriculum related matters. It shows that, on average, schools in the sample earmarked 7.6% of the budget for this purpose. This is, however, problematic because of the huge variation of interpretation of what is included in this category by the sample schools. When the sample is split into independent and public schools it becomes a little more useful. It shows that independent schools allocate 2.3% of the annual budget for this purpose. The average figure of 10.8% for public schools is, however, still problematic because of the huge variation within the group; 0.6% in School III on one hand and 27.2% in School IV on the other<sup>26</sup>. It must be mentioned though, that contrary to the other public schools, School IV included the salary costs for additional staff under this heading. The independent schools include the entire salary component as a cost item in their budgets and this then impacts on the percentage allocated to academic/curricular matters.

None of the schools in the sample included costs related to technology (computers, smart boards, data projectors, etc.) in this category because they consider this to be a separate budget item. Although budgeted for separately, both salary costs and costs related to technological infrastructure should in my opinion form part of the expenditure on academic and curricular matters. As discussed later in Chapter 7 respondents indicated that costs related to these

<sup>25</sup> Schools III, IV and V are categorised as National quintile 5 schools and School VI as a National quintile 4 school, thus the huge difference in the P/C cost per learner.

<sup>26</sup> Expressing amounts allocated for academic and curriculum matters in actual Rand value will be meaningless for purposes of comparison.

aspects do influence the quality of education. Table 6.21 shows that a significant percentage (36.5% on average) of the annual budget of public schools is used to provide for the appointment of additional teaching staff to reduce class size thus impacting on the quality of education.

**Table 6.20:** *Academic budget as a percentage of the annual budget.*

Annual Budget Information		Sample schools					
	AVG	I	II	III	IV	V	VI
2007	9.9	2.46	-	0.6	29	6.34	11
2008	9.1	2.3	-	0.6	28.0	6.4	8
2009	7.1	2.94	1.9	0.6	24.7	6.32	8
Overall AVG	7.6	2.6	1.9	0.6	27.2	6.4	9.0
Indep. Schls	2.3	2.6	1.9	-	-	-	-
Publ. Schls	10.8	-	-	0.6	27.2	6.4	9.0

**Table 6.21:** *SGB appointed staff as a percentage of the Annual budget.*

Annual Budget Information		Sample schools					
	AVG	I	II	III	IV	V	VI
2007 – 2009	36.5%	-	-	30%	47%	46%	28%

### **6.2.11 Additional funding per subject in preparation for the NSCE**

None of the schools in the sample allocated any additional funding for the preparation of learners for the National Senior Certificate Examinations. They manage the preparations for the examinations as part of their normal academic quality assurance. This dimension is discussed in detail in paragraph 6.3.

### **6.2.12 Activities funded in preparation for the NSCE**

Because of the fact that no additional funds are made available for this purpose, there were no specific activities funded in preparation for the

National Senior Certificate Examinations. The management of the performance of the sample schools is discussed in paragraph 6.3

## **6.3 Section B: Performance in the National Senior Certificate<sup>27</sup> Examination**

### ***6.3.1 Management of the academic programme***

All the respondents indicated that a senior member of staff is responsible for managing the academic programme at the school.

The two independent schools do not have HODs in their organisation structure. School IV has five grade heads who manage and coordinate the academic programme. Schools I and II (independent schools) follow a matrix approach and organise themselves into subject teams for the delivery of high quality education. The effect of the organisation structure on academic performance was not investigated specifically. It can be incorporated into similar investigations in future.

In the four public schools, the management of academic programmes is the responsibility of one or more of the Deputy Principals. Depending on the size of the school, this task is split into the junior and senior secondary phases; thus becoming the responsibility of two of the Deputy Principals. HODs are responsible for subject areas in all the public schools. Three of the public schools (III, IV and V) appoint additional HODs from school funds to allow for a bigger subject choice as part of the school's curriculum. All the public schools have a non-formal position of subject heads where a senior, highly experienced teacher is responsible for the coordination of a specific subject and is accountable to the HOD for that subject field/learning area.

All the schools also have a system of grade heads that act in a coordinating role for programme delivery. In two of the public schools (IV & V) they deploy two persons (one male and one female) in this capacity in the senior

---

<sup>27</sup> For an explanation of what this examination entails, see paragraph 2.2 in Chapter 2

phase. One of the public schools (School V) refers to this position as a ‘grade tutor’ rather than a grade head. In this specific school one of the HODs acts as ‘head tutor’ to coordinate the functioning of the grade tutors.

In all the schools, provision is made for the services of at least one counsellor/psychologist as a support function for programme delivery. In one of the public schools (V) this is formalised in what is known as the School Based Support Team consisting of one counsellor, one psychologist and one educational psychologist.

The track record of having a 100% pass rate for a number of consecutive years combined with the ethos and philosophy of these schools has become both a powerful marketing / branding factor as well as an important management tool in all of the sample schools. Parents enrol their children in these schools expecting their children to receive quality education and to pass the NSCE. Evidence of this is found in the sentiments expressed by the principal of School III *“The school advocates academic excellence and a balanced school life. Students support and encourage each other but students are not pressurised to be a top performer with six or more distinctions”*. Teachers consider it important to teach at such a school because it projects them as being highly successful teachers. Students likewise want to be enrolled at such a school and work harder in order to succeed. Inherent in the ethos and philosophy of all these schools are considerations like: success requires focus and being motivated to achieve specific objectives and working hard to realise these objectives. Evidence of the above is found in the words of the respondent from School I. *“New applicants are interviewed and not just everyone is accepted. The newcomer has to subscribe to the school’s philosophy, both parent and the student have to understand the philosophy.”*

### ***6.3.2 Management of academic performance with special reference to grade twelve***

The two independent schools (I & II) do not necessarily enrol all applicants. Both of them have a selection process in place. In School I, prospective students are interviewed by the principal personally. During the interview, the

student has to show that he / she has a vision, is highly motivated and is focussed on achieving their objectives (... *the students must have a vision of what he/she wants from life and finally they must show signs of commitment and tenacity in working towards their goals*). The four public schools do not have a selection process before enrolling students. One public school (VI) does not take in any new students in grade twelve.

The question of subject choice is dealt with in detail in all the schools since this is an important motivational factor impacting on student success. If students are interested in a field of study, they want to know more and want to perform well. A huge effort also goes into making sure that students comply with the admission requirements of their prospective career choices and fields of further study after leaving school. It provides a sense of direction and purpose to their studies in grades eleven and twelve. The importance of the grade eleven marks in determining admission to institutions of higher education is communicated early and extra classes are offered in spring to afford students the opportunity to improve on their grades in grade eleven. A common point of departure is that grade twelve results are the culmination of a five year process and that at least grades ten, eleven and twelve should be treated as a unit. One of the public schools has introduced a special programme to improve the mathematics and reading skills of grade eight and nine learners and have found this to be extremely beneficial to the performance of students in subsequent years of study. From the discussion above, it becomes evident that achieving top results and academic excellence starts with the selection process but subject choice and the motivation of the student are also important determining factors. It is also evident that providing specific subject choices and providing additional support mechanisms have financial implications for schools.

All the schools place considerable emphasis on keeping parents informed of their child's academic performance at all times. Different schools handle this matter in different ways. Techniques for communicating this information vary from parents' evenings, meetings of specific groups of parents (such as the grade twelve parents), newsletters, personal letters, telephone calls, e-mails,

SMSs, personal interviews and formal academic reports; as the respondent of School III puts it “...Parents are notified of this (i.e. parents evenings) and invited to attend in different ways; notice is given in the remarks column on the report, letters as well as SMSs are sent out ...” . One of the independent schools (School I) issues eight such academic reports in the course of a year. Academic performance is managed as a partnership between the parents and the school. This is inter alia endorsed in the following quote from a respondent of School VI: “*Very strong sense of involvement. Very strong support from parents. The slightest problem is dealt with immediately. Parents are focused on the fact that their child must perform. There is a prestige factor involved in children attending this school*”.

All the schools have a system where students write regular tests according to a formal time table that is published annually and made available to all parents. School V already does this in the preceding year, but in the other schools this information is made available at the beginning of the year.

The number and frequency of the tests vary from school to school. A formal test series where the cumulative marks form the student’s year mark are written once a month with smaller tests for revision purposes in between. Academic results of all tests and examinations are discussed at formal meetings in different groupings; with the subject head and or HOD, within grade context and with the Deputy Principal or Principal. The frequency of such meetings varies from school to school; in one instance they take place on a weekly basis. The results are submitted as formal documents that provide management information on the progress of individual students. Students’ results are discussed and individualised plans of action are agreed with the teacher and student concerned to manage the performance of students who are underperforming (i.e. either failing, not performing to capacity or not achieving previously agreed upon levels of achievement).

Two of the public schools (III and IV) have adopted the principle that the same teacher teaches a given subject in both grades eleven and twelve. This enables the teachers to deal with the curriculum over the two years. One public

school (III) mentioned that they attempt to have two teachers team teach a subject in grade twelve wherever possible. This only came to the fore in one school; so no meaningful deductions can be made from this and will have to be investigated in future studies.

A very important factor in managing academic performance is the matter of teacher availability. One of the independent schools has a policy that teachers are available in person or by cell phone until 21:00 for consultation and assistance to students. All the public schools offer extra classes; some in the mornings before school, some in the afternoon and some during school holidays. This varies from school to school. One public school has extended the school day formally to last until 15:00 for grade twelve learners. In most cases however, it is an individual arrangement made by the teacher concerned. All the public schools offer winter schools during the July school holidays as part of the final preparation for the NSCE. With the exception of one public school these classes are offered to the parents at a cost.

School II, an independent school, has a formal system of international benchmarking for their grade twelve learners. Grade 12 students have the opportunity to obtain an internationally recognised school leaving certificate. The Victorian Curriculum Assessment Authority, in Australia (hereafter referred to as VCAA <http://www.vcaa.vic.edu.au/>) moderates the setting and the marking of examinations set by the school's staff on the South African core syllabus. These examinations are written in September of the grade twelve year in place of the customary preliminary examinations. On the basis of this moderation and the careful scrutiny of standards, the VCAA issues a *VCAA Certificate of Equivalence* which states that the grades achieved in each subject are of a standard equivalent to those of the VCAA, Victoria. This certificate is recognised by universities throughout the world. The principal has copies of specific responses from selected universities in Europe, Australia, the United Kingdom and the United States, indicating acceptance of the certification of the VCAA. Currently, the following Higher Grade subjects are offered: English, French, Afrikaans (moderated by the University of Pretoria), Mathematics, Physics, Chemistry, Biology, History, Geography,

Accounting, Business Economics, Computer Studies, Art and Additional Mathematics.

The examinations moderated by the VCAA must be written in conjunction with the General Achievement Test (hereafter referred to as GAT; <http://www.vcaa.vic.edu.au/-vce/exams/gat/gat.html>). Examinations are written in June by Grade 12 students. The tests assess general knowledge and skills in a broad range of fields including Written Communication, Mathematics, Science and Human and Social Science. The test is used to benchmark the equivalence examinations to ensure that standards are kept in place. Students are ranked in terms of performance against students from Australia, New Zealand, The Pan Pacific Islands and Singapore.

A third method used for international benchmarking is the Schools International Assessment Test (hereafter referred to as SIAT; <http://www.siat.co.za/>). Grade 8 students write compulsory examinations in English and Mathematics which are paid for by the corporate owners of the school. Competitions are held in English, Mathematics, Science and Computer Studies. They are constructed by the Educational Testing Centre of the University of New South Wales. Medals are awarded to the top achievers in each paper. Analysis of the school results are used to emphasize strengths and weaknesses in the assessed subjects.

### ***6.3.3 Correlation between funding levels and academic performance of the school as a whole***

The general response to this aspect was that money had very little to do with the performance levels of the schools in the sample. The principals were of the opinion that the general philosophy and approach to academic performance, the way they treated staff and the way they managed performance were the determining factors that made the difference. The principal of School I put it this way “*It costs more to attend a private school, but the results are*

*attributable to the approach and methodology and not to the higher fees. If this was a government school we would have followed the same approach.”*

The principal of School II said, *“Yes and no. It is not the only driver. ... it is about the dedication of the teacher; that is where the money comes in; to find a dedicated teacher you need to pay a little more and you have to go and look for them.”*

The public schools all said that, except for the funding of **additional staff** appointed by the SGB, money has very little to do with the academic performance of the school. The respondents from the different schools put it this way: School I: *“It costs more to attend a private school, but the results are attributable to the approach and methodology and not to the higher fees”*. School II: *“Yes and no. It is not the only driver. ... it is about the dedication of the teacher; that is where the money comes in; to find a dedicated teacher you need to pay a little more”*. School III: *“Not directly. The academic budget plays a supportive role across all grades and is not geared at the NSCE specifically.”* School IV: *“... money does play a role in terms of academic performance of the school in terms of staffing”*. School VI: *“There is no correlation between academic performance in individual subjects and funding. ... Our success can be attributed to the individual teacher ...”* Additional staff allows them to reduce class size (Table 6.22 illustrates class size in the sample schools; the impact of which on academic performance was discussed in paragraph 2.3.7), to deploy additional administrative staff and to utilize the services of counsellors and (educational) psychologists. School V has formalized the latter into what they call the *School-Based Support Team* that plays a major supportive role in the management of academic performance of the school.

**Table 6.22:** *Average class size*

<b>School</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Average class size</b>	24	25	35	35	35	35

School III was the only public school where a specific amount was budgeted for the language departments and that is managed by the HOD concerned (see 5.3 on p.39 - 40 in ANNEXURE 4).

The availability and use of **technology** seem to suggest another area where funding plays a role in the performance of schools as a whole. However, most of the respondents said that it was more of a ‘nice to have’ than a prerequisite for good academic results. *“We have access to smart board technology and the internet; it is nice to have, it makes life easier, it gives the teacher a sense of being in touch with technology and the world of the student, but I am convinced that if you take it away, we will still achieve a 100% pass rate” (School I).* *“Technology plays a very small role in the academic performance of grade twelve learners. Except for IT and CAT, teachers do not have computers in their classrooms” (School III).* *“Technology plays a very small role in the academic performance of grade twelve learners. Except for IT and CAT, teachers do not have computers in their classrooms” (School V).* *“ ... except for the two members of staff that teach CAT no other teachers have access to computers and or smart boards. They use standard OHPs to teach” (School VI).*

**Table 6.23:** Availability of technology

School	I	II	III	IV	V	VI
Information Technology (Computer) Laboratories (Labs)	1	2	5	2	2	3
Comp./Lab	20	28	35	35	30	25
Internet in Lab	Yes	Yes	Yes	Yes	Yes	Yes
Comp. in library	0	?	35	10	16	0
Internet in library	Yes	Yes	Yes	Yes	Yes	Yes
PC/Laptops per class	1	1	No	No	1	No
Data projectors	1/class	1/class	1/dept	10/school	1/class	No
Internet in class	Yes	Yes	No	No	Yes	No
Smart Board technology	Yes	Yes	No	No	Yes	No
WiFi access	No	No	No	No	Yes	No
Cell phone technology	No	No	No	No	Yes	No

It is only in the two independent schools (I and II) and School V where the latest technology is really integrated into the teaching didactics in the classroom. That is where the majority of the teachers use computers / laptops, data projectors and smart board technology when they teach their classes. Similarly, they are the only schools included in the research sample that have internet access in their classrooms. School V is the only school that is using WiFi and cell phone technology as part of their didactic support when teaching.

All the schools in the sample have a separate budget vote for staff development. The amounts vary from school to school (see Table 6.24). In all instances, monies made available for this purpose include the attendance of short courses linked to the individual's field of specialisation. School II was not able to provide a percentage as this function and the funding thereof for this specific independent school, is dealt with at a corporate level and the budgets are not split to reveal the amounts per school within the group. In some instances, e.g. School I (ICDL training) and School V (e-teacher training), specific skills are targeted and the entire staff is sent for training. School IV subsidises further tertiary training on an individual merit basis. School V also has a system where staff members are subsidised to purchase laptop computers for use in the classroom for administrative as well as didactical purposes. However, the funding for the laptops does not come from the staff development budget but, from the portfolio covering computer technology. The budgets of the 5 schools are remarkably similar in size.

**Table 6.24:** *Budget for staff development*

Staff Development as % of Annual budget		Sample schools					
		AVG	I	II	III	IV	V
2007 – 2009	0.7%	0.624%	*	0.57%	1.0%	1.1%	0.4%

\* *This is budgeted for at corporate level*

#### **6.3.4 Correlation of funding levels and academic performance of selected subjects in the National Senior Certificate Examination.**

The general response by the respondents to this item was that funding levels have no or very little bearing on the performance levels of specific subjects in the NSCE whatsoever!

All the respondents were adamant that the one single factor that determined their success in the NSCE was their teachers. In order to illustrate this I am including specific quotes from individual respondents.

School I said: *“Results in individual subjects are (also) because of the philosophy and approach of the school; much more so than because the child pays a higher fee, or that they have access to more technology or because the teachers get a higher salary. ... they are good because they are handpicked, but they are picked more for their passion rather than being such a subject specialist. ... They must be happy in their working environment. They must be focused on those matters that make a difference in the student’s performance and they must have the time to develop themselves”.*

School II put it this way: *“So it is about the dedication of the teacher; that is where the money comes in; to find a dedicated teacher you need to pay a little more and you have to go and look for them. I head-hunt teachers to find the best teacher available at the time. ... you must have the right person; he/she must be motivated, must be dedicated, and must be here for the child. My aim is to put the best person in the class for the student. ... There is a whole ethos around being the best teacher. They have to be innovative, thoroughly prepared (not the chalk and talk kind of business or reading from a textbook) ... You need subject experts, you need dedication and then you need fair infrastructure; it is not the most important thing, but it makes it comfortable and easier to achieve your objectives. ... They are doing things differently for the benefit of the students. It is very much part of the school’s ethos.”*

In School III's opinion: *“The secret of our success lies with the teachers. Teachers walk the extra mile without any additional remuneration. The school offers free extra classes in all subjects on Wednesday afternoons. In addition to the extra classes, Mathematics and Science offer big-group classes on Mondays. Classes are also offered in the morning before school (Afrikaans on Mondays and Wednesdays; Business Economics on Fridays). ... The academic success of the school is primarily linked to the vision, drive and dedication of the teachers on the one hand and the fact that they know that they can count on the support from the school management. The SMT and HODs specifically support the grade twelve staff on an individual basis. The motto for grade twelve teachers is twofold (i) a 0% failure rate, and (ii) a subject average 5% above that of the district in ‘my’ subject.”*

School IV phrased it in the following manner: *“... This enables the school to employ specialist teachers; it further enables the school to limit class size to a maximum of 35; it provides for flexibility both in terms of subject choices and when making the time table. ... Each teacher lives the moral obligation expressed by President Zuma; to be well-prepared, in class on time and teaching. This happens every period from January to December and is considered as a given. It requires continuous consistent hard work and involvement of the teacher. ... They then work as a team to optimise their collective skills and experience. The senior member of the team acts as leader for that subject for the specific grade. These teams consult at least on a weekly basis, if not from day to day, to monitor progress and performance. No additional remuneration is paid to individuals who act as subject leaders in the respective grades.”*

School V is of the opinion that: *“In general however, the school has a staff that is absolutely dedicated, purpose-driven and enthusiastic. No amount of technology can replace that. I believe that even without access to the technology they currently have the school would have been a top performer because of dedication and passion of the staff.”*

School VI responded by saying: “*Our success can be attributed to the individual teachers; their subject knowledge, skills, attitude and experience. ... In general, our success can be attributed to the staff; their level of training, their commitment as well as a lot of time and energy from the principal.*”

The sample schools are thus almost unanimous in their response. Question 9 of Section B in the research instrument provided for the opportunity to ask probing questions related to aspect that were not clear or needed additional elucidation. These responses are discussed in paragraph 6.3.5.

### ***6.3.5 Reasons for the success in the National Senior Certificate Examination – supplementary comments derived from probing questions<sup>28</sup>***

#### ***Motivation of staff***

The two independent schools both placed great emphasis on treating teachers as professional people. The Pygmalion effect of ‘*You get what you expect*’ appears to be a strong driver in how staff is managed. It was further emphasised that minimising the administrative load of educators appeared to be a strong motivational consideration. School I removed this responsibility entirely by appointing administrative staff for this purpose. Another way of alleviating administrative responsibilities was the introduction of WiFi connectivity from their classrooms to the school’s administration system by School V. In School VI, the principal has taken sole responsibility for the Grade twelve learners’ discipline; this includes poor behaviour, not doing their homework and absenteeism.

All the sample schools go to great lengths to afford staff opportunities to attend training. This includes both formal studies at tertiary institutions and non-formal training to improve their professional capacity. Studies are either fully or at least partially subsidised, depending on the school and the type of training. Staff should lead by example; as the respondent from School IV put it, “*Another very important contributing factor to academic excellence is the*

---

<sup>28</sup> Verbatim accounts are reported in ANNEXURE 5).

*track record and example of the corps of leaders and the emphasis they place on academic excellence. This applies to the entire SMT*". All schools have a specific budget portfolio for staff development.

Most of the schools arrange for motivational speakers to address staff. This takes the form of special slots during staff meetings, a monthly Teachers' Forum (School V) or an annual seminar on motivation (School III).

- ***Mentoring***

There is a significant 50:50 split in the responses in this regard. The two independent schools and one of the public schools (School III) have a formal one-on-one mentoring system that applies to all newcomers to the school, irrespective of rank or position. Two of the other public schools (IV & V) do not have a formal mentor system, but in both instances this role is handled very ably by the HOD concerned within the normal functioning of the specific department. This includes formal interviews with new arrivals as well as training during departmental meetings. The remaining public school (VI) follows a team approach in dealing with newly appointed members of staff; it becomes a collective responsibility and orientation is not limited to one individual.

The services of counsellors and or educational psychologists are available to staff in one independent school (I) and in two of the public schools (III & V). Staff can either consult these professionals in their personal capacity or refer learners with problems to them.

Networking with colleagues from other schools forms an important part of motivation within the different subject areas in all the public schools. This was not mentioned in the private schools, but that does not exclude the possibility of networking there as well.

- ***Use of external subject specialists in preparing students for the NSCE***

The use of external subject specialists in preparing students for the NSCE only occurred in two of the public schools in the sample.

In the first instance (School III), external subject specialists offer small group classes (a maximum of 20 students in a class) at a fee. That is it operates like a private school within a public school. This service is offered as a parallel to the school structure by independent subject specialists renting the facilities of the school. Parents pay the subject specialists directly for this service from their own pockets. Admission to these classes is not automatic, students undergo a screening process by the subject specialists. These classes are only offered in Mathematics and Physical science.

In the second instance (School IV), external subject specialists are invited to offer classes to potential distinction candidates during the annual winter school for grade twelve learners. These classes are also paid for by parents.

It appears to be common practice for teachers to network with colleagues at other schools when drawing up preliminary examination papers and on grooming grade twelve learners for the NSCE.

- ***Peer group pressure***

All the schools in the sample have consistently finished among the top performing schools in Gauteng in terms of their NSCE examination results; that is they have maintained a 100% pass rate for three consecutive years. This is an accomplishment of which they are all very proud. In almost all the cases, they have a motto putting this sense of pride into words. Examples are: “*it is cool to do well*”, “*excellence in all areas*”, “*you don’t fail*”, “*academic excellence*”.

This proud tradition is propagated in a number of ways. All the schools have an honours evening of some sort (early in the year), where recognition is given to the previous year group for their excellent results. A guest speaker normally

forms part of the programme for this event. The guest speaker often is a former student that has distinguished him / herself in his / her professional capacity. School V traditionally invites the head boy / girl or both of ten years ago to fulfil this function. This school also has a formal *Peer Support Group* of thirty learners who are elected to and trained for this position. Over and above advocating that it forms part of the school's ethos not to break the tradition of having a 100% pass in the NSCE, they motivate their fellow students, assist with study methods and assist underperforming students morally in addition to the formal support that they receive from the staff of the school.

All the schools have a system of giving recognition to the top performing students. The names of the "Top Ten / Fifteen" students are announced formally, most of them receive a badge that they wear on their uniform and their names are displayed in a prominent place in the school. Some schools announce these groups twice a year and others do so every term. The competition to be one of this select group of students is very strong. One principal (School II) indicated that a student needed a subject average of 90% plus to qualify. One independent school (School I) has a system where students receive an effort rating for their performance and this is held in very high esteem. The effort rating trophy is considered to be the most prestigious award in that school. This practice is likely to nurture both intrinsic and extrinsic motivation in learners and assist in prioritising their activities.

Grade twelve students in general, but the top performing teams specifically support and motivate one another. All respondents considered this to be a healthy situation in their schools where the phenomenon is rather referred to as peer group support, than peer group pressure;: *"There is a sense of competition among top achievers. They support one another, sit together, help each other etc. The school has a name and reputation of excellence and parents queue to get their children enrolled in this school"* (School VI).

- ***Parental and community involvement***

Respondents from the independent schools reported that parents are very involved with their children's performance. Because parents pay significant amounts of money, they expect results and are therefore quick to respond to underperformance by their children. They are very involved in their own child's performance and progress. The attitude in general, is very positive. *"Both parents and learners are highly motivated and highly driven. You will often find that a parent approaches me to find out how his child's performance can be improved"* (School II). Because independent schools charge large amounts for school fees, there are no fundraising projects etc. that require their involvement as is the case in public schools.

All the principals of public schools reported a similar phenomenon; parents are very involved in their own children's activities and performance, but the large scale involvement that typified PTAs ten to fifteen years ago, appears to be declining. All principals reported a positive relationship with parents and the communities that they serve<sup>29</sup>.

- ***General comments***

Respondents were afforded an opportunity to add any general comment they may have at the end of the interview on Section B of the research instrument. They were almost unanimous in their response - they all attribute their success primarily to their teaching staff. This sentiment was phrased neatly by the respondent from School III: *"The academic success of the school is primarily linked to the vision, drive and dedication of the teachers on the one hand and the fact that they know that they can count on the support from the school management"*.

---

<sup>29</sup> During a visit to the top-performing primary school in Shanghai, China last year, I was informed by the principal that they have a 100% attendance of parents at parents' meetings. Parent involvement is very high because if the child does not perform he / she loses his / her position in the school. The Shanghai district came out tops in the most recent PISA survey; the first time that they participated.

To summarise the analysis of data obtained from the semi-structured interviews with the respondents based on Section B of the research instrument, I have the following two comments.

Firstly, the quality of the education offered at the sample schools is the cumulative effect of a number of structural and managerial factors. The respondents all agree on the crucial role the teacher plays in this regard. The primary factor here seems to be the sound academic background of teachers and their dedication, commitment and many extra hours of involvement with students. It is evident from the data that all the schools have different, but well-organised structures to support the academic programmes, with clear lines of communication and scheduled programmes of tuition, assessment and reporting mechanisms to identify academic under-performance. All schools also have well established support systems and interventions to remedy under-performance; both from the side of the teaching and support staff as well as peer support. A very important part of managing the academic performance of the schools is the involvement of parents in the achievements of their children by the schools through a well-established communication infrastructure.

Secondly, from the data in the respondents' reaction during the semi-structured interviews as contained in Annexure 4, it is evident that money does play a significant role in the quality of the education provided at the sample schools that formed part of this research project. Contrary to what would generally have been expected, the responses consistently indicated that technology, although convenient and beneficial, was not a particularly important factor in determining academic excellence. Again, the responses unanimously pointed to the fact that funding was primarily used to appoint staff. The appointment of additional staff members contributed to the academic performance of the schools in the following manners:

- It allowed the schools to reduce class size.
- These teachers were handpicked for their knowledge, experience and commitment.

- They walked the extra mile for the students by putting in hours of extra classes.
- The appointment of additional administrative staff lightened this burden of or took it away completely from subject teachers

The incorporation of technology enriched the learner experience of students.

## 6.4 Section C: Indicators of Quality Education

Questions in this section relate to the *sixteen indicators of the Quality of School Education instrument developed by the European Commission* in 2000. They were used to probe the quality of education in the sample schools by asking the respondents (i) to rate their respective schools on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve = 1; Implemented successfully / satisfactorily / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3) and (ii) to substantiate their views by commenting in the space provided. The raw data is contained in ANNEXURE 4. The comments of the respondents are reported in a cryptic style to convey the essence of what was reported. Where the same response was received, the number of times it was repeated is indicated in brackets to get a sense of how widely this response occurs.

Regarding *Attainment* as an indicator of quality education as reported in Table 6.25, the average rating of 2.2 awarded by the six schools seems to point to the fact that they consider themselves to be performing at a satisfactory, slightly above the acceptable level based on their perception of what constitutes an acceptable norm. In relation to the three international indicators normally used in international studies to rate the quality of education; *Mathematics*, *Reading/language* and *Science* (physical science) are all rated 2 and above. It is noteworthy that two of the schools (one independent and one public school) mentioned that they are using computer software to upgrade the reading ability of specifically grade eight learners to address an identified need in this regard;

substandard reading ability impacts negatively on the academic performance of students. When the ratings for *ICT* and *Foreign languages* are considered, their ratings are also above 2. It is noteworthy that (i) not all the schools are offering a third / foreign language and (ii) where it is offered, it is rated very highly, but that in two instances, the tuition is offered by teachers from outside the school. It would appear that with the exception of school VI, all the schools consider the *Learning to earn* and *Citizenship* dimensions to be of a satisfactory nature.

**Table 6.25:** *Attainment as indicator of quality education.*

Average rating	2.2	2.3	2.7	2.4	2.2	2.2	1
ATTAINMENT	AVG	I	II	III	IV	V	VI
1. Mathematics	2.5	3	3	3	3	2	1
Started a Mathematics Career Targeting school; Very experienced staff (2x); Focus on Mathematics instead of Mathematical literacy (2x); We have a 100% pass rate and our average of 73% is way above the national standard Track record of SMT members sets the standard.							
	AVG	I	II	III	IV	V	VI
2. Reading/Language	2.0	2	3	2	2	2	1
Many foreign students struggle with English - started English-for-foreigners course; Reading not as expected; Reading programme for Grade 8 in IT centre during school hours based on software programme (2x); We are 25 to 30% above the national standard							
	AVG	I	II	III	IV	V	VI
3. Science	2.2	2	3	3	2	2	1
Many students struggle with Science, but parents force them to take the subject; Most popular elective (2x); We are 25 to 30% above the national standard Excellent results							
	AVG	I	II	III	IV	V	VI
4. ICT	2.0	3	2	2	2	2	1
Superb IT & CAT results IT is select group. We start with a group of 15 in Gr 10 and eventually about 9 complete Gr 12. It is very difficult and the focus is almost completely on programming. Unfortunately CAT has fallen by the way which is a pity. Number of students decreased. Do not have computers in every classroom							
	AVG	I	II	III	IV	V	VI
5. Foreign language	2.7	2	3	3	N/A	N/A	N/A
Outside teachers offer foreign languages privately on demand We offer Hebrew, French and German. We have Spanish and Portuguese, but they are offered by teachers from the relevant embassies.							

They are all doing very well. In fact in French students are writing the external examinations taught at a university level and the students perform very well. Very few students take a third language							
	<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
6. Learning to learn	2.0	2	3	2	2	2	1
Our Counselling Psychologist offer Study Skills Training Courses Linked to the Life Orientation programme. Can be improved							
	<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
7. Civics/Citizenship	1.8	2	2	2	2	3	0
Covered in all subjects. Constitution taught in Life Orientation. It is difficult because we are quite cosmopolitan; we have 14/15 different nationalities coming to school. We have a lot of the embassy children over here. No formal programme. It is incorporated throughout the curriculum. Existing efforts can be improved							

With regard to *Success & Transition* as an indicator of quality education as reported in Table 6.26, the average rating of 2.6 awarded by the six schools can be expected since all of these schools were included in the sample based on their academic performance. Concerning *Drop-out rate* (2.8 on average) it is apparent that this is not deemed to be a major problem, especially from grade ten onward. Completion of *Upper secondary education* (2.7 on average) and *Admission to University studies* (2.5) are both well above the acceptable norm of 2. All the schools in the sample have maintained a 100% pass rate in the NSCE for at least three consecutive years, thus scoring high on the completion of the upper secondary education category. From the comments of

the respondents it is also evident that, with the exception of School VI (where, as we have explained previously, pursuing tertiary studies is not such a high priority – only 20%), all the schools closely follow the further studies and career development of their alumni. It is informative that admission to universities in Schools 1 to V vary between 65% and 86% and there does not seem to be any logical explanation for it. I also find it noteworthy that in two instances (one independent and one public school) schools have researched the

**Table 6.26:** *Success & transition as indicators of quality education*

Average rating	2.6	2.5	3	3	2	2.8	2.3
Success & Transition	AVG	I	II	III	IV	V	VI
8. Drop-out rates							
Gr 8 -12	2.3	1	3	3	2	2	3
Gr 10 -12	2.8	3	3	3	2	3	3
Too many students drop-out in junior grades. Often (mainly) fee related. None Very few, if any. High in Gr 8.							
	AVG	I	II	III	IV	V	VI
9. Completing Upper secondary education	2.7	3	3	3	2	3	2
All who write the examinations, pass. 100%							
	AVG	I	II	III	IV	V	VI
10. Percentage obtaining admission to university	2.5	3	3	3	2	3	1
A large % goes to University (difficult to get exact numbers though). A large number go to other tertiary institutions. We provide Career Information Days. 65 to 70% go to varsity and complete their studies. We started following alumni's careers and the feedback is fantastic (one student received an Art award of R120 000 to study in Paris). High percentage passes with University entry. Good feedback from Universities. 86% 70% to 80% More than 20%							

academic performance of alumni doing undergraduate studies to keep track of their achievements after leaving school.

On the subject of *Monitoring Education* as an indicator of quality education as reported in Table 6.27, the respondents rated their schools as 2.3 on average. *Evaluating and steering school education* was graded as 2.7 on average, indicating that the structures and mechanisms established in the schools to (i) manage tuition and assessment and (ii) to provide support to underperforming individuals were considered to be well above average. This is endorsed by the track records of the respective schools in the NSCE. I find the average rating of 1.8 for parent participation, particularly remarkable. This is even more thought provoking when one considers the split between the independent and public schools on this dimension. School III in particular has a very comprehensive communication infrastructure and uses a public company to get feedback from the parent community. The other three public schools echo the sentiment that parents are very involved with the

performance of their individual children, but less so with the school as a whole.<sup>30</sup>

**Table 6.27: Monitoring as indicator of quality education**

Average rating	2.3	2.5	3	3	1.5	2	1.5
Monitoring education	AVG	I	II	III	IV	V	VI
11. Evaluating and steering school education	2.7	3	3	3	2	3	2
8 school reports per year. Constant feedback given to parents. Continuous monitoring. Address deviations immediately. Doing well, but there always is room for improvement							
12. Parent participation	AVG	I	II	III	IV	V	VI
	1.8	2	3	3	1	1	1
Parents sign a contract with the school. They “buy” a service from us. They participate where asked, but they are mainly asked to support the academic process by providing resources at home and an environment in which students can learn. No PTA. Parents are dealt with on an individual basis. They do have a voice and make a contribution through their participation in the Markinor survey. We have a very open door policy and a client driven customer based approach in dealing with parents. Above average compared to other communities Involvement decreased over last 6 years							

About *Resources and Structures* as an indicator of quality education as reported in Table 6.28, the average rating of 2.1 for this dimension is well within the range of credibility. The schools rated *Education & training of teachers* as 2.3 on average and have also indicated that they invest in *extensive staff development programmes*. Both the independent schools indicated that they are accredited by *Investors in People*<sup>31</sup>. The comment about junior teachers not always being on par, is irrelevant in terms of this research project since no junior teacher (in either public or independent schools) will be involved in preparing grade twelve learners for the NSCE. *Participation in primary education* was ignored because the sample schools are all secondary

<sup>30</sup> The role of parental involvement in academic performance needs to be investigated further. What appears to be particularly significant is (i) the communication strategy followed to keep parents informed and involved and (ii) the way in which parents are involved in the academic performance of their children.

<sup>31</sup> **Investors in People** is a business improvement tool administered by the [UK Commission for Employment and Skills](#) and supported by the [Department for Business, Innovation and Skills](#) (BIS).

schools. The average rating of 1.8 for the *Number of computers* criterion is interesting since all the schools do have computer laboratories where learners do have access to computers. It would however, appear that the schools deem this not to be ideal. Looking at the number of computers, I have included the numbers obtained from the interviews on Section B of the research instrument since not all the respondents provided numbers, but merely commented on the situation. The two independent schools have the lowest computers per student ratio when all the learners in the school are considered. Both these schools are also below the 2.4 computers per grade twelve learner for the sample. However, it is particularly interesting that School VI has the lowest ratio of grade twelve learners per computer of all the respondents. The average rating of 2.2 for *Education expenditure per student* seems to indicate that the respondents are of the opinion that this criterion is of a satisfactory nature. However, School VI indicated that there is room for improvement in this regard. The comments on this aspect allude to the fact that capital cost items are expensive ones. This in itself does not give us a picture of the situation. I thus included calculations of the actual cost to the school based on the information provided in Section B of the research instrument.

Although the combined average per capita cost for these schools may be informative, it becomes significant when the per capita cost of the two groupings is split. It now becomes evident that the average education expenditure for students for independent schools amount to R50,700 per annum while the corresponding amount for public schools is R8,500. It is further interesting to note that the cost of sending a child to School II is double that for School I. It is doubtful whether the quality of the education provided by the different schools in the sample corresponds to the education cost per student portrayed here. There are various other factors that influence these amounts, but this will have to be investigated in another research project.

The fact there are very few opinions shared by schools (evident from more than one similar response to the same criterion) is probably the result of the

**Table 6.28:** Resources & structures as indicators of quality education

Average rating	2.1	1.7	2.7	2	2	2	1.3
Resources & Structures	AVG	I	II	III	IV	V	VI
22. Education & training of teachers	2.3	3	3	2	2	2	2
Extensive staff development program. Investors in People accredited. Senior teachers are well trained. Subject knowledge of younger teachers not always on par							
14. Participation in	AVG	I	II	III	IV	V	VI
Primary Education	<b>NOT APPLICABLE</b>						
15 Number of computers	AVG	I	II	III	IV	V	VI
	1.8	2	2	2	2	2	1
Students/computer in school	11.8	7.8	9.6	11.5	15.8	14.1	11.6
Gr 12 students/computer	2.4	2.3	2	2.5	3.6	2.6	1.4
Mainly for CAT & IT 28 computers in the laboratory. All are linked to the internet. Are used for tuition and for research by learners. Two computer centres; one for IT and RTT the other for general use by the rest of the subject areas							
16. Education expenditure/student	AVG	I	II	III	IV	V	VI
Rating	2.2	3	3	2	2	2	1
Average amount in R (000)	22.6	33.3	68.1	11.3	8.0	10.8	4.0
Independent schools	50.7	33.3	68.1	-	-	-	-
Public schools	8.5	-	-	11.3	8.0	10.8	4.0
Capital expenditure budget is where big money is. Buses, computer laboratories, smart boards, lap tops etc.							

novelty of this instrument and may suggest that schools are not yet consciously engaging with these factors related to quality education.

## 6.5 Summary

In this chapter I have discussed the analysis of the data collected by means of the research instrument. The analysed data based on Section A of the research instrument deals with demographical and other information pertaining to the respective schools was discussed in paragraph 6.2. This included the total number of students per school and the number of students from the different schools that sat for the NSCE for the period 2007 to 2009. The performance of the respective schools in the NSCE was analysed in terms of the total number

of distinctions as well as the average number of distinctions per candidate in general as well as their performance in English, Mathematics and Physical science. The profiles of the school management teams, the grade twelve teachers, the school governing body and the finance committees were analysed and discussed. This section was concluded by discussing the budget information for the period under investigation. This included a discussion of the total amounts budgeted for during this period, the relationship between public and private funding as a source of income, the annual per capita cost to the schools and the cost centres required to sustain the quality of education offered at these schools.

The analysed data based on Section B of the research instrument deals with demographical information pertaining to the respective schools was discussed in paragraph 6.3. This data spoke to four aspects namely the management of the academic process, the management of academic performance, the correlation between academic performance and the availability of funds and other factors that impact on academic performance. The correlation between funding and performance was addressed by referring to costs related to the appointment of additional staff, costs related to technology, costs related to staff development. Other factors that impact on academic performance that came to the fore were the motivation of staff, mentoring, the involvement of external subject specialists, the impact of peer group pressure and the role that parents play in this regard.

The analysed data based on Section C of the research instrument deals with demographical information pertaining to the respective schools was discussed in paragraph 6.4. This data was discussed in the context of the four dimensions identified by the European Union in developing these criteria namely, attainment (representing academic performance in different fields of study, including mathematics, reading and language ability, English in this case, and physical science), success and transition (referring to the drop-out rate in schools, the completion of upper secondary education and admission to university studies), monitoring education (related to the internal evaluation and steering of education in schools and parent participation in the process)

and resources and structures (where the education and training of teachers, the availability of computers and the expenditure per student) are taken into account as factors serving as indicators of the quality of education offered at schools. However, further investigation is required before any substantive claims can be made regarding the use of these criteria in the South African context and whether similar analysis in poorly performing or non-performing schools, will yield similar results.

This chapter provides the information and platform for the conclusions and arguments that will be made in Chapter 7.

## CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Introduction

The rationale for researching the relationship between the funding and the quality of education in South African secondary schools stems from three perspectives. From a personal perspective, I have been involved in educational institutions at micro, meso and macro levels both as a teacher/lecturer and as a manager striving to provide quality education. From a systems' perspective, every effort is being made by the state to improve the quality of education and to achieve equity since the onset of the new democracy in South Africa after the 1994 elections. The system was restructured, funding levels were increased and funding formulae were changed a number of times (1998, 2006 and 2009). However, South African learners have been underperforming in regional and international assessments like TIMMS, PIRLS and SACMEQ<sup>32</sup>. From the perspective of international literature, we have the international programme on Education for All (EFA) driven by UNESCO as part of the worldwide quest to improve the quality of education<sup>33</sup> as well as the international debate on the relationship between funding and the quality of education<sup>34</sup>. I thus became more and more intrigued by questions related to the amounts of money being spent on education and the performance of learners in the Senior Certificate Examination in public secondary schools in South Africa.

The purpose of this research was to analyse the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa. The main question investigated was: *“What is the relationship between the funding of education and the quality of education in selected diverse top performing*

---

<sup>32</sup>See paragraph 2.3 of chapter 2 for the detailed discussion

<sup>33</sup>See paragraph 2.2 of chapter 2 for the detailed discussion

<sup>34</sup>See paragraph 1.7.4 of chapter 1 for the detailed discussion

*secondary schools in the Gauteng province of South Africa?”*. The main question led to the following sub-questions: (i) *Which factors have a direct impact on the performance levels of selected diverse top performing secondary schools in the National Senior Certificate examinations?* (ii) *To what extent are the funds available to selected diverse top performing schools spent on aspects that contribute to improving the quality of education in the research sample?* (iii) *To what extent does spending more funds on developing the skills of educators in the research sample improve the quality of education as reflected in the Senior Certificate Examinations?*

The theoretical background to the study was discussed in chapters two to four, the methodology was discussed in chapter five and the data analysis was discussed in chapter six. In this chapter I will briefly summarise the content of chapters one to six of my dissertation before proceeding to discuss the findings and recommendations based on my research in paragraphs ....

## **7.2 Reflection on and integration of literature review**

Equity in the South African education system has been advanced in two ways. One has been to bring about more equitable learner-educator ratios within provinces based on an equitable post-provisioning model. The other equity effort is focused on the *National Norms and Standards for School Funding* with its intention of redistributing recurrent non-personnel expenditure to the most needy schools. The one variable that has a direct relation to learner output, namely teacher quality, has not been significantly affected in current equity plans (Wildeman, 2000: 10). Louw, van den Berg and Yu (2006: 1) found that intergenerational social mobility within race groups improved over the period 1970 to 2001, with *the indices suggesting that South African children are currently better able to take advantage of educational opportunities than the bulk of their peers in comparable countries. However, significant racial barriers remain in the quest to equalise educational opportunities across the board for South African children.*

## 7.2.1 Quality education

This aspect was discussed in detail in chapter two of this research report. To reiterate: it is important to distinguish coaching, training, education and quality education. It is common practice in South African to refer to teaching and learning when education is meant (when I googled ‘*culture of teaching and learning in South Africa*’, I got 4,420 000 hits; and when I changed the phrase to read ‘*restoring the culture of teaching and learning in South African public schools*’ I got 2080 000 hits, with prominent South African academics being quoted such as MX Lethoko, AG Kruger, GM Steyn, HJ Joubert, MC Phurutse and J Heystek among them). Teaching and learning are activities inherent to the education process, but cannot be limited to that. For the purposes of this dissertation education was defined as the integration of new knowledge, the associated skills and related value systems enabling the learner to apply it in real life situations (*my formulation*). The quality of the education is assessed on the value that the school leaver adds to the community.

SASA refers to the quality of education on four occasions. Firstly, the preamble to SASA expresses the intention that a new national system for schools will *provide an education of progressively high quality for all learners and in so doing lay a strong foundation for the development of all our people’s talents and capabilities*. Secondly, SASA stipulates in Section 8(2) that the code of conduct for learners must be *aimed at establishing a disciplined and purposeful school environment, dedicated to the improvement and maintenance of the quality of the learning process*. Thirdly, the first function of the governing body of a public school, as contained in Section 20(1)(a) of SASA, is to *promote the best interests of the school and strive to ensure its development through the provision of quality education for all learners at the school*. Finally, when referring to the obligation of the governing body of a public school to supplement the resources supplied by the State in Section 36(1) of SASA, the purpose thereof is stated as “*to improve the quality of education provided by the school to all learners at the school*”.

The role, relevance and impact of quality education in terms of this dissertation are dealt with in the paragraphs below.

### **7.2.1.1 Indicators of quality education**

In chapter two, reference was made to a number of indicators of the quality of education; the PIRLS, TIMSS, PISA, SACMEQ and ANA tests all primarily focus on the student's ability in language, mathematics and science to assess the quality of the education provided by the education system of the country concerned. The regional and international standardised tests are all of a quantitative nature

The sixteen indicators developed by the European Union are more comprehensive than just assessing language, mathematics and science. The sixteen dimensions or criteria have been grouped into four categories namely, (i) Attainment, (ii) Success and transition, (iii) Monitoring education and (iv) Resources and structures. In assessing these dimensions the approach is of a qualitative nature. This instrument has not been used to assess the quality of education in South Africa before.

In South Africa, the results of the National Senior Certificate Examination of a secondary school are still used as the most common indicator of the level of performance and quality of the education provided at any given school<sup>35</sup>. This is the yardstick applied by the state and the respective departments of basic education as well as by parents and communities. The primary considerations for selecting the sample schools were that they were among the top performing schools in the country and Gauteng and that they had to be diverse. All of them had to have a 100% pass rate in the NSCE for the past three years to be included in the sample.

---

<sup>35</sup>Quoting the Minister of Basic Education - see paragraph 2.3.6.2 in chapter 2

The fact that the sample schools maintained a 100% pass rate for the last number of years implies that they have been providing education of an outstanding quality.

### 7.2.1.2 Performance levels

**Table 7.1:** *Academic performance levels*

<b>Aspect</b>	<b>Avg</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Univ. entrance (%)	75.2	83.9	98.0	83.8	75.3	74.7	35.3
Distinctions/learner	1.5	1.2	3.3	1.8	1.3	1.1	0.3
Overall average (%)	60.9	55	67	68	64	60	47
English (%)	67.2	64	75	72	74	67	52
Mathematics (%)	63.9	60	71	68	68	58	58
Physical science (%)	58.5	59	66	64	62	58	42

Table 7.1 represents a composite picture of six indicators related to the performance of the six sample schools for the window period 2007 to 2009. On average only 20% of South African students qualify to enrol for tertiary studies at a university (UK 20% - based on 2001 census information <http://www.thestudentroom.co.uk/showthread.-php?t=894755> – accessed on 15/11/2011 ; USA 27% - [http://en.wikipedia.org/wiki/Education\\_in\\_the\\_United\\_States](http://en.wikipedia.org/wiki/Education_in_the_United_States) - accessed on 15/11/2011; Canada 24% - <http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=56> – accessed on 15/11/2011). . Except for School VI, all the schools have an outstanding number of students that gain entry to tertiary training (75.2% on average while school VI had a 35.3 % university entry, which is almost twice the national average.

The average number of distinctions per learner is 1.5 for the schools under investigation. That means that every grade twelve learner in the sample obtained more than 80% in at least one out of six subjects that they normally offer for the NSCE. The overall average for the window period, was calculated for the eight subjects included in Section A of the questionnaire namely, Afrikaans, English, Third language, Mathematics, Biology (Life sciences),

Physical sciences, Accounting and Economics. With one exception all the schools achieved an average of more than 50% in most subjects. In South Africa, the average mark obtained in any given subject in the NSCE is, similar to the pass rate of a school in the NSCE, an indicator of academic standard and quality of education. To pass the NSCE a learner must pass one (of the eleven) official language at home language level at 40% or more; 2 other subjects at 40% and 3 subjects at 30%. This translates to a pass mark of 35% on average. An average pass mark of more than 50% thus exceeds the norm by 15% (<http://www.education.gov.za/LinkClick.aspx?fileticket=6s3VBeAo4V4%3D&tabid=390&mid=1127>;  
[http://harvestchristianschool.co.za/index.php?option=com\\_content&view=article&id=67&Itemid=159](http://harvestchristianschool.co.za/index.php?option=com_content&view=article&id=67&Itemid=159);  
[http://en.wikipedia.org/wiki/National\\_Senior\\_Certificate](http://en.wikipedia.org/wiki/National_Senior_Certificate) - accessed on 29/11/2011).

This will obviously vary from subject to subject as was evident from Table 6.6 in chapter 6.

### **7.2.1.3 Class size**

As discussed in chapter two<sup>36</sup> and from the evidence obtained during the interviews and depicted in Table 6.22 in chapter six, it is evident that class size is a determining factor in the academic performance of schools. We saw that research in the USA indicated that the ideal class size is between 16 and 20. It is a factor that has to be taken into consideration when managing academic performance levels in all schools. It is also evident from the feedback from all the principals that they are fully aware of this fact and that they are taking active steps to manage this factor in their respective schools. None of the sample schools have classes as small as the reported ideal of between 16 and 20, but it seems to be working for them. All the schools provide for this factor when planning their staff provisioning for any given year. For the independent schools, this is a package deal and is factored in from the outset in both their financial and human resource planning. However, for the public schools it is a

---

<sup>36</sup>See paragraph 2.3.7 in chapter 2.

complex aspect that is addressed by appointing staff in addition to their formal staffing establishments paid for by the state. These staff members are employed by the school and are remunerated from school funds. Financial means is thus a limiting factor in managing class size in all schools; both public and independent.

#### **7.2.1.4 Technology**

A number of types of uses of what is loosely termed *technology* are in found the schools that formed part of this research project. It varied from the use of overhead projectors in classrooms to state of the art interactive smart boards and the incorporation of cell phone technology in revising curricula. However, none of the respondents were of the opinion that technology was a prerequisite for academic success. They all agreed that it made life easier for the teacher / educator, but did not consider access to technology as essential to provide quality education. Students respond well to the use of technology and consider teachers that use it as being *cool*. The principal of School V put it this way “*Students relate to this very well and their focus is on their work and the technology they are familiar with*”.

#### **7.2.1.5 Teacher / educator**

All the respondents were unanimous in their opinion that the single most important factor determining academic performance in providing quality education is the teacher / educator. This sentiment was phrased neatly by the respondent from School III: “*The academic success of the school is primarily linked to the vision, drive and dedication of the teachers on the one hand and the fact that they know that they can count on the support from the school management*”. This is consistent with the findings of Gustafsson (2003: 103) who found that *among resource factors, teacher competence is the single most powerful factor in influencing student achievement, and the effect sizes seem to be substantially larger than those associated with class size*.

### **7.2.1.6 Role of money**

All the respondents indicated that money plays a definite role in the appointment of additional staff in order to allow for smaller classes and in the acquisition of technology. With the exception of one public school, none of the schools have budgets specifically for academic departments managed by an HOD. None of the schools budget specifically for final preparations or special classes for grade twelve learners writing the NSCE. Teachers do offer extra classes, but this is done without any extra remuneration. Attendance of winter and summer schools organised as part of the final preparations for the NSCE is not compulsory and are paid for by parents from their own pockets. Money does therefore play a role in the academic results of the sample schools. The expenditure on additional staff is for the benefit of the entire school and not for grade twelve only and therefore indirectly improves the NSCE results. The money parents pay for extra classes over and above what the school offers for free, and for attending winter / summer schools directly impacts the NSCE results.

### **7.2.1.7 Managing academic performance<sup>37</sup>**

All the schools delegate the responsibility of managing the academic performance of the respective grades to senior members of staff. With regard to the NSCE this responsibility normally rests on one of the Deputy Principals or the Principal him- / herself. In all schools, in line with Section 16A of SASA, all principals take the final responsibility and are accountable for the results of grade twelve learners in the NSCE (see paragraph 6.5.3 of chapter six). Managing academic performance requires regular assessment with regular feedback to the student and his/her parents. It involves detailed analysis of results; close monitoring of the progress of individual students and complex strategies to provide support and remedial work with underperforming students. This includes extra classes on study methods and

---

<sup>37</sup>Academic performance refers to a holistic approach to managing the results achieved by individual students/learners in the respective subjects that they are enrolled for in an entire school. It can be considered as part of the management of teaching and learning in schools, but represent a specialised focus.

counselling by professional staff such as (educational) psychologists. It is a very hands on and involved process.

## 7.2.2 Legislative framework

This aspect was discussed in detail in chapter three of the dissertation. What follows is a summary of legislation as it pertains to key role players in the provisioning of quality education in the South African education system. The obligations of these role players in the provision of education to the citizens of the country, as contained in legislation, are spelt out in the paragraphs that follow.

The government of the democratic *State* of the Republic of South Africa is obliged by law, in terms of Section 29(1) of the South African Constitution, to honour the right to a basic education for every South African citizen. It is further obliged to establish public schools in terms of Section 12 of SASA and to fund public education from public revenue in terms of Sections 34 and 35 of the South African Schools Act (SASA).

In terms of Section 1 of SASA, a *parent* is defined as –

- (a) *the parent or guardian of a learner;*
- (b) *the person legally entitled to custody of a learner; or*
- (c) *the person who undertakes to fulfil the obligations of a person referred to in paragraphs (a) and (b) towards the learner's education at school.*

In terms of Section 3(1) of SASA and any applicable provincial law, *every parent must cause every learner for whom he or she is responsible to attend a school from the first school day of the year in which such learner reaches the age of seven years until the last school day of the year in which such learner reaches the age of fifteen years or the ninth grade, whichever occurs first.*

All South African citizens are obliged to pay income tax to the state in terms of Section 5(1) of the South African Income Tax Act, Act 58 of 1962. The

parent of a learner attending a public school in quintile 4 or 5 is obliged to pay school fees in terms of Section 40 and public school may by process of law *enforce the payment of school fees by parents who are liable to pay* in terms of Section 41 of SASA. However parents may also be exempted (proportionally or fully) from the payment of school fees if they meet the criteria set out in Section 40 of SASA<sup>38</sup>.

SASA defines a **school** as *a public school or an independent school which enrolls learners in one or more grades from grade R (Reception) to grade twelve*. In terms of SASA a **“learner”** means *any person receiving education or obliged to receive education in terms of this Act*. A **public school** means *a school contemplated in Chapter 3 of SASA*. Every public school is *a juristic person, with legal capacity to perform its functions* in terms of Section 15 of SASA. An **independent school** means *a school registered or deemed to be registered in terms of Section 46 of SASA*. Subject to SASA and any applicable provincial law, *any person may, at his or her own cost, establish and maintain an independent school* (s.45 of SASA). It is assumed that schools have the obligation to provide education in order to qualify for the title, irrespective of whether it is a public or independent school.

A **school governing body** means a governing body contemplated in *Section 16(1) of SASA where the governance of every public school is vested in its governing body which may perform only such functions and obligations and exercise only such rights as prescribed by the Act and a governing body stands in a position of trust towards the school*(s.16 (2) of SASA). The functions of the school governing body of all public schools are spelt out among others in Section 20 of SASA. Governing bodies of public schools may also apply to be allocated one or more of the additional functions contained in Section 21 of SASA. At a minimum, the governing body of a public school is, in terms of Section 20(1)(a) of SASA, obliged to and must *promote the best interests of the school and strive to ensure its development through the provision of quality education for all learners at the school*.

---

<sup>38</sup>See the detailed discussion on exemption and no fee schools in paragraph 1.7.2.

A **principal** is defined as *an educator appointed or acting as the head of a school* in SASA. The responsibilities of a principal are set out in Sections 16(3) and 16A of SASA and in paragraph 4.2 of the *Personnel Administrative Measures* (hereafter referred to as the PAM). Section 16A(2)(a)(i) of SASA determines that *in undertaking the professional management of a public school as contemplated in Section 16(3), the principal must carry out duties which include, but are not limited to the implementation of all the educational programmes and curriculum activities*. The principal further has specific obligations regarding the academic performance of his/her school. These are contained in Section 16A (1)(b)(i) that stipulates the principal must prepare and submit an *annual report in respect of the academic performance* of that school to the Head of Department; and in Section 16A(1)(c)(i to v) that requires the principal to develop an *academic performance improvement plan* for submission to the provincial Head of Department for education, if the school is underperforming.

A **learner** is defined in chapter one of SASA as *any person receiving education or obliged to receive education in terms of this Act*. The Member of the Executive Council responsible for education in a province is obliged to ensure that *there are enough school places so that every child who lives in his or her province can attend school* as required by Sections 3(1) and 3(2) of SASA. In doing so, he / she is thus meeting the obligation to ensure access to education. If a child does not attend school, the Head of Department responsible for education in a given province may –

- (a) *investigate the circumstances of the learner's absence from school;*
- (b) *take appropriate measures to remedy the situation; and*
- (c) *failing such a remedy, issue a written notice to the parent of the learner requiring compliance with subsection (1) in terms of Section 3(5) of SASA.*

Any parent who, *without just cause and after a written notice from the Head of Department, fails to comply with subsection (1), is guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding six months* in terms of Section 3(6)(a) of SASA. In terms of Section 3(6)(b) of

SASA any other person who, *without just cause, prevents a learner who is subject to compulsory attendance from attending a school, is guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding six months*. In terms of Section 3(1) of SASA, a parent is obliged to ensure that “*every learner for whom he or she is responsible*” attend a school from the first school day of the year in which such learner “*reaches the age of seven years until the last school day of the year in which such learner reaches the age of fifteen years or the ninth grade, whichever occurs first*”. Despite the obligations imposed on the state and the parent, learners are obliged to attend school and to study in order to claim their constitutional right to education.

### **7.2.3 Accountability**

This aspect was discussed in detail in paragraphs 4.2.3 and 4.5 of chapter four of this dissertation. In management terms, it is common cause that accountability is inseparably linked to an individual in a position of authority in an organisation. After delegating specific responsibilities to a subordinate, the supervisor has the right to demand feedback from the subordinate and the subordinate is obliged to respond to such a request<sup>39</sup>. This also applies to the different role players in the provisioning of education in South Africa.

The government of the day was mandated by the electorate to provide education and therefore has to account to them on both the quality of the education provided and the public money spent on education.

The departments of education as organs of state have to account to both the government and the electorate on the provisioning of facilities and access to education in terms of Section 12 and on the funding of education in terms of Sections 34 and 35 of SASA. They also have to account to the government and the electorate on the quality of the education provided in terms of Section 29(1) of the Constitution.

---

<sup>39</sup>See paragraph 4.2.3 in chapter four

Principals have to account to both the provincial departments of education as their employer and to the parent community on the academic performance of the school in terms of Sections 16(3) and 16A of SASA. As an ex officio member of the SGB, they are also collectively accountable for the actions (or lack thereof) of the SGB.

The individual teacher has to account to the principal as professional manager and representative of his / her employer and to parents on their performance as teachers. This performance relates to all the roles and functions expected of a professionally qualified teacher, registered with the South African Council for Educators (SACE).

School governing bodies are elected by parents of learners of public schools and constituted in terms of Sections 28 to 32 of SASA. As such they are then accountable to the parent community that elected them and to the state in terms of Section 16(1) of SASA to *perform only such functions and obligations and exercise only such rights as prescribed by the Act.*

The legal obligations of parents and learners are discussed in paragraph 7.5.1 above and parents have to account to the State in this regard. Learners are obliged to account to both parents and teachers for their academic performance at school.

#### **7.2.4 To summarise**

Chapter 2 and paragraph 7.2.1 above on the quality of education gives a representative overview on the broad international debate on the relationship between funding and quality of education. This debate has been going for decades and numerous researchers both nationally and internationally have made contributions; although it has not been exhausted yet. Important moments in the macro level debate was the work of Coleman (1966; with the publication of the Coleman Report ) and Katarina Tomasevski (1999 on the right to quality education typified by the 4As). The tussle between the views

whether the relationship is linear or not is still continuing. Key role players in the international arena are Jencks, Hanushek, Monk, Greenwald, Carnoy, Crouch, Cohen, Ball, Raudenbush and many others. In the South African context, the contributions of Case & Deaton, Crouch, Perry, Fiske & Ladd, Fleisch, Motala E and Motala S, Wildeman and van den Berg (in no particular order) and others were invaluable. It has become clear that this relationship is not simplistic and that numerous factors (both in systems as well as institutional contexts) play a role. It has also become evident that many of these factors are interrelated; these include issues of access/exclusion, equity, equality, levels of funding, class size and the teacher. My research has again brought these factors to the fore and I am of the view that one will never arrive at a point where research on issues of quality and funding will have exhausted the topic. It can only lead to a better and more comprehensive understanding of the debate and the factors impacting on it.

In my research I have added the chapters on the legal framework within which education, as preparation for the NSCE, is delivered and aspects of accountability, as it pertains to both the financial management of funds at public schools and the professional management of all the schools in the research sample. This was done for reasons of contextualisation and to afford a frame of reference to international readers of this dissertation.

I will now proceed to discuss my findings based on my research questions and the ensuing research aims.

## 7.3 Findings

As indicated in chapter one, the purpose of this research was formulated as “*to analyse the relationship between the funding of education and the quality of education in selected top performing secondary public schools in the Gauteng province of South Africa*”. Emanating from this, the main research question to be investigated, were formulated as follows: *What is the relationship between the funding of education and the quality of education in selected top performing secondary public schools in the Gauteng province of South Africa?*

An ensuing number of sub-questions were formulated to read: (i) Which factors have a direct impact on the performance levels of public secondary schools in the National Senior Certificate examinations? (ii) To what extent are the funds available to public schools spent on aspects that contribute to improving the quality of education in the research sample? (iii) To what extent does spending more funds on developing the skills of educators, improve the quality of education as reflected in the Senior Certificate Examinations, in the research sample?

These sub-questions were reformulated as research aims. I will now proceed to discuss seriatim what was found in regard to each aim.

### **7.3.1 The relationship between funding and the quality of education.**

With regard to the main research question regarding the relationship between the funding of education and the quality of education in selected top performing secondary public schools in the Gauteng province of South Africa my research showed that there is a relationship but that it is an indirect one; that relates to the provisioning of staff and class size. This statement is based on the responses to questions 5 and 8 in the questionnaire reported and discussed in detail in paragraphs 6.3.3 and 6.3.4 of chapter six.

### **7.3.2 Factors impacting on the quality of education in the research sample.**

The results in the national senior certificate examinations are, in this context, equated to and used as indicator of the quality of education. Regarding the question on which factors have a direct impact on the performance levels of public secondary schools in the National Senior Certificate examinations, the research showed that there are four primary factors impacting on academic performance in the NSCE, namely the individual teacher / educator, the

management of academic performance, the use of technology to provide management information to inform the management process, and class size.

### 7.3.2.1 The teacher / educator

Fleisch (2004: 265) gives an comprehensive overview of both national and international research on educators as a resource impacting on the quality of education and then summarises as follows “... *although some inconsistencies have emerged, the South African literature appears to point to the conclusion that teachers are a 'crucial' input into the education process*”. The critical role of the teacher/educator came to the fore in the respondents’ answers to questions 6, 7 and 9 of the questionnaire as discussed in paragraphs 6.2.7 and 6.3 of chapter six. The demographic profile of the generic grade twelve teacher / educator was depicted in Table 6.13. The feedback from the respondents and the discussion in paragraph 6.2.7 enabled me to construct a profile of a grade twelve teacher determining the success in the NSCE. The respondents collectively mentioned the following twenty critical dimensions which made educators the primary determining factor in their schools’ success in the NSCE:

- Identifying with and living the school’s vision and or motto,
- A positive attitude, values and norms,
- Being passionate about what they do,
- Enthusiasm,
- Contentedness (job satisfaction),
- Motivation,
- Innovativeness (doing things differently),
- Drive,
- Being purpose–driven,
- Commitment,
- Dedication,
- Involvement,
- Being there for the child,
- Expert subject knowledge,
- Being thoroughly prepared every day,
- Teaching skills,
- Experience,
- Teamwork,
- Support from the SMT, and
- Many hours of hard work!

A crucial aspect related to ‘expert subject knowledge’ that merits further investigation in future research of this nature, is what has been referred to as *pedagogical content knowledge* (i.e. subject matter knowledge for teaching) (Shulman, 1986 in Hill, Rowan and Ball, 2005:376)

### **7.3.2.2 Management of academic performance**

Based on the responses reported in paragraph 6.5.2.7 in chapter six, it is my opinion that, second to the role of the teacher, this is probably the most important factor determining success in the NSCE. This process requires the dedicated attention of a senior member of staff. My results showed that this responsibility is, in one instance (School VI), handled by the principal personally and in all other instances by a deputy principal. HODs play a crucial role in managing the academic performance of their departments by moderating tests and test results to capture management information regarding the individual performance of students. Schools differed, but all of them used either grade heads and or tutors to assist HODs in the management of academic performance of learners in general and the grade twelve learners in particular.

The schools offer a counseling service to learners in general and grade twelve learners specifically. This service is rendered by professional persons appointed for that purpose or by senior members of the SMT. The role that the School-Based Support Team of School V plays is a typical example.

The success of the management of academic performance hinges on the close scrutiny and hands-on monitoring of the academic performance of the individual learners and regular feedback to both learners and their parents. All the respondents confirmed that parental interest and involvement regarding their own child’s performance is very good. The role of parental involvement in managing the academic performance of individual learners and an effective communication system to support this was evident in all the sample schools. The importance and impact of this factor is alluded to in Woolman & Fleisch, (2009: 237) quoting Brand as saying, “*By promoting, community engagement and parental responsibility, the modified fees system created by the state may*

*well foster the kinds of changes in institutional culture that, as much as increased resources, affect the quality of education.* The influence of this factor warrants an investigation on its own as another crucial determinant (my view) in the results achieved in the NSCE and the quality of education in general.

Although it did not happen in grade twelve, it is important to take note of the premium School II places on maintaining a set standard of academic performance. When students were underperforming in a given test the school took the drastic step of holding back the results, re-teaching the work concerned and re-writing the test before releasing the results in a specific subject. This is further manifested in the fact that the school achieved an average of 3.3 distinctions per grade twelve learner for the period under investigation; this is more than double the average of 1.5 achieved by all the sample schools. A further factor that in my opinion contributes to School II's remarkable results is the role of the benchmarking strategies that they employ (see paragraph 6.3.2 in chapter six for a detailed discussion) in the final preparation of the grade twelve learners for the NSCE.

### **7.3.2.3 The use of technology**

The conclusions arrived at in this paragraph are based on the responses to Questions 5 to 8 of the questionnaire as reported in d the discussions in paragraph 6.5.2.4 of chapter six. The kind of technology encountered in schools varied largely.

All schools had access to overhead projectors. In some schools these were in the process of being replaced with data projectors linked to either a desktop computer or a laptop. All the schools have one or more computer laboratories with, on average, 30 workstations linked to the internet. At least one laboratory is used extensively for the teaching of Information Technology (IT) and Computer Aided Teaching (CAT). The other computer laboratories were used in a supportive and a remedial role. Computer laboratories have to be booked when used in offering the national curriculum subjects. Specialised

software is used where they are used in a remedial role. The use of cell phone technology is currently limited to Schools I and V and in both instances it is used on a limited scale.

In all instances the respondents were of the opinion that technology played a supportive role in the education process, but that it was not a prerequisite for academic performance. Where it does play an important role is in the administration of schools. It records information that serves as management information for the general management of the school, but more specifically regarding learner performance and the management of academic performance.

#### **7.3.2.4 Class size**

It was established from the literature in that class size is a critical factor impacting on academic performance ([http://ed.gov/pubs/ReducingClass/Class\\_size.html](http://ed.gov/pubs/ReducingClass/Class_size.html) - accessed on 24/05/2011; ).) My research showed that all the sample schools were aware of this and that all of them annually incorporated this factor into planning their human resource needs. They consciously budget for and plan their staffing needs based on a predetermined average class size. The respondents' answers to questions 6 and 9 of the questionnaire reported in paragraphs 6.3.3 and 6.5.2.3 of chapter six and the information in Tables 6.21 and 6.22 confirm this. The independent schools had an average class size of 25, whereas the public schools had an average class size of 35. The smaller class sizes in public schools are made possible through the appointment of additional staff from school funds by the school governing bodies.

#### **7.3.3 The role of money.**

The answer to the question regarding the extent to which funds available to schools are spent on aspects that contribute to improving the quality of education in the research sample as manifested in the NSCE results, is primarily found in the responses to questions 5 and 8 of the questionnaire.

However, the responses to questions 6 and 7 were also relevant in this context. These responses are reported in detail in paragraphs 6.2.10 to 6.2.12 as well as paragraphs 6.3.3 and 6.3.4 of chapter six. Based on the feedback from the respondents, the following constitutes a hierarchy of priorities on which funds available to schools are spent on improving the quality of education:

- Additional staff to reduce class size
- Staff development
- Technology

These findings are consistent with the work of Motala (2006: 208) in two respects. First, it revealed that private funding by parents is used towards quality related inputs employing additional educators to reduce class size and second that *“parents connect private contributions with quality schooling”*. Future research should consider factoring in the equitable distribution of available funds within-school context as alluded to in the work of Wenglinsky (1998: 269) where it was found that *“spending on instruction and capital expenditures, while not related to mean achievement levels, were related to differences in achievement between SES groups; lower spending levels are associated with greater achievement gaps within schools”*

#### **7.3.4 Staff development.**

My response to the question regarding the extent to which spending more funds on developing the skills of educators improves the quality of education as reflected in the Senior Certificate Examinations, is that based on my research, it is not possible to quantify this factor or to give a conclusive answer. All the schools have a specific budget for this purpose. It varies vastly yet all schools seem to be performing well.

The fact that the research showed conclusively that the teacher is the primary factor impacting on the quality of the academic results of the school, implies that any money spent on developing the knowledge or skills of the educators will of necessity have a positive influence. This money is earmarked for the development of the entire staff of the schools. It is thus not possible to

attribute this expenditure conclusively to the level of achievement in the NSCE.

## 7.4 Conclusions based on assumptions

At the onset of my research, I assumed the following can be regarded as non-negotiable for providing quality education in any education system:

- *Motivated, well qualified teachers facilitating teaching and learning in a constructive manner*
- *Schools that provide the minimum infrastructure required for an environment conducive to effective teaching and learning*
- *Functional teaching and learning support material*
- *Sufficient funding to finance the above*
- *High standards of management and governance at micro, meso and macro levels in the education system ensuring the efficient and effective realisation of educational objectives at the respective levels in the organisation*
- *Sound articulation between the education system on one hand and the economy on the other hand (economy is used here in its broadest context to include all sectors of the economy of any country. As per definition of economy, this should include balancing the needs of the country and the available resources).*

The research question ‘*What is the relationship between the funding of education and the quality of education in selected diverse top performing secondary schools in the Gauteng province of South Africa?*’, was investigated by making use of multiple case studies. Because it was a qualitative investigation utilising case studies from an interpretivist paradigm, there was no hypothesis testing. The result of the research process is a better and deeper understanding of the intricate relationship between the funding the funding of education and the quality of education provided in the sample schools that formed part of the investigation. Although the investigation was of a restricted

nature and case study work does not normally allow for generalisation, I want to formulate the following conclusions based on the research and findings for my dissertation:

*There is a definite relationship between the funding and the quality of education in the schools that formed part of the investigation. However, the interdependence does not appear to be directly proportional. The unanimous view of all respondents were, that the primary factor that determined the quality of education as manifested in the results of the National Senior Certificate examination (NSCE), was the quality and commitment of the individual teacher in their schools. In addition to this, my research showed that the hands-on effective management of the academic performance of the entire school, but specifically that of the grade twelve learners plays a decisive role in the results achieved in the NSCE. Funding does contribute to the level of academic performance in the schools under investigation in that it allows for (i) smaller classes through the appointment of additional staff (teaching and administrative), (ii) the acquisition of (computer) technology for administrative and educational purposes and (iii) opportunities for staff development.*

Testing some of these conclusions will however, require further investigation on a much larger scale, in a much wider context (as recommended below) before any general claims can be made.

Reflecting on the entire research process I was surprised by the absolute emphasis and prominence of the teacher's role in achieving academic excellence in every school that formed part of the investigation.

I expected that the use of the latest technology teaching aids would be considered to be a prerequisite for providing quality education in the schools under investigation and was amazed by the fact that no school viewed it that way. On the contrary, it was considered to be convenient but not a prerequisite.

The research was conducted in a small but very representative sample of a select group of schools. However, I consider the findings and recommendations of high importance and believe that it should form the basis for conducting similar research on a wider basis with a view of extrapolating the principles to other schools to improve the quality of education in all South African schools as recommended below.

## **7.5 Recommendations for improvement of practice and further investigation**

### **7.5.1 Recommendations for improvement of practice**

Based on the results of the research project contained in this dissertation, I would like to recommend that:

- a training programme specifically aimed at managing academic performance in schools be developed;
- criteria to assess the quality of education developed by the European Union be formally adapted for the South African context.

### **7.5.2 Recommendations for further investigation**

Based on the results of the research project contained in this dissertation, I would like to recommend that:

- the research be extended to include other top performing schools in Gauteng;
- the research be extended to include other top performing schools outside Gauteng;
- the research be extended to include underperforming schools both in- and outside Gauteng;
- the influence of *pedagogical content knowledge* be factored into subsequent research;
- the role of parental involvement in academic performance (other than being a funder) and the quality of education.

## 7.6 Final impression

*The quest to provide the best quality education in the most economic manner on an equitable basis remains a universal challenge!*

This resonates well with National Development Plan, Vision for 2030 developed by the National Planning Commission stating:

*By 2030, South Africa needs an education system with the following attributes:*

- *High quality Early Childhood Development, with access rate exceeding 90%*
  - *Quality school education with globally competitive literacy and numeracy levels*
- (RSA, 2011d: 17)*

## LIST OF REFERENCES

### Printed sources

Adelman, C., Jenkins, D. and Kemmis, S. 1994. *Rethinking Case study*, in Bell, J., Bush, T., Fox, A., Goodey, J. and Goulding, S. (Eds). *Conducting Small-scale Investigations in Educational Management*. London: Harper and Rowe.

Adams, D. 1993. *Defining educational quality: Improving Education Quality Project Publication # 1: Biennial Report*. Arlington, VA: Institute for International Research.

African National Congress. 1955. *The Freedom Charter*. Congress of the people. Kliptown.

Apple, M.W. s.a. *Education, markets, and an audit culture*. *Critical quarterly*, volume 47, no. 1-2

Asmal, K. 1999. *Call to Action: Mobilising Citizens to build a South African Education and Training System for the 21st Century*. Statement in South African Parliament by Professor Kader Asmal, Minister of Education.

Asmal, K. 2002. *Speech by Professor Kader Asmal MP, Minister of Education, introducing the debate on vote 8, Education, National Council of Provinces, 18 April 2000*. <http://www.info.gov.za/speeches/2000/0004181233p1002.htm> accessed on 28 01 '12

Asmal, K. 2002. *Speech by Professor Kader Asmal MP, Minister of education, to the South African Certification Council, Pretoria, 25 March 2002*. <http://www.info.gov.za/speeches/2002/020326246p1002.htm>

Basse, M. 1999. *Case Study Research in Educational Settings*. Buckingham: Open Beach University Press.

Beckmann, J.L. and Prinsloo, J. 2004. *Towards an analytical framework for accountability regarding equal educational opportunities*. *Perspectives in Education*, Volume 22(3). September 2004: pages 133 to 146.

Beckmann, J.L. and Prinsloo, J. 2007. *Equality and non-discrimination in education: the South African case*. Paper read at the ELA (Europe) Conference held in Potsdam, Germany in May 2007.

Beckmann, J.L. and Fuessel, H-P. 2011. *The rights and the status of educators in South Africa and Germany and Quality education: an exploratory comparison*. Unpublished paper read at the 16<sup>th</sup> International

Conference of SAELA held at the Protea Hotel Umhalanga Rocks, Durban, South Africa.

Beckmann, J.L. 2011. *Onderwys in Suid-Afrika van 1961 tot 2011: Tussen twee paradigmas en ontwykende ideale*. Draft article for the Tydskrif vir Geesteswetenskappe of the Suid-Afrikaanse Akademie vir Wetenskap en Kuns.

Bell, J. 1987. *Doing your research project*. Milton Keynes: Open University Press.

Bengu, S.M.E., 1996. *Address by Prof SME Bengu, Minister of Education, on the occasion of the debate on the education budget vote in the national assembly, 21 May 1996*. [http://www.info.gov.za/speeches/1996/960711\\_107.htm](http://www.info.gov.za/speeches/1996/960711_107.htm) - accessed on 28 Jan 2012.

Berkhout, F. & Berkhout, S. 1992. *Die Skool. Finansiële bestuurstegnieke*. Pretoria: JL van Schaik.

Bisschoff, T.C. and Mestry, R. 2003. 2<sup>nd</sup> Edition. *Financial Management Explained*. Cape Town: Maskew Millar Longman (Pty) Ltd under Kagiso imprint.

Boasberg, T. 2011. *School reform. Paper read during the Edward Kennedy Memorial Lecture at the University of Pretoria on 8 April 2011*.

Burns, Y. 1999. *Administrative Law under the 1996 Constitution*. Durban: Butterworths

Burtless, G (Editor). 1996. *Does Money Matter? The effect of school resources on student achievement and adult success*. Washington DC: Brookings Institution Press

---

Bush, T. 2005a. *Research Methods Seminar: School Management and Governance: Designing Research*. Unpublished paper read at training seminar under the auspices of Matthew Goniwe School for Leadership and Governance. Johannesburg. South Africa.

Bush, T. 2005b. *Research Methods Seminar: School Management and Governance: Data Analysis*. Unpublished paper read at training seminar under the auspices of Matthew Goniwe School for Leadership and Governance. Johannesburg. South Africa.

Centre for Evaluation and Assessment. 2006. *PIRLS of Wisdom: The What, Where, When and How of the International Reading Literacy Study in South Africa*. Pretoria: University of Pretoria.

Caldwell, B.J. and Spinks, J.M. 1988. *The Self-Managing School*. London: The Falmer Press.

Caldwell, B.J. and Spinks, J.M. 1998. *Beyond the Self-Managing School*. London: The Falmer Press.

Campbell, J.R., Kelly, D.L., Mullis, I.V.S., Martin, M.O., & Sainsbury, M. 2001. 2<sup>nd</sup> Edition. *Framework and Specifications for PIRLS Assessment 2001*. Chestnut Hill, MA: Boston College.

Carnoy, M. 1999. *Globalization and Educational Reform: What planners need to know*. Paris: UNESCO

Charles, C.M. and Mertler, C.A. 2002. *Introduction to Educational Research*. Boston: Allyn & Bacon

Christie, P., Butler, D. and Potterton, M. 2007. *Schools that work*. Report to the Minister of Education by the Ministerial committee: 13 October 2007.

Cohen, D.K., Raudenbush, S.W. and Ball, D.L. 2003. *Resources, Instruction, and Research. Educational Evaluation and Policy Analysis. Summer 2003, Vol. 25, No. 2, pp. 119-142.*

Colditz, P. 2011. *Principles for a new legislative framework to improve school education in South Africa*. Unpublished paper read at the 16<sup>th</sup> International Conference of SAELA held at the Protea Hotel Umhalanga Rocks, Durban, South Africa.

Commonwealth 2003. *Improving Quality in Education.htm* found on the web at: <http://www.thecommonwealth.org>

Creswell, J.W. 1994. *Research Design: Qualitative and Quantitative Approaches*. London: Sage Publications Inc.

Cronbach, L.J. 1975. Beyond the two disciplines of Scientific Psychology. *American Psychologist*, No. 30, pp. 116 – 127.

Crouch, L. 2005. *Disappearing schoolchildren or data misunderstandings? Dropout phenomena in South Africa*. Research Triangle Institute (RTI), <http://www.rti.org/abstract.cfm?pubid=6507>

Czaja, R. & Blair, J. 2005. *Designing Surveys. A Guide to Decisions and Procedures*. London: Pine Forge Press.

Davies, H. 2012. Personal communication on 10 July 2012.

De Groof, J. (Editor) 1995. *The Legal Status of Teachers in Europe. Mobility and Education*. Leuven: ACCO.

De Groof, J. & Lauwers, G. 2005. *Increasing access to education throughout European society* in Russo, C.J., Beckmann, J.L. and Jansen, J.D. (Editors).

2005. Equal Education Opportunities. Comparative perspectives in Education Law. Pretoria: Van Schaiks.

Department of Education. 1995. *White Paper on Education and Training*. Notice 196 of 1995. Cape Town: Government Printer

Department of Education. 2001. *Education White Paper 6. Special Needs Education. Building an Inclusive education and training system*. Pretoria: department of Education.

Department of Education. 2003a. *Plan of Action: Improving access to free & quality basic education for all*. Pretoria: Government Printer.

Department of Education. 2003b. *Report to the Minister. A review of the financing, resourcing and costs of education in public schools*. Pretoria: Government Printer

Department of Education. 2005a. *Education Statistics in South Africa at a Glance 2003*. Found at the following official website:  
<http://www.education.gov.za/EMIS/emisweb/03stats/2003%20Stat%20at%20a%20Glance.pdf>

Department of Education. 2005b. *Information on the State Budget for Higher Education*. August 2005. Pretoria: Department of Education.

Department of Basic Education. 2009. *The national senior certificate: A qualification at level 4 on the national qualifications framework (NQF)*. Pretoria: Department of Basic Education

Editors of the American Heritage Dictionaries . 2010. 4th edition. *The American Heritage® Dictionary of the English Language*. Houghton: Houghton Mifflin Harcourt Publishing Company.

Ehrenberg, R.G. & Brewer, D.J. 1995. *Did teachers' verbal ability and race matter in the 1960s? Coleman revisited. Economics of Education Review, 14*, 1–21, 291–299.

Ehrenberg, R.G., Brewer, D.J., Gamoran, A. and Willms, J.D. 2001. *Class size and student achievement*. Psychological Science in the Public Interest. Vol. 2, No. 1, May 2001 pages 1 -30

European Commission. 2001. *European Report on the Quality of School Education. Sixteen Quality Indicators*. Luxembourg: European Communities  
Easterby-Smith, M., Thorpe, R. and Lowe, A. 1994b. 'Analysing qualitative data' in Bennet, N., Glatter, R. and Levacic, R. (Eds.) *Improving Educational Management through Research and Consultancy*. London: Paul Chapman.

Fiske, E.B. & Ladd, H.F. 2004. In Chisholm, Linda (Ed.) *Changing Class. Education and social change in post-apartheid South Africa*. Pretoria: HSRC Press.

Foxcroft, C. and Stumpf, R. 2005. *What is matric for?* In the proceedings of the joint seminar by UMALUSI and Centre for Higher Education Transformation Conference on *Matric: What is to be done?* Held on 23 June 2005.

Fraenkel, J.R. & Wallen, N.E. 6<sup>th</sup> Edition. 2006. *How to design and evaluate Research in Education*. New York: McGraw-Hill.

Ferguson, R.F. 1991. *Paying for public education: New evidence on how and why money matters*. *Harvard Journal of Legislation*, 28, 465–497.

Ferguson, R.F. & Ladd, H.F. 1996. *How and why money matters: An analysis of Alabama schools*. In H.F. Ladd (Ed.), *Holding Schools Accountable: Performance Based Reform in Education* (pp. 265–298). Washington,DC: Brookings Institution Press.

Fleisch, B. 2004. *Does higher education expenditure generate higher learner achievement? A study of historically disadvantaged schools in Gauteng*. *South African Journal of Education*, 2004. EASA Vol 24(4) 264–269

Gamoran, A. and Borman, G. 2007. *Coleman Report, Forty Years On* - [http://www.wcer.wisc.edu/news/coverstories/coleman\\_report\\_40\\_years.php](http://www.wcer.wisc.edu/news/coverstories/coleman_report_40_years.php) - accessed on 2 02 '12

Gustafsson, J-E. 2003. *What do we know about effects of school resources on educational results?* *Swedish Economic Policy Review* 10 (2003) 77-110

Hanushek, E. A. 1996. *School resource and student performance*. In Burtless, G (Editor). 1996. *Does Money Matter? The effect of school resources on student achievement and adult success*. Washington DC: Brookings Institution Press

---

Herman, C. 2004. *Prophets and Profits*. Unpublished PhD thesis. University of Pretoria.

Hersey, P. & Blanchard, K. 1988. 5<sup>th</sup> Edition. *Management of Organizational Behavior. Utilizing Human Resources*. Englewood Cliffs NJ: Prentice-Hall Int. Editions.

Hiemstra, V.G. and Gonin, H.L. 1992. *Trilingual Legal Dictionary*. Johannesburg: JUTA.

Hill, H.C., Rowan, B. and Ball, D.L. *Effects of Teachers' Mathematical knowledge for Teaching on student achievement*. *American Educational Research Journal*. pp 371 to 406.

Hoaglin, D.C. et al. 1982. *Data for decisions*. Cambridge, Massachusetts: AbT Books.

HSRC. s.a. *National Priority Initiatives Education Quality Improvement (EQI)* found at the HSRC website: <http://www.hsrc.ac.za/index>

Johnson, D. 1994. *Research Methods in Educational Management*. Harlow, Longman.

Joubert, H.J. 1994. *The Management Task of the Principal of a State-Aided School*. Unpublished M Ed Dissertation. University of Pretoria.

Joubert, H.J. and Prinsloo, I.J. 2001. *Education Law. A practical guide for educators*. Pretoria: Van Schaik Publishers.

Kerzner, H. 1998. 6<sup>th</sup> Edition. *Project Management. A systems approach to planning, scheduling and controlling*. New York: Wiley & Sons.

Koontz, H. & Weihrich, H. 1998. 9<sup>th</sup> Edition. *Management*. New York: McGraw-Hill Int. Editions.

Leu, E. 2005. *The Role of Teachers, Schools, and Communities in Quality Education: A review of the Literature*. Academy for Educational Development Global Education Center.

Louw, M., Van der Berg, S. and Yu, D. 2006. *Educational attainment and intergenerational social mobility in South Africa*. Stellenbosch Economic Working Papers 09/06. Stellenbosch: Bureau for Economic Research, University of Stellenbosch.

Look C. 2011. Personal communication on 22 October 2011.

Maile, S. 2002. Accountability: An Essential Aspect of School Governance. *South African Journal of Education*. 22(4): 326 - 331

Matho, K.C. 2010. *The relationship between quality policies and lived experiences of orphaned learners*. Unpublished PhD thesis. Pretoria: University of Pretoria

Merriam, S.B. 1998. *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey –Bass Publishers.

Miles, M.B. and Huberman, A.M. 1994 (2<sup>nd</sup> Edition). *Qualitative data analysis: An Expanded Sourcebook*. Thousand Oaks, California: Sage

Moloi, M., & Strauss, J. (2005). *The SACMEQ II Project in South Africa: A Study of the Conditions of Schooling and the Quality of Education*. Harare: SACMEQ.

Monk, D.H. 1994. *Subject area preparation of secondary mathematics and*

*science teachers and student achievement.* *Economics of Education Review*, 13, 125–145.

Monk, D.H. & King, J.A. 1995. *Multilevel teacher resource effects on pupil performance in secondary mathematics and science: The case of teacher subject matter preparation.* In R.G. Ehrenberg (Ed.), *Choices and Consequences: Contemporary Policy Issues In Education.* Ithaca, NY: ILR Press.

Motshekga, A. 2009. *Minister of Basic Education, Angie Motshekga, Member of Parliament 2009/10 Education Budget Speech, 30 Jun 2009.*  
<http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=752&tid=771> - accessed on 28 01 '12.

Motshekga, A. 2011. *Statement during announcement of the National Senior Certificate Grade 12 Examination results for 2010 by Angie Motshekga, Minister of Basic Education.*  
<http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=15519&tid=26422>

Morrison, M. 2002. 'What do we mean by educational research?' in Coleman, M. and Briggs, A. (Eds.), *Conducting Small-Scale investigations in Educational Management*, Harper Row. London.

Motala, E. 2001. *Policy analysis capacity in South Africa, Implementing Education Policies: South African Experience.* (Eds) Sayed, Y. and Jansen, J. Lansdowne: UCT Press.

Motala, S. 2006. *Education transformation in post-apartheid South Africa: finance equity in public schooling in Gauteng.* Unpublished PhD thesis. University of the Witwatersrand. Johannesburg.

Motala, S. 2008. *Meaningful access to education in South Africa.* In Hofmeyer, J. 2008. *Risk and Opportunity.* Cape Town: Institute for Justice and Reconciliation. Pp 46 to 53.

*National Center for Public Policy and Higher Education. s.a. Quality Education found on the New Jersey website: [http://www.njstatelib.org/Research\\_Guide/Public\\_Policy/Index.php](http://www.njstatelib.org/Research_Guide/Public_Policy/Index.php) accessed on 23 March 2010)*

Neethling, J., Potgieter, J.M., Visser, P.J. and Knobel, J.C. 2006. 5<sup>th</sup> Edition. *Law of Delict.* Durban: Butterworths.

Nieuwenhuis, F.J. & Mokoena, S. 2005. *Decentralisation and the management of change in South African teacher training institutions.* Compare: Volume 35, No. 2, May 2005, pp. 127-137.

Oosthuizen, I.J. (Ed) 1998. *Aspects of Educational Law.* Pretoria: Van Schaik Publishers.

Pandor, N. 2004. *Speech by Naledi Pandor, MP, Minister of Education, introducing the debate on the Education Budget Vote 15, National Assembly, 18 June 2004.* <http://www.education.gov.za/Newsroom/Speeches/Speeches2004/tabid/180/ctl/Details/mid/580/ItemID/2377/Default.aspx> - accessed 28 01 '12.

Pandor, N. 2005. *Introducing the debate on Education Vote 15 on 17 May 2005.* Government website: <http://www.info.gov.za/speeches/2005/05051714151002.htm>

Perry, H and Andrews, F. 2003. *Public schooling.* Human Resource Development Review 2003. Cape town: HSRC Press.

Raudenbush, S. and Bryk, A.S. 1986. *Hierarchical model for studying school effects.* Sociology of Education 1986, Vol. 59, (January) : 1 to 17

Reddy, V. (Editor). 2006. *Mathematics and Science Achievement at South African Schools in TIMSS 2003.* Cape town: HSRC Press.

Rees, S and Rodley, G. (Eds). In Herman, C. 2004. *Prophets and Profits.* Unpublished PhD thesis. University of Pretoria.

Republic of South Africa. 1962. *South African Income Tax Act, Act 58 of 1962.* Pretoria: Government Printer.

Republic of South Africa. 1995. *The South African Qualifications Authority Act (Act 58 of 1995).* Pretoria: Government Printer.

Republic of South Africa. 1996a. *The National Education Policy Act (Act 27 of 1996).* Pretoria: Government Printer.

Republic of South Africa. 1996b. *The South African Schools Act (Act 84 of 1996).* Pretoria: Government Printer.

Republic of South Africa. 1996c. *The Constitution of South African Schools Act (Act 108 of 1996).* Pretoria: Government Printer.

Republic of South Africa. 1997a. *The Basic Conditions of Employment Act (Act 75 of 1997).* Pretoria: Government Printer.

Republic of South Africa. 1997b. *The Higher Education Act (Act 101 of 1997).* Pretoria: Government Printer.

Republic of South Africa. 1998a. *The Employment of Educators Act, Act 76 of 1998).* Pretoria: Government Printer.

Republic of South Africa. 1998b. *The Further Education and Training Act (Act 98 of 1998).* Pretoria: Government Printer.

Republic of South Africa. 1998c. *National Norms and Standards for School Funding*. Government Gazette 19347 of 12 October 1998. Pretoria: Government Printer.

Republic of South Africa. 1999a. *Public Finance Management Act, Act no. 1 of 1999*. Pretoria: Government Printers

Republic of South Africa. 1999b. *Personnel Administrative Measures*. G.N. 222 of 1999 published in *Government Gazette* No. 19767 dated 18 February 1999. Pretoria: Government Printer.

Republic of South Africa. 2000a. *The South African Council for Educators Act (Act 31 of 2000)*. Pretoria: Government Printer.

Republic of South Africa. 2000b. *The Adult Basic Education and Training Act (Act 52 of 2000)*. Pretoria: Government Printer.

Republic of South Africa. 2003. *South Africa Human Development Report 2003*. Pretoria: Government Printer.

Republic of South Africa. 2006. *National Norms and Standards for School Funding*. Government Gazette 29179 of 31 August 2006. Pretoria: Government Printer.

Republic of South Africa. 2007a. *National Norms and Standards of School Funding*. Government Gazette Number 30322 of 26 September 2007. Pretoria: Government Printers.

Republic of South Africa. 2007b. *Education Laws Amendment Act, Act 31 of 2007*. Pretoria: Government Printers.

Republic of South Africa. 2009. *Human Resource Development Strategy for South Africa (HRD-SA) 2010 - 2030*. Pretoria: Government Printer.

Republic of South Africa. 2011a. *Basic Education Laws Amendment Act, Act 15 of 2011*. Pretoria: Government Printer.

Republic of South Africa. 2011b. *Budget 2011. A People's Guide*. National Treasury.  
[http://www.treasury.gov.za/documents/national%20budget/2011/guides/Eng%20PGB%202011\\_.pdf](http://www.treasury.gov.za/documents/national%20budget/2011/guides/Eng%20PGB%202011_.pdf) – accessed on 14 April 2011.

Republic of South Africa. 2011c. *Budget Speech. Minister of Finance. Pravin Gordhan. 23 February 2011*. Pretoria: Government Printers.

Republic of South Africa. 2011d. *National Development Plan. Vision for 2030*. National Planning Commission. Pretoria: Government Printer.

SAQA website. Roles of educators. Downloaded on 14 June 2008.  
<http://www.saqa.org.za/show.asp?include=structure/nsb/nsb5/delineatin.html>

- Scott, C. 2010. *SA ready to take the TIMSS test again*. Mail & Guardian. 3 August 2010. <http://mg.co.za/article/2010-08-03-sa-ready-to-take-the-timss-test-again>, accessed on 20/08/2010
- Seddon, D.J., March, J. and Willis, M. 1980. *Local Management of Schools*. London: Kogan Page Ltd.
- Sinclair, J. and Hanks, P (Editors). 1989. *Essential English Dictionary*. London & Glasgow: Collins
- Skelton, A. 2011. *Children's rights and Education*. Unpublished paper read at the 16<sup>th</sup> International Conference of SAELA held at the Protea Hotel Umhalanga Rocks, Durban, South Africa.
- Smit, P.J. & Cronje, G.J. de J. (Eds.) 1992. *Management Principles*. Cape Town: JUTA & Co. Ltd.
- Spaul, N. 2011. *A Preliminary Analysis of SACMEQ III South Africa. Stellenbosch Economic Working Papers: 11/11*. Bureau for Economic Research, University of Stellenbosch. Stellenbosch: Bureau for Economic Research.
- Stoner, J.A.F. & Wankel, C. 1986. 3<sup>rd</sup> Edition. *Management*. Englewood Cliffs NJ: Prentice-Hall Int. Editions.
- Strauss, R.P. & Sawyer, E. 1986. *Some new evidence on teacher and student competencies*. *Economics of Education Review*, 5, 41–48.
- Sykes, J.B. (Editor). 1982. Sixth Edition. *The Concise Oxford Dictionary*. Oxford: Clarendon Press.
- The Editor. 2010. *PIRLS 2011*. School management & Leadership, Vol. 4 Number 9&10, pages 16/17.
- Van der Berg, S. 2009. *Poor educational quality in SA: Issues of equity and efficiency*. Pretoria : HSRC Seminar Series. 2 May 2009.
- Van der Berg, S. et al. 2011. *Low Quality Education as a poverty trap*. Social Policy Research Group in the Department of Economics at Stellenbosch University. <http://www.polity.org.za/article/low-quality-education-as-a-poverty-trap-april-2011-2011-04-20> - accessed on 5/11 /2011.
- Van der Linde, C.H. 1998. *Clinical Supervision in Teacher Evaluation: A Pivotal Factor in the Quality Management of Education*. *Education* 119(2): 326 – 334.
- Van Rooyen, J.W. and Rossouw, J.P. 2007. *School governance and management: Background/Concepts*. In Joubert, R and Bray, E. 2007. *Public School Governance*. Pretoria: CELP.

Volansky, A. and Friedman, I. A. (2003) *School self-management: An International Perspective*. Israel: Ministry of Education. Jerusalem.

Yin, R. 1994. *Designing single and multiple-case studies*, in Bennett, N., Glatter, R. and Levacic, R. Eds.), *Improving Educational Management through Research and Consultancy*. London: Paul Chapman.

Wenglinsky, H. 1998. *Finance Equalisation and within-school equity: The relationship between education spending and the social distribution of achievement*. *Education Evaluation and Policy Analysis*. Winter 1998, Vol. 20, No. 4 pp 269 to 283.

Wildeman, R. 2003. *Public Expenditure on Education*. In *Human Resource Development Review 2003*. Cape Town: HSRC Press. Chapter 12 pages 280 to 301.

Wildeman, R. 2008a. *Public Expenditure on Education*. In *Human Resource Development Review 2008*. Cape Town: HSRC Press. Chapter 8 pages 161 to 185.

Wildeman, R. 2008b. *Social capital and school education in South Africa*. In Hofmeyer, J. 2008. *Risk and Opportunity*. Cape Town: Institute for Justice and Reconciliation. Pages 62 to 70.

Wilson, S. 1979. *Explorations of the usefulness of Case Study Evaluations*. *Evaluation Quarterly*. No. 3, pp.446 – 459.

Wilson, M. 1984. Styles of research, in Bell, J., Bush, T., Fox, A., Goodey, J. and Goulding, S. (Eds.) *Conducting small-scale investigations in educational management*. London: Harper and Row.

Woolman, S. and Fleisch, B. 2009. *The Constitution in the classroom: Law and education in South Africa 1994 – 2008*. Cape Town: PULP

UNESCO. 1989. *United Nations International Convention on the Rights of the Child* (18 Nov 1989) - <http://www2.ohchr.org/english/law/crc.htm> - accessed 20 March 2006.

UNESCO. 2000. *Dakar Framework for Action: Education for all – Meeting our collective commitments*. World Education Forum, Dakar, Senegal. 26 – 28 April. [unesdoc.unesco.org/images/0012/001211/121147e.pdf](http://unesdoc.unesco.org/images/0012/001211/121147e.pdf) - accessed 20 March 2006.

UNESCO. 2004a. *Education for All THE QUALITY IMPERATIVE*. EFA Global Monitoring Report 2005. Paris: UNESCO - [unesdoc.unesco.org/images/0013/001373/137333e](http://unesdoc.unesco.org/images/0013/001373/137333e) – accessed on 20 March 2006.

UNESCO. 2004b. *Quality education and HIV/AIDS*. Paris: UNESCO

## Case law:

Bastian Financial Services (Pty) Ltd v Generaal Hendrik Schoeman Primary School, Case number 207/07 in the Supreme Court of appeal of South Africa.

Knouwds v the Administrator of the Cape Province 1981(1) SA 544 (C) in the High Court of South Africa, Cape Provincial Division.

South View High School v Financial Services of South Africa (Pty) Ltd, Case number 7612/2001 in the High Court of South Africa, Transvaal Provincial Division.

The Governing Body of the Juma Musjid Primary School and another v Essay NO and Others (Centre for Child Law and Another as Amici Curiae) 2011 (7) BCLR 651 (CC)

The Governing Body of the Rivonia Primary School and another v the MEC for Education: Gauteng Province and Others (Equal Education and Centre for Child Law as Amici Curiae) (Unreported case number: 11/08340 heard in the South Gauteng High Court).

TM Jacobs v The Chairman of the Governing Body of Rhodes High School and Others. Case number 7953/2004 in the High Court of South Africa, Western Cape.

Willem Sternberg Schoonbee and 17 others v The MEC for Education in the Mpumalanga Province and the Head of Department: Department of Education of the Mpumalanga Province 2002. 33750/01 DMA

*The Centre for Applied Legal Studies (CALs) & two mothers obtained and unequivocal victory today by obtaining a court order compelling Hunt Secondary School to obey the laws protecting poor parents who cannot afford school fees.*

*The order granted by the court in a nutshell does the following:*

- *The school is interdicted from proceeding with any actions instituted against parents after 26 January 2006 unless they are able to provide proof that those parents would not have qualified for exemptions in terms of the legal framework. Where parents would have qualified for exemptions, the school will have to will make application to rescind judgments taken, or withdraw action where judgments have not yet been obtained.*
- *The school is required to transmit to all parents of learners currently at the school a letter advising parents of the exemption policy and inviting them to apply for exemptions if they qualify.*
- *The school is required to process all exemption applications received and advice parents who have been refused of their right to an appeal and the procedure for this.*
- *In respect of previous learners, the school is required to send to all parents where there are open files in respect of actions instituted before 26 January 2006, a letter explaining that such parents may be entitled to*

*exemptions and inviting them to apply for exemptions before 30 September 2007. The school is also interdicted against proceeding with any action against these parents until 30 September 2007 and thereafter only if the parent would not have been entitled to an exemption and if no appeal has been lodged against any application.*

- *The school is required immediately to implement their obligations in terms of the South African Schools Act of 1996 read with The Exemption of Parents from the Payment of School Fees Regulations, 2006.*

*The case was initiated by CALS in 2006 as a test case to begin address the nationwide, systemic failure on the part of many schools to enforce the legal framework protecting poor parents and learners who cannot afford school fees. The case is a class action suit with CALS and the two mothers acting in the public interest, in particular, on behalf of all parents whose children attend Hunt Secondary School, who are poor and who are eligible for exemptions from schools fees, but who cannot act in their own names because of poverty and lack of awareness of their rights.*

*Between 2005 and 2006 CALS has been approached by different parents with complaints against Hunt Secondary School. In two of the matters CALS successfully rescinded default judgments taken against the poor single mothers for arrear school fees. In terms of the law, both women were eligible for exemptions from the payment of school fees, and should not have been sued. In both cases, these women attempted to apply to the school for exemptions from the payment of schools fees, which exemption applications were not processed in terms of the law. CALS attorneys also extracted at least ten other case files of other similarly situated and similarly treated parents by the school. This suggested that the school was in flagrant violation of the legal framework, as set out in the South African Schools Act read with the Exemption of Parents from the Payment of Schools Fees Regulations. The application was therefore instituted to enforce the law.*

*While CALS believes that no school should be above the law, it views such a victory as only partial solution to ensuring that all learners are able to access an adequate education. While schools like Hunt Secondary School cannot pursue poor parents that ought to be exempted from school fees. At the same time, schools like Hunt Secondary which cater for predominantly poor learners should be adequately funded so that they need not resort to unlawful means of fee collection.*

*For further information please contact Faranaaz Veriava at CALS @ 011 717 8616 or 011 717 8600; or attorney, Trudie Nichols @ 031 539 4248. A copy of the order of court is attached.*

*FRIDAY, 15 JUNE 2007*

## Web-based sources

Commonwealth s.a. Improving Quality in Education.htm found on the web at: <http://www.thecommonwealth.org>

Examinations.

<http://www.education.gov.za/Examinations/tabid/338/Default.aspx> accessed on 20 May 2011

*Reducing Class Size, What Do We Know?* – March 1999

[http://ed.gov/pubs/ReducingClass/Class\\_size.html](http://ed.gov/pubs/ReducingClass/Class_size.html) - accessed on 24/05/2011

SACMEQ <http://www.sacmeq.org/about.htm>. accessed on 5/4/2011

TIMSS <http://timss.bc.edu/>, accessed on 16/03/2010

UNESCO. 2000. *Bangkok Quality Education*. -

[www.unescobkk.org/education/.../world-education-forum/](http://www.unescobkk.org/education/.../world-education-forum/) - accessed on 20 March 2006.

UNESCO. s.a. Education - *Quality Education.htm*

<http://www.merriam-webster.com/dictionary/extent> - accessed on 02/02/2012

<http://www.thefreedictionary.com/extent> - accessed on 02/02/2012

[http://www.njstatelib.org/Research\\_Guide/Public\\_Policy/Index.php](http://www.njstatelib.org/Research_Guide/Public_Policy/Index.php) - accessed 20/05/2008

<http://www.education.gov.za/EMIS/emisweb/03stats/2003%20Stat%20at%20a%20Glance.pdf> - accessed on 20/5/2010.

<http://www.businessdictionary.com/definition/legal-capacity.html>- accessed on 20 August 2011

<http://www.umalusi.org.za/Inveloper.asp?iP=2&iVdate=22/10/2011&iS={4CABC8F-183A-4015-A076-6C898BC190DB}> accessed on 22/10/2011

<http://dictionary.reference.com/browse/epistemology> - accessed on 2/11/2011

<http://pespmc1.vub.ac.be/EPISTEMI.html> - accessed on 2/11/2011

<http://plato.stanford.edu/entries/epistemology/> - accessed on 2/11/2011

<http://www.rep.routledge.com/article/P059> - accessed on 2/11/2011

<http://www.thefreedictionary.com/reality>; - accessed on 2/11/2011

<http://dictionary.reference.com/browse/reality>; - accessed on 2/11/2011

<http://www.merriam-webster.com/dictionary/reality>; - accessed on 2/11/2011

<http://www.brainyquote.com/words/re/reality210450.html>; - accessed on 2/11/2011

<http://oxforddictionaries.com/definition/reality> - accessed on 2/11/2011

<http://en.wikipedia.org/wiki/Reality> - accessed on 2/11/2011

<http://www.merriam-webster.com/dictionary/truth> - accessed on 2/11/2011

<http://dictionary.cambridge.org/dictionary/british/belief> - accessed on 2/11/2011

<http://www.thefreedictionary.com/Truth> - accessed on 2/11/2011

<http://www.merriam-webster.com/dictionary/truth> - accessed on 2/11/2011

<http://plusroot.com/dbook/23TruthDef.html> - accessed on 2/11/2011

<http://www.thefreedictionary.com/beliefv> - accessed on 3/11/2011

<http://dictionary.reference.com/browse/belief> - accessed on 3/11/2011

<http://www.brainyquote.com/words/be/belief135832.html> - accessed on 3/11/2011

<http://www.merriam-webster.com/dictionary/belief> - accessed on 3/11/2011

<http://oxforddictionaries.com/definition/belief> - accessed on 3/11/2011

<http://www.definitions.net/definition/belief> - accessed on 3/11/2011

<http://www.yourdictionary.com/belief> - accessed on 3/11/2011

<http://dictionary.cambridge.org/dictionary/british/belief> - accessed on 3/11/2011

<http://edulibpretoria.wordpress.com/2007/11/30/results-from-pirls-2006-international-report-is-shocking/> - accessed on 28/11/2011



# ANNEXURE 1

ANNEXURE 1



UNIVERSITY OF PRETORIA  
FACULTY OF EDUCATION  
RESEARCH ETHICS COMMITTEE

**CLEARANCE CERTIFICATE**  
**DEGREE AND PROJECT**

**INVESTIGATOR(S)**

**DEPARTMENT**

**DATE CONSIDERED**

**DECISION OF THE COMMITTEE**

**CLEARANCE NUMBER :**

EM 10/07/02

PhD

The relationship between funding in education and quality education

Jean Wilhelm van Rooyen

Educational Management and Policy Studies

3 November 2011

APPROVED

Please note:

*For Masters applications, ethical clearance is valid for 2 years*

*For PhD applications, ethical clearance is valid for 3 years.*

**CHAIRPERSON OF ETHICS**  
**COMMITTEE**

Prof L Ebersohn

**DATE**

3 November 2011

**CC**

Jeannie Beukes  
Prof J.L. Beckmann

This ethical clearance certificate is issued subject to the following conditions:

1. A signed personal declaration of responsibility
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted
3. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.



## ANNEXURE 2

ANNEXURE 2



UMnyango WezeMfundo  
Department of Education

Lefapha la Thuto  
Departement van Onderwys

Enquiries: Nomvula Ubisi (011)3550488

Date:	12 May 2010
Name of Researcher:	Van Rooyen Jean Wilhelm
Address of Researcher:	8A Pygmy Street Amberfield Glen Estate Rooihuiskraal North
Telephone Number:	0124203484/0825513108
Fax Number:	0124203723
Research Topic:	"The Relationship Between Funding in Education and Quality Education"
Number and type of schools:	4 Secondary and 2 Independent Schools
District/s/HO	Gauteng North, Tshwane North, South and West

**Re: Approval in Respect of Request to Conduct Research**

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

Permission has been granted to proceed with the above study subject to the conditions listed below being met, and may be withdrawn should any of these conditions be flouted:

1. *The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
3. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*

Office of the Chief Director: Information and Knowledge Management  
Room 501, 111 Commissioner Street, Johannesburg, 2000 P.O.Box 7710, Johannesburg, 2000  
Tel: (011) 355-0809 Fax: (011) 355-0734



4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and one Ring bound copy of the final, approved research report. The researcher would also provide the said manager with an electronic copy of the research abstract/summary and/or annotation.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

Martha Mashego  
ACTING DIRECTOR: KNOWLEDGE MANAGEMENT & RESEARCH

The contents of this letter has been read and understood by the researcher.	
Signature of Researcher:	
Date:	

## ANNEXURE 3

### RESEARCH INSTRUMENT

#### Semi structured interview i.r.o.:

**“The relationship between funding in education and quality education”**

**Name:**

**Institution:**

**Capacity:** Principal

#### Section A

- Demographic information about the school.

##### 1.1 Enrolment

	2007	2008	2009
Total number of boys in school			
Total number of girls in school			
Total number of learners in school			

##### 1.2 Enrolment in Gr. 12

	2007	2008	2009
Total number of boys in Gr. 12			
Total number of girls in Gr. 12			
Total number of learners in Gr. 12			

##### 1.3 Drop out rate

	2007	2008	2009
Drop out rate Gr. 8 to Gr. 12 as %			

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	2007	2008	2009
Pass rate Gr. 12 as %			

1.5 University Entrance Admission

	2007	2008	2009
University entrance admission as %			

1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Total number of subject distinctions in Gr. 12			
Number of distinctions in Afrikaans			
Number of distinctions in English			
Number of distinctions in 3 <sup>rd</sup> Language			
Number of distinctions in Mathematics			
Number of distinctions in Phys. Science			
Number of distinctions in Biology			
Number of distinctions in Accounting			
Number of distinctions in Economics			
Candidates with an A aggregate			
Candidates with 8 or more distinctions			
Candidates with 7 distinctions			
Candidates with 6 distinctions			
Candidates with 5 distinctions			
Candidates with 4 distinctions			
Candidates with 3 distinctions			
Candidates with 2 distinctions			
Candidates with 1 distinction			

1.7 Subject averages in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Overall average for all subjects in NSCE			



Subject average in Afrikaans			
Subject average in English			
Subject average in 3 <sup>rd</sup> Language			
Subject average in Mathematics			
Subject average in Phys. Science			
Number of distinctions in Biology			
Subject average in Accounting			
Subject average in Economics			

2. Demographic information about educational staff.

2.1 Demographic information about the SMT.

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Principal							
Deputy Principal 1							
Deputy Principal 2							
Deputy Principal 3							
HOD 1							
HOD 2							
HOD 3							
HOD 4							
HOD 5							

2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans							
English							



3 <sup>rd</sup> Language							
Mathematics							
Phys.Science							
Biology/LO							
Accounting							
Economics							

3. Demographic information about the members of the School Governing Body (SGB).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair							
Deputy chair							
Secretary							
Treasurer							
Member 1							
Member 2							
Member 3							
Member 4							
Member 5							
Member 6							
Member 7							
Member 8							

4. Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair							
Deputy chair							
Secretary							
Treasurer/FO							
Member 1							



Member 2							
Member 3							
Member 4							
Member 5							

5. Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved			
Total annual budget			
Funds from public funding			
Funds from private funding			
Funds from school fees			
Funds from entrepreneurial ventures			
Funds from donors			
Funds from sponsorships			
Funds from bequests			
Interest on investments			
Other sources of income 1			
Other sources of income 2			
Other sources of income 3			
Other sources of income 4			
Other sources of income 5			
Amount received from Govt grant			
Amount budgeted for staff development			
Amount budgeted for technology (computers, data projectors, smart boards etc.)			

## 5.2 Regarding the academic budget

	2007	2008	2009
Academic budget as % of total budget			
Afrikaans as % of academic budget			
English as % of academic budget			
3 <sup>rd</sup> Language as % of academic budget			
Mathematics as % of academic budget			
Phys. Science as % of academic budget			
Biology/LO as % of academic budget			
Accounting as % of academic budget			
Economics as % of academic budget			

## 5.3 Additional funding per subject in preparation for NSCE

	2007	2008	2009
Total budget for additional funding/subject			
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

## 5.4 Activities funded from additional funding as preparation for NSCE

	2007	2008	2009
In general			
Afrikaans			
English			

3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

## **Section B**

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

6. How do you manage the academic programme at your school?
7. How do you manage academic performance at your school?
8. In your opinion, what is the correlation between the level of funding and the academic performance of ...
  - 8.1 your school as a whole? Please explain your view.
  - 8.2 the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.
9. What do you attribute your school's success rate in the National Senior Certificate Examinations to?
 

*This will be followed up with probing questions to address the following dimensions:*

  - Additional funding
  - Additional staff
  - Class size
  - Extra classes
  - Extra teaching learning support material
  - Motivation of staff
  - Academic background of staff

- Teaching experience of staff
- Additional training for staff
- Mentor system
- Use of external specialists
- Peer group pressure
- Parental involvement
- Community involvement
- Role of traditional leaders
- An opinion on the effectiveness of the programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- An opinion on the functioning of the school's Finance Committee
- Evidence to substantiate the information provided in the preceding bullets.

### **Section C**

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

#### **C1 Attainment**

<b>Dimension</b>	<b>Rating 0/1/2/3</b>	<b>Comments</b>
10. Mathematics		
11. Reading/Language competence		
12. Science		
13. ICT		



14. Foreign Language		
15. Learning to learn		
16. Civics		

### C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17. Drop-out rates		
18. Completing upper Secondary Education		
19. Participation in Tertiary Education		

### C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20. Evaluating & Steering School Education		
21. Parent participation		

### C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22. Education & Training of Teachers		
23. Participation in Primary Education		

24. Number of students per computer		
25. Education expenditure per student		

26. Any other comments / remarks that you deem relevant to the research question?

## ANNEXURE 4: RESEARCH DATA PER SAMPLE SCHOOL

### Case study 1: Sample school I

#### Section A

#### 1. Demographic information about the school.

##### 1.1 Enrolment

	2007	2008	2009
Total number of boys in school	96	121	164
Total number of girls in school	97	115	141
Total number of learners in school	193	236	305

##### 1.2 Enrolment in Grade. 12

	2007	2008	2009
Total number of boys in Gr. 12	21	30	44
Total number of girls in Gr. 12	27	37	47
Total number of learners in Gr. 12	48	67	91

##### 1.3 Dropout rate

	2007	2008	2009
Drop out rate Gr. 8 to Gr. 12 as %	9.3%	7.2%	10.1%

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	2007	2008	2009
Pass rate Gr. 12 as %	100%	100%	100%

##### 1.5 University Entrance Admission

	2007	2008	2009
University entrance admission as %	93%	88.9%	69.9%

##### 1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of subject distinctions in Gr. 12	74	73	95
Number of distinctions in Afrikaans	24	12	14
Number of distinctions in English	8	4	4
Number of distinctions in 3 <sup>rd</sup> Language	-	-	-
Number of distinctions in Mathematics	5	3	8
Number of distinctions in Phys. Science	4	3	2
Number of distinctions in Biology	5	3	4
Number of distinctions in Accounting	3	2	2
Number of distinctions in Economics	1	1	0
Candidates with an A aggregate	5	5	6
Candidates with 8 or more distinctions	-	-	-
Candidates with 7 distinctions	-	2	1
Candidates with 6 distinctions	4	2	2
Candidates with 5 distinctions	1	0	3
Candidates with 4 distinctions	0	1	2
Candidates with 3 distinctions	1	7	5
Candidates with 2 distinctions	12	8	11
Candidates with 1 distinction	18	16	16

1.7 Subject averages in National Senior Certificate Examination  
(NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Overall average for all subjects in NSCE			
Subject average in Afrikaans	76.3%	67.2%	66.7%
Subject average in English	66.9%	64.2%	61.0%
Subject average in 3 <sup>rd</sup> Language			
Subject average in Mathematics	59.9%	60.5%	60.7%
Subject average in Phys. Science	69.4%	55.5%	51.4%
Number of distinctions in Biology	67.8%	63.8%	61.5%

Subject average in Accounting	67.2%	69.6%	68.0%
Subject average in Economics	63.5%	58.3%	50.5%

## 2. Demographic information about educational staff.

### 2.3 Demographic information about the SMT.

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced Training	Awards / Achievements
Principal	20	5	5	BA HOD BEd Hons	Geography & Afrikaans	Currently MEd Leadership	
Deputy Principal 1	14	3	2	BA HOD	English & French	Currently BEd Hons	
Deputy Principal 2	None						
Deputy Principal 3	None						
HOD 1	None						
HOD 2	None						
HOD 3	None						
HOD 4	None						
HOD 5	None						

### 2.4 Demographic information about staff teaching Grade. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	5.5 yrs	2	2	BA (Lang) BA Hons	Afrikaans FAL Eng HL&FAL	Editing & Translation PGCE	
English	5	5	5	MA (English)	English HL	PGCE	
3 <sup>rd</sup> Language							
Mathematics	23	23	3	BSc Bed Hons	Mathematics	HED	
Phys. Science	20	13	2	MSc	Physics	HED	
Biology/LO	5	5	5	BSc AniSA	Life Science	PGCE	
Accounting	10	8	5	BCom	Acco & Econ	HED	
Economics	10	8	5	BCom	Accounting & Economics	HED	

3. Demographic information about the members of the School Governing Body (SGB). **Independent School owned by listed company. No SGB.**

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	N/A						
Deputy chair	N/A						
Secretary	N/A						
Treasurer	N/A						
Member 1	N/A						
Member 2	N/A						
Member 3	N/A						
Member 4	N/A						
Member 5	N/A						
Member 6	N/A						
Member 7	N/A						
Member 8	N/A						

4. Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	N/A						
Deputy chair	N/A						
Secretary	N/A						
Treasurer/FO	N/A						
Member 1	N/A						
Member 2	N/A						
Member 3	N/A						
Member 4	N/A						
Member 5	N/A						

5. Information regarding the financial management of the school for the window period.

5.2 Regarding the budget

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Date when budget was approved	Nov 2006	Nov 2007	Nov 2008
Total annual budget	5,773,805	8,845,474	9,628,000
Funds from public funding	-	-	-
Funds from private funding	100%	100%	100%
Funds from school fees	100%	100%	100%
Funds from entrepreneurial ventures	-	-	-
Funds from donors	-	-	-
Funds from sponsorships	-	108,933	140,077
Funds from bequests	-	-	-
Interest on investments	-	-	-
Other sources of income 1	-	-	-
Other sources of income 2	-	-	-
Other sources of income 3	-	-	-
Other sources of income 4	-	-	-
Other sources of income 5	-	-	-

5.5 Regarding the academic budget

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Academic budget as % of total budget	2,46%	2,3%	2,94%
Afrikaans as % of academic budget			
English as % of academic budget			
3 <sup>rd</sup> Language as % of academic budget			
Mathematics as % of academic budget			
Phys. Science as % of academic budget			
Biology/LO as % of academic budget			

Accounting as % of academic budget			
Economics as % of academic budget			

### 5.6 Additional funding per subject in preparation for NSCE

No individual budgets for the different subject fields; just one collective budget. Provision is however made for the payment of an annual once-off subject levy in certain fields; for instance for Art and Design, Drama, Computer application, IT, Tourism, Hospitality studies and Life orientation. These subjects are more expensive to offer because many have a practical component and the classes are normally also smaller. Other fields of study with a practical component cover the cost from the normal education materials budget. This budget is also used to buy text books. There are no fundraising efforts in the course of the year. An all-inclusive fee is charged and students/parents get a one stop service. Students do however buy their own stationery.

	2007	2008	2009
Total budget for additional funding/subject			
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

### 5.7 Activities funded from additional funding as preparation for NSCE

2007 was still the old Senior Certificate Exam. It is only since 2008 that we have the National Senior Certificate Exams. Up until 2007, the policy was that

there were no September school holidays for matrics and the teacher's contracts stipulated that as such. Clinics were held where specific preparation for the matric exams took place according to a detailed programme.

This practice was stopped since 2008 because the exams are now a month later providing enough time for the final preparations for the exam. The syllabi are covered by the time prelims are written in August/September. The clinics are now offered in October as integral part of the normal school programme. No new work is done; the time is used for revision and teachers are therefore also not additionally remunerated for this task.

The final preparations for the NSCE exams do not carry any additional costs. The school's focus is that Grade 10, 11 and 12 are seen as a unit and everything that is done from the beginning of Grade 10 is geared at affording the student the opportunity to obtain the best possible matric certificate. The general approach is not to burden teachers with administrative frills or other time wasters such as extramural activities. Although provision is made for sporting and cultural events, the primary focus is on academic achievement. Universities look at academic results when considering admission or bursaries. The matric certificate is the ticket into professional life. They try to open as many doors as possible to students. His teachers are all academic mentors to the students. Every student has a teacher that he/she is allocated to the meet with them on a regular basis (every three to four weeks). They council them on what they want to study, which courses, admission requirements, how are they performing now, are they on track. The mentors are empowered to fulfil this role; they must know the admission requirements, both in terms of subject choice and performance levels, required APS scores and how that works. It is emphasised that if you meet the selection criteria, it only means that your application will be considered. If you want to be sure of being accepted your performance need to be that much better than the average applicant. They try to emphasise 'what do you want to do with your matric certificate?' Right from grade ten onwards students must know where they want to go and what the alternatives are if I do not get accepted for their first choice. We have a money back guarantee that says 'we guarantee access to tertiary studies'.

There are of course terms and conditions and it is a given that the student have work hard. Students are treated like adults and they work in a focussed manner. The school has a methodology to ensure that they work in a structured manner. A lot of energy is spent on motivation to bring the message home that the student is working in his/her own interest to benefit his/her own future.

The perception that we have a 100% pass rate because we ask large amounts for school fees is flawed. We get large numbers of students that arrive with very low averages. The emphasis is on how much value does the school add to ensure a pass with the best possible averages. It would have been nice to have had a national examination at the end of grade 9 (like they have in the UK) and to see how that compares with the NSCE at the end of grade 12.

### **6.2.2 Section B**

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

#### **6. How do you manage the academic programme at your school?**

The most important element in the functioning of the school is the teachers. I look for a teacher with a specific profile; the most important requirement is passion for what they do and then secondly I look at qualifications and experience. Part of the passion is; do you like what you do, do you love children, do you have enough patience to repeat something that is not thoroughly understood the first time. I am absolutely convinced that our teachers are the primary reason for our success and passion is contagious.

Secondly we make sure that our teachers are not overburdened, especially not with administrative red tape. This is the one privilege of being a private school and having access to money to take that responsibility away from teachers. An individual became a teacher because they loved their subject and wanted to be the best teacher in his/her field; not to become a jack of all trades ending up doing different other things (sport, cultural activities etc.) and not having time

to his /her job as teacher properly. Admin makes them unhappy and frustrated and that is projected onto the students. I want a happy teacher.

A third factor is that we pay a competitive salary, although contrary to perceptions, it is not all that much higher than what government pays. It is not a matter of just throwing large amounts of money at teachers. We have had applications from teachers who came to our school to work for less than what they got in government schools. It was about the conditions of service.

The fourth factor is conditions of work. We treat our teacher as professionals. What does it mean to be professional? You are a highly qualified person from a small layer of society, you do not have to be treated like a child, you are going to be well prepared, and you are going to be in class on time. It is someone who is so well versed in his /her subject that they can explain to a client at an academic level, why he/she has a problem, what caused the problem and how to solve the problem. It is not about the fact that you can invoice a client. It is how you deal with people. We are committed to deliver what we promise the parent; we will give your child the best quality education possible and we have top notch staff to do so! Staff all knows the answers to the following questions: “What is our goal?” Where are we going? What am I here for?” We don’t waste time on trivialities. They are focused and know exactly what is expected of them.

We have a compulsory daily homework period of plus minus one and a half hours four days a week. It is supervised, it is quiet, the students work and if a problem arises, the student gets a letter to go and see his/her teacher to assist in solving the problem (teachers are at school until at least 15:15 on a daily basis, often until 17:30 because they prefer to sit and work at school). If a student has a problem, they ask their teachers. If they come across a problem at home, they have the cell phone numbers of all their teachers in their school diary and they can phone teachers until nine at night if they have a problem. So there can be no excuse for not having done their homework.

We give regular feedback on performance. Students get eight comprehensive reports per annum; that is one every month. Not a fancy thing with all sorts of

comments that wastes the teacher's time; just the mark, the average and then something unique, we call an effort rating. It is a rating done by the teacher on a six point scale that is spelt out in detail in the school diary. The effort rating for the different subjects are added and then expressed as an average. If the effort rating is above a certain level, the student gets relief from attending the compulsory homework sessions for a month. This privilege is not automatic but has to be deserved with every report. If the effort rating is very low, the student has to stay on for late-homework; this is not detention, but the student stays until 16:00 until such time as the can manage their own time and effort. The purpose is to teach students to work hard in a focused manner on those things that matter.

School rules do not focus on petty things such as the length of hair or nails. Discipline does not depend on the external factors; what is important is your behaviour, the ability to work hard in a focused and structured way towards achieving set objectives. The most important achievement in this school is to be awarded the effort rating trophy. A 100 % pass rate is the result of the school's commitment to and emphasis on the individual's concerted effort to perform at the highest possible level and not an objective per se.

New applicants are interviewed and not just everyone is accepted. The newcomer has to subscribe to the school's philosophy, both parent and the student have to understand the philosophy, secondly the students must have a vision of what he/she wants from life and finally they must show signs of commitment and tenacity in working towards their goals.

#### 7. How do you manage academic performance at your school?

It starts with the selection process for students. Key factors are; what is his/her attitude, does he/she have a vision for him-/herself, how motivated is the student, is the student focused. A lot of motivation goes into the selection interview and the student signs a commitment.

A second mechanism is the regular feedback to parents and students in the form of the eight reports that go home once a month. Any deviation in performance is picked up and addressed immediately.

A third strategy is the '*Effort rating scores*'. These scores are not used in an intimidating or degrading manner. It is motivational in itself and late homework sessions are treated as a form of remedial work. The involvement of the teacher is to assist the student with whatever is causing him/her to underperform.

Before any of the reports go out, a staff meeting is held and every individual is discussed in detail. Every teacher is responsible for the mentoring of plus minus 16 students (a workable load) on an absolutely random basis. If a student needs assistance, a strategy is devised there and then and attended to. Parents are also not burdened with the student's performance; it the teacher's job and they are available to assist the students until nine in the evening.

A huge emphasis is placed on '*Class time*'. Forty five minute periods; nothing and nobody interrupts any lesson. Interruptions by the principal / intercom are limited to an absolute minimum/necessity. Not even departmental officials; if the subject advisor wants to speak to a teacher, they do so in free periods or they have to make appointments to see teachers after school. Students get the attention of the teacher for the full 45 minutes.

The whole thing about managing performance is very much based on a philosophy rather than specific tricks or measures.

In terms of the organization structure they have one principal, one deputy principal and three grade heads and the rest are regular teachers. They follow a matrix approach in their functioning. Each teacher fulfills a specific niche role. Persons applying for promotion must want to change to a management/administrative role and not for salary purposes. In this way top teachers are kept in the classroom and they are treated, professional people and they respond accordingly. The three grade heads have an administrative

function to coordinate student absenteeism, coordinate meetings etc. Their responsibility in the management of the academic performance of students entails chairing the discussion on the marks, phoning the parents to inform them that there is a problem and disseminating the information to the student's academic mentor for follow up. Meetings are held on a weekly basis.

They have started a specialist school in maths and science; it is called the CT (Career Targeting) School. It targets learners who intend following a career in architecture, engineering or medicine etc. It is an enriched curriculum that prepares the student for the specific career needs of the different fields of specialization. Students are addressed by specialists from the field to give them first-hand information. Students pay a little more for this and receive a certificate afterwards that can be attached to their documents when applying for entry into university. It is envisaged that this initiative will be extended to include other fields such as, Art & Design, Hospitality & Tourism, Business school (Economics, Business Economics and Accounting) as well as Philosophy and Political Science. This provides a second stream of income to both the school and the teacher (because it is offered after hours) as well as focused enrichment for the students.

The preceding discussions have also covered the questions in paragraph 8.

8. In your opinion, what is the correlation between the level of funding and the academic performance of ...

8.3 your school as a whole? Please explain your view.

It cost more to attend a private school, but the results are attributable to the approach and methodology and not to the higher fees. If this was a government school we would have followed the same approach.

8.4 the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

Results in individual subjects are also because of the philosophy and approach of the school; much more so than because the child pays a higher fee, or that they have access to more technology or because the teachers get a higher

salary. The philosophy is carried through to and applied in the classroom by the teacher. The principal says that he is also not convinced that his teachers are that much better than good teachers in government schools; they are good because they are handpicked, but they are picked more for their passion rather than being such a subject specialist. When they join the school, they are treated as professionals, they are given that much time, they are clear on what is expected of them, they progressively become better teachers and there years down the line they are invited by the department to join the panel that sets the exam papers because they are perceived to be subject specialists. How is it possible that a teacher can develop into a subject specialist in three years' time? They have to have the will to do so. They must be happy in their working environment. They must be focused on those matters that make a difference in the student's performance and they must have the time to develop themselves.

Focus on the positive and the Pygmalion effect of 'you get what you expect' will become true.

9. What do you attribute your school's success rate in the National Senior Certificate Examinations to?

*This will be followed up with probing questions to address the following dimensions:*

- Additional funding – No
- Additional staff – To a certain degree yes. Compared to a government school, I would have more teachers. It goes with the issue of class size.
- Class size - My average class size is not more than 1:24. The teacher must know the individual student. He/She must be able to manage without being overloaded.

- Extra classes – Yes see the discussion on the homework period that is conducted in the afternoons, but we also offer an extra period of class on a weekly basis, to all students taking maths and science. Any student taking any other subject gets additional attention based on their individual needs because the teachers are there and are available.
- Extra teaching learning support material – Very little. We have access to smart board technology and the internet; it is nice to have, it makes life easier, it gives the teacher a sense of being in touch with technology and the world of the student, but I am convinced that if you take it away, we will still achieve a 100% pass rate.
- Motivation of staff – yes this crucial and we have addressed the next two bullets as well in our previous discussion
- Academic background of staff
- Teaching experience of staff
- Additional training for staff - I do not view this as being limited to the attendance of workshops, that too, but they are intelligent literate people that can read, information is readily available and they are able to do their own research. We focus on the development of the professional person that can function optimally in his/her environment. We focus on other topics. As institution, we are an accredited with “*Investors in People*”. We take it seriously and therefore have more than one discussion annually with every staff member on what is it that they think they have to develop; are there any courses that they think that they have to enroll for. Is there anything that the school can do to assist you? We go to a lot of trouble to assist them in achieving whatever they express as a need. Every member has thus far this year, completed

four modules of the ICDL course (Excel, PPT etc). Formal training that members are enrolled for; principal – M, Deputy principal – Hons., another teacher is also busy with an M, one of the cleaners enrolled for a course in HR at UNISA, both secretaries are doing a course in office administration with Varsity College. We recently got in a de-cluttering specialist to assist staff on how to organize ourselves our lives and our shelves. It is not limited to your environment, it extends to your computer and your whole life. It started with one teacher expressing the need, and now it extended to the rest of the staff.

- Mentor system – Newly appointed staff members are assigned to a mentor to familiarize them with the school, its policies and procedures, but this relationship lasts for a limited period. They work as one team; the principal and deputy being the main mentors of the team. We also have a full-time psychologist on the staff to assist with whatever trauma whenever necessary. The team includes both teaching and non-teaching staff. Also when they go to the Matric dance everyone gets invited; the cleaners too.
- Use of external specialists – no, because all my teachers are specialists.
- Peer group pressure – more or less no bullying whatsoever in this school, the least he has experienced in any school that he taught at. *'It is cool to do well'* in this school.
- Parental involvement
- Community involvement

Feedback from parents is just positive. They pay the fees, are entitled to a quality service, but not bothered otherwise. The relationship is a one on one relationship

- Role of traditional leaders

### 6.2.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

### C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10 Mathematics	3	Started a Mathematics Career Targeting School
11 Reading / Language competence	2	Many foreign students still struggle with English, so we started an “English-for-foreigners” course
12 Science	2	Many students struggle with Science, but parents force them to take the subject
13 ICT	3	Superb IT & CAT results
14 Foreign Language	2	Outside teachers offer foreign languages privately on demand

15 Learning to learn	2	Our Counselling Psychologist offer Study Skills Training Courses
16 Civics	2	Covered in all subjects. Constitution taught in Life Orientation.

## C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17 Drop-out rates	1	Too many students drop-out. Often (mainly) fee related.
18 Completing upper Secondary Education	3	All who write the exams, pass.
19 Participation in Tertiary Education	3	A large % goes to University – difficult to get exact no's though. More than 20%. A large number go to other tertiary institutions. We provide Career Information Days.

## C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20 Evaluating & Steering School Education	3	8 school reports per year. Constant feedback given to parents.
21 Parent participation	2	Parents sign a contract with the school. They “buy” a service from us. They participate where asked, but they are mainly asked to support the academic process by providing resources at home and an environment in which students can learn.

## C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22 Education & Training of Teachers	3	Extensive staff development program. Investors in People accredited.

23 Participation in Primary Education	n/a	
24 Number of students per computer	2	38 computers currently, mainly for CAT & IT i.e. $275 \div 38 = 7,2$ students per computer.
25 Education expenditure per student	3	Total expense $\div$ total students: 2007 = R36,086 / student 2008 = R42,939 / student 2009 = R37,317 / student

26. Any other comments / remarks that you deem relevant to the research question?

I am of the opinion that finances plays a role, but not the main role to achieve good results. The attitude of the teachers is the key. The way they are treated and accepted as being professionals makes all the difference. That spills over to the students.

## Case study 2: Sample school II

### Section A

#### 1 Demographic information about the school.

##### 1.1 Enrolment

	2007	2008	2009
Total number of boys in school	269	275	267
Total number of girls in school	290	274	273
Total number of learners in school	559	549	540

##### 1.2 Enrolment in Gr. 12

	2007	2008	2009
Total number of boys in Gr. 12	57	50	56
Total number of girls in Gr. 12	69	53	53
Total number of learners in Gr. 12	126	103	109

##### 1.3 Drop out rate

	2007	2008	2009
Drop out rate Gr. 8 to Gr. 12 as %	-	-	-

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	2007	2008	2009
Pass rate Gr. 12 as %	100%	100%	100%

##### 1.5 University Entrance Admission

	2007	2008	2009
University entrance admission as %	99%	97%	98%

##### 1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Total number of subject distinctions in Gr. 12	339	376	386

Number of distinctions in Afrikaans	59	28	24
Number of distinctions in English	42	45	38
Number of distinctions in 3 <sup>rd</sup> Language	14	11	15
Number of distinctions in Mathematics	31	47	19
Number of distinctions in Phys. Science	16	13	20
Number of distinctions in Biology	16	10	19
Number of distinctions in Accounting	42	19	12
Number of distinctions in Economics	n/a	1	n/a
Candidates with an A aggregate	65	49	65
Candidates with 8 or more distinctions	-	4	11
Candidates with 7 distinctions	8	9	12
Candidates with 6 distinctions	8	16	7
Candidates with 5 distinctions	13	11	8
Candidates with 4 distinctions	13	10	9
Candidates with 3 distinctions	20	17	11
Candidates with 2 distinctions	18	10	20
Candidates with 1 distinction	22	18	21

### 1.7 Subject averages in National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Overall average for all subjects in NSCE	n/a	n/a	n/a
Subject average in Afrikaans	78.7%	71.8%	66.3%
Subject average in English	73.7%	76.1%	74.7%
Subject average in 3 <sup>rd</sup> Language	76.4%	75.8%	76.6%
Subject average in Mathematics	71.0%	79.5%	63.5%
Subject average in Phys. Science	68.5%	70.6%	59.6%
Number of distinctions in Biology	71.4%	73.9%	71.6%
Subject average in Accounting	80.0%	77.4%	66.0%
Subject average in Economics	n/a	77.4%	n/a

## 2. Demographic information about educational staff.

### 2.1 Demographic information about the SMT.

Position	Total Experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Principal	29		8	BA PhysED, FDE,HDE	Geography	Professional Degree	
Deputy Principal 1	29		5	BA HDE	Geography	Professional Degree	
Deputy Principal 2	19		5	BSc HDE	Mathematics	Professional Degree	

This school does not have any HODs. They work as teams in the respective fields of study/subject areas; where different individuals take on a leadership role depending on the specific problem/topic. Graeme Crawford appointed former HODs from other schools; because he wanted the best teachers and when they came here he paid them an equivalent salary or higher. For example we have five former HODs in our English department but here we have a flat hierarchy they are all just teachers. They take responsibility for different aspects of teaching the different grades amongst themselves based on an internal arrangement. They do team teaching.

### 2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	14		2	BA ED FDE			
Afrikaans	30		15	BA HONS HDE			
Afrikaans	15		8	BA HED			
Afrikaans	18		2	HOD Snr			
English	21		3	BA HONS HED			
English	41		14	DLIT ET PHIL (App Ling)			
English	21		3	BA HONS			



3 <sup>rd</sup> Language	26		15	BA HOD			
3 <sup>rd</sup> Language	37		14	BA HONS BEd Management			
Mathematics	19		4	BSC HDE BED HONS			
Phys.Science	16		2	BSC ED			
Phys.Science	6		1	BSC PGCE			
Biology/LO	13		6	BSC HONS HED			
Accounting	39		15	NHED (Commerce FDE)			

3. Demographic information about the members of the School Governing Body (SGB). We do not have a Governing Body. We belong to a listed company.

4. Demographic information about the members of the Finance Committee (FC).

We do not have a FC. We belong to a listed company. Our Finances are managed by a Bursar who reports to Company Head Office.

5. Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved	Not available		
Total annual budget			36,798,182
Funds from public funding			
Funds from private funding			100%
Funds from school fees			99.9%

Funds from entrepreneurial ventures		0.1%
Funds from donors		
Funds from sponsorships		
Funds from bequests		
Interest on investments		
Other sources of income 1		
Other sources of income 2		
Other sources of income 3		
Other sources of income 4		
Other sources of income 5		

## 5.2 Regarding the academic budget

They do not budget per subject or field of study. The IT budget for instance is amongst other things for Smart boards as a collective item. The English Department is the last to receive theirs as it was felt that the Maths and Science departments needed theirs first. This however is from the collective IT budget and not from a departmental budget. The average amount spent per subject field, would probably be between R3 000 and a maximum of R5 000 per subject. The Science department would have more because they have to buy chemicals and science equipment. For instance our printing budget is R244 152 for contractual costs and R121 000 for consumable costs. Computer related consumables for instance amounts to R241 000 whereas consumable educational materials only amounts to R89 000. That would be posters for the history class, textbooks, DVDs, videos etc. It does not include any for the hardware in the classroom video recorders, the laptops, smart boards or any other infrastructure. It would not be for textbooks as students buy their own textbooks. And then there is training and conferences and small assets. The company has a budget of more or less 4 million rand for staff development. Staff members, wanting to go to conferences, simply approach the principal, who considers every application on its own merits and passes it on to the company HQ for approval. They have joined a programme called 'Investors

in people’ It is a company initiative that is very well known in the UK. Persons from the company, randomly assesses more or less ten staff members randomly; it includes teaching staff, admin staff and support staff but also includes the principal. They ask questions on the vision & mission of the school etc. The basic focus is that everyone at the school must realise what the importance of their specific role is in making it a successful school right from the gardener to the principal.

If you are a successful school, pupils want to enrol. We are very customer orientated. In addition to this as a check and balance, we also annually do the Markinor survey where the students, the teachers and parents all complete the same questionnaire to assess the quality of their performance. There are a whole lot of things there that are used as part of their strategic planning; strengths and weaknesses are identified in the teaching staff, the admin staff, the infrastructure and associations between parents and students , the students and teachers to keep us in touch using first-hand information from your clientele. For instance we identified that our canteen needed attention and that has now been addressed. Feedback on teacher performance is used similarly to identify differences in the feedback on staff themselves and that of learners and parents. This is then used for interventions and strategic planning.

The combined feedback from all the surveys is also important in terms of the company profile and a marketing perspective since it allows the company to get money back from the SETA based on school development that is reinvested in further training.

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Academic budget as % of total budget	No specific breakdown of amounts spent per subject field is available. The collective amounts have been discussed above.		
Afrikaans as % of academic budget			
English as % of academic budget			
3 <sup>rd</sup> Language as % of academic budget			
Mathematics as % of academic budget			
Phys. Science as % of academic budget			

Biology/LO as % of academic budget	
Accounting as % of academic budget	
Economics as % of academic budget	

### 5.3 Additional funding per subject in preparation for NSCE

	2007	2008	2009
Total budget for additional funding/subject	No additional money is made available for the specific purpose of preparing students for the NSCE. None of the teachers or subject fields has a specific budget for preparing students for the matric exams.		
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

### 5.4 Activities funded from additional funding as preparation for NSCE

	2007	2008	2009
In general	Not applicable		
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

Our matric result is our chief marketing tool, but no subject gets any special treatment. What I do is that in the time table that works in blocks and thirds, maths and science get a bit of extra contact time.

When a teacher is appointed, it is made clear to them that they must be available in the morning and the afternoon, teachers are expected to offer extra support lessons of plus minus an hour at least three times a week. Any costs, like for extra notes, are considered to be part of the normal running costs of the school. Teachers are not remunerated for these extra classes; it is considered to be part of their normal responsibilities. If however, new learners join the school and they are behind or have not done certain section of the syllabus, a private arrangement can be made with the parents to assist the newcomer to catch up and teachers are allowed to charge a fee for that service.

### **6.3.2 Section B**

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

#### 6. How do you manage the academic programme at your school?

The organizational structure does not provide for the management of the academic programme per se. It is an integrated matrix approach where teachers work in subject teams. The core business of the school is to provide a high quality academic programme and that is what the school wants to be known for. The school does have outstanding music, drama and dance departments that give the school a special ethos, but the focus is on academic performance in all the core subjects. The emphasis is to train students for university. A recent phenomenon is that parents bring their children from government schools at the beginning of grade 11 to complete at this school; we are beginning to see ourselves as finishing school of sorts. Because of the high fees, they cannot afford to enroll their child from grade 8 but somehow find the money for the two final years. We have a huge success rate as far as sending students to university is concerned. Students are often accepted at three universities and can then make a choice as to which university they want to go to. Last year we had 12 students accepted at the local medical school. A lot of that has to do with the academic ability of the teachers. We offer what

others schools don't, we give students the opportunity to do community service and we also support them in doing a semester course in Grade 11 at the university called MTL, which is a course in medical terminology.

7. How do you manage academic performance at your school?

In our school there is a slogan "It is cool to do well". An average of 60 % is not cool; here the norm is to have an average of 80 to 90%. We have brag boards where the top ten performers per grade are depicted. A grade 10 learner with a 90% average in the June exams, would for instance not even appear on the brag board, you need an average of at least 91% plus. A child is recognized for his/her ability. There is a huge drive for academics.

For us it is all about benchmarking; we use various methods to benchmark. Like for instance today all the grade 8s and the grade 10s wrote the SIAT exams in English (Schools International Assessment Test administered by the Educational Assessment Australia Unit of the University of New South Wales in Australia. In South Africa tests are available for Maths, Science and English for grades 3 to 12. More than two million students worldwide write these tests. Schools receive a detailed diagnostic report on the performance of every student; highlighting strengths and weaknesses. Costs vary and depend on the number of participants. It ranges from R120/paper and decreases depending on the number of papers ordered). These are skills-based tests that are sent to Australia where they are marked and then we look at our results compared to the SIAT results to see how we are doing. More than a million students worldwide write the SIAT exams.

In grade 12 our matrices write the GAT (General Achievement Tasks) exams. Students from the Philippine countries, Australia, China, Korea; all write this exam. It also is skills based tests. The results are used to back up the VCAA exams from Queensland in Australia. We use the VCAA (Victoria Curriculum and Assessment Authority) exams as our external prelim. The students use their performance in the GAT and VCAA to obtain entrance into overseas

universities. It is my experience that the VCAA exams are more difficult than our government exams; the trend is that in June the marks are quite low, there is a slight rise with the VCAA and then there is a 10% rise with the Umalusi exams at the end of matric.

Both parents and learners are highly motivated and highly driven. You will often find that a parent approaches me to find out how his child's performance can be improved if he gets 85% because the child normally gets 90 to 95%. Part of our success is that before the students sit for the VCAA exams they have all done 5 past matric papers. The kids do well, but it does not come easy, it requires mega hours of hard work from their side.

8. In your opinion, what is the correlation between the level of funding and the academic performance of ...

#### 8.1 Your school as a whole? Please explain your view.

Yes and no. It is not the only driver. When the school started the facilities were pretty shocking. That year the English and drama departments were literally teaching under a tree and produced brilliant results. So it is about the dedication of the teacher; that is where the money comes in; to find a dedicated teacher you need to pay a little more and you have to go and look for them. I head-hunt teachers to find the best teacher available at the time. You can teach under a tree but having a decent classroom and access to smart board technology makes it easier. At the same time however, you must have the right person; he/she must be motivated, must be dedicated, and must be here for the child. My aim is to put the best person in the class for the student. I do pay teachers more than what they get at government schools.

There is a whole ethos around being the best teacher. They have to be innovative, thoroughly prepared (not the chalk and talk kind of business or reading from a textbook). I do regular appraisals of the staff. I very seldom do class visits. I do get invited to attend classes. There is a lot of soft motivation amongst staff, they work hard and take pride in their results. I sit down with

them and discuss their situation with them identifying areas that needs attention or learners that might need more work to achieve the results. For example the grade 11 science were of an unacceptable level. The intervention was to re-teach concepts that were taught in grade 10. So from now until the end of the year there is a compulsory lesson of an hour and a half on Tuesdays and Fridays. In that way we rectify the problem.

8.2 The individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

Student performance is monitored on a continuous basis at various levels. Teachers inform principal and parents of individual poor performance and make arrangements for the child to come for extra lessons. Test and exam results are sent to parents via SMS within two days so that by the time you get to a parents evening there are no surprises and the problems have been addressed already.

Exam results are submitted to the principal in the form of a spreadsheet and problems (like levels that are dropping) are brought to his attention. No results are read into the computer before he has signed it off. If there are deviations that require attention, it is dealt with immediately if it of a serious nature or at a later stage after the reports were issued, if not so serious. The Senior Deputy in charge of academics manages the process; the problem is identified, analysed and a strategy devised to solve it. For example four years ago the Maths results were poor with a 56% average (our benchmark is 63% to 65%). Parents were informed of the problem and how they were going to fix it. The entire program was re-taught and re-examined to rectify the matter. Reports were held back and were only released after the school holidays.

None of the above has any direct financial implications as far as the budget goes and are handled as part of the normal operations of the school.

9. What do you attribute your school's success rate in the National Senior Certificate Examinations to?

*This will be followed up with probing questions to address the following dimensions:*

- Additional funding
- Additional staff
- Class size
- Extra classes
- Extra teaching learning support material
- Motivation of staff
- Academic background of staff
- Teaching experience of staff
- Additional training for staff
- Mentor system
- Use of external specialists
- Peer group pressure
- Parental involvement
- Community involvement
- Role of traditional leaders
- An opinion on the effectiveness of the programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- An opinion on the functioning of the school's Finance Committee
- Evidence to substantiate the information provided in the preceding bullets.

The first thing is that the teachers have to be at the school to teach. You need dedicated staff. We have a very relaxed atmosphere at school. We treat teachers as professionals; if their classes start at nine, they arrive at nine or if it finishes at one they don't sit around at school; and they respond accordingly. If they are not feeling well, they speak to the principal, come and teach the matric class and they go home. You need to have people that are subject experts. We find that when my teachers go to cluster meetings, subject advisors often don't know the content and cannot field the questions and my staff is then drawn in to assist as the expert.

You need subject experts, you need dedication and then you need fair infrastructure; it is not the most important thing, but it makes it comfortable and easier to achieve your objectives. Part of the professionalism of the staff is that they are here and that they are here to help the children to perform to the

best of their ability; so their whole take on it is; how can I get you to go from 50 to 60, 60 to 70, 70 to 80 or 80 to 90. They are doing things differently for the benefit of the students. It is very much part of the school's ethos.

Average class size is 25.

We have a mentoring system where a new teacher piggybacks with an experienced one and they literally take them by the hand and show them the ropes. We have an induction arranged by the group head office.

### 6.3.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve = 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

## C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10. Mathematics	3	We have a 100% pass rate and our average of 73% is way above the national standard
11. Reading/Language competence	3	Ditto – we are 25 to 30% above the national standard



12. Science	3	Ditto
13. ICT	2	IT is select group. We start with a group of 15 in Gr 10 and eventually about 9 complete Gr 12. It is very difficult and the focus is almost completely on programming. Unfortunately CAT has fallen by the way which is a pity.
14. Foreign Language	3	We offer Hebrew, French and German. We also have Spanish and Portuguese, but they are offered by teachers from the relevant embassies. They are all doing very well. In fact in French students are writing the Delph exams taught are at a university level and the student perform very well.
15. Learning to learn	3	Linked to the Life Orientation programme.
16. Civics / Citizenship training	2	It is difficult because we are quite cosmopolitan; we have 14/15 different nationalities coming to school. We have a lot of the embassy children over here. No formal programme. It is incorporated throughout the curriculum.

## C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17. Drop-out rates Gr 11/12 Gr 9 to 12	3	0% None
18. Completing upper Secondary Education	3	100%
19. Participation in Tertiary Education	3	65 to 70% go to varsity and complete their studies. We started following alumni's careers and the feedback is fantastic. For example one student received an Art award of R120 000 to study in Paris.

### C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20. Evaluating & Steering School Education	3	Continuous monitoring. Address deviations immediately.
21. Parent participation	3	No PTA. Parents are dealt with on an individual basis. They do have a voice and make a contribution through their participation in the Markinor survey. We have a very open door policy and a client driven customer based approach in dealing with parents.

### C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22. Education & Training of Teachers	3	See par 2.1, 2.2 and 5.2
23. Participation in Primary Education		Not applicable
24. Number of students per computer		28 computers in the lab. All are linked to the internet. Are used for tuition and for research by learners.
25. Education expenditure per student		See spreadsheet. Capital expenditure budget is where big money is. Busses, computer labs, smart boards, lap tops etc.

26. Any other comments / remarks that you deem relevant to the research question?

Our parents want a return on their investment and if we don't perform, my head is on the line.

## Case study 3: Sample school III

### Section A

#### 1. Demographic information about the school.

##### 1.1 Enrolment

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in school	956	956	864
Total number of girls in school	1016	942	861
Total number of learners in school	1972	1898	1725

##### 1.2 Enrolment in Gr. 12

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in Gr. 12	201	212	186
Total number of girls in Gr. 12	236	190	186
Total number of learners in Gr. 12	437	402	366

##### 1.3 Drop out rate

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Drop out rate Gr. 8 to Gr. 12 as %	0.0005%	0.0005%	0.00057%
	(1/1972)	(1/1898)	(1/1725)

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Pass rate Gr. 12 as %	100%	100%	100%

##### 1.5 University Entrance Admission

	<b>2007</b>	<b>2008</b>	<b>2009</b>
University entrance admission as %	75%	90.36%	85.9%

##### 1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>

Total number of subject distinctions in Gr. 12	616	807	800
Number of distinctions in Afrikaans	62	94	56
Number of distinctions in English	9	9	10
1st	96	84	70
2nd			
Number of distinctions in 3 <sup>rd</sup> Language			
German	8	-	7
	6	2	3
French			
Number of distinctions in Mathematics	62	127	88
Number of distinctions in Phys. Science	51	39	16
Number of distinctions in Biology	19	9	19
Number of distinctions in Accounting	34	40	31
Number of distinctions in Economics	15	10	5
Candidates with an A aggregate			
Candidates with 8 or more distinctions	6	15	5
Candidates with 7 distinctions	11	19	12
Candidates with 6 distinctions	15		
Candidates with 5 distinctions			
Candidates with 4 distinctions			
Candidates with 3 distinctions			
Candidates with 2 distinctions			
Candidates with 1 distinction			

### 1.7 Subject averages in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Overall average for all subjects in NSCE			

Subject average in Afrikaans	66.62	71.5	70
Subject average in English	70.54	73	72
Number of distinctions in 3 <sup>rd</sup>			
Language	78	66.7	77
German	68	71.9	75
French			
Subject average in Mathematics	61.3	72	70
Subject average in Phys. Science	62.42	67	64
Subject average in Biology	61.62	62.8	66
Subject average in Accounting	68.3	72	72
Subject average in Economics	58.99	63.8	58

## 2. Demographic information about educational staff.

### 2.1 Demographic information about the SMT.

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Principal	29	2 Acting as P	DP	BA HDE	History	FDE (YP) B Ed (Ed Man)	-
Deputy Principal 1	28	2 Acted as P	11	BA HDE	Maths	FDE (Gifted Child)	3 Merits
Deputy Principal 2	20	11	11	HDE	Metal Work Technology	FDE (YP)	1 Merit
Deputy Principal 3	19	10	3	MA	Afrikaans	EBL	-
HOD 1	24	8	8	B Com HDE	Accounting Buss. Studies	-	-
HOD 2	30	7	7	BA Hons FDE (Biology)	Biology	B Ed Hons (Ed Man)	3 Merits
HOD 3	26	11	11	BA HDE	Maths	NSC	-
HOD 4	36	22	22	BA Hons THDE	Afrikaans German	FDE (Gifted Child)	2 Merits
HOD 5	29	9	9	BA Ed	English	FDE (YP)	2 Merits

--	--	--	--	--	--	--	--

## 2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	36	22	22	BA Hons THDE	Afr; German; History	FDE Gifted Child	2 Merits
English	20	17	12	BA HDE	Eng	B Ed H M Ed Subj Did	1 Merit Internal top 10
3 <sup>rd</sup> Language	14	14	10	BA HDE	French	BA Hons (French)	
Mathematics	20	20	8	B Sc HDE	Maths; Physics	B Ed H	HOD at previous school
Phys.Science	21	21	18	B Sc HDE	Biology Nat Sc	B Ed H	
Biology/LO	42	42	20	HPDE	Biology; Maths		Int. IEEF award
Accounting	24	8	8	B Com HDE	Accounting		
Economics	30	30	7	B Com HDE	Economics	Dipl in Spec Educ	Internal HOD at previous school

## 3. Demographic information about the members of the School Governing Body (SGB).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	9	9	2	PhD	Maths Engineering		
Deputy chair	5	5	1	B Com	Business		
Secretary	2	2	2	Professor			
Treasurer	5	2	2	Advocate	Law		
Member 1	2	2	2	HDE	Business	Marketing	
Member 2	2	2	2	CA	Auditor	Internal audit	
Member 3	5	5	5		Tennis Coach	Sport	

Member 4	5	5	5	BA BD	Minister	Life Skills	
Member 5	5	5	5	Ph D	Social work	Culture	
Member 6	2	2	2	B degree	IT Business	Academics	
Member 7							
Member 8							

4. Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	5	2	2	Advocate	Law		Good
Deputy chair	10	10	4	Educator	Education	Man of School	Very good
Secretary	0	0	0	Admin	Finances	Fin Clerk	
Treasurer/FO	0	0	2	B Com	Accounting Management	Registrar of finances	Good
Member 1	0	0	4	CA	Auditor		Very good
Member 2	9	9	2	PhD	Maths Engineering		Very good
Member 3	2	2	2	CA	Auditor	Internal audit	Good
Member 4	0	0	11	B Com HDE	Accounting	HOD (EMS)	Good
Member 5	15	15	2	B Ed	History	Principal	Very good

5. Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved	Oct 2006	Oct 2007	Oct 2008
Total annual budget	19,668,045	20,902,932	22,263,213
Funds from public funding	193,384	251,658	294,191
Funds from private funding			
Funds from school fees	18,393,761	19,361,854	20,842,523
Funds from entrepreneurial ventures	350,000	350,000	350,000

Funds from donors			
Funds from sponsorships			
Funds from bequests			
Interest on investments	50,000	60,000	65,000
Other sources of income 1 – Culture	70,500	108,000	65,000
Other sources of income 2 – Practical Subjs	600,400	651,420	626,500
Other sources of income 3 - Transport	100,000	120,000	20,000
Other sources of income 4			
Other sources of income 5			

### 5.2 Regarding the academic budget

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Academic budget as % of total budget	0.6%	0.6%	0.6%
Afrikaans as % of academic budget	7	6.9	7
English as % of academic budget	6.5	6.4	6.3
3 <sup>rd</sup> Language as % of academic budget	2.6	2.6	2.7
Mathematics as % of academic budget	14.1	14.5	14.8
Phys. Science as % of academic budget	33.5	33.6	33.7
Biology/LO as % of academic budget	21.3	21.6	20.7
Accounting as % of academic budget	7.5	7.2	7.4
Economics as % of academic budget	7.5	7.3	7.4

### 5.3 Additional funding per subject in preparation for NSCE

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total budget for additional funding/subject			
Afrikaans	2,000	2,000	2,000
English	2,000	2,000	2,000
3 <sup>rd</sup> Language			

Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

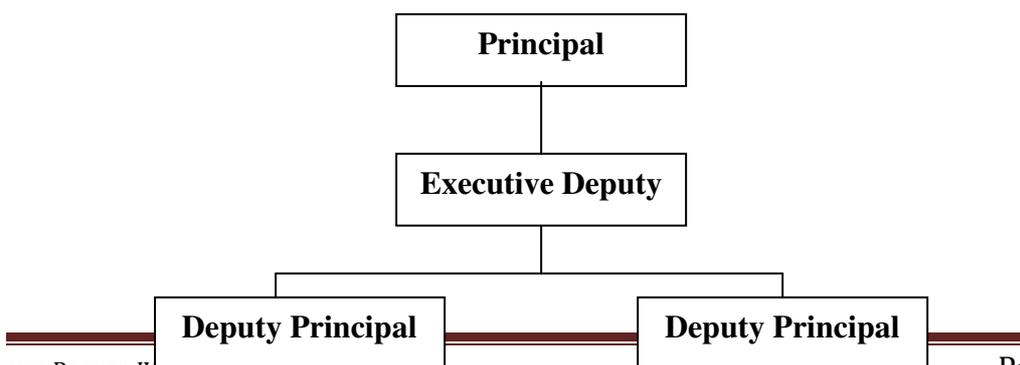
5.4 Activities funded from additional funding as preparation for NSCE – special grant from State for LTSM (textbooks)

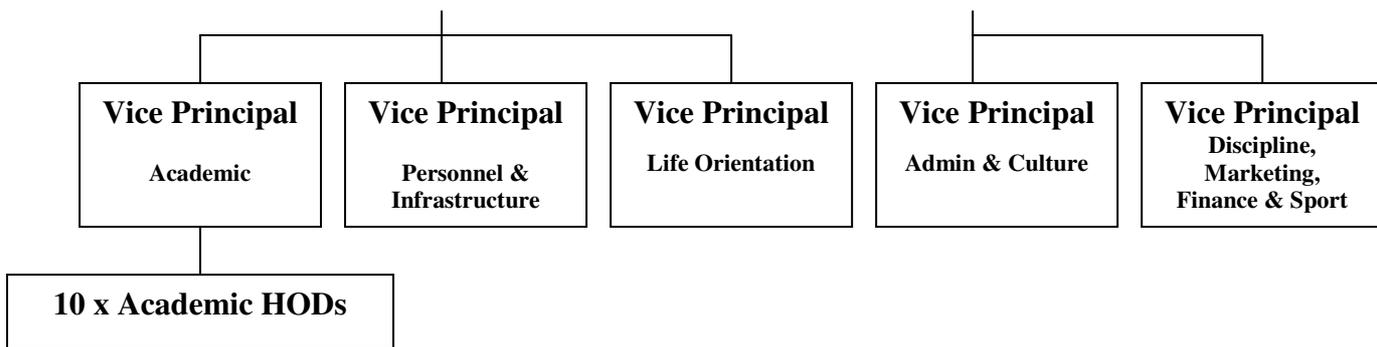
	2007	2008	2009
In general			
Afrikaans		44,983	44,960
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science		165,209	88,350
Biology/LO			
Accounting		All other subjects combined 210,968	All other subjects combined 44,960
Economics			

6.4.2 Section B

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

6. How do you manage the academic programme at your school?





The school has ten academic HODs (eight of whom are paid by the State). Every HOD has a number of Subject heads PLUS the five Grade coordinators reporting to them.

#### 7. How do you manage academic performance at your school?

The academic performance of the school and especially the grade twelve students is the responsibility of the one Deputy Principal. It is a process of continued involvement, encouragement and coercing to enable every student to achieve the best possible results.

Grade twelve students are addressed by motivational speakers on a regular basis. The school offers a wide variety of activities, but the general message is that academic performance is the top priority and that time is of the essence. Students are therefore encouraged to use their time optimally.

The academic performance of every student is monitored individually. The grade eleven results are used to identify potential cases that may fail. This is over and above the GDE 450 that is used by the state. School reports go out after the first term and a parents evening is held early in the second term. Parents are notified of this and invited to attend in different ways; notice is given in the remarks column on the report, letters as well as SMSs are sent out via the school's e-communicator (a systems driven facility). It is also put up on the school's digital notice board. Parents then see teachers by appointment or by just pitching at school. Following the parent's evening, feedback

meetings are held per grade. The meeting for the grade twelve students is handled by the Deputy Principal. Top performers, students that have missed distinctions and poor performances are highlighted and discussed with both the grade head and the respective subject teachers. Follow-ups are then made with individual candidates and their parents.

The Deputy Principal sends letters to the parents of underperforming students to inform them of their child's lack of performance and to get them on board in the management of their child's performance. This communication is kept up throughout the year. Parents are also phoned or sent SMSs to keep them informed of their child's performance. In critical cases parents are invited for personal interviews to discuss their child's academic problems. Candidates that fail subjects are allocated to Grade heads for personal attention. Meticulous records are kept of all interactions with individual students and their parents. Students that fail have to carry progress reports that are signed by the subject teachers, the parent and the register class teacher on a daily basis to certify that classes were attended and work was done on a satisfactory level. The purpose of this system is to enhance commitment and to ensure that students work regularly. Grade heads do spot checks of these progress reports to ensure that the system is working as intended. The school also has counselors and a psychologist to assist students.

The secret of our success lies with the teachers! Teachers walk the extra mile without any additional remuneration. The school offers free extra classes in all subjects on Wednesday afternoons. In addition to the extra classes, Maths and Science offer big-group classes on Mondays. Classes are also offered in the morning before school (Afrikaans on Mondays and Wednesdays; Business Economics on Fridays).

The school organises a two and a half week winter school to assist students in their preparation for the NSCE. This however, is for the account of the parents. Students buy their own workbooks and bound copies of previous examination papers. Classes are small (plus minus fifteen) and the training is very effective. Classes vary from four to eighteen hours in the different

subjects at a cost of fifteen rand per hour. Attendance is kept and feedback is given to parents on both progress and attendance. The school also offers classes in the September/October holidays. Although it is only for a week, classes are offered in Maths and Engineering subjects for grade twelve students and in Maths and Science for grade ten and eleven students. The latter is done to enable students to raise their performance with a view to being admitted to the University course of their choice.

Preliminary (mock) exam papers are set in collaboration with other top performing schools to enhance the quality of the papers as a final preparation for the NSCE.

8. In your opinion, what is the correlation between the level of funding and the academic performance of ...

8.1 ... your school as a whole? Please explain your view.

Not directly. The academic budget plays a supportive role across all grades and is not geared at the NSCE specifically. However there may be a cost factor in terms of the school organization. Firstly, the teaching load of the Deputy Principal responsible for academic performance may be lighter than that of colleagues at other schools. This is to enable the incumbent to manage the performance of grade twelve students on an individual basis.

The school has a staffing establishment of 66 employed by the State. The SGB employs twenty additional teachers. These appointees are mostly for either the big subject groups like Languages, Maths and Science, or for scarce subjects like German, French, Electrical technology, Music and Dancing. The SGB appointments also include the services of a full time psychologist and a choirmaster. They consider a class size of 30 to be ideal, but the classes are 35 on average at the moment. This is made possible by the appointment of the additional staff.

The above enables the school to market itself based on a versatile curriculum and programme selection as well as excellence/achievement/performance on all terrains.

8.2 ... the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

Very little! Performance in individual subjects is determined by quality educators, who are willing to walk the extra mile without remuneration by offering extra classes before and after school as explained in paragraph seven.

Technology plays a very small role in the academic performance of grade twelve learners. Except for IT and CAT, teachers do not have computers in their classrooms. With the exception of Biology and Maths, subject departments only have access to one data projector that is shared within the department. The school does not use Smart board technology at this stage. The school has one IT lab with 30 computers that is linked to the internet. The lab is used by individual teachers on occasion, to illustrate specific aspects of the curriculum. However, they have to book the lab well in advance. The lab is also accessible to students in the afternoons to do projects and research.

9 What do you attribute your school's success rate in the National Senior Certificate Examinations to?

*This will be followed up with probing questions to address the following dimensions:*

- Additional funding, Additional staff, Class size, Extra classes, Extra teaching learning support material have all been covered in paragraphs 7 and 8.

- Motivation of staff

The school does have a budget for staff development. Part of which is used for a motivation seminar once a year. Speakers for this are fairly expensive. Provision is also made for a slot on motivation during staff meetings where external guest speakers are also used. This money is also used to pay for training that staff attends. Examples include FET training for SGB appointed staff (the state funded this training for state employed educators), training for German and French teachers writing the IEB examinations and IT training. Most of these training sessions were more or less R200 per person. Educators apply to go for such training and are either fully or partially funded depending on the nature of the training; whether it includes travel and accommodations costs etc.

- Academic background of staff, Teaching experience of staff, Additional training for staff have all been covered in section A.

- Mentor system

A mentor is appointed to all newly appointed staff members on a one on one basis. The decision as to who mentors who, is made by the HOD involved.

- Use of external specialists

The school does have a system of small group classes that runs concurrent with the normal school timetable where external specialists offer classes. Parents pay more or less R2000 per annum for their children to be taught by these specialists. Students have to apply to be enrolled for these classes and the specialist then select only twenty students per class. Small group classes are only offered in Mathematics and Science.

- Peer group pressure

The school advocates academic excellence and a balanced school life. Students support and encourage each other but students are not pressurised to be a top performer with six or more distinctions. Failing, especially in grade twelve is not an option, “You just don’t fail!” Because of the individualized monitoring of grade twelve students by the Deputy Principal and other staff, peer pressure as a management induced strategy is not really necessary.

- Parental involvement and Community involvement.

Both parental and community involvement are at a high level and cooperation and buy-in from parents and the community poses no problem whatsoever.

- Role of traditional leaders

Play no role at all.

- An opinion on the effectiveness of the programmes / efforts to prepare the grade 12 learners for the senior certificate examination, in general.

The academic success of the school is primarily linked to the vision, drive and dedication of the teachers on the one hand and the fact that they know that they can count on the support from the school management. The SMT and HODs specifically support the grade twelve staff on an individual basis. The motto for grade twelve teachers is twofold:

- 0% failure rate, and

- A subject average 5% above that of the district in ‘my’ subject.

### 6.4.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

### C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10 Mathematics	3	Direct students to pass Maths instead of Mathematical literacy
11 Reading/Language competence	2	Gr 8 learners do reading programme in IT centre based on software programme
12 Science	3	Most students. Excellent results
13 ICT	2	Number of students decreased. Do not have computers in every classroom
14 Foreign Language	3	Very few students take a third language
15 Learning to learn	2	Can be improved
16 Civics	2	Existing efforts can be improved

## C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17 Drop-out rates Gr 8 - 12	3	Very few, if any.
Gr 10 – 12	3	
18 Completing upper Secondary Education	3	-
19 Percentage obtaining admission to University	3	High percentage passes with University entry. Good feedback from Universities.

## C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20 Evaluating & Steering School Education	3	Doing well, but there always is room for improvement
21 Parent participation	3	Above average compared to other communities

## C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22 Education & Training of Teachers	3	Senior teachers are well trained. Subject knowledge of younger teachers not always on par.
23 Participation in Primary Education	NOT APPLICABLE	
24 Number of	2	Two computer centres; one for IT and RTT the

computers & number of students per computer		other for general use by the rest of the subject areas
25 Education expenditure per student	2	-

26 Any other comments / remarks that you deem relevant to the research question? – None.

## Case study 4: Sample school IV

### Section A

#### 1. Demographic information about the school.

##### 1.1 Enrolment

	2007	2008	2009
Total number of boys in school			
Total number of girls in school			
Total number of learners in school	1198	1336	1435

##### 1.2 Enrolment in Gr. 12

	2007	2008	2009
Total number of boys in Gr. 12			
Total number of girls in Gr. 12			
Total number of learners in Gr. 12	226	252	290

##### 1.3 Drop out rate

	2007	2008	2009
Drop out rate Gr. 8 to Gr. 12 as %		4%	

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	2007	2008	2009
Pass rate Gr. 12 as %	100	100	100

##### 1.5 University Entrance Admission

	2007	2008	2009
University entrance admission as %	62	78	86

##### 1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Total number of subject distinctions in	229	336	435

Gr. 12			
Number of distinctions in Afrikaans		35	45
Number of distinctions in English		47	63
Number of distinctions in 3 <sup>rd</sup> Language			
Number of distinctions in Mathematics		48	38
Number of distinctions in Phys. Science		15	5
Number of distinctions in Biology		17	18
Number of distinctions in Accounting		7	6
Number of distinctions in Economics		2	2
Candidates with an A aggregate			
Candidates with 8 or more distinctions		3	1
Candidates with 7 distinctions		4	4
Candidates with 6 distinctions		10	13
Candidates with 5 distinctions		7	14
Candidates with 4 distinctions	26	10	13
Candidates with 3 distinctions			
Candidates with 2 distinctions			
Candidates with 1 distinction			

1.7 Subject averages in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Overall average for all subjects in NSCE			
Subject average in Afrikaans	69,6	69	69,8
Subject average in English	70	81,3	71,2
Subject average in 3 <sup>rd</sup> Language	78	69,7	-
Subject average in Mathematics	60	77,2	67,5
Subject average in Phys. Science	63	66,3	56,6
Number of distinctions in Biology	59	65,5	66
Subject average in Accounting	64	62,8	60

Subject average in Economics	71	59,3	64,4
------------------------------	----	------	------

## 2 Demographic information about educational staff.

### 2.1 Demographic information about the SMT.

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced Training	Awards / Achievements
Principal	33	22	22	BSc B Ed HDE	Maths/Econ		
Deputy Principal 1	32 (17)	15	15	BA Hons MEd HDE	History		
Deputy Principal 2	33 (19)	8	8	BA Hons HDE FDE(EM)	Geography		
Deputy Principal 3	31 (19)	8	8	BA HDE	Latin		
Deputy Principal 4	29 (29)	8	8	BSc HDE FDE (EM)	Maths		
HOD 1	19			BA HDE	Eng		
HOD 2	17			BA HDE	Geo/PhysEd		
HOD 3	17			BA HDE	Buss Econ		
HOD 4	28	15	15	BSc Ed	Phys Sc		
HOD 5	20			BSc Hons HDE	Bio/Phys Sc		

### 2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	30	20	8	Bib Ed	Afr		
English	34	23	10	BA HDE	Eng		
3 <sup>rd</sup> Language							
Mathematics	29	13	8	B Sc BEd	Maths		



				HDE			
Phys.Science	28	15	15	BSc Ed	Phys Sc		
Biology/LO	21	8	8	BSc Hons HDE	Bio/Phys Sc		
Accounting	34	15	15	BCom HDE	Accounting		
Economics	6	3	1	BCom NGSO	Econ		

3 Demographic information about the members of the School Governing Body (SGB).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair							
Deputy chair							
Secretary							
Treasurer							
Member 1							
Member 2							
Member 3							
Member 4							
Member 5							
Member 6							
Member 7							
Member 8							

4 Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair				CA			
Deputy chair							
Secretary							



Treasurer/FO				SAIPA			
Member 1							
Member 2							
Member 3							
Member 4							
Member 5							

5 Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved			
Total annual budget		11 817 450	
Funds from public funding		160 000 (1.4%)	
Funds from private funding			
Funds from school fees		+8000*1336= 10 688 000- exemptions= 10 400 000	
Funds from entrepreneurial ventures		30 000	
Funds from donors			
Funds from sponsorships			
Funds from bequests			
Interest on investments		2000	
Other sources of income 1 – Add subs		220 450	
Other sources of income 2 - Lockers		30 000	
Other sources of income 3 - Debt		850 000	

Other sources of income 4 – Rent of facile.		125 00	
Other sources of income 5			

### 5.2 Regarding the academic budget

	2007	2008	2009
Academic budget as % of total budget		40.6 (4 792 495)	
Additional staff as % of total budget		31.6	
Additional staff as % of academic budget		Sal = 78% (3 738 797)	
Afrikaans as % of academic budget		0.73	
English as % of academic budget		2.66	
3 <sup>rd</sup> Language as % of academic budget		0.05	
Mathematics as % of academic budget		0.19	
Phys. Science as % of academic budget		2.7	
Biology/LO as % of academic budget		0.31	
Accounting as % of academic budget		0.08	
Economics as % of academic budget		0.09	

### 5.3 Additional funding per subject in preparation for NSCE

	2007	2008	2009
Total budget for additional funding/subject		Nil	
Afrikaans		Nil	
English		Nil	
3 <sup>rd</sup> Language		Nil	
Mathematics		Nil	

Phys. Science		Nil	
Biology/LO		Nil	
Accounting		Nil	
Economics		Nil	

Individual subjects do have their own budgets, BUT no specific provision is made for preparation for matric exams.

#### 5.4 Activities funded from additional funding as preparation for NSCE

	2007	2008	2009
In general	<p>Not applicable</p> <p>GDE provided special grants for acquisition of additional textbooks in certain subjects for the past two years. This resulted in the buying of a second textbook in certain subjects because the money was ring-fenced for this purpose. In many instances though, the catalogue price was as much as R30 more than the regular retail price.</p> <p>Teachers use old exam papers sold by different people in preparation for matric exams, but students buy these themselves.</p> <p>Maths and Science offer extra lessons outside normal time table. This however is free of charge. Science every Wednesday from 06:30. This is primarily done to be able to complete the syllabus on time. Maths offer extra lessons 3 x a week in the afternoon for 1 hour. Attendance is voluntary but 98% students attend. No additional remuneration for teachers for this service.</p>		
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

	<p>They do offer finishing school during the October holidays in Maths, Science, Accounting, Biology and Technology. Parents pay for these classes. Students are divided into two groups; one for underperforming students where classes are offered by our own staff and a second group where outside individuals are contracted to teach these students. The school manages the process</p>
--	---

### 6.5.2 Section B

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

6 How do you manage the academic programme at your school?

Academic responsibility rests with the two Deputy Principals; one is responsible for the junior phase and the other for the senior phase's academic performance. Success in grade 12 exam starts in grade 10; if you leave it until grade 12 you cannot succeed. They plan their academic programme in such a way that the syllabus is covered well before the prelim/mock exams start. Preparation for the NSCE should be a three year programme that is dealt with as a package. It starts in grade 10! Grade 12 results are managed in this way. Teachers start with a group in grade 11 and take them through to grade 12. Every subject has an HOD who manages the curriculum, the content and the teaching thereof. The management of the grade 12 academic performance is the responsibility of the Deputy Principal responsible for the senior academic programme.

7 How do your manage academic performance at your school?

There are grade heads for each grade; one for boys and one for girls, managed by a male and female teacher respectively. They are assisted by a deputy grade

head. They are responsible for the educational side and the mentoring of the students' well-being.

We have a number of occasions where the students' performance is discussed with them. Early in the grade 12 year a meeting is held with all the top performers (based on their grade 11 achievements). Their goals for grade 12, is then discussed with them; irrespective of whether they are working for two, four, six or eight distinctions. Their current position as well as what needs to happen to achieve their objectives, forms part of this discussion. The school's objective is not primarily to achieve a 100% pass rate, but the focus is on supporting as many students as possible to gain university entry. This is currently at 86%.

Simultaneously all underperforming students are counseled; recommendations are made for subject changes where applicable. This is done in such a manner that it does not limit career choices and or admission to tertiary study. Their progress is monitored very closely and there are individualized programmes to support them to perform to the best of their ability. Their parents are also involved in the process to monitor and improve their performance, as and where necessary.

Students are monitored closely; firstly by their subject teachers and any problematic performance is addressed directly. Secondly, a meeting of all matric teachers with the SMT is held immediately after the first parents evening (in March) where every student's performance is discussed in terms of his/her performance in his subject package. Anomalies, such as a student with five distinctions and the sixth subject with a 60% average, are discussed on a case by case basis. Other than the academic performance, social factors are also shared and taken into account. This could include: ill health, depression, tension in the family, loss of a parent etc.

After the July examinations, a similar meeting is held under the guidance of the Deputy Principal responsible for the academic programmes. These

meetings are not limited to the Grade 12 learners. Similar meetings are held for all grades. Feedback is also given to parents.

Extra classes are offered in most Grade 12 subjects and attendance is more or less compulsory. This coupled with the close monitoring of performance addresses the needs of the majority of students. In instances where students clearly show that they are not coping and the supportive programmes do not have the necessary effect, it is suggested that such a learner consider level or subject changes. This is however not enforced. In the case where a student is misbehaving or shirking his/her responsibilities they have to attend a detention class of two hours on a Friday afternoon. These classes are supervised and they have to work constructively on their problem area.

8 In your opinion, what is the correlation between the level of funding and the academic performance of ...

8.1 your school as a whole? Please explain your view.

You previously indicated that money does not play a direct role in the academic performance of the school in the sense that no additional funds go to specific subjects. However money does play a role in terms of academic performance of the school in terms of staffing. The school has an academic staffing establishment of 59. Of these, 44 are paid by the state and 15 are employed by the SGB. This enables the school to employ specialist teachers; it further enables the school to limit class size to a maximum of 35; it provides for flexibility both in terms of subject choices and when making the time table. The 35 size limit is applied stringently. If for instance there are 72 learners enrolled for a specific subject, the 72 is divided by 35 and renders an answer of 2.1. This then translates into three classes and not two. The formula is consistently applied upwards to ensure that no class is bigger than 35.

The state provides for seven HOD positions and for two Deputy principal positions. Additional funding also enables the school to provide for additional members on the SMT. The school is able to employ five additional HODs and two additional Deputy principals. These appointments are all based on the

specialist contributions of the incumbents of the respective positions. To reiterate, the correlation between the level of funding and the academic achievement of the school is 100% limited to the provisioning of additional personnel.

The only other areas where funding impacts on the academic programme are:

- the school has a well-equipped library, with ten workstations that are all linked to the internet
- the school also has two fully equipped computer centres, each with 35 work stations that are not only integrated into the time table, but are also available to students in the afternoons. An amount of R350 000 was recently spent on the upgrading of the computer centres.
- the school spent R40 000 on equipment for the tuition of Technika electronics as field of study. This is however not limited to the grade 12 (matric) group.

The school does have a number of data projectors that are drawn and used by individual members of staff, but not all classes are equipped with these. The school does not use 'SMART-board' technology as yet. The principal is of the opinion that the impact and success of this kind of technology is still fully dependent on the ability of the individual teacher; thus the emphasis on appointing specialist teachers for each field of study as far as possible.

8.2 the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

It has been said before that, with the exception of a few individual so-called 'expensive' subjects, no additional funding impacts on the academic achievement of individual subjects for the NSCE. The so-called expensive subjects are expensive for one or both of two reasons; the classes are small and it requires expensive equipment, translating into a very high unit cost. These subjects include:

- Technika (electrical and mechanical) – expensive equipment and class size
- Music – expensive equipment and class size
- Visual Art – expensive equipment and class size
- Home Economics – expensive equipment

9 What do you attribute your school's success rate in the National Senior Certificate Examinations to?

*This will be followed up with probing questions to address the following dimensions:*

- Additional funding – does not apply in the sense that no specific funding is allocated for final preparation NSCE.
- Additional staff and Class size - Funds do play a major role in the employment of additional staff with specialist knowledge and to reduce class size to 35 or less.
- Extra classes – was dealt with in paragraph 5.4
- Extra teaching learning support material – in addition to what was said previously, it is important to note that teachers (and grade 12 learners after the GDE special grants for this purpose) have access to more than one textbook. In addition LTSM is also loaned from the GDE teacher's or the local Provincial library. Often in the form of block loans that are either kept in the school library or in that of the specific department. One such example is the English department who has their own mini library.
- Motivation of staff – the academic success of the school is attributed in its entirety to the dedication of the staff involved. Each teacher lives the moral obligation expressed by President Zuma; to

be well-prepared, in class on time and teaching. This happens every period from January to December and is considered as a given. It requires continuous consistent hard work and involvement of the teacher. Teachers have come a long road before they teach Grade 12.

The academic performance in every field of study is the primary responsibility of the HOD in conjunction with the Deputy Principal of the phase involved. Work is monitored on a weekly basis. Regular subject meetings are held. During subject meetings training is provided to junior members, model lessons are demonstrated etc. Except for the odd exception, Grade 12 subjects are normally taught by more than one experienced teacher. They then work as a team to optimise their collective skills and experience. The senior member of the team acts as leader for that subject for the specific grade. These teams consult at least on a weekly basis, if not from day to day, to monitor progress and performance. No additional remuneration is paid to individuals who act as subject leaders in the respective grades.

Each field of study is managed by a HOD. In the case of subjects with large numbers of students (i.e. Afrikaans, English, Mathematics and the Practical subjects) provision is made for a Deputy HOD who will then be responsible for grades 8 and 9, while the HOD take responsibility for grades 10 to 12. Since there are not HODs for every single subject, fields of study are sometimes grouped together to form, a department. The commercial sciences is a case in hand, where there is an HOD who is responsible for the field, but individual Subject heads are appointed for subjects like Accountancy and Business Economics. The Deputy HODs and Subject heads receive a small amount for these additional responsibilities.

Teachers can also apply for financial support for further studies that are subject related. Such support is handled as a bursary from the SGB. Provision is also made on an ad hoc basis for attending conferences and seminars that are deemed to be of value.

Underperformance of staff is managed by the HOD. It starts with counseling but can end up in disciplinary action if the individual does not cooperate.

- Academic background of staff / Teaching experience of staff / Additional training for staff

The school has never yet head hunted specific people for vacancies. Applicants apply through the normal process and are then appointed. The result is that the best available staff is appointed and then trained to conform to the work ethics and the standards of the school through the normal management of the academic programme as discussed earlier. Because people tend to stay with school, staff is highly experienced and the staff turnover is low. One problem though, is that staff is getting older and this may result in a problem in five years' time.

- Mentor system – the school does not have a formal mentor system. This role is by and large taken care of in the normal management of departments and the training provided during subject meetings as discussed earlier.
- Use of external specialists – External specialists from neighbouring schools and other institutions are used during the so-called winter school, to assist with the candidates working for a distinction or a higher symbol as external stimulus. The school's regular teachers

cater for students whose progress are not satisfactory to ensure that they do pass.

- Peer group pressure – the school’s motto is ‘Academic Excellence’. This is advocated widely and takes a prominent position in the entire school programme. Everyone is aware of the premium placed on academic time. Compromises to take part in sport or cultural events that infringes on academic time are limited to an absolute minimum.

Recognition of academic achievement gets prominence through a system where academic teams (15 top performers) for every grade that are announced twice a year.

The school a Gala evening in February every year where recognition is given to the grade 12 learners of the previous year as well as the top performers from feeder schools that joined the school as grade 8 students. Students receive a charter and a former student who excelled in his her career is invited as guest speaker. This is a very prestigious occasion and plays an important role in establishing and propagating the motto of academic excellence.

Research at one of the local universities on how students adapt to university life looked at first year pass rate, changing subjects or courses and adapting to the multicultural environment of the university as criteria. The results of this research project showed that students from this school were a top performing group.

All of the above plus the prominence of the school’s motto contribute to a degree of peer pressure on individual students.

The LRC has an academic portfolio, but other than propagating the school’s motto through activities such as announcing the academic teams, collective motivation through reminders that the exams are

due shortly etc., they do not play a direct role in the academic performance of the school in the NSCE.

Another very important contributing factor to academic excellence is the track record and example of the corps of leaders and the emphasis they place on academic excellence. This applies to the entire SMT.

- Parental involvement and Community involvement – A distinction is made between parental involvement and parental support. Parental support is at a very high level and the parent community is apparently fairly happy with what is happening at the school.irate parents confronting the SMT or SGB are few and far between.

However, parental involvement if compared to 15 or 20 years ago is at a much lower level. This is evident in the support for activities of the PTA as well as in the attendance of parents meetings. The school has an annual meeting in August for matric parents where final arrangements are communicated. Attendance has dropped from 90% in the past to 50% at present. Individual parents are involved as and where their own children are involved, whether it is academic, sports or cultural activities. Mass involvement of parents has however dissipated over the years.

- Role of traditional leaders – does not apply

### 6.5.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

### C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10 Mathematics	3	Very experienced staff
11 Reading/Language competence	2	
12 Science	2	
13 ICT	2	
14 Foreign Language	-	
15 Learning to learn	2	
16 Civics	2	

### C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17 Drop-out rates Gr 8 – 12\ Gr 10 - 12	2 2	High in Gr 8.
18 Completing	2	



upper Secondary Education		
19 Participation in Tertiary Education	2	86%

### C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20 Evaluating & Steering School Education	2	
21 Parent participation	1	Involvement decreased over last 6 years

### C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22 Education & Training of Teachers	2	
23 Participation in Primary Education		N/A
24 Number of students per computer	2	
25 Education expenditure per student	2	

26 Any other comments / remarks that you deem relevant to the research question?

None.

## Case study 5: Sample school V

### Section A

#### 1. Demographic information about the school.

##### 1.1 Enrolment

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in school	481	533	469
Total number of girls in school	584	545	604
Total number of learners in school	1065	1078	1073

##### 1.2 Enrolment in Gr. 12

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in Gr. 12	91	88	92
Total number of girls in Gr. 12	94	129	106
Total number of learners in Gr. 12	179	217	198

##### 1.3 Drop out rate

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Drop out rate Gr. 8 to Gr. 12 as %	4,8%	4,6%	3,9%

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Pass rate Gr. 12 as %	100%	100%	100%

##### 1.5 University Entrance Admission

	<b>2007</b>	<b>2008</b>	<b>2009</b>
University entrance admission as %	70	81	73

##### 1.6 Number of distinctions in National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of subject distinctions in	164	292	216

Gr. 12			
Number of distinctions in Afrikaans	49	30	33
Number of distinctions in English	17	34	14
Number of distinctions in 3 <sup>rd</sup> Language	2	1	1
Number of distinctions in Mathematics	17	44	22
Number of distinctions in Phys. Science	9	16	1
Number of distinctions in Biology	10	31	9
Number of distinctions in Accounting	7	7	2
Number of distinctions in Economics	-	3	-
Candidates with an A aggregate	25	29	23
Candidates with 8 or more distinctions	-	2	-
Candidates with 7 distinctions	4	4	7
Candidates with 6 distinctions	3	9	6
Candidates with 5 distinctions	-	10	-
Candidates with 4 distinctions	3	7	5
Candidates with 3 distinctions	11	31	12
Candidates with 2 distinctions	3	19	59
Candidates with 1 distinction	4	15	44

### 1.7 Subject averages in National Senior Certificate Examination (NSCE)

	2007	2008	2009
Overall average for all subjects in NSCE	68	67	66
Subject average in Afrikaans	71	66	67
Subject average in English	68	69	63
Subject average in 3 <sup>rd</sup> Language	66	64	65
Subject average in Mathematics	60	63	51
Subject average in Phys. Science	60	63	51
Number of average in Biology	62	73	66

Subject average in Accounting	60	63	56
Subject average in Economics	-	54	58

## 2. Demographic information about educational staff.

### 2.1 Demographic information about the SMT.

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Principal	25	7	5½	BA Ed BAHons B.Ed	History Management	B.Ed	1 Merit award award
Deputy Principal 1	27	19	19	M.Ed	Management	M.Ed	Excellence in Secondary School Leadership
Deputy Principal 2	29	2	2	BA HOD	Afrikaans		Merit Awards
Deputy Principal 3	32	4	4	BA HDE B.Ed	Tourism Discipline	B.Ed	Merit Awards
HOD 1	14	1	1	BSC Hons	Physical Science	BSC Hons	
HOD 2	20	3	3	BSc Hons	Maths	BSc Hons	
HOD 3	15	1	1	BA B.Ed	History	B.Ed (Ed Mange)	
HOD 4	26	3	3	BA.Hons	English	BA.Hons	
HOD 5	22	5	2	BA.MA	Afrikaans	E-Teacher	NTA Provincial
HOD 6	25	10	10	BA	Maths	E-Teacher Full Bright Exchange	

## 2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	36	34	15	BA.HED	Afrikaans	E-Teacher	
English	See Attached						
3 <sup>rd</sup> Language	16	14	14	STD(3years)	Sepedi	OBE NCT	
Mathematics	26	26	8	B.Com HED	Accounting Maths	E-Teacher	
Phys.Science	16	11	8	HDE IV	Physical Science		
Biology/LO	12	12	3	MSc	Botany Zoology	M.Sc BSc Hons	
Accounting	See Attached						
Economics	06	3	3	B.Com PGCE	Economics	E Citizen	

## 3. Demographic information about the members of the School Governing Body (SGB).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	8	3	3	B.Com	Strategy Finance	Finance	
Deputy chair	3	3	2	B.Tech	Catering Conferences	Fund Raising	

Secretary	2	2	2	B.Eng	Engineer	Infrastructure FT	
Treasurer	2	2	2	Diploma Finance	Finance Bookkeeper	Finance	
Member 1	3	2	2	SAP Training	Security	Safety Security	
Member 2	5	5	5	BA	Fundraising	PTSA Fundraising	
Member 3	3	3	3	B.Juris LLB	Advocate	Discipline	
Member 4	14	14	14	MEB	Deputy Principal	Planning Marketing	
Member 5	5	5	5	BA	Deputy Principal	Discipline	
Member 6	16	6	6	B.Ed BA. Hons	Principal	EL Officio	
Member 7	1	1	1	B.Com Hons	Teacher	Staff Rep	
Member 8	5	5	5	BA. Hons	Public Relations	Marketing	

4. Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair 1	8	3	3	B.Com	Stratergy Finance	Chairman	
Deputy chair 2	3	3	2	B.Tech	Catering Conferences	-	
Secretary							

Treasurer/FO 3	2	2	2	Diploma Accounting	Bursar	Bursar	
Member 1	16	6	6	B.Ed BA.Hons	Principal	Principal	
Member 2							
Member 3							
Member 4							
Member 5							

5. Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved	18.10.06	17.10.07	16.10.08
Total annual budget	10516050	11399275	12691000
Funds from public funding	131979	167090	171099
Funds from private funding	448827	356481	345679
Funds from school fees	8940299	8953118	10402485
Funds from entrepreneurial ventures	-	765	15708
Funds from donors	-	-	441000
Funds from sponsorships	-	35000	-
Funds from bequests	-	-	-
Interest on investments	30069	30108	3582
Other sources of income 1	-	-	-
Other sources of income 2	-	-	-
Other sources of income 3	-	-	-
Other sources of income 4	-	-	-
Other sources of income 5	-	-	-

5.2 Regarding the academic budget

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Academic budget as % of total budget	6,34	6,4	6,32
Afrikaans as % of academic budget	4,55	4,39	4,34
English as % of academic budget	5,86	5,62	3,69
3 <sup>rd</sup> Language as % of academic budget	1,05	0,96	0,87
Mathematics as % of academic budget	3,45	3,45	4,36
Phys. Science as % of academic budget	3,45	3,43	2,55
Biology/LO as % of academic budget	4,57	4,38	4,86
Accounting as % of academic budget	3,95	3,43	3,49
Economics as % of academic budget	3,75	3,45	3,49

### 5.3 Additional funding per subject in preparation for NSCE

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total budget for additional funding/subject	–	–	–
Afrikaans	–	–	–
English	–	–	–
3 <sup>rd</sup> Language	–	–	–
Mathematics	–	16429	25200
Phys. Science	–	14000	9000
Biology/LO	–	–	–
Accounting	–	4000	–
Economics	–	4000	–

### 5.4 Activities funded from additional funding as preparation for NSCE

	<b>2007</b>	<b>2008</b>	<b>2009</b>
--	-------------	-------------	-------------

In general	–	–	–
Afrikaans	–	–	–
English	–	–	–
3 <sup>rd</sup> Language	–	–	–
Mathematics	–	Costs incurred for extra classes in June and September holidays	
Phys. Science	–	Costs incurred for extra classes in June and September holidays	
Biology/LO	–	–	–
Accounting	–	Costs incurred for extra classes in June and September holidays	–
Economics	–	Costs incurred for extra classes in June and September holidays	–

The school has gone to great lengths in the past three to four years to upgrade technology for the entire school in the form of interactive ‘smart boards’ and training of staff on the use of this technology. This is however, not limited to or specifically for the NSCE; it was for the benefit of the entire school and are reflected in the budget as upgrading of technology.

### **6.6.2 Section B**

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

#### 6. How do you manage the academic programme at your school?

I assume the structure for the management of the academic programmes are similar in most schools; we do however have a few things that I think are specific to this school.

We have a HOD for every subject group. Because the PED do not provide for enough HODs, a number of them are employed by the SGB. The HOD for Arts (Visual, Design & Arts and Culture) is an example. The academic portfolio is coordinated by a Deputy Principal in conjunction with the HODs. This involves the planning of the academic programme, the entire assessment programme, the collection and analysis of statistical data on tests and examination results.

The HODs have a large degree of autonomy on how they manage their portfolios and basically report to the principal once a week. The key word here is accountability; they are accountable for the academic performance in their respective departments. The principal only becomes involved as and when necessary when they cannot handle a problem themselves.

Because of the diverse nature of the student population (the school is multicultural, there are more than 70 foreign students and for many students English is their third or fourth language) they have a very strong support system in the school. There is one academic tutor for each grades 8 and 9. Senior phase students have two tutors per grade. It is their responsibility to identify students who are underperforming, irrespective whether it originates in learning or emotional problems. Such students are then referred to the “Support team”. This team is made up of a coordinator, who is a qualified counsellor, plus a clinical psychologist and an educational psychologist.

One of the HODs acts as Head Tutor, this individual is overall responsible for the actions of all the tutors and for the referral of students to the support team. Such students (between 60 and 80) undergo an intervention programme conducted during two sessions every afternoon in the school’s two computer labs. The primary focus is on the Maths and Reading skills of grade 8 and 9 students. Independent tests have shown that more than 40% of the grade 8 learners have the reading skills of grade 6 or less. The intervention programmes address this and also include courses on study methods.

This model of academic support was introduced five years ago and has been showing results since 2009. For example, the 2010 grade nine group obtaining an average 70 % or more in the July exams have double from the previous year. Achieving a 100% pass rate would not have been possible without the support programme and its interventions. It is difficult to compete and compare your performance with that of a mono-cultural school. We do have students that obtain seven and eight distinctions, but the spread is different. During the June exams, 82% of the 2010 group of matrics obtained an average of more than 50% and only three students had an average of less that 40%. It is mainly Maths and Science that are causing the students problems. These problem cases are then addressed by means of the support programme.

Another very important factor that impacts on the performance of students is subject choice. If they study what they are interested in, motivation levels are high and they perform accordingly. With the exception of agricultural sciences, all other subjects are offered at this school. The support team and the Deputy Principal responsible for the academic programme play a very important role in this regard. They are heavily involved in assisting students from grade nine onwards with aptitude tests and subject choices.

#### 7. How do your manage academic performance at your school?

In addition to the organisation structure we have discussed in the previous paragraph, the school's academic programme is set in the previous year and communicated to the entire school community. We have a fixed test programme and teachers have to submit their test statistics every Thursday. This enables us to identify and address problems immediately; we don't have to wait for the exams to discover problems. The tutors play a major role in this regard. They are ordinary, but experienced teachers that have applied for the position of tutor. They do not have a register class and receive a very small remuneration for this additional responsibility.

A further measure that enhances the management of performance at the school is a practice where subject meetings are held fortnightly on a Wednesday

afternoon for administrative and training purposes. On the alternate Wednesday afternoons, the different grades meet with the tutors to identify students with performance problems. These problem cases are then investigated to determine the reason(s) for the underperformance, whether it is a dyslexic, dyscalculia, emotional, social problem or whether there are problems at home.

The school changed its didactic approach about four years ago to be much more technologically focussed. This includes the use of data projectors, interactive smart boards and mimeo technology. The cost of one fully installed interactive Smart board is more or less R27, 000. A Mimeo unit's cost is about R15,000 and that of an installed data projector is about R7,000. These are installed at a rate of three or four per year and are funded from a budget post for technology. The maths department has access to seven interactive Smart boards and there is one in the senior science lab.

Linked to this a system was introduced whereby ten teachers are subsidised for an amount of R2,500 per annum to buy a laptop computer. By 2011 there will be 50 teachers that have purchased laptop computers in this way. The school has 22 data projectors that are installed in classrooms and one that serves as a mobile unit that can be booked beforehand. A WiFi system has been installed in the school to enable teachers to access the school's administrative system from their classrooms. The school has received donations for Maths from a trust fund varying from R280,000 to R400,000 that enabled the school to send twenty members of staff on an e-teacher course at a unit cost of plus minus R3,500 per person. Teachers can download a lesson onto a server and students can then access the lesson from home.

The school has two computer labs with thirty computers each and there are sixteen computers in the library. All of these are linked to the internet. The computer labs use software for student support. In mathematics for instance they are using software that was developed by a former grade 12 learner that is very useful up to grade nine level. They are receiving assistance from Kids Development Academy (KDA) with software for Mathematics.

The school is piloting a product where the entire Gr 12 syllabus can be revised through the use of cell phone technology. Both the student and his/her teacher get immediate feedback by SMS. Students relate to this very well and their focus is on their work and the technology they are familiar with. It is envisaged that all students will be provided with a school cell phone to access the downloaded lessons mentioned earlier.

8. In your opinion, what is the correlation between the level of funding and the academic performance of ...
  - 8.1 ... your school as a whole?

The discussion in the previous paragraph has covered the impact of funding levels on the use of technology in the school's didactical approach. It also indicated that these are funded from a separate budget vote and that it cannot necessarily be linked to the NSCE specifically.

Another dimension that relates to funding is that of staffing. The school has 54 members of staff; 37 of whom are funded by the state. The rest of them are SGB appointees. The teaching staff is supplemented by the School-based Support Team (the counselor and two psychologists mentioned previously) and the Sports Buro (5 people) to enable them to focus on their primary responsibility of teaching. The support team, the managers of the different sporting codes and the Tutors work together very closely in providing the information to manage the performance of the individual student. Various individuals that have quantifiable additional responsibilities receive a proportional top-up from the SGB. Staff is also refunded for traveling costs and other personal expenses related to attending meetings on behalf of the school.

The school has a substantial budget for staff development that enables the SGB to send them for training and to attend conferences. As an example, this enabled the school to send 14 staff members to a conference in Stellenbosch last year, at a cost of R45,000. Another example is the training that twenty teachers underwent on becoming a qualified e-teacher. The school also holds a

monthly Teacher's Forum for two hours on a Thursday evening where the principal and a guest speaker deal with matters such as management training, thinking patterns, safety in the class, bullying, suicide and other relevant topics.

8.2 ... the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

More or less none since individuals do not receive additional remuneration nor are significant amounts allocated to specific subjects for this purpose. In general, there is an indirect benefit in the sense that the appointment of additional staff by the SGB, allows for smaller classes and more individualised attention and thus impacting on performance.

In general however, the school has a staff that is absolutely dedicated, purpose-driven and enthusiastic. Technology plays a very small role in the academic performance of grade twelve learners. Except for IT and CAT, teachers do not have computers in their classrooms.

9. What do you attribute your school's success rate in the National Senior Certificate Examinations to? Discipline, dedication, determination, desire of Teachers and Learners

*This will be followed up with probing questions to address the following dimensions:*

The following matters have been covered elsewhere in this document.

- Additional funding
- Additional staff
- Class size
- Extra classes
- Extra teaching learning support material
- Motivation of staff
- Academic background of staff
- Teaching experience of staff
- Additional training for staff

- Mentor system

The school does not have a formal mentor system. This function is, by and large, performed by the HODs and the Tutors. New arrivals at the school are however, allocated to an experienced staff member for the first year just to settle into the school culture and operational procedures.

- Use of external specialists

Not applicable. None are used.

- Peer group pressure

The school does have a formal structured 'Peer Support Group' of thirty learners, elected and trained to provide peer support to fellow students. They are trained in study methods and to assist students who are experiencing problems with their performance.

It is part of the school's ethos to perform well. There is pressure on every new group of matrics not to break the tradition of having a 100% pass rate. During the Academic Honnours evening for grade 12 (matric) learners in February, either the head boy or head girl from ten years ago is invited as guest speaker to motivate and challenge the current students. These persons normally have established themselves in a profession and often have a Masters or a PhD. The principal, guest speaker and staff all wear full academic gowns on this occasion to give stature to the event.

- Parental and Community involvement

???

- Role of traditional leaders

None

### 6.6.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

#### C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10 Mathematics	2	
11 Reading /Language competence	2	
12 Science	2	
13 ICT	2	
14 Foreign Language	0	
15 Learning to learn	2	
16 Civics	3	



### C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17 Drop-out rates	2	
18 Completing upper Secondary Education	3	
19 Participation in Tertiary Education	3	70% to 80%

### C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20 Evaluating & Steering School Education	3	
21 Parent participation	1	

### C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22 Education & Training of Teachers	2	
23 Participation in Primary Education	1	
24 Number of students per computer	2	
25 Education expenditure per student	2	

26 Any other comments / remarks that you - **None.**

## Case study 6: Sample school VI

### Section A

#### 1. Demographic information about the school.

##### 1.1 Enrolment

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in school	370	371	378
Total number of girls in school	443	447	493
Total number of learners in school	813	818	871

##### 1.2 Enrolment in Gr. 12

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total number of boys in Gr. 12	38	48	26
Total number of girls in Gr. 12	59	73	77
Total number of learners in Gr. 12	97	121	103

##### 1.3 Drop out rate

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Drop out rate Gr. 8 to Gr. 12 as %	79.5	82	92

##### 1.4 Pass rate National Senior Certificate Examination (NSCE)

	<b>2007</b>	<b>2008</b>	<b>2009</b>
Pass rate Gr. 12 as %	98	100	100

##### 1.5 University Entrance Admission

	<b>2007</b>	<b>2008</b>	<b>2009</b>
University entrance admission as %	18		43

1.6 Number of distinctions in National Senior Certificate  
Examination (NSCE)

	2007	2008	2009
Total number of subject distinctions in Gr. 12	9	45	30
Number of distinctions in Afrikaans	4	1	3
Number of distinctions in English		1	1
Number of distinctions in 3 <sup>rd</sup> Language			
Number of distinctions in Mathematics	1	2	6
Number of distinctions in Phys. Science			1
Number of distinctions in Biology		2	3
Number of distinctions in Accounting	3	1	2
Number of distinctions in Economics			
Candidates with an A aggregate			
Candidates with 8 or more distinctions			
Candidates with 7 distinctions			
Candidates with 6 distinctions			
Candidates with 5 distinctions		1	
Candidates with 4 distinctions		1	1
Candidates with 3 distinctions		1	1
Candidates with 2 distinctions	1	5	1
Candidates with 1 distinction	7	23	8

1.7 Subject averages in National Senior Certificate Examination  
(NSCE)

	2007	2008	2009
Overall average for all subjects in NSCE			
Subject average in Afrikaans	62	448	65
Subject average in English		47	56
Subject average in 3 <sup>rd</sup> Language			

Subject average in Mathematics		58	57
Subject average in Phys. Science		42	41
Number of distinctions in Biology		51	3
Subject average in Accounting		51	48
Subject average in Economics			

## 2 Demographic information about educational staff.

### 2.1 Demographic information about the SMT.

Position	Total Experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced Training	Awards / Achievements
Principal	30	5	5	BA, HOD VDO			
Deputy Principal 1	15	3	3	HED Dipl M+4			
Deputy Principal 2	23	2	2	BA STD DSE			
Deputy Principal 3							
HOD 1	40	33	33	BSc Hons B Ed THOD			
HOD 2	13	1	1	BA, Ed			
HOD 3	14	2	2	Nat. Dipl. B Tech ACE			
HOD 4	18	1	1	BA, B Ed Hons PDMS STD ACE			
HOD 5							

## 2.2 Demographic information about staff teaching Gr. 12

Position	Total experience	Total experience in current post level	Experience in current post at this school	Qualifications	Field of specialisation	Advanced training	Awards / Achievements
Afrikaans	11		3	HOD			
English	13		1	BA Ed			
3 <sup>rd</sup> Language							
Mathematics	40		30	B Sc Hons B Ed THOD			
Phys.Science	18			BA B Ed Hons PMDS STD ACE			
Biology/LO	27		7	BA HOD VDO			
Accounting	8		5	B Com HOD			
Economics							

## 3 Demographic information about the members of the School Governing Body (SGB).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	9	2	1	SAP K13 Human Resources	Treasurer 6yr Chair 2 yrs.		Acquiring donations
Deputy							

chair							
Secretary	15	15	2	NCS Typing Dipl 1	Admin	Secretary	Governance of school in general
Treasurer							
Member 1	7	2	2	Dipl Retail Management	Admin	Stock Control Manager	Governance of school in general
Member 2							
Member 3							
Member 4							
Member 5							
Member 6							
Member 7							
Member 8							

4 Demographic information about the members of the Finance Committee (FC).

Position	Total experience as SGB member	Experience in SGB at this school	Total experience in current position	Qualifications	Field of specialisation	Portfolio	Contribution / Achievements
Chair	1	1	1	Tech Dipl	Sport		
Deputy chair	7	2	2	Dipl Retail Management	Admin	Stock Control Manager	Governance of school in general
Secretary	15	3	2	HED Dipl M+4			
Treasurer/FO	15	15	15	NCS			
Member 1	9	2	1	SAP K13 Human Resources	Treasurer 6yr Chair 2 yrs.		Acquiring donations

Member 2							
Member 3							
Member 4							
Member 5							

5 Information regarding the financial management of the school for the window period.

5.1 Regarding the budget

	2007	2008	2009
Date when budget was approved			
Total annual budget	R2 251 550	R2 806 750	R3 195 576
Funds from public funding			
Funds from private funding			
Funds from school fees	R2 871 206	R3 298 410	R3 841 313
Funds from entrepreneurial ventures	R99 408	R108 345	R103 843
Funds from donors			
Funds from sponsorships			
Funds from bequests			
Interest on investments	R44 931	R54 362	R48 050
Other sources of income 1 (Tuck shop)	R510 825	R540 819	R535 318
Other sources of income 2			
Other sources of income 3			
Other sources of income 4			
Other sources of income 5			

5.2 Regarding the academic budget

	2007	2008	2009
	<b>R292 500</b>	<b>R248 500</b>	<b>R261 500</b>

Academic budget as % of total budget	11	8	8
Afrikaans as % of academic budget	2	3	3
English as % of academic budget	0	2	1
3 <sup>rd</sup> Language as % of academic budget			
Mathematics as % of academic budget		3	7
Phys. Science as % of academic budget	1	2	4
Biology/LO as % of academic budget	1	5	5
Accounting as % of academic budget		2	1
Economics as % of academic budget			
CAT as % of academic budget	2	4	4,8
Consumer as % of academic budget	3	14	5

### 5.3 Additional funding per subject in preparation for NSCE

	2007	2008	2009
Total budget for additional funding/subject	None whatsoever.		
Afrikaans			
English			
3 <sup>rd</sup> Language			
Mathematics			
Phys. Science			
Biology/LO			
Accounting			
Economics			

### 5.4 Activities funded from additional funding as preparation for NSCE

	2007	2008	2009

In general	No additional provision for matric preparation. If however a teacher approaches me and requests that a specific textbook or workbook will be of significant value in their preparation for the NSCE exams, we go to extraordinary lengths to assist them if at all possible. An example is a workbook that we bought for Accounting. In such instances, we reallocate money from other budget items to accommodate the need.
Afrikaans	
English	
3 <sup>rd</sup> Language	
Mathematics	
Phys. Science	
Biology/LO	
Accounting	
Economics	

### 6.7.2 Section B

Information regarding special programmes / efforts to prepare the grade 12 learners for the National Senior Certificate Examination (NSCE).

6 How do you manage the academic programme at your school?

The matrics and their performance directly fall under the principal. She takes full responsibility for them. She monitors attendance and absenteeism. Every morning, the secretary prints a list of all matrics that are absent and the principal personally follows this up by calling the parents to find out why their child is not at school.

The principal and all the matric teachers form a team. As a first strategy, we try to keep the same teacher for both grades 11 and 12. The reason being that they can already start on the grade twelve curriculum in grade eleven.

7 How do your manage academic performance at your school?

The preparation process starts with teaching the students skills related to writing exams; how to read the paper, how to plan your answers etc. This process needs to start in grade eleven, because there is no time for that in grade twelve. The focus is then on the academic work.

No new students are taken in, after the first term in grade 11 and none in the grade 12 year.

At the beginning of the grade 12 year, we have a meeting with all the grade 12 parents and the grade 12 teachers. At this meeting parents are briefed in full as to what the programme for the rest of the entails, all relevant dates for tests and examinations etc.

In 2010 we decided that grade 12 learners come to school from 07:45 to 15:00 this means that they have had one extra hour of lessons per day from the beginning of January. This was worked into their time table. We also taught for the whole April school holiday. They only had a break to rest over the Easter weekend. The full team is at school during this time. Attendance is compulsory and absenteeism is followed up just like on an ordinary school day.

We are physically putting in many extra hours. Staff is not remunerated for these extra hours of work.

The test time table is printed in the school diary that is given to every student in January already. One-hour tests are written every Monday and Friday. Provision for this purpose is made in the regular time table.

Test results are submitted to the principal who personally follow any deviations up with a personal interview where the candidate has to explain what went wrong. The guiding principle is what do you want to do after school? No punches are pulled; expectations and aspirations are aligned with performance and ability because these are often not realistic. If there is an attitude or commitment problem, the parents are also interviewed. The fact that all parties know that they are being monitored has great motivational power. This is true of both homework and their test scores.

The recipe for success is based on hard work, extra hours of work and the personal involvement with every individual student. We know them individually and show interest in them as an individual.

8 In your opinion, what is the correlation between the level of funding and the academic performance of ...

8.1 ... your school as a whole? Please explain your view.

Because funds are limited, we do not have a vast budget for this purpose. However, if a teacher requests to attend training that are deemed to be worthwhile, the course fees and travelling costs are covered from the budget for staff development. This does not include training by District offices because the subject advisors are not able to give guidance.

8.2 ... the individual performances in the different subjects offered at your school for the NSCE? Please explain your view.

There is no correlation between academic performance in individual subjects and funding. We do not spend any additional funds on subjects for the NSCE exams. Our success can be attributed to the individual teacher; their subject knowledge, skills, attitude and experience.

9 What do you attribute your school's success rate in the National Senior Certificate Examinations to?

*This will be followed up with probing questions to address the following dimensions:*

- Additional funding - none

- Additional staff - we have 8 SGB appointments plus 30 posts funded by the state. The majority of the SGB staff are utilised in grades 8 to 10 to keep numbers down with a view to addressing disciplinary problems.
- Class size – class size is 35 on average
- Extra classes - see discussion above regarding time table and extra classes since January. There will also be extra classes in the Sep/Oct holidays. This will be after the mock/prelim exams and teachers will recap based on the performance in the prelim exams.
- Extra teaching learning support material - except for the two members of staff that teach CAT no other teachers have access to computers and or smart boards. They use standard OHPs to teach.
- Motivation of staff - Nothing specific, except for maybe taking some of the nasty parts of their jobs off their hands. I handle all instances of homework that was not done and related disciplinary problems. Their names are called over the intercom to come and do their homework under supervision in the principal's office during break. Matric students only subject themselves to this experience once or twice and then do their homework rather than being subjected to the embarrassment.
- Academic background of staff }
- Teaching experience of staff } See section A
- Additional training for staff }
- Mentor system AND Use of external specialists - the team approach of the grade 12 teachers under the leadership of the principal can be equated to a mentoring process. New members of

the team are mentored by the rest in their approach to delivering good results. All the grade 12 teachers network with teachers from other schools in their preparation for the NSCE exams and in setting papers to enhance their performance. This is over and above the cluster meetings organized from the district offices.

- Peer group pressure - system of top 10 achievers given recognition by giving them a badge to wear. Top achievers are announced every term. There is a sense of competition among top achievers. They support one another, sit together, help each other etc. The school has a name and reputation of excellence and parents queue to get their children enrolled in this school
- Parental involvement AND Community involvement - Very strong sense of involvement. Very strong support from parents. The slightest problem is dealt with immediately. Parents are focused on the fact that their child must perform. There is a prestige factor involved in children attending this school.
- Role of traditional leaders
- An opinion on the effectiveness of the programmes / efforts to prepare the grade 12 learners for the senior certificate examination,
- An opinion on the functioning of the school's Finance Committee
- Evidence to substantiate the information provided in the preceding bullets.

In general, our success can be attributed to the staff; their level of training, their commitment as well as a lot of time and energy from the principal.

Transformation process. Started in 1995. Closing of industry. Lost majority of white learners. Took a decision to open school. The more black learners enrolled, the more white parents took their children away. There were lots of growing pains initially; with conflict between learners. However the moment

the black learners were a majority, things settled down. Students mix and interact freely. No relationships across cultural lines. Only 20 out of 914 students are still white.

### 6.7.3 Section C

Questions in this section relate to the *sixteen indicators of the Quality of School Education developed by the European Commission* in 2000 and will be used to probe the quality of education in the sample schools.

Responses will be rated on a four point scale (Not applicable / unacceptable performance = 0; Apply to limited extent / unsatisfactory / substandard / need to improve= 1; Implemented successfully / satisfactory / acceptable standard = 2; and Implemented very successfully / exceptional / exceeds the standard = 3).

*Ratings will be complemented by asking the respondents to substantiate their views.*

### C1 Attainment

Dimension	Rating 0/1/2/3	Comments
10 Mathematics	1	
11 Reading/Language competence	1	
12 Science	1	
13 ICT		
14 Foreign Language		
15 Learning to learn	1	
16 Civics		



## C2 Success & Transition

Dimension	Rating 0/1/2/3	Comments
17 Drop-out rates Gr 8 - 12	3	
Gr 10 – 12	3	
18 Completing upper Secondary Education	2	
19 Percentage obtaining admission to University	1	

## C3 Monitoring Education

Dimension	Rating 0/1/2/3	Comments
20 Evaluating & Steering School Education	2	
21 Parent participation	1	

## C4 Resources & Structures

Dimension	Rating 0/1/2/3	Comments
22 Education & Training of Teachers	2	
23 Participation in Primary Education	NOT APPLICABLE	

24 Number of computers & number of students per computer	1	
25 Education expenditure per student	1	

26 Any other comments / remarks that you deem relevant to the research question?

## ANNEXURE 5

### DATA ANALYSIS Section A – JWvR

#### SECTION A

#### 1. Demographics of the school

##### 1.1 Enrolment

		AVG	I	II	III	IV	V	VI
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
2007	M	469.0	96	269	956	642	481	370
	F	516.0	97	290	1016	666	584	443
	Total	985.0	193	559	1972	1308	1065	813
2008	M	482.3	121	275	956	638	533	371
	F	494.0	115	274	942	641	545	447
	Total	976.3	236	549	1898	1279	1078	818
2009	M	462.5	164	267	864	633	469	378
	F	500.7	141	273	861	632	604	493
	Total	963.2	305	540	1725	1265	1073	871
Overall averages	M	471.3	48.3%		Highest			
	F	503.6	51.7%					
	Total	974.8			Lowest			

### 1.2 Enrolment in Gr 12

		AVG	I	II	III	IV	V	VI
			I	II	III	IV	V	VI
2007	M	84.8	21	57	201	101	91	38
	F	102.0	27	69	236	127	94	59
	Total	186.8	48	126	437	228	185	97
2008	M	92.2	30	50	212	125	88	48
	F	101.8	37	53	190	129	129	73
	Total	194.0	67	103	402	254	217	121
2009	M	92.0	44	56	186	148	92	26
	F	101.5	47	53	186	140	106	77
	Total	193.5	91	109	372	288	198	103
Overall averages	M	89.7						
	F	101.8						
	Total	191.4	68.7	112.7	403.7	256.7	200.0	107.0

### 1.3 Drop out rate Gr 8 -12 (%)

		AVG	I	II	III	IV	V	VI
			I	II	III	IV	V	VI
	2007	5.9	9.3	0	0.0	1.5	4.8	20
	2008	5.3	7.2	0	0.0	1.7	4.6	18
	2009	4.1	10.1	0	0.0	2.5	3.9	8
	Average	5.1	8.9	0.0	0.0	1.9	4.4	15.3

### 1.4 Pass rate NSCE as %

		AVG	I	II	III	IV	V	VI
			I	II	III	IV	V	VI
	2007	99.7	100	100	100	100	100	98
	2008	100	100	100	100	100	100	100

	2009	100	100	100	100	100	100	100	100
Average		99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.3

### 1.5 Univ Entrance admission as %

		AVG	I	II	III	IV	V	VI
	2007	69.5	93	99	75	62	70	18
	2008	80.0	88.9	97	90.36	78	81	45
	2009	76.0	69.9	98	85.9	86	73	43
Average		75.2	83.9	98.0	83.8	75.3	74.7	35.3

### 1.6 NSCE Distinctions

		AVG	I	II	III	IV	V	VI
Total # of distinctions								
	2007	238.5	74	339	616	229	164	9
	2008	321.5	73	376	807	336	292	45
	2009	327.0	95	386	800	435	216	30
Average		295.7	81	367	741	333	224	28
n/Gr 12 Lrn		1.5	1.2	3.3	1.8	1.3	1.1	0.3

Afrikaans		AVG	I	II	III	IV	V	VI
	2007	39.6	24	59	62		49	4
	2008	33.3	12	28	94	35	30	1
	2009	29.2	14	24	56	45	33	3
Average		34.1	17	37	71	40	37	3

English		AVG	I	II	III	IV	V	VI
	2007	43.0	8	42	105		17	
	2008	39.0	4	45	103	47	34	1

		2009	33.3	4	38	80	63	14	1
	Average		36.7	5	42	96	55	22	1
3rd Language			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	10.0		14	14		2	
		2008	5.3		11	4		1	
		2009	8.7		15	10		1	
	Average		4.0	0	13	9	0	1	0
Mathematics			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	23.2	5	31	62		17	1
		2008	45.2	3	47	127	48	44	2
		2009	30.2	8	19	88	38	22	6
	Average		33.9	5	32	92	43	28	3
Physical Science			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	20.0	4	16	51		9	
		2008	17.2	3	13	39	15	16	
		2009	7.5	2	20	16	5	1	1
	Average		12.3	3	16	35	10	9	0
Biology			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	12.5	5	16	19		10	
		2008	12.0	3	10	9	17	31	2
		2009	12.0	4	19	19	18	9	3
	Average		11.8	4	15	16	18	17	2
Accounting			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	17.8	3	42	34		7	3

	2008	12.7	2	19	40	7	7	1
	2009	9.2	2	12	31	6	2	2
Average		12.6	2	24	35	7	5	2
Economics		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	8.0	1		15			
	2008	3.4	1	1	10	2	3	
	2009	3.5			5	2		
Average		2.3	1	0	10	2	1	0
Candidates with an A aggregate								
	2007	15.8	5	65	0	0	25	0
	2008	13.8	5	49	0	0	29	0
	2009	15.7	6	65	0	0	23	0
Average		15.1	5	60	0	0	26	0
Candidates with 8 or more distinctions								
	2007	1.0	0	0	6	0	0	0
	2008	4.0	0	4	15	3	2	0
	2009	2.8	0	11	5	1	0	0
Average		2.7	0	5	9	2	1	0
Candidates with 7 distinctions								
	2007	3.8	0	8	11	0	4	0
	2008	6.3	2	9	19	4	4	0
	2009	6.0	1	12	12	4	7	0
Average		5.6	1	10	14	4	5	0
Candidates with 6 distinctions								

	2007	5.0	4	8	15	0	3	0
	2008	6.2	2	16	0	10	9	0
	2009	4.7	2	7	0	13	6	0
Average		5.9	3	10	5	12	6	0
			0.038834951	0.091715976	0.01238646	0.04480519	0.03	0
Candidates with 5 distinctions								
	2007	2.3	1	13	0	0	0	0
	2008	4.8	0	11	0	7	10	1
	2009	4.2	3	8	0	14	0	0
Average		4.4	1	11	0	11	3	0
Candidates with 4 distinctions								
	2007	7.0	0	13	0	26	3	0
	2008	4.8	1	10	0	10	7	1
	2009	5.0	2	9	0	13	5	1
Average		5.6	1	11	0	16	5	1
Candidates with 3 distinctions								
	2007	5.3	1	20	0	0	11	0
	2008	9.3	7	17	0	0	31	1
	2009	4.8	5	11	0	0	12	1
Average		6.5	4	16	0	0	18	1
Candidates with 2 distinctions								
	2007	5.7	12	18	0	0	3	1
	2008	7.0	8	10	0	0	19	5
	2009	15.2	11	20	0	0	59	1
Average		9.3	10	16	0	0	27	2

Candidates with 1 distinction

	2007	8.5	18	22	0	0	4	7
	2008	12.0	16	18	0	0	15	23
	2009	14.8	16	21	0	0	44	8
Average		11.8	17	20	0	0	21	13

**1.7 Subject avgs in NSCE**

Overall average		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	60.0	58.9	65.0	65.3	66.8	55.9	48.0
	2008	63.6	54.9	75.3	68.9	68.9	64.4	49.0
	2009	57.0	52.5	59.8	68.5	56.9	59.6	44.5
Average		60.2	55	67	68	64	60	47
<b>Afrikaans</b>		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	70.7	76.3	78.7	66.62	69.6	71	62
	2008	65.1	67.2	71.8	71.5	69	66	44.8
	2009	67.5	66.7	66.3	70	69.8	67	65
Average		67.7	70	72	69	69	68	57
<b>English</b>		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	66.9	66.9	73.7	70.54	70	68	52
	2008	68.4	64.2	76.1	73	81.3	69	47
	2009	66.3	61	74.7	72	71.2	63	56
Average		67.2	64	75	72	74	67	52
<b>3rd Language</b>		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>

		2007	73.4		76.4	73	78	66	
		2008	69.7		75.8	69.3	69.7	64	
		2009	72.5		76.6	76		65	
	Average		48.0	0	76	73	74	65	0
Mathematics			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	61.7	59.9	71	61.3	60	60	58
		2008	68.4	60.5	79.5	72	77.2	63	58
		2009	61.6	60.7	63.5	70	67.5	51	57
	Average		63.9	60	71	68	68	58	58
Physical Science			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	61.4	69.4	68.5	62.42	63	60	45
		2008	60.7	55.5	70.6	67	66.3	63	42
		2009	53.9	51.4	59.6	64	56.6	51	41
	Average		58.7	59	66	64	62	58	43
Biology			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	64.4	67.8	71.4	61.62	59	62	
		2008	65.0	63.8	73.9	62.8	65.5	73	51
		2009	66.2	61.5	71.6	66	66	66	
	Average		63.6	64	72	63	64	67	51
Accounting			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
		2007	67.9	67.2	80	68.3	64	60	
		2008	66.0	69.6	77.4	72	62.8	63	51
		2009	61.7	68	66	72	60	56	48
	Average		64.2	68	74	71	62	60	50

Economics		AVG	I	II	III	IV	V	VI
	2007	64.5	63.5		58.99	71		
	2008	62.6	58.3	77.4	63.8	59.3	54	
	2009	57.7	50.5		58	64.4	58	
	Average	49.6	57	77	60	65	37	0

## 2. Demographics of Educational Staff

### 2.1 SMT

		AVG	I	II	III	IV	V	VI
Principal	Total exp.	27.7	20	29	29	33	25	30
B = 3	Exp curr level	6.0	5		2	11	7	5
B+D = 4	At this school	6.1	5	8	2	11	5.5	5
FDE = +2	Qualifications	4.0	4	4	4	4	4	4
Hons+ +2	Specialisation		Geogr/Afr/EdMan	Geogr/PhysEd	Hist	Maths	Hist/Ed Man	EdMan
M = + 2	Adv training	7.0	8	6	8	6	8	6
D = + 2	Awards	0.2	0	0	0	0	1	0
		AVG	I	II	III	IV	V	VI
DP 1	Total exp.	24.3	14	29	28	33	27	15
B = 3	Exp curr level	8.8	3		2	17	19	3
B+D = 4	At this school	9.5	2	5	11	17	19	3
FDE = +2	Qualifications	4.0	4	4	4	4	4	4
Hons+ +2	Specialisation		Eng/French	Geogr	Maths	History	Ed Man	
M = + 2	Adv training	7.0	6		6	8	8	
D = + 2	Awards	4			3 merits		Excell in Schl Idrshp	
		AVG	I	II	III	IV	V	VI
DP 2	Total exp.	24.8		19	20	33	29	23
B = 3	Exp curr level	8.5			11	19	2	2
B+D = 4	At this school	5.6		5	11	8	2	2

FDE = +2	Qualifications	4.0			4	4	4	4	4
Hons+ +2	Specialisation			Maths	MW Techn	Geography	Afr		
M = +2	Adv training	6.7			6		8		6
D = +2	Awards	2			1 merit			Merit awrds	
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
DP 3	Total exp.	27.3			19		31	32	
B = 3	Exp curr level	11.0			10		19	4	
B+D = 4	At this school	5.0			3		8	4	
FDE = +2	Qualifications	4.0			4		4	4	
Hons+ +2	Specialisation				Afr	Latin		Tourism/Discipl	
M = +2	Adv training	7.7			9		8	6	
D = +2	Awards	1						Merit awrds	
		<b>AVG</b>							
<b>Avg DP</b>	Total exp.	25.5							
B = 3	Exp curr level	9.4							
B+D = 4	At this school	6.7							
FDE = +2	Qualifications	4.0							
Hons+ +2	Specialisation	0.0							
M = +2	Adv training	7.1							
D = +2	Awards	2.3							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
HOD 1	Total exp.	24.3			24	19	14	40	
B = 3	Exp curr level	14.0			8		1	33	
B+D = 4	At this school	14.0			8		1	33	
FDE = +2	Qualifications	4.0			4	4	4	4	
Hons+ +2	Specialisation				Acc/BussSt	Eng	Phys Sc		
M = +2	Adv training	7.5			8	8	6	8	

D = + 2	Awards	0								
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
HOD 2	Total exp.	20.0			30	17	20	13		
B = 3	Exp curr level	3.7			7		3	1		
B+D = 4	At this school	3.7			7		3	1		
FDE = +2	Qualifications	4.0			4	4	4	4		
Hons+ +2	Specialisation				Biol	Geo	Maths			
M = + 2	Adv training	8.3			11	8	6			
D = + 2	Awards	1			3 merits					
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
HOD 3	Total exp.	18.0			26	17	15	14		
B = 3	Exp curr level	4.7			11		1	2		
B+D = 4	At this school	4.7			11		1	2		
FDE = +2	Qualifications	4.0			4	4	4	4		
Hons+ +2	Specialisation				Maths	Buss Econ	Hist	Techn		
M = + 2	Adv training	8.0			9	8	6	9		
D = + 2	Awards	0								
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
HOD 4	Total exp.	27.0			36	28	26	18		
B = 3	Exp curr level	10.3			22	15	3	1		
B+D = 4	At this school	10.3			22	15	3	1		
FDE = +2	Qualifications	4.0			4	4	4	4		
Hons+ +2	Specialisation				Afr/Germ	Phys Sc	Eng			
M = + 2	Adv training	7.5			8	4	6	12		
D = + 2	Awards	1			2 merits					
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
HOD 5	Total exp.	23.7			29	20	22			
B = 3	Exp curr level	7			9		5			
B+D = 4	At this school	5.5			9		2			

FDE = +2	Qualifications	4	4	4	4
Hons+ +2	Specialisation		Eng	Biol	Afr
M = + 2	Adv training	6.7	6	6	8
D = + 2	Awards	2	2 merits		NTAProv/e-T
<b>Avg HOD</b>	Total exp.	22.6			
B = 3	Exp curr level	7.9			
B+D = 4	At this school	7.6			
FDE = +2	Qualifications	4.0			
Hons+ +2	Specialisation	0.0			
M = + 2	Adv training	7.6			
D = + 2	Awards	0.8			

## 2.2 GR 12 Teachers

	AVG	I	II	III	IV	V	VI	
Afrikaans	Total exp.	23.5	6	22	36	30	36	11
B = 3	Exp curr level	17.0	2		22	16	34	11
B+D = 4	At this school	10.3	2	7	22	13	15	3
FDE = +2	Qualifications	4	4	4	4	4	4	4
Hons+ +2	Specialisation		Afr		Afr/Germ	Afr	Afr	Afr
M = + 2	Further trng	5	7	6	8	4	5	0
D = + 2	Adv training	2	3	2	4	0	1	0
	Awards	33%	0	0	1	0	1	0
		AVG	I	II	III	IV	V	VI
English	Total exp.	21.5	5	41	20	24	26	13
B = 3	Exp curr level	12.8	5	30	17	9	3	13

####

B+D = 4	At this school	7.3	5	14	12	9	3	1
FDE = +2	Qualifications	4	4	4	4	4	4	4
Hons+ +2	Specialisation		Eng		Eng	Eng	Eng	Eng
M = + 2	Further trng	6	8	10	8	4	6	0
D = + 2	Adv training	3	4	6	4	0	2	0
	Awards	17%	0	0	1	0	0	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
3rd Language	Total exp.	20.3		31	14		16	
B = 3	Exp curr level	12.0			10		14	
B+D = 4	At this school	12.7		14	10		14	
FDE = +2	Qualifications	4		4	4		3	
Hons+ +2	Specialisation				French		Sepedi	
M = + 2	Further trng	6		8	6		4	
D = + 2	Adv training	2		4	2		1	
	Awards	0	0	0	0	0	0	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Mathematics	Total exp.	26.2	23	19	20	29	26	40
B = 3	Exp curr level	22.4	23		8	15	26	40
B+D = 4	At this school	10.2	3	4	8	8	8	30
FDE = +2	Qualifications	4	4	4	4	4	4	4
Hons+ +2	Specialisation		Maths		Maths/Phys	Maths	Acc/Maths	Maths
M = + 2	Further trng	7	6	8	6	6	5	8
D = + 2	Adv training	3	2	4	2	2	1	4
	Awards	33%	0	0	1	0	1	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Phys. Science	Total exp.	19.0	20	11	21	28	16	18

B = 3	Exp curr level	15.6	13		21	15	11	18
B+D = 4	At this school	9.0	2	2	18	15	8	
FDE = +2	Qualifications	4	4	4	4	4	4	4
Hons+ +2	Specialisation		Phys		Bio/Phys Sc	Phys Sc	Phys Sc	Phys Sc
M = + 2	Further trng	6	10	4	6	4	0	11
D = + 2	Adv training	3	6	0	2	0	0	7
	Awards	0	0	0	0	0	0	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Biology	Total exp.	20.0	5	13	42	21	12	27
B = 3	Exp curr level	20.4	5		42	16	12	27
B+D = 4	At this school	9.0	5	6	20	13	3	7
FDE = +2	Qualifications	4	4	4	4	4	4	4
Hons+ +2	Specialisation		Life Sc		Bio/Maths	Bio/Phys Ed	Bot/Zool	Biol
M = + 2	Further trng	5	6	6	0	6	8	6
D = + 2	Adv training	2	2	2	0	2	4	2
	Awards	17%	0	0	1	0	0	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Accounting	Total exp.	17.4	10	39	24	6		8
B = 3	Exp curr level	7.5	8		8	6		8
B+D = 4	At this school	7.0	5	15	8	2		5
FDE = +2	Qualifications	4	4	4	4	4		4
Hons+ +2	Specialisation		Acc/Econ		Acc/BussSt	Acc		Acc
M = + 2	Further trng	3	0	6	0	8		0
D = + 2	Adv training	1	0	2	0	4	0	0
	Awards	17%	0	1	0	0	0	0
	<b>AVG</b>		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>

Economics	Total exp.	18.0	10		30	26	6	
B = 3	Exp curr level	14.0	8		30	15	3	
B+D = 4	At this school	7.5	5		7	15	3	
FDE = +2	Qualifications	4	4		4	4	4	
Hons+ +2	Specialisation			Acc/Econ	Econ	Econ		
M = + 2	Further trng	5	0		6	6	8	
D = + 2	Adv training	2	0		2	2	4	
	Awards	33%	0	0	1	0	1	0

**Avg Gr 12 Teacher**

**AVG**

	Total exp.	20.7	
B = 3	Exp curr level	15.2	
B+D = 4	At this school	9.1	
FDE = +2	Qualifications	4.0	
Hons+ +2	Specialisation	0.0	
M = + 2	Further trng	5.3	Maths 7
D = + 2	Adv training	2.1	
	Awards	18.8%	

**3. Demographics of SGB**

	AVG	Chr	D Chr	Secr	Tr/FO	M1	M2	M3	M4	M5
Total exp.	4.5	7.5	3.0	5.0	4.3	3.3	3.7	3.0	6.7	5.7
Exp curr level	3.7	3.8	3.0	5.0	1.8	1.8	3.7	3.0	6.7	5.7
At this school	3.2	1.8	1.3	1.8	1.5	1.8	3.7	3.0	6.7	5.7
Qualifications	5.1	5	5	5	4	4	5	5	6	6
Specialisation		Maths, Law	Busn, Fin	Varied	Law	Bus/Mark	CA	Adm	Relig	Fin
		Finance	Engineer	Admin	Fin	Adm	Law	Law	Ed	Soc
									Man	W

		AVG	I	II	III	IV	V	VI	
Chair	Total exp.	7.5				9	4	8	9
B = 3	Exp curr level	3.8				9	1	3	2
B+D = 4	At this school	1.8				2	1	3	1
FDE = +2	Qualifications	5				9	6	3	1
Hons+ +2	Specialisation				Maths	Theol	Strat Fin	SAPD	
M = + 2	Portfolio					Man	Finance	Treasurer	
D = + 2	Contribution							Donations	
		AVG	I	II	III	IV	V	VI	
Dep chair	Total exp.	3.0				5	1	3	
B = 3	Exp curr level	3.0				5	1	3	
B+D = 4	At this school	1.3				1	1	2	
FDE = +2	Qualifications	5				4	7	3	
Hons+ +2	Specialisation				Buss	Engineering	Catering/Conf		
M = + 2	Portfolio						Fundraising		
D = + 2	Contribution								
		AVG	I	II	III	IV	V	VI	
Secretary	Total exp.	5.0				2	1	2	15
B = 3	Exp curr level	5.0				2	1	2	15
B+D = 4	At this school	1.8				2	1	2	2
FDE = +2	Qualifications	5				9	3	4	2
Hons+ +2	Specialisation						Training	Engineer	Admin
M = + 2	Portfolio						Secr Trng	Infrastr/FT	Governance
D = + 2	Contribution								
		AVG	I	II	III	IV	V	VI	
Treasurer / FO	Total exp.	4.3				5	1	2	9
B = 3	Exp curr level	1.8				2	1	2	2
B+D = 4	At this school	1.5				2	1	2	1

FDE = +2	Qualifications	4			6	6	3	2
Hons+ +2	Specialisation				Law	CA	Finance	SAPD
M = + 2	Portfolio				Finance	Treasurer	Bookkeeper	Treasurer
D = + 2	Contribution							Donations
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 1	Total exp.	3.3			2	1	3	7
B = 3	Exp curr level	1.8			2	1	2	2
B+D = 4	At this school	1.8			2	1	2	2
FDE = +2	Qualifications	4			4	4	3	3
Hons+ +2	Specialisation				Buss	Urban Planner	SAPD	Admin
M = + 2	Portfolio				Marketing	Phys Facilities	Safety/Security	Stock cntrl
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 2	Total exp.	3.7			2	4	5	
B = 3	Exp curr level	3.7			2	4	5	
B+D = 4	At this school	3.7			2	4	5	
FDE = +2	Qualifications	5			5	8	3	
Hons+ +2	Specialisation				CA	Advocate	Fundraising	
M = + 2	Portfolio				Int Audit	Legal matters	PTSA/Fundraising	
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 3	Total exp.	3.0			5	1	3	
B = 3	Exp curr level	3.0			5	1	3	
B+D = 4	At this school	3.0			5	1	3	
FDE = +2	Qualifications	5				4	6	
Hons+ +2	Specialisation				Tennis	Systems Engineer	Adv/Law	
M = + 2	Portfolio				Sport	Sport & Parents	Discipline	
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>



		AVG	I	II	III	IV	V	VI
Member 4	Total exp.	6.7				5	1	14
B = 3	Exp curr level	6.7				5	1	14
B+D = 4	At this school	6.7				5	1	14
FDE = +2	Qualifications	5.7				6	3	8
Hons+ +2	Specialisation				Minister	Director		Ed Man/DP
M = + 2	Portfolio				LO	Sport		Planning/Marketing
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 5	Total exp.	5.7				5	7	5
B = 3	Exp curr level	5.7				5	7	5
B+D = 4	At this school	5.7				5	7	5
FDE = +2	Qualifications	6				9	4	4
Hons+ +2	Specialisation				Soc Work	Fin Director		DP
M = + 2	Portfolio				Culture	Fin Man		Discipline
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 6	Total exp.	9.0				2		16
B = 3	Exp curr level	4.0				2		6
B+D = 4	At this school	4.0				2		6
FDE = +2	Qualifications	6				3		8
Hons+ +2	Specialisation				IT Buss			Pr
M = + 2	Portfolio				Academic			Ex officio
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 7	Total exp.	1.0						1
B = 3	Exp curr level	1.0						1
B+D = 4	At this school	1.0						1
FDE = +2	Qualifications	6						6
Hons+ +2	Specialisation						T	

		AVG	I	II	III	IV	V	VI
M = + 2	Portfolio						Staff rep	
D = + 2	Contribution							
Member 8	Total exp.	5.0					5	
B = 3	Exp curr level	5.0					5	
B+D = 4	At this school	5.0					5	
FDE = +2	Qualifications	6					6	
Hons+ +2	Specialisation						Publ Relations	
M = + 2	Portfolio						Marketing	
D = + 2	Contribution							

#### 4. Demographics of Finance Committee

		AVG	Chr	D Chr	Secr	Tr/FO	M1	M2	M3	M4	
Chair	Total exp.	7.0		6.5	6.8	5.3	5.7	7.3	10.5	7.0	11.5
B = 3	Exp curr level	5.0		2.0	5.5	1.7	5.7	4.8	10.5	7.0	11.5
B+D = 4	At this school	4.2		1.8	3.8	1.0	6.3	5.5	7.0	7.0	11.5
FDE = +2	Qualifications	5		5	3	4	2.3	5.7	9.0	6.0	4.0
Hons+ +2	Specialisation		Law	Varied	Admin	Finance	Office Man	Engineer		CA	Ed Man
M = + 2			Finance		Finance	Business	FO/Clerk	Math		Finance	
D = + 2											
		AVG	I	II	III	IV	V	VI			
Chair	Total exp.	6.5			5	4	8	9			
B = 3	Exp curr level	2.0			2	1	3	2			
B+D = 4	At this school	1.8			2	1	3	1			
FDE = +2	Qualifications	5			6	8	3	1			
Hons+ +2	Specialisation				Law	CA	Fin Strat	SAPD			

M = + 2	Portfolio					Finance		SGB Chair	Treasurer
D = + 2	Contribution								Donations
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
Dep chair	Total exp.	6.8			10		7	3	7
B = 3	Exp curr level	5.5			10		7	3	2
B+D = 4	At this school	3.8			4		7	2	2
FDE = +2	Qualifications	3						3	3
Hons+ +2	Specialisation					Ed Man		Catering/Conf	Admin
M = + 2	Portfolio								Stock cntrl
D = + 2	Contribution								
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
Secretary	Total exp.	5.3			0		1		15
B = 3	Exp curr level	1.7			1		1		3
B+D = 4	At this school	1.0			0		1		2
FDE = +2	Qualifications	4							4
Hons+ +2	Specialisation								
M = + 2	Portfolio					Office Man			
D = + 2	Contribution					FO/Clerk			
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
Treasurer/FO	Total exp.	5.7			0			2	15
B = 3	Exp curr level	5.7			0			2	15
B+D = 4	At this school	6.3			2			2	15
FDE = +2	Qualifications	2			4			3	0
Hons+ +2	Specialisation					Acc/BussMan		Accounting	
M = + 2	Portfolio					Registrar Fin		Bursar	
D = + 2	Contribution								
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
Member 1	Total exp.	7.3			0		12	16	1
B = 3	Exp curr level	4.8			0		12	6	1



B+D = 4	At this school	5.5			4	11	6	1
FDE = +2	Qualifications	6			6		8	3
Hons+ +2	Specialisation				CA		Pr	Sport
M = + 2	Portfolio				Ext Auditor		Ex officio	
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 2	Total exp.	10.5			9	12		
B = 3	Exp curr level	10.5			9	12		
B+D = 4	At this school	7.0			2	12		
FDE = +2	Qualifications	9			9			
Hons+ +2	Specialisation				Ing/Math			
M = + 2	Portfolio							
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 3	Total exp.	7.0			2	12		
B = 3	Exp curr level	7.0			2	12		
B+D = 4	At this school	7.0			2	12		
FDE = +2	Qualifications	6			6			
Hons+ +2	Specialisation				CA			
M = + 2	Portfolio				Int Audit			
D = + 2	Contribution							
		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Member 4	Total exp.	11.5			11	12		
B = 3	Exp curr level	11.5			11	12		
B+D = 4	At this school	11.5			11	12		
FDE = +2	Qualifications	4			4			
Hons+ +2	Specialisation				HOD EBS			
M = + 2	Portfolio							
D = + 2	Contribution							

		AVG	I	II	III	IV	V	VI
Member 5	Total exp.	15.0			15			
B = 3	Exp curr level	15.0			15			
B+D = 4	At this school	2.0			2			
FDE = +2	Qualifications	8			8			
Hons+ +2	Specialisation				Principal			
M = + 2	Portfolio				x officio			
D = + 2	Contribution							

## 5. Financial Management

### 5.1 Annual budget

		AVG	I	II	III	IV	V	VI
Approved	2007		11		10	11	10	
	2008		11		10	11	10	
	2009		11		10	11	10	

### 5.1 Annual budget

		AVG	I	II	III	IV	V	VI
Total budget	2007	9.48	5.77		19.67	9.20	10.52	2.25
	2008	10.87	8.85		20.90	10.40	11.40	2.80
	2009	15.93	9.63	36.80	22.26	11.00	12.69	3.20
	Variance %	8.4%	8.1%		6.1%	5.5%	10.2%	12.2%

Total budget	2007	9,605,821	5,773,805		19,668,045	9,200,000	10,516,050	2,871,206
	2008	10,969,218	8,845,474		20,902,932	10,400,000	11,399,275	3,298,410
	2009	16,036,951	9,628,000	36,798,182	22,263,213	11,000,000	12,691,000	3,841,313
	Variance %	8.8%	8.1%		6.1%	5.5%	10.2%	14.1%

Expend./student		2007	12,066	29,916		9,974	7,034	9,874	3,532
		2008	14,246	37,481		11,013	8,131	10,574	4,032
		2009	22,925	31,567	68,145	12,906	8,696	11,828	4,410
	Avgamnt/learner		22,522	32,988	68,145	11,298	7,954	10,759	3,991
			50,567	32,988	68,145				
			8,501		11,298	7,954	10,759	3,991	
x Publ Funding		2007	266,255			193,384	120,000	131,979	619,656
		2008	267,602			251,658	160,000	167,090	491,660
		2009	332,757			294,191	220,000	171,099	645,737
	1.39% % of Total budg		5.4%			1.2%	1.6%	1.4%	17.6%
x Private Funding		2007	7,827,348	5,773,805	-	19,474,661	9,080,000	10,384,071	2,251,550
		2008	8,962,614	8,845,474	-	20,651,274	10,240,000	11,232,185	2,806,750
		2009	15,815,114	9,628,000	36,798,182	21,969,022	10,780,000	12,519,901	3,195,576
	% of Total budg		96.4%	100.0%	100.0%	98.8%	98.4%	98.6%	82.4%
Check control		2007	7,905,172	5,773,805	-	19,564,661	9,147,000	9,419,195	3,526,370

Priv Funding	2008	8,857,682	8,954,407	-	20,651,274	10,163,000	9,375,472	4,001,936	
	2009	15,839,877 96.4%	9,768,077 100.0%	36,798,181 100.0%	21,969,023 98.8%	10,767,000 98.4%	11,208,454 98.6%	4,528,524 82.4%	
School fees	2007	8,995,814	5,773,805		18,393,761	9,000,000	8,940,299	2,871,206	
	2008	10,111,771	8,845,474		19,361,854	10,100,000	8,953,118	3,298,410	
	2009	15,360,336 95.4%	9,628,000 100.0%	36,747,694 99.9%	20,842,523 93.3%	10,700,000 97.4%	10,402,485 81.8%	3,841,313 100.0%	
Entrepreneurial ventures	2007	177,136			350,000	82,000		99,408	
	2008	128,528			350,000	55,000	765	108,345	
	2009	116,008 3.8%		50,487 0.1%	350,000 1.7%	60,000 2.6%	15,708 18.2%	103,843 0.0%	
x Donors	2007	65,000				65,000			
	2008	8,000				8,000			
	2009	224,000 63.2%				7,000 97.4%	441,000 81.8%		
x Sponsorships	2007	#DIV/0!							
	2008		108,933				35,000		

?????

			71,967						
		2009	140,077	140,077					
	% of Total budg		0.2%	1.0%	0.0%	0.0%	0.0%	0.1%	0.0%
x Bequests		2007	#DIV/0!						
		2008	#DIV/0!						
		2009	#DIV/0!						
	% of Total budg		#REF!	#REF!	#REF!	0.0%	#REF!	#REF!	#REF!
x Investments		2007	41,667		50,000		30,069	44,931	
/Interest		2008	48,157		60,000		30,108	54,362	
		2009	38,877		65,000		3,582	48,050	
	% of Total budg		#REF!	#REF!	#REF!	0.3%	#REF!	#REF!	#REF!
					Culture				
Other 1		2007	343,384		70,500		448,827	510,825	
		2008	335,100		108,000		356,481	540,819	
		2009	315,332		65,000		345,679	535,318	
	% of Total budg		#REF!	#REF!	#REF!	0.4%	#REF!	#REF!	#REF!
					Practical subjs				
Other 2		2007	600,400		600,400				
		2008	651,420		651,420				
		2009			626,500				

			626,500							
	% of Total budg		#REF!	#REF!	#REF!	3.0%	#REF!	#REF!	#REF!	
						Transport				
Other 3		2007	100,000			100,000				
		2008	120,000			120,000				
		2009	20,000			20,000				
	% of Total budg		#REF!	#REF!	#REF!	0.4%	#REF!	#REF!	#REF!	
Other 4		2007	#DIV/0!							
		2008	#DIV/0!							
		2009	#DIV/0!							
	% of Total budg		#REF!	#REF!	#REF!	0.0%	#REF!	#REF!	#REF!	
Other 5		2007	#DIV/0!							
		2008	#DIV/0!							
		2009	#DIV/0!							
	% of Total budg		#REF!	#REF!	#REF!	0.0%	#REF!	#REF!	#REF!	
<b>5.2 Academic budget</b>										
% of Annual budget										
			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
		2007	9.9	2.46		0.6	29	6.34		11
		2008	9.1	2.3		0.6	28.0	6.4		8
		2009	7.4	2.94	1.9	0.6	24.7	6.32		8
Average	Overall		7.9	2.6	1.9	0.6	27.2	6.4		9.0
	Indep.		2.3	2.6	1.9					
	Public		10.8			0.6	27.2	6.4		9.0

Additional staff as % of Annual budget		AVG	I	II	III	IV	V	VI
	2007	#DIV/0!						
	2008	35.9				35.9		
	2009	#DIV/0!						
Average		#DIV/0!	0.0	#DIV/0!	0	12.0	0.0	0.0
Additional staff as % of Academic budget		AVG	I	II	III	IV	V	VI
	2007	#DIV/0!						
	2008	78.0				78.0		
	2009	#DIV/0!						
Average		#DIV/0!	0.0	#DIV/0!	0	26.0	0.0	0.0
Budget for staff development		AVG	I	II	III	IV	V	VI
	2007	#DIV/0!						
	2008	#DIV/0!						
	2009	#DIV/0!						
Average		#DIV/0!						
Budget for staff development as % of Annual budget		AVG	I	II	III	IV	V	VI
	2007	#DIV/0!						
	2008	#DIV/0!						
	2009	#DIV/0!						
Average		#DIV/0!						
Afrikaans as % of academic		AVG	I	II	III	IV	V	VI
	2007	4.9			7	6	4.55	2

	2008	3.8			6.9	1	4.39	3
	2009	3.9			7	1.4	4.34	3
Average		2.5	0.0	0.0	7.0	1.1	4.4	2.7
English as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	6.5			6.5	7	5.86	
	2008	4.3			6.4	3	5.62	2
	2009	3.4			6.3	2.8	3.69	1
Average		2.8	0.0	0.0	6.4	4.3	5.1	1.0
3rd Language as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	1.8			2.6		1.05	
	2008	1.8			2.6		0.96	
	2009	1.7			2.6		0.87	
Average		0.6	0.0	0.0	2.6	0.0	1.0	0.0
Mathematics as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	6.5			14.1	2	3.45	
	2008	5.5			14.5	1	3.45	3
	2009	7.0			14.8	1	4.36	8
Average		3.9	0.0	0.0	14.5	1.3	3.8	3.7
Phys Science as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2007	11.7			33.5	9	3.45	1
	2008	10.5			33.6	3	3.43	2
	2009	10.8			33.7	3	2.55	4
Average		7.3	0.0	0.0	33.6	5.0	3.1	2.3
Biology as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>

	2007	7.2			21.3	2	4.57	1	
	2008	8.0			21.6	1	4.38	5	
	2009	7.9			20.7	1	4.86	5	
Average		5.1	0.0	0.0	21.2	1.3	4.6	3.7	
Accounting as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
	2007	4.0			7.5	0.5	3.95		
	2008	3.7			7.2	0.5	3.43		
	2009	3.8			7.4	0.5	3.49		
Average		1.9	0.0	0.0	7.4	0.5	3.6	0.0	
Economics as % of academic		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
	2007	3.9			7.5	0.5	3.75		
	2008	3.8			7.3	0.5	3.45		
	2009	3.8			7.4	0.5	3.49		
Average		1.9	0.0	0.0	7.4	0.5	3.6	0.0	
<b>5.3 Additional funding/NSCE subject</b>									
Total additional funding		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	
	2007	667	-	-	Incl. Special grant 4,000	-	-	-	
	2008	42,103	-	-	214,191	-	38,429	-	
	2009	43,572	-	-	227,230	-	34,200	-	
Average		28,781	-	-	148,474	-	24,210	-	
Afrikaans	2007	<b>AVG</b> 2,000	<b>I</b>	<b>II</b>	<b>III</b> 2,000	<b>IV</b>	<b>V</b>	<b>VI</b>	

		2008	46,983			46,983					
		2009	46,960			46,960					
	Average		5,330	-	-	31,981	-	-	-	-	-
			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
English		2007	2,000			2,000					
		2008	2,000			2,000					
		2009	46,960			46,960					
	Average		2,831	-	-	16,987	-	-	-	-	-
			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
3rd Language		2007	#DIV/0!								
		2008	#DIV/0!								
		2009	44,960			44,960					
	Average		2,498	-	-	14,987	-	-	-	-	-
			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
Mathematics		2007	#DIV/0!								
		2008	16,429					16429			
		2009	25,200					25200			
	Average		2,313	-	-	-	-	13,876		-	-
			<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>		
Phys Science		2007	#DIV/0!								
		2008	48,302			82604.37		14000			
		2009	26,588			44175.08		9000			
	Average		8,321	-	-	42,260	-	7,667		-	-

		<b>AVG</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
Biology	2007	#DIV/0!						
	2008	82,604			82604.37			
	2009	44,175			44175.08			
	Average	7,043	-	-	42,260	-	-	-
Accounting	2007	#DIV/0!	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2008	4,000					4000	
	2009	#DIV/0!						
	Average	222	-	-	-	-	1,333	-
Economics	2007	#DIV/0!	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
	2008	4,000					4000	
	2009	#DIV/0!						
	Average	222	-	-	-	-	1,333	-

#### 5.4 Activities funded as preparation for NSCE

In general

2007	None
2008	
2009	

