

https://dspace.org/

The use of grade three external assessment results in two Gauteng public schools to improve teaching and learning.

Viljoen, Hettie Cornelia

2012-02-28
http://hdl.handle.net/10539/11372

Downloaded from a DSpace repository. https://dspace.org/

CHAPTER I
DESCRIPTION OF THE RESEARCH PROBLEM

1.1 INTRODUCTION

1.1.1 PROBLEM STATEMENT

This study examines how the Gauteng Provincial Assessment (GPA) and Annual National Assessment (ANA) tests were used in two public primary schools. The new *Guideline for the interpretation and use of ANA results*, indicates the specific use of Annual National Assessment (ANA) results at school, district, provincial and national levels (DBE, 2010b, p. 14-18). At school level, teachers are to analyse results in Literacy and Numeracy, per learner, identifying areas of strength and weakness and to adapt their planning in a corrective way. The learners are the most important customers as Herbert from the Chartered Institute for Educational Assessors (EIEA) in England proposes (2009). Teaching, learning and assessment directly influence their progression. He views the purpose of an assessment to inform the customer, who wants either individual or collective information, satisfying his or her own purpose. In the classroom, the purpose of assessment is to benefit the learner. In external summative assessments, the purpose is firstly to meet external needs. Therefore, depending on the purpose of any assessment exercise, the customer is different and the information needed is different (Herbert, 2009, p. 5). In the case of the ANA, the DBE aims to serve both types of customer, while the GPA is designed to serve systemic needs. In 2008, when the ANA and GPA tests were administered, there were no "clear instructions how the assessment should be administered, e.g. may LSEN learners be helped or do they take a different test". No guidance was given on how to interact with the results when they became available. Policy in this regard was only developed by the DBE in 2010 (DBE, 2010a; DBE, 2010b). This fact certainly influenced the way in which districts and schools interacted with the 2008 external assessment results.

1.2 LAYOUT OF CHAPTERS

The literature review in the second chapter of this report presents an introduction to the theory of testing and assessment; the typologies of assessments linked to their purposes both internationally and in South Africa. A good deal of focus in the current literature on assessment makes a distinction between helping schools to use results of "assessment for learning" or "formative assessment" to improve teaching and learning, on one hand, and "assessment of learning" to serve systemic purposes, on the other. In following the discussions of Black and Wiliam (1998) and subsequent researchers, the distinction between formative, diagnostic, summative assessment for progress, assessment for transfer, assessment for certification and assessment for accountability is highlighted.

Chapter 3 presents the background of each of the two external assessments involved in this study, the Gauteng Provincial Assessment (GPA) (2008) and the ANA (2008). We describe the goals, the selected sample, the design, and administration and marking, as well as reporting of both the GPA and ANA studies conducted in 2008. The Chapter ends with a table summarising the characteristics, advantages and disadvantages in the design and implementation of the two assessment exercises.

Chapter 4 describes the design and methodology of the study. It indicates the difference between qualitative and quantitative studies, and shows how case studies fit into the qualitative realm. The qualitative equivalents of reliability and validity of the external assessments, as well as the reliability and validity of the study itself is explored. The design and methodology sections detail how the sample of two schools was chosen, and how the researcher identified research questions from the literature. The chapter presents the outline of how the information was collected from the participants and analysed deductively.

Chapter 5 of the research report presents an analysis of the data as collected from the district and two schools participating in the study. The main research question as indicated below in 1.4 asks how two Gauteng public primary schools engaged with the results of the two external assessment exercises in 2008 to improve learner

performance. Following a deductive approach, initially, three themes were identified from the literature, examining the influence of districts, school management and teachers, respectively, on learner performance in the classroom. These themes were disaggregated into sub-questions in order to examine the main research question in more detail. We interviewed the district coordinator, principal, HOD and two Foundation Phase teachers of two public primary schools, and collected artifactual evidence of their interaction with the GPA and the ANA in 2008.

In Chapter 6, we link the findings from the information gained from the participants to the literature, drawing conclusions and making recommendations concerning the use of external assessment data to improve teaching and learning. The research report motivates how this investigation may contribute to the knowledge of assessment.

1.3 DIFFICULTY OF IMPROVING LEARNER PERFORMANCE

A number of authors point to the fact that not all schools have the capacity to translate the data of external assessments into practices that may enhance learner performance (Elmore, 1996). If so, supporting and monitoring practices of districts linked to school management, with the aim of assisting teachers, becomes important. It is worth determining the way school management develops teachers in using external assessment results to sculpture teaching practices in addressing the diversity in the classroom. Important to this study is the relationship between results of the two external assessments of 2008 and the unfolding of processes at the district and participating schools to improve learner performance.

Important to this relationship is whether all districts and schools received the external assessment results in time to plan for the next year. Both the GPA and the ANA focused on Grade 3 level, although the DBE administered the GPA to Grade 4 learners early in 2008, on the assumption that the results reflected the performance of Grade 3 learners. This is problematic because it cannot be assumed learners in the first quarter of the next year remember as much as in the fourth quarter of the previous year. It is a general practice of effective schools to do revision of work in the first weeks of January. The teachers administered the ANA to Grade 1-6 learners from the 3rd to the 28th November 2008, which could influence the performance of

the learners, depending on whether they were tested earlier or later in the month. The teachers marked and submitted the ANA scripts of the learners in Grades 3 and 6 to the district, and the district submitted the scripts to the DBE for verification. Answering the following main research question aims to shed more light on how schools used the innovative external assessments in 2008.

1.4 RESEARCH QUESTION

The main research question is as follows: How did two Gauteng public schools engage with the results of two external assessment exercises to improve learner performance?

1.5 THE SIGNIFICANCE OF THE STUDY

The significance of what happened with the external assessment results at the participating district and schools, when comparing it to the notions of research experts as a benchmark, is to understand the potential and limitations of using the GPA and the ANA for the advancement of learning. In a small way, this report contributes to the knowledge linked to external assessments and together with the prevailing evidence of other case studies may shape the knowledge about the use of external assessments over time.

Knowing how the district and participating schools interacted with the results of the external assessments in 2008, will help us to build theory on the possibility to balance external and internal school-based assessment. It will help to collect information on the most crucial areas of need in learner performance regarding Literacy and Numeracy in the participating schools, which may alert the district to the possibility of occurring in more schools in the district. This information may assist provincial and district offices to make informed decisions regarding where support is needed most.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

A good deal of focus in the current literature on assessment is now on helping schools use results of “assessment for learning” or “formative assessment” to improve teaching and learning. The Assessment Reform Group, under the wing of Wynne Harlen, plays a prominent role in the development and use of “assessment of learning” or “summative assessment”, which summarises what learners have achieved in terms of skills and knowledge, as well as their progress at pre-determined times (Assessment Reform Group, 2006, p. 1). As Caulley (1992) of the University of La Trobe advises, we compare and contrast the different views of authors on assessment (UK Student, 2011, p.1). We do this by organising the notions of different authors according to themes (The Writing Centre, 2011, p. 5).

In this discussion, we follow the beliefs of several experts in the field of assessment, distinguishing between the different typologies of assessment and their purposes. The importance of balanced assessment practices in the classroom leads up to the integration of formative and summative assessment in the school and education system. We use this review to understand the potential and limitations of using the Gauteng Provincial Assessment (GPA) and the Annual National Assessment (ANA) in Gauteng primary schools to improve teaching and learning. A founding assumption of our literature review is:

The way in which the teacher uses the information of the assessment determines the type of assessment it is (The Writing Centre, 2011, p. 4).

2.2. TYPOLOGIES OF ASSESSMENT

2.2.1 Formative assessment

Teachers use assessments for different purposes in schools, mostly aiming at improving learner performance. In 1998, Black identified three purposes of assessment:

- Formative, with the aim of support
- Summative, with the aim of reviewing, transfer and certification
- Summative, with the purpose of accountability

(Black, 1998, p. 35)

Much has been written on the characteristics and benefits of "assessment for learning" with the aim of support. The research of Black and Wiliam, as presented in their classic work *Inside the Black box (1998)* stands out, claiming that more than any other educational intervention strategy, "assessment for learning" causes the most significant improvement in learner performance when the basic principles link to the need of the learner. More importantly, this approach is most effective in learners with learning difficulties. Looney (2011) presents a convincing argument that in addition to the valuable classroom benefit of formative assessment, it can be linked to data collected from external assessments. Summative assessments monitor the performance of the school and system and could influence curriculum planning and delivery, thereby enhancing the learner performance in the classroom. In turn, data collected from classroom assessments may inform decisions at a school and system level (Looney, 2011, p. 5). Several factors influence this kind of seamless integration, such as the reliability of the data of both formative and summative external assessments and the ability of the teachers to use the data for the benefit of the learner. However, teachers need to be trained how to analyse and use the external assessment results. An example of an intervention aimed at assisting teachers to use the results of summative assessment is the Data Informed Practice Improvement Project (DIPIP) at the University of the Witwatersrand (University of the Witwatersrand, 2010). The project employed small group discussions focused on lesson plans as a form of pre-teaching or pre-moderation, and lesson reflection as a form of post-teaching. In depth discussions, highlight misconceptions regarding the errors learners make and teachers learn how to detect the reasoning behind common errors, enabling them to support learners more effectively.

The Independent Examination Board (IEB) assessor course, based on the work of Blythe (1998), Clark (1998, 2001, 2003 and 2006), as well as Butler and McMunn (2006), indicates that assessment for learning involves:

- Sharing of learning intentions
- Effective questioning
- Self and peer evaluation
- Effective feedback

These researchers promote the idea that every child has the ability to improve, and believe in building the learners' self-esteem in the quest for success (IEB, 2011, p. 8). The strength of their approach lies in the consistent assessment pathway in an ongoing cycle, where the teacher concentrates on a basic skill or concept, which the learners practice. The teacher evaluates performance against learning outcomes, identifies areas that need support to improve performance, and gives feedback to the learners on what they need to achieve before commencing to the next learning goal (IEB, 2010, p. 3). Black and Wiliam (1998) give a more detailed description of the characteristics of "assessment for learning":

- Interlinking teaching, learning and assessment by careful planning
- Learners need to understand themselves and the classroom culture should be such that they feel safe to take risks and make mistakes
- Effective feedback is timely and "scaffolds" information leading to improved learner performance. It seems that feedback focusing on the learning process rather than the end product is more effective
- Effective questioning techniques show the learners' understanding and misconceptions
- The skill to assess one self and others forms a key part of formative assessment
- Picking up on the last point, Looney asserts that, by making the success criteria known to learners, they may develop the skill to monitor their own work (Looney, 2011, p. 8, 9 and 10; see also (Chappuis, Stiggins, Arter and Chappuis, 2005, p. 14, 15 and 75).

Black (1998) sees effective teaching as varying or differentiating the pace and style of teaching according to the need of the individual learner. The collected evidence of classroom assessment informs this pace and learning style of the learner. He views a variety of assessments of the learners' performance, as more trustworthy and therefore more valid than any single point of measurement. Furthermore, formative assessment practices occur closer to the real context where the gained knowledge will be used, which makes it more authentic and enhances the validity and trustworthiness of any assessment practice (Black, 1998, p. 106).

2.2.2 Diagnostic assessment

Diagnostic assessment is a specific type of formative assessment, expert and detailed, indicating the underlying challenges the learner experiences. Learners and parents need to know of these knowledge gaps and misconceptions as early as possible, and teachers need to plan a supporting program tailored to meet the needs of the learner.

In France innovative, national external assessments in Mathematics take place at ages 8, 11 and 15, at the beginning of the school year, acting as a diagnostic assessment (Black, 1998, p. 108). This indicates how diagnostic assessments can be used on a national scale. The results of these assessments help teachers to plan teaching and assessment activities for the year. In South Africa, the DBE aims to use the Annual National Assessment (ANA) in a similar way (DBE, 2011a). The French Department of Education trains teachers specifically how to use the results of these external assessments to strengthen their classroom practices. However, teachers reported that using the results to support learners with barriers effectively, in addition to pressures of the normal teaching program, was very difficult (Black, 1998, p. 108). The example illustrates the point how very difficult it is to implement these ideas in a well-developed system, such as the French Education system. It is not surprising that teachers in the developing South African education system are struggling.

2.3 ASSESSMENT FOR PROGRESS, TRANSFER AND CERTIFICATION

2.3.1. Summative assessment in a school

2.3.1.1. Assessment for progress

Black presents a clear and detailed distinction between the different purposes of summative assessments. The aim of summative assessment is to give an overall picture of learner performance at the end of a period or the year. The South African *Assessment Guidelines for Foundation Phase Grades R-3* describes summative assessment as a "snapshot" of how the learner progressed and what the learner achieved at the end of the period (DBE, 2008a, p. 9). Some documents refer to summative assessment as "assessment of learning" (Western and Northern Canadian Protocol for Collaboration in Education, 2006; DBE, 2007a, p. 9; Looney, 2011). When learners go to the next grade, the teacher should pass on this "overall picture", including formative information regarding the learners' strengths, challenges and progress to the new teacher. The difference in formative and summative assessment at the same school, with a high degree of continuity, could be rather small (Black, 1998, p. 28). Not promoting learner involvement directly, Black believes several assessments by teachers, such as homework or weekly tests are summative purely because the assessment does not influence the teaching activities to enhance the learners' ability to perform. How the teacher interprets the results of an assessment indicates the nature of the assessment as formative or summative. Some assessments are summative only because the teacher does not use them to improve the performance of the learner and some assessments are useful for both formative and summative processes. In this way, the purpose indicates the nature of the assessment (Black, 1998, p.117, 118).

2.3.1.2. Assessment for Transfer

Summative assessments collected over time and/or by completing a test at the end of the learning phase covering the whole area of the previous learning phase indicate an overview of the competence of the learner (Black, 1998, p. 29). In South Africa, policy requires schools to have a learner profile system (DBE, 2007a, p.19). When a learner goes to a new grade or a new school, the new school should request the learner profile from the school where the learner attended previously. The teacher files evidence of the learners' work, the end of year report card, as well as challenges the learner experience in the learner profile. The learner profile is up-dated by the class teacher quarterly (DBE, 2007a, p.19).

2.3.1.3. Assessment for Certification

Assessment for Certification, as part of summative assessment, takes place at the end of the learners' schooling career or the end of a schooling phase. A certification system may require teachers to collect evidence through the year, considering this evidence in addition to the exam mark. In South Africa, the school marks count 25% of the Senior Certificate in Grade 12. Van der Berg and Shepherd (2008), in agreement with Black (1998), have shown this to be very problematic, highlighting the difficulty in selecting the most important information to indicate the competence of the learner when measured against the goals of the year (Black, 1998, p. 28, 106, 114 and 115). The primary purpose of this form of summative assessment is to hold the learner accountable for achieving the curriculum goals. In South Africa, the Grade 12 examination and ABET level 4 examination are examples of Assessment for Certification.

2.3.1.4. Assessment for accountability

One purpose of summative assessment is to hold schools and teachers accountable. The Gauteng Provincial Assessment (GPA) exercise undertaken in 2008 is an example of assessment for accountability at the teacher, school and provincial system levels. Elmore (2008) links accountability in the school to the leadership of the classroom or school. He argues convincingly, that accountability measures are only effective to the degree that the principal and teachers are committed to the improvement of the school, and have the knowledge and skills to bring about this improvement. Thinking in similar fashion to Elmore (2008), Kellaghan, Greaney and Murry (2009), believe that learners will not improve unless teachers use the assessments to develop strategies to change teaching practices in the classroom. Teachers need to learn how to identify whether they focus too much on a specific area and too little on others (Kellaghan, Greaney and Murry, 2009, p. 97-105).

Kellaghan, Greaney and Murry (2009), as well as Earl (2009), are convinced that seeing examples of effective activities and participating in professional discussions will assist teachers to improve their professional performance, following an external assessment. Seeing school improvement as a developmental process, Elmore (2008) explains that schools or systems do not always know how to comply with accountability policies, and it is rather the degree to which the teachers can be

convinced to adopt new effective teaching practices, that improves learner performance (Elmore, 2008, p. 39, 40 and 41).

2.3.1.5. International assessments

International assessments have the intention to compare the performance of any national or regional system with that of other systems. International external assessments, such as Trends in International Mathematics and Science Systems (TIMSS), addresses Mathematics and Science on a Grade 8 level and South African learners participated in 1995, 1999 and 2003. In the same way, South African learners participated in the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) on primary level in 2000 and 2007. South Africa was ninth out of the 14 participating countries in the Grade 6 Literacy and Maths tests in 2000 (Moloi and Strauss, 2005). In the light of the results of these assessment exercises, Minister Naledi Pandor launched several supporting programs in Mathematics, Science and Technology (MST). In an attempt to enhance Literacy and Numeracy at primary school level, the South African government initiated the "Foundations for Learning" (FFL) campaign in 2008 (DBE, 2008c, p.4). The focus was on improving writing skills and competence in Numeracy by 2011. For the duration of the FFL campaign, all primary schools would temporarily refrain from participating in regional and international assessments testing learner performance. In 2009, the provincial department launched the Gauteng Provincial Literacy Strategy in underperforming primary schools in Gauteng to improve the competence of the learners in Literacy/Languages (GDE, 2009b).

2.3.1.6. Systemic evaluation

Systemic assessments, as part of summative external assessments, inform policies for assessment, the national curriculum and address accountability in the system (Black, 1998). The GPA report, *A baseline study of Grades 3 and 6 Learner Performance in Literacy/Languages and Numeracy/Mathematics* (2008) indicates that the main objective was to assess the effectiveness of the provincial education system and the

extent to which the schools reached the goals of the transformation process (GDE, 2008, p.109). Information regarding what teaching and learning takes place in schools has significantly improved since the onset of external assessments in South Africa in 2001. The DBE conducted three systemic assessment studies in 2001, 2004 and 2007 (GDE, 2008, p.114).

A systemic evaluation is an externally administered standardised test, generally administered to a sample of learners in the system, with the aim to indicate learner knowledge in a particular subject at a particular grade level. It acts as a benchmark of what teaching and learning should take place in the classroom, and against which improvement can be measured. Detailed results indicate specific challenges giving guidance to teachers tailoring classroom practices to improve learner performance where these challenges occur.

The Department of Basic Education (DBE) aims to evaluate the learners' cognition and assess progress in performance levels in Literacy and Numeracy, annually. Minister Pandor referred to this compulsory assessment as the Annual National Assessment (ANA) (DBE, 2008b). *A Guideline to the Administration of Annual National Assessments* (GDE, 2011a) indicates the commitment of the president toward an independent ongoing national system, testing learners in Grades 3, 6 and 9, and targets an improvement towards achieving 60% levels of performance in Literacy and Numeracy by 2014. *The Action Plan 2014 Towards Schooling 2025* (DBE, 2010a) indicates the importance of the Annual National Assessment (ANA) as the main instrument for monitoring progress towards achieving measurable quality educational goals. The ANA aims to monitor progress, and to guide planning and the distribution of resources for the advancement of Literacy and Numeracy (DBE, 2011a, p.1). The *Annual National Assessment report of 2011,* targets four key effects on schools: to provide an example of better assessment practices, to assist districts in identifying underperforming schools with the aim to support, to celebrate outstanding performance in well performing schools and to inform parents on the performance of their child (DBE, 2011a, p. 4). However, Taylor (2009) mentions the opinion of several researchers, such as McNeil (2000), Nichols *et al*. (2005) and Nichols and Berlinger (2005) rejecting national assessments as an effective way of gauging learner performance on a large scale, resulting in corruptible indicators because of the

prominence given to the assessments. He presents four reasons for the inadequacy of large-scale external assessments, the first, the high priority given to the assessment causing distortions in the emphases of the curriculum, secondly the influence of the socio-economic background of the school on the performance of the learners, thirdly, the anxiety round the test situation influencing the behaviour of teachers, learners and parents. Fourthly, Taylor agrees with Elmore (2008), who believes that the extent to which a school is able to respond to external accountability measures depends on the strength of the internal accountability system in the school (Taylor, 2009, p. 3).

2.4 THE SYMBIOSIS BETWEEN FORMATIVE AND SUMMATIVE ASSESSMENT

The most popular distinction in assessment is between formative and summative assessment as illustrated in the OECD Education Working Paper no 58. Concepts of "formative" or "summative" assessment are the main ingredient in the OECD report by Looney (2011). She views quantitative summative assessment or "assessment of learning" to be a summary of different assessments of a learner's performance, presumably at the end of a period. This could include tests, examinations or end of year marks. Summative assessments inform promotion, certification or admission to higher levels of education. Looney further indicates the teacher uses qualitative "formative" assessment, which she equates to "assessment for learning", to gather information on possible needs of the learner and to adapt his/her teaching in a corrective way, enabling the learner to achieve the goal of the lesson. Looney supports Black and Wiliam (1998) and Wiliam (2006) in their view that assessment is formative only if it shapes further learning (Looney, 2011, p. 7). In the opinion of Chappuis and colleagues (2005), formative assessment and assessment for learning do not necessarily equate with one another. They perceive assessment for learning to be far more than testing several times at certain intervals to revise and adapt instruction. In their view, the distinctive quality of assessment for learning involves the learner actively in the process of teaching and learning (Chappuis *et al.*, 2005, p. 33, 34).

The distinction between summative and formative assessment in the Northern Ireland Curriculum (2000) views summative assessment or "assessment of learning" as a product separate from teaching and learning. In contrast, the curriculum sees the

"assessment for learning" as part of the learning process and focuses on improving learning. The Northern Ireland Curriculum treats summative assessment and formative assessment as complementing each other (Northern Ireland Curriculum, 2000, p. 1).

Looney (2011) traces the origin of the distinction between formative and summative assessment back to Scriven (1967) who made the distinction in terms of evaluations of curricula and teaching methods. Scriven believed that early identification of areas of need would be to the benefit of the learners. Later Bloom followed on these notions, as well as Hasting and Madaus, developing the concepts of "mastery of learning" (Guskey, 2005, p. 3-10). Their strategy was to break the work into units and assess the learners' competence at the end of each unit. They viewed this as formative assessment, giving feedback to the learners, and adjusting their teaching strategies to include the needs of the learners.

In South Africa, the *Policy on Assessment and Qualifications for schools in the General Education and Training Band* (DBE, 2007), as well as the new *Protocol for Assessment* (2011c) promotes a balanced view of assessment, indicating assessment to be both formal and informal. Teachers use formal assessments to order their collected evidence of learner progress systematically and record the evaluations of the learners' progress in achieving the Assessment Standards in a particular Learning Program per grade. Formal assessments may include projects, oral presentations, demonstrations, performances, tests, examinations or practical demonstrations and more. Observations, discussions, learner-teacher conferences, informal classroom interactions are considered informal assessments. Informal and formal assessments inform planning of teaching practices, such as the Learning Program, the Work Schedule and lesson plans and although these functions are linked, it should be noted that "not all responses to teaching need to be assessed formally and not all formal assessments need to be recorded" (DBE, 2007, p. 5, 6). The new *Foundation Phase Draft Training Toolkit manual* indicates the minimum formal assessment tasks that need to be recorded (DBE, 2010c, p. 12).

2.5 BALANCED ASSESSMENT IN THE CLASSROOM

Chappuis and colleagues (2005) provide guidelines to school leadership based on their belief that a balanced quality assessment system is the basis for school improvement. Their work provides a structure through which schools may achieve their vision of excellence, indicating the skills and knowledge needed to achieve a balanced assessment system where both the classroom assessments for learning and standardised assessments of learning serve their respective purposes effectively. In building a foundation for a balanced assessment system, they introduce a model for professional development enhancing the assessment literacy of school leaders (Chappuis, *et al.*, 2005, p. 4, 5).

Looney adds to these developments envisioning a seamless integration of formative and summative assessments where teachers use information from external assessments, in a formative way to adapt their classroom practices (Looney, 2011, p. 7).

2.6 INFLUENCE OF ASSESSMENT ON POLICIES

The work of Black and Wiliam (1998) has influenced education policies of countries such as Singapore, Northern Ireland (2000) and more, focusing on the practical implementation of formative assessment

According to the *Policy of Educational Assessment* in Singapore (Lim and Tan, 2010), the emphasis of school-based assessment should be on diagnostic and formative approaches, as an integral part of teaching and learning. School-based assessment informs promotion of learners to the next level within the school. Only pen and paper tests are seen as formal assessments and other forms of assessment, such as projects or presentations are considered informal or non-formal (Lim and Tan, 2010, p. 393). School-based assessment indicates what learners have already achieved, and what still needs to be done to develop the learner to his/her full potential. The validity and reliability of the assessment instrument receive high priority. School-based assessment is seen as formative and/or summative, or a combination, depending on the purpose of the assessment. Continuous assessment (formative) is used to gauge the effectiveness of teaching and learning and corrective measures are taken to improve learning (Lim and Tan, 2010, p. 401).

The majority of OECD countries have decentralised education systems and accountability requirements, giving more authority to local teachers in the way they teach and support learners to their specific need. In contrast, the Department of Basic Education in South Africa (DBE) is moving towards more control, as indicated in the new *National Protocol for Assessment Grades R*-12 document (DBE, 2011c). However, very little is given on how "formative assessment" could be used other than describing it as being an integral part of teaching, and including various forms of assessment. Formative assessment is seen as informal assessment involving teacher observations and teacher-learner interactions initiated by either teachers or learners. The protocol document briefly mentions feedback to the learners, closing the gaps in learners' knowledge and skills. The purpose of the protocol document is to guide teachers on recording and reporting evidence of learner performance, with the emphasis on formal assessment tasks, seen as a summative assessment (DBE, 2011c, p. 3, 4, 17). Although mention is made of informal assessment as an integral part of teaching and learning in the draft *National Protocol for Assessment* (DBE, 2011c), in South Africa, other purposes, such as accountability or school and system improvement cannot be linked to formative assessment. In our view, not enough guidance has been provided on the practical implementation thereof, lacking the capacity-building component as argued by Taylor (2009, p.1-4). Furthermore, the hope was that teachers would have one policy document to follow, making it less difficult than wading through several documents to comply with what is expected. Nonetheless, the protocol document indicates it should be read in conjunction with previous policy documents, which does not alleviate the problem (DBE, 2011c, p. 2).

2.7 USING THE ANNUAL NATIONAL ASSESSMENT IN AN INTEGRATED WAY

With the *Draft National Policy on the conduct, administration and management of the Annual National Assessment* (DBE, 2011b), the DBE is working towards the following targets:

- to collect information on the most crucial areas of need in learner performance regarding Literacy and Numeracy
- to assist provincial and district offices to make informed decisions regarding where support is needed most

- provide resources to the poorest of the poor
- to inform the DBE and the public how well schools serve the country where it matters most
- to identify which skills need to be developed enabling learners to compete in the equity market
- to provide information (data) which teachers may use as a baseline assessment in Literacy and Numeracy at the beginning of each grade, influencing the planning for the grade
- to inform teachers how far schools are in achieving the goal to have 60% of the learners perform at the achieving level of 50% by 2014
- to inform parents of the levels of performance in the school (DBE, 2011b, p. 3, 4).

In implementing these integrated aims the provincial office in Gauteng is currently training the district assessment advisers, on the interpretation and use of the data of the ANA of 2010, administered early in 2011. The expectation is to filter the information down to teachers through the districts and School Assessment Teams (SAT). The provincial office distributed a question analysis per grade, per school and aims to train the district officials on the development of intervention programs to support teachers.

The new *Guideline for the interpretation and use of ANA results* (2011b), indicates the specific use of ANA results at school, district, provincial and national levels (DBE, 2011b, p. 14-18). At school level, teachers are expected to analyse results in Literacy and Numeracy per learner, identifying areas of strength and weakness. Parents need to be informed and teachers should give feedback to the learners on their performance. The learners are the most important customers as Herbert from the Chartered Institute for Educational Assessors (EIEA) in England sees it (2009). Teaching, learning and assessment directly influence their progression. He views the purpose of an assessment to inform the customer, who wants either individual or collective information, satisfying his or her own purpose. In classroom assessment, the purpose is for the benefit of the learner. In external summative assessments, the purpose is firstly, to meet external needs and so the customer is different and

therefore the information needed is different (Herbert, 2009, p. 5). In the case of the ANA, the DBE aims to serve both customers. Teachers compare the standards and results of the ANA to those of their internal assessment tasks, and are expected to adjust the standards of internal assessment accordingly.

According to emerging policy for ANA, the management of the school is expected to analyse the results per class and per teacher learning area, in collaboration with the teachers. The aim is to identify learners with challenges and their specific areas of need and develop a remedial programme for these learners. The school management address teacher development where needed and sets targets for the school, individual teachers, and specific classes and compares their results with schools in similar circumstances (DBE, 2011a, p. 22). School governing bodies may also make informed decisions based on the ANA results and provide support enhancing the functionality of the school (DBE, 2011a, p. 23).

Officials at district level identify poor performing schools and inform them of their status. The districts are to assist underperforming schools in developing an Academic Improvement Plan. Districts identify common areas of challenge and develop an intervention plan supporting the schools with similar challenges. Challenges regarding resources are addressed and realistic targets are set (DBE, 2011a, p. 23). Daugherty, from the University of Cardiff, does not recommend that school-based assessments (SBA) be used for school-based accountability. He compares SBA to a series of links in a chain. If one link is weak, the validity of the assessment is compromised. He lists the different links in the assessment chain, as task conditions, teacher expertise, training and support of teachers, as well as quality assurance (Daugherty, 2009, p. 6).

2.8 PROFESSIONAL DEVELOPMENT OF TEACHERS

Black (1998) and later Earl and Timperley (2009) amongst others, viewed the interaction between teachers as extremely valuable in determining the effectiveness of planning and teaching (Black, 1998, p. 115; Earl and Timperley, 2009). The feedback of fellow teachers greatly enhances the progress towards closing the “gaps” in learner knowledge as teachers make changes in their practice. Discussions between teachers develop professional skills and strengthen learning processes in the whole school. Black (1998) mentions successful practices of this kind involving professional groups

in Australia and England (Black, 1998, p. 112). Earl (2009) argues that leadership plays a key role in conversations round the use of data to inform following teaching practices. Current research moves away from leaders in specialised roles towards a distributed model, involving multiple leaders to build the capacity of teachers in collecting and using data to support struggling learners (Spillane, 2005; Zorn and Boler, 2007, p. 138). Leaders with a thirst for understanding, continue to search for reasons and solutions using data. They look beyond the obvious into detail trying to find ways to make the most difference (Earl and Timperley, 2009, p. 5, 14).

In addition to identifying challenges in learning, teachers need to know how to support learners in their specific strength or style and Black (1998) is concerned that teachers are not supported enough to identify these needs in the learners (Black, 1998, p.111, 116). The teacher should be familiar with cognitive processes in the learning process and in the teaching methodology needed to address the identified challenges. The teacher should also be familiar with different methods of assessment, such as teacher assessment, peer assessment or self-assessment and the appropriate form of assessment, such as observation, practical or written assessment, to gain the information needed to identify challenges.

During a very useful presentation promoting the Data Informed Practice Improvement Project (DIPIP), presenters of the University of the Witwatersrand introduced “formative assessment” for teachers, addressing the question as to how teachers could determine what they need in order to change their teaching practice and how learners’ errors informed the process (University of the Witwatersrand, 2010).

The DIPIP views teacher development as central to quality teaching, which in turn has a direct influence on the quality of learning that takes place in the classroom. However, they indicated that changes in teaching practices are more likely when teachers are supported continuously, focusing on practical details. Research by Elmore and Burney (1997, p. 14) argues teachers do not change their practices only because the districts tell them to. Support needs to be continued over a substantial period until teachers are able to understand the new practices fully and “buy into” the practice. The DIPIP indicates according to Ball (1999) teacher development is most effective when focused on a few key aspects of teaching practices in a specific content area rather than a generic focus, covering too many content areas or too many learning goals of subjects

(Cohen and Ball, 1999, p. 9). The DIPIP inspired by expert advocates for data informed interventions, such as Earl and Timperley, views data as a vehicle for accountability. The project assumes that success in systemic assessment occurs when teachers participate actively as interpreters of data. Teachers perceive assessment to be meaningful when they learn how to analyse data and use it in conjunction with prior knowledge, such as internal assessment tasks or quarterly learner performance statistics, to make informed changes in classroom practices (Western and Northern Canadian Protocol for Collaboration in Education, 2009).

2.9 CONCLUSION

The literature makes a fundamental distinction between assessment of learning, which primarily aims to inform policy and system managers external to the school, and assessment for learning, which primarily assists role players within the school in improving teaching and learning. However, it is clear that these two main types of assessment may overlap in school practices, depending on their purposes and how they may be used. Following scepticism at the beginning of external assessment, as shown by Curriculum 2005 (Jansen, 1999), South Africa has gradually moved towards using systemic and other assessment of learning tools, and is currently entering a phase in which external accountability is to play a major role in managing schools (DBE, 2010b). The literature leads us to expect optimal use of such instruments. This happens when officials at higher levels of the system, such as the district, engage on a school level with school management and teachers in using the results to improve teaching and learning. The value is greater when school level systems enable teachers to work together to develop their own capacity to analyse test results and to develop more effective classroom strategies, correcting the gaps exposed by the tests.

This study makes a modest start in investigating the use of systemic instruments by two public schools in Gauteng. The selection of the GPA and ANA for the study allows us to look at the respective effects achieved by two instruments, very different in design and administration. This provides the opportunity for participants at all levels of the school system to think, with the aim to refine the design and implementation, about improving these important assessment processes. We turn now to look more deeply into the design and administration of the GPA and ANA.

CHAPTER 3

TWO RELEVANT EXTERNAL ASSESSMENTS IN GAUTENG

3.1 INTRODUCTION

Chapter 3 presents the background of each of the two external assessments involved in this study, the Gauteng Provincial Assessment (GPA) (2008) and the Annual National Assessment (ANA) (2008). We describe the goals, the selected sample, the design, and administration and marking, as well as reporting of both the GPA and ANA studies conducted in 2008. The Chapter ends with a table summarising the characteristics, advantages and disadvantages in the design and implementation of the two assessment exercises.

3.2 GAUTENG PROVINCIAL ASSESSMENT (GPA)

3.2.1 Background to the GPA – 2008

The Gauteng Department of Education (GDE) aims to collect information regarding the performance of learners in Literacy/Languages and Numeracy /Mathematics in Grades 3 and 6 through regular, province-wide assessments in all public primary schools. An external agent administered the GPA in 2008 for the first time, and the province is planning to repeat the exercise in 2011, using a new test designed to provide detailed diagnostic information. An additional questionnaire accompanying the GPA (2008) indicated the needs of schools in terms of resources as requested by the Quality Initiative Development and Support Upliftment Programme (QIDS-UP).

The GPA took place in all Gauteng public primary schools as a census test in 2008. The GDE used an instrument, set by the National Department of Education and administered, marked and scored the assessment externally. The primary purpose of the study was to determine learner knowledge as part of monitoring and tracking provincial performance. The *Gauteng Provincial Assessment report* (GDE, 2008) indicated average results for each school in terms of Learning Outcomes in both

Literacy and Numeracy. The GPA hoped to inform teaching and learning as a secondary purpose (GDE, 2008, p. 2, 3).

3.2.2 Goals of the GPA (2008)

The primary purpose of the GPA (2008) as a province-wide testing program was to monitor learner performance, compare the results across schools and feed into policy-making. In addition, individual teachers, schools and districts supporting the system, could make improvements by using the data as assessment for learning purpose, while a third goal was for province to use the results to increase accountability on the part of all stakeholders (GDE, 2008, p. 3).

Given the goals of this study, the GPA provided reports at three levels: province, district and school (GDE, 2008, p. 4). The provincial report looked at the results holistically and identified common trends and nuances, by examining the learner performance results in relation to the key variables of interest (such as quintiles, former department, gender, age and language). The GPA (2008) drew heavily on previous studies and literature on learner performance, to assist policy-makers in the Gauteng province to make decisions about educational support programmes in the province (GDE, 2008, p.4).

The second level of reporting was the *district reports*. Each of the 15 districts participating in the study received its own report indicating the performance of the learners in Grades 3 and 6 of the district.

School reports as third level of reporting provided information regarding school performance to each of the public schools in Gauteng. These reports were intended to present the results simply and to make specific recommendations on ways to improve schools' learner performance in Literacy/Language and Numeracy/Mathematics.

3.2.3 The sample of the GPA (2008)

Learners in Grades 4 and 7 wrote the test early in 2008, with the assumption that at the start of the new school year, the knowledge of these learners would be

equivalent to that of Grade 3 and 6 learners respectively, at the end of the previous school year (GDE, 2008, p. 6). A population sample involved all public schools in the Gauteng province. The Grade 4 study would provide information about 15 districts, 1197 ordinary public primary schools, and 118 415 Grade 4 learners that participated. This represented 86% of the total number of schools in the province, which means that 197 schools did not participate in the study. The Gauteng Provincial Report (2008) does not indicate the reason for non-participation (GDE, 2008, p. 8). The Grade 7 study would provide information on 15 districts, 1141 primary schools, representing 83% of the total number of primary schools in Gauteng. 119 158 learners in Grade 7 participated in the test (GDE, 2008, p, 8, 13, 18).

Schools had the choice for their Grade 4 learners to write the tests in their home languages, or in the Language of Learning and Teaching (LoLT) of the school. It was assumed that schools would understand this to mean they could choose to write in the LoLT used in the Foundation Phase, although they could have interpreted it to mean the LoLT used from Grade 4. In any event, 81% opted to write in English, 10% in Afrikaans, and only 9% wrote in an African language.

3.2.4 Instrument design

The Grade 3 Literacy Assessment Task used in the current study was a parallel version of the 2007 national DBE's Systemic Evaluation Literacy Assessment Task for Grade 3 (in future, this assessment will be called national assessment). The DBE developed the Literacy Assessment Task to be diagnostic at two levels: by skill and grade level. This Assessment Task comprised of 6 questions and 36 items, drawn from the five Learning Outcomes (LOs) and Assessment Standards (ASs). Eighteen items were multiple-questions, eleven were open-ended questions requiring short answers, three items required extended responses and four were closed questions (GDE, 2008, p. 23).

The Numeracy task was a parallel version of the 2007 national DBE Systemic Numeracy Assessment Task for Grade 3. This task consisted of fifty items covering all Learning Outcomes and most important Numeracy skills. To add to the diagnostic power of the Numeracy Assessment Task, the DBE pitched the items at various

levels of difficulty (as defined by grade level specified in the NCS) (GDE, 2008, p. 24).

3.2.5 Administration and marking

All learners in Grades 4 and 7 wrote the test representing Grades 3 and 6. All schools participated in the study, starting from 28th January 2008 until 30th April 2008. Training took place on 25th and 26th January and on 11th and 12th February 2008 and involved four hundred and thirty administrators. Trainees received a training manual. Most administrators followed procedures and gave feedback on challenges they experienced. Forty-five schools were monitored for quality assurance purposes (GDE, 2008, p. 29, 31). SMTs, as well as district and provincial officials assisted in monitoring the process

3.2.6 Reporting

3.2.6.1 Literacy

The province had a mean score of 28% in the Literacy Assessment Task in Grade 3. The highest score was 73%, achieved by three learners. 1157 learners (1%) scored zero. The Literacy results of the GPA in 2008 is remarkably lower than the mean scores of the 2001(33%) and 2007(38%) systemic assessments conducted by the national department (DOE, 2008, p. 45). 1197 of the schools (75%) performed on a "not achieved" level (1-34%). Not one school in Gauteng performed on an outstanding level in Literacy in Grade 3 (GDE, 2008, p. 48). The GPA (2008) reported an average per LO per school, not per learner which influenced supporting programs.

3.2.6.2 Numeracy

The province performed at an overall mean score of 43% in the Numeracy Assessment task for Grade 3. Of the 118 415 participating learners, 82 learners (0, 07%) achieved the highest score (100%). 984 (0.8%) of learners achieved 0% (GDE, 2008, p. 56).

3.3 THE SOUTH AFRICAN ANNUAL NATIONAL ASSESSMENT (ANA)

3.3.1 Background of ANA – 2008

The Minister of Education in 2008, Naledi Pandor, introduced the Annual National Assessment (ANA) as part of the Foundations for Learning Campaign (FFL). Her aim was to lay solid foundations for learning, starting with public primary schools. The FFL indicated specific directives on minimum expectations regarding resources; time-on-task and learner performance targets (DBE, 2008c, p. 3) and the ANA monitored the progress towards achieving the goals. For the duration of the campaign, until 2011, all primary schools were to assess learners (Grades 1 – 6) annually in Numeracy/Mathematics and Literacy/Languages using standardized tests to measure progress towards achievement of the set targets.

3.3.2 Goals of the ANA (2008)

Government Gazette no. 30880 of 2008 indicates these targets as increasing the level of performance in Literacy/Languages and Numeracy/Mathematics to at least 50% by the end of the four year campaign. This indicated an estimated improvement of 15-20 % (DBE, 2008c, p.3). The current Minister of Education, Angie Motshekga, has now extended the campaign indefinitely as an important element of her Action Plan announced in 2011 (DBE, 2010a). The results in this report indicate both quantitative and qualitative analyses of the current level of performance in the first year of the FFL.

3.3.3 Sample

The ANA was also intended as a census test, and was administered in 21 000 public primary schools and an approximate 7.3 million learners were involved (DBE, 2008, p. 3).

3.3.4 Instrument design

According to the *Annual National Assessment Grades 3 and 6 results* (2008b), the ANA in 2008 involved the development of 78 items in the 11 official languages (DBE,

2008b, p. 3). As with the ANA (2008), the ANA (2009) and the ANA (2010/11) comprised of paper-and-pencil test items answered on a question paper. The test items formed a balanced mix of items including simple, moderately complex and complex items. Items included required knowledge and skills that learners needed to have achieved per grade as identified by the DBE. A marking guideline for scoring accompanied the question paper (DBE, 2011b, p. 2, 3). The teachers administered and marked the test, giving them direct access to the strengths and weaknesses of all their own learners.

3.3.5 Administration and Marking

The report from the provincial office (2008) indicates the DBE was responsible for the delivery of the assessment instruments to districts. Initially, the DBE would distribute the assessment instruments to schools by the 15th of October 2008, so schools could commence with duplicating the papers for learners during the month of October. Schools were to start writing from the 3rd to the 28th November 2008. The DBE communicated these instructions by a provincial circular (Circular 64/2008). Unfortunately, there was a delay in delivery. According to the delivery schedule, the tests reached the courier company responsible for delivery, on the 27th October 2008. Districts only received and distributed the test instruments within the first two weeks of November 2008. Districts and schools had to adjust their plans to accommodate these delays (GDE, 2008). The marking memoranda were not included in these packages and the DBE sent them to the province electronically as from the 7th November 2008. The districts delivered them to the schools. The DBE also sent the tool for capturing the results of the assessments to the province via e-mail on the 24th November 2008, who forwarded it to the districts that in turn had to provide these to schools. Notwithstanding the challenges above, 21 000 public primary schools wrote the test (GDE, 2008, p. 5).

The *ANA Grades 3 and 6 results* (2008) report indicates, those teachers administered the assessment in November 2008, marked, and recorded the results on a summary form, designed and provided by the DBE. Schools submitted these forms to the districts, who submitted them to the DBE for processing and analyses. School Management Teams (SMTs) district officials and provincial officials assisted

in monitoring the process at their schools. The DBE indicated that evidence gathered from a random sample of scripts showed that, apart from a few exceptions, there was reasonable consistency in the marking of the scripts by the teachers (DBE, 2008, p. 4).

The delivery process had improved a lot in ANA (2009). Delivery was timeous and a minimum of challenges were noted. The administration of the test at schools progressed much smoother than in 2008. Schools were grateful for the financial assistance for copying learner scripts. As a result, more schools participated and fewer learners were absent (DBE, 2009, p. 6).

Initially, in 2008 the aim of the ANA as census test was to determine the health of the system with the secondary purpose of informing teaching and learning. It could be debated whether in practice scores were reliable, for teachers marked the papers at the schools and submitted the papers to the DBE, who only moderated papers from a sample of schools. Conditions were not uniform at all schools and the teachers did not interpret the questions in a uniform manner when assisting learners during the assessment or when marking the papers. There is general concern that the DBE did not train the teachers sufficiently on the interpretation of the items of the assessment, or on how to administer the assessment of 2008, therefore it is unlikely that scores indicated in the national, provincial, district and school reports were comparable across schools, or within any school from one year to the next.

Learning from the past, the DBE has tightened processes in the administration of the ANA (2010/11) to ensure the reliability of the scores by enhancing moderation processes. The DBE postponed the 2010 ANA to February 2011. Grade 4 and Grade 7 learners wrote the ANA (2010/11), representing Grade 3 and Grade 6 learners at the end of 2010. The ANA process of 2011 involved two categories, The Universal ANA and the Independent Verification ANA. In Grades 1-6 (actual Grades 2-7), all the learners in all the public primary schools wrote the test and SMTs, district and provincial officials monitored the process. Teachers who taught the learners marked and moderated the scripts at school and submitted the scores to the district, who moderated 10% of these marked scripts, identifying areas of need, which districts would capture in the District Improvement Plan of the following year.

In the Independent Verification category, the DBE randomly selected a sample of 200 schools per province for moderation. The DBE, made use of an independent agent, Human Sciences Research Council (HSRC), who administered the assessment in some of the 200 schools and separately moderated 25 learner scripts in both Numeracy/Mathematics and Literacy/Languages of the 200 randomly sampled schools in Grades 3 and 6 and gave feedback on school, district, provincial and national levels. The DBE trained officials at provinces and the officials at the provinces trained 250 administrators at districts (DBE, 2010, p. 3).

3.3.6 Reporting

The *ANA Grades 3 and 6 results (2008)* included results in terms of overall performance and performance in specific competencies that learners were able or not able to demonstrate. A four-level scale as shown in Table 1 below (DBE, 2008, p. 3) was used to report overall performance of the learners.

Table 1: A four-level scale of performance

Level	Percentage range	Descriptors
1	0 - 34	Unsatisfactory achievement
2	35 - 49	Partial achievement
3	50 - 69	Satisfactory achievement
4	70 - 100	Outstanding achievement

Eighty percent of public primary schools in eight of the nine provinces submitted results. The number of Grade 3 and 6 learners included in the results of this report was 663 001, comprising 336 321 in Grade 3, and 326 680 in Grade 6 (DBE, 2008, p. 4, 5). In the present study, the focus is on Grade 3.

Figure 1 shows that over one-third of learners achieved at Level 1 (Unsatisfactory) in both Literacy and Numeracy, while just over 14% achieved at the Outstanding Level (DBE, 2008, p. 5, 6).

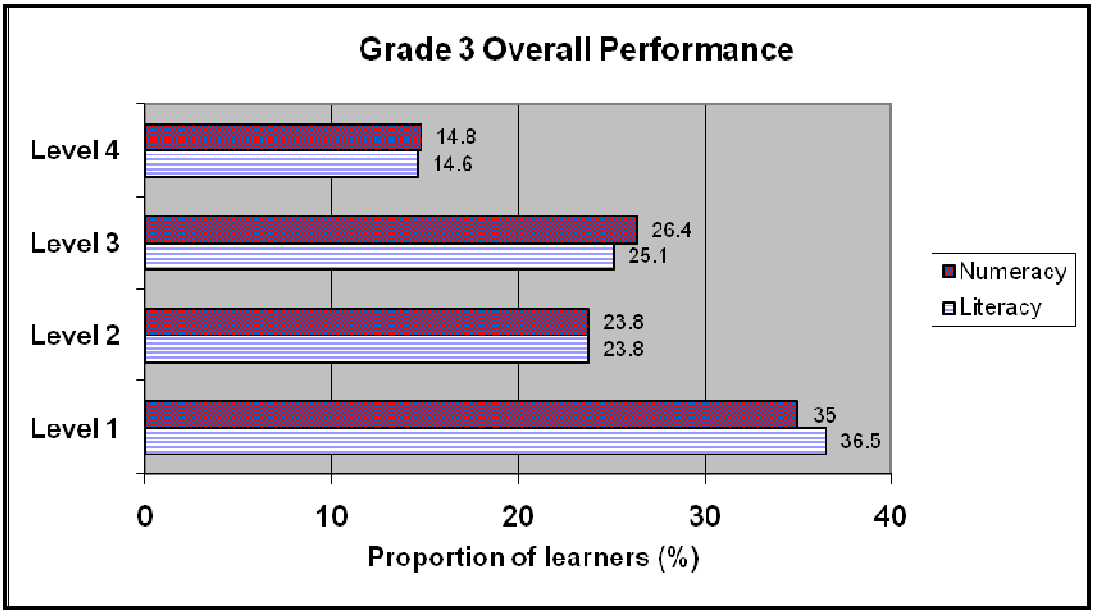


Figure 1: Proportion of Grade 3 learners performing at different levels, ANA 2008 (DBE, 2008)

The provincial analysis of the Grades 3 and 6 Numeracy and Literacy results (2008) showed that the learners were not performing at acceptable levels to meet the target of the national benchmark of 50%. In order to reach this, the provincial targets were set to increase by 10% in each of the remaining years of the FFL, with the vision of reaching the target in 2011(GDE, 2009, p. 10). An annual assessment of all primary school learners (Grades 1 – 6) in Numeracy/Mathematics and Literacy/Languages aims to measure progress towards achievement of the set targets (DBE, 2008, p. 3). The current Gauteng Provincial Literacy Strategy (GPLS) of 2010-2014 has the objective of improving the current average learner performance of between 35 % and 40% to at least 60% by 2014 (DBE, 2011).

3.4 CONCLUSION

Although the GPA and ANA are both census tests, their very different structural features provide each with distinctive advantages and disadvantages, as summarised in Table 2.

Table 2: Advantages and disadvantages of the GPA and ANA (2008)

GPA	Advantages	Disadvantages
	i. Administered and marked externally, ensuring high levels of reliability. ii. Reported on three levels: school, district and province iii. Reported simply in a single average percentage iv. Schools chose the language of the test	i. Administered externally, which alienates teachers from the process ii. Administered periodically every three to four years, but intervention strategies run per year iii. Did not indicate individual learner performance
ANA	**Advantages**	**Disadvantages**
	i. All learners from Grade 1 to 6 were assessed, providing teachers with detailed information on each learner ii. Teachers marked the ANA (2008) scripts and therefore results on learner performance was per individual learner iii. Assessment was in the same year as learners were in grade 3 and it served as instant feedback on the assessment, which could be acted upon iv. Assessment administered by familiar people, putting Foundation Phase learners at ease v. Teachers are involved in the process and buy into using the results for planning and support	i. The main disadvantage of this test is reliability. The following issues indicated how the reliability is compromised ii. Assessment administered in non- uniform conditions from school to school iii The test was of such high profile, the teachers' could adjust the marks to look better iv. Teachers marked the answers and standards therefore could differ from teacher to teacher. v. Results were dependent on submission of schools to the district because about 20% of schools did not submit scores.

The main advantage of the GPA is that, because the tests were administered, marked and moderated externally the results have a relatively high degree of reliability. In other words, the results can be compared with confidence across

schools and across time. The main disadvantage is that teachers felt alienated from this process, and this fact, together with the late production of the results, led to teachers not using the results in their teaching. An additional disadvantage is that the results were not reported in detail by learner and test item.

The main advantage of the ANA is that, because teachers administered and marked the tests themselves, they received immediate feedback on the detailed performance of individual learners. This provided for optimal use of the results to improve teaching and learning. The main disadvantage of the ANA is the poor reliability of the scores, making them unsuitable for comparison between schools and for tracking the progress of individual schools from one year to the next. These features make the ANA unsuitable for one of the main purposes envisaged by the DBE.

CHAPTER 4
RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter on the research design and the methodology starts by introducing a theoretical framework indicating which factors contribute to improved learner performance as cited in international and South African literature. Altinay and Paraskevas (no date), argue for a theory driven approach to data collection because it helps to describe and explain the "pattern of relationships and interactions better, because you group the data according to clearly defined codes which derive from the literature" (Altinay, *et al*., p.1). We used this theory driven deductive approach to understand the relationship between the support of the district, school management and its influence on learner performance. The research questions are linked to these important factors, focusing on the roles of the district, school management and teachers.

4.2 THEORETICAL FRAMEWORK

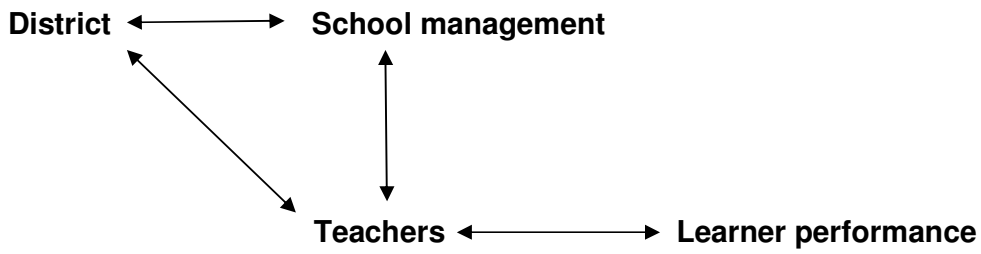
International and South African literature suggests that data collected from external assessments, such as those provided by the GPA (2008) and the ANA (2008), may be used successfully to improve learner performance (DBE, 2010a; DBE, 2010b, Northern Ireland Curriculum, 2000; Chappuis, *et al*., 2005; Western and Northern Canadian Protocol, 2006; Lim and Tan, 2010; Looney, 2011).

The first important enabling factor is the support the district gives to the school management, in order to strengthen accountability processes. In addition to supporting the school management, the district supports teachers with respect to their teaching methods and assessment practices (Kanjee, 2007; Thornton, Shepperson and Cavero, nd, p. 48; DBE, 2010a, p. 23). The second factor is the strength of the leadership in developing teachers and monitoring their classroom practices (Chappuis, *et al*., 2005, p. 4, 5; Kanjee, 2007; Earl and Timperley, 2009, p. 5, 14; University of Witwatersrand, 2010). The third factor, influencing learner performance directly, is the core

responsibility of the teachers in the process of identifying, gathering and interpreting information about the performance of learners in the classroom and using this information to improve their teaching (Black and Wiliam, 1998, p. 115; Independent Schools Queensland, 2005, p. 2; Kanjee, 2007; Earl and Timperley, 2009; Looney, 2011, p. 7). The pedagogical skills and knowledge of the teacher influence this third factor (Independent Schools Queensland, 2005). In the fourth place, parents play an important role in holding school management and teachers accountable for learner performance (Kanjee, 2007; DBE, 2011, p. 4) and in supporting their children with activities, such as homework. However, this study is confined to an examination of district, school and classroom level assessment practices, which influence learning and did not address the educational practices of parents.

Diagram 1 indicates how the practices of the district, school management, and teachers influence the learner performance of the school.

Diagram1: Accountability and support interaction between the work of districts, school management and teachers in influencing learner performance



4.3 RESEARCH QUESTIONS

4.3.1 Main question

As indicated in Chapter 1, the main research question guiding the study is:

How did two Gauteng public primary schools engage with the results of two external assessment exercises (GPA and ANA) to improve learner performance?

4.3.2 Sub-questions

The three factors discussed in 4.2 above give rise to three research sub-questions:

1: What monitoring and support services does the district provide to schools with respect to the external assessments?
2: What monitoring and support services does school management provide to the teachers enabling them to use the test results to improve their teaching?
3: To what extent do the teachers adapt their learning programmes to advance learning, in the light of the results provided by GPA and ANA?

4.3.2.1 Sub-question 1

What monitoring and support services does the district provide to schools with respect to the external assessments?

Districts have the potential to play a key role in developing school management to maintain accountability systems and to manage their schools. Sub-question 1 provides information on the first enabling factor to improve learner performance, as identified in the literature discussed in Chapter 2. More specifically, we anticipate that, with respect to external assessment exercises, districts might provide the following services to schools:

- Distribute the external assessment results timeously to principals. This consideration applies to the GPA only, as schools administered and marked the ANA results themselves, and thus received the ANA results before the district did.
- Provide forums for the discussion of results by schools.
- Assist schools to use the external assessment results to improve learner performance by, for example, providing teacher development programs to address common errors made by learners in the tests.

These considerations are captured in the three analytical questions relating to sub-question 1, shown in Table 3 below.

4.3.2.2 Sub-question 2

What monitoring and support services does school management provide to the teachers enabling them to use the test results to improve their teaching?

As our literature review shows, it is clear that, according to policy, principals are ultimately responsible for delivery of the curriculum and, within this role, of ensuring that the results of external assessment exercises are used to improve teaching and learning. Although much of this work may be delegated to other senior staff members, the principal remains responsible for ensuring that it is done. In fulfilling this role, we might anticipate school management to do some or all of the following:

- Distribute the test results to teachers (GPA only)
- Set up assessment structures according to national and provincial policy
- Convene Phase meetings in order to discuss the results
- Set learning targets or other measures in response to the external assessments
- Oversee the adaptation of learning area programmes, in the light of the school's test scores
- Compare the 2008 and 2009 ANA results
- Monitor classroom practices in order to see that plans were implemented

Each of these considerations is captured in an analytical question, which collectively aggregates to Sub-question 2 and listed in Table 3 below.

4.3.2.3 Sub-question 3

To what extent do the teachers adapt their learning programmes to advance learning, in the light of the results provided by GPA and ANA?

Our literature review indicates that teachers perceive external assessment to be meaningful when they learn how to analyse data and use it in conjunction with prior knowledge, such as internal assessment tasks, to make informed changes in classroom practices (Western and Northern Canadian Protocol for Collaboration in

Education, 2009). In order to do this, we anticipate that teachers might undertake some or all of the following activities:

- Use the external assessment results to identify learner weaknesses in Literacy
- Use the external assessment results to identify learner weaknesses in Numeracy
- Address strengths and weaknesses in learner knowledge identified by the external assessment exercises in their lesson planning
- Address strengths and weaknesses in learner knowledge identified by the external assessment exercises in their teaching practices
- Be responsive to the weaknesses identified by the external assessment exercises in their own assessment practices
- As a result of all of the above, improve the performance of their learners

These considerations are incorporated into a set of analytical questions in relation to sub-question 2 as shown in Table 3 below.

Table 3: Disaggregation of the Research Question into sub-questions and analytical questions

Sub-questions (Topics)	**Analytical questions informing the interview questionnaires**
1, What monitoring and support services does the district provide to schools with respect to the external assessments?	Did the principals receive the external assessment results timeously? (GPA only)
	In which forums were the results discussed at district level?
	To what extent did the district assist schools to use the external assessment results to improve learner performance?
2. What monitoring and support services does school management provide to the teachers enabling them to use the test results to improve their teaching?	Did school management distribute the test results to teachers? (GPA only)
	Were management systems functioning according to policy?
	Did the HODs convene Phase meetings in order to discuss the results?
	How did the principals and HODs use the results of the external assessments?
	Did school management oversee the adaptation of learning area programmes, in the light of their school's test scores?
	Was a comparison of 2008 and 2009 ANA results made and target scores for the next round of testing set?
	If yes to the last question, did management monitor classroom practices?
3 To what extent do the teachers adapt their learning	What was the identified area of need in Literacy?
	What was the identified area of need in Numeracy?
	How did the results influence the planning in the classroom?

programmes to advance learning, in the light of the results provided by GPA and ANA?	Were the teachers able to translate the results into teaching practices?
	Did teachers' assessment practices change because of the external assessments?
	Did learner performance improve?

We used this scheme to guide the collection of data, analysis of the data, and to report the analysis of findings in Chapter 5. The details are discussed below.

4.4 RESEARCH DESIGN

4.4.2 Case study methodology

Qualitative or quantitative research approach?

Harling (no date) indicates the underlying methodology of a case study design to be completely different from that of an agricultural economical investigation, for example. In the case of the latter, the focus would be quantitative, investigating the aggregates of population or objects, rather than the uniqueness of individuals. A case study design has a qualitative approach focusing on the individual uniqueness of the individual case.

Borrowing from Stake (1995, p. 35), Harling notes three principal differences between a quantitative and qualitative research approach. Firstly, quantitative research focuses on explaining, whilst qualitative research focus on understanding. Secondly, quantitative research is impersonal, whilst qualitative work has a personal undertone. Thirdly, the focus of the quantitative research is to discover, starting with "why", rather than construct knowledge, starting with "what" and "how", as is the aim of the qualitative researcher (Harling, nd, p. 4). Academics in Ontario, Canada, differ as to which questions inform a case study design. According to Baxter and Jack (2008), a case study design is used when the focus of the investigation is to understand by answering "how" and "why" questions, which is different from the perception of Harling as mentioned above. A case study design is also chosen when the researcher believes the contextual factors contribute to the understanding of the situation and identifies different types of case study designs. In our study, a descriptive case study hopes to answer the main research question in context (Baxter and Jack, 2008, p. 545, 547, 548).

Quantitative research

Quantitative research methods developed from the need for scientific cause and effect assisting in constructing theory, which the researcher hope can be transferred to other cases. Context and the uniqueness of each case are irrelevant. Quantitative research studies a small number of variables and the results are perceived to be objective (Baxter and Jack, 2008, p. 1).

Qualitative research

On the other hand, qualitative methods have developed to understand the complex interactions when humans are involved. In this approach, the researcher believes interaction is seldom simply caused and seeks to understand all the factors influencing the unique situation. Baxter and Jack add that rigorous qualitative case studies enables researchers to describe the situation under investigation in context, using different methods of collecting data, thus looking at a situation through many lenses (Baxter and Jack, 2008, p. 1).

The role of the quantitative or qualitative researcher involves interpretation, and both are influenced by the research question. The qualitative researcher aims to find expected and unexpected patterns among variables. The researcher develops the initial questions for collecting information and as the information is collected, the researcher plays an interpretive role, observing, analysing and synthesising, being more subjective.

In research, the aim is to identify patterns by analysing collected information. Quantitative research looks for repetitive patterns in multiple cases and qualitative research focuses on the situation, taking it apart, interpreting the information and putting it back together again, creating knowledge of the particular situation. Crabtree and Millar (1999, p. 335) argue that the ultimate test for qualitative research lies in the conviction that someone else will come to the same truth of the account (Harling, nd, p. 5, 6). Triangulation is a powerful technique enhancing this truth in both quantitative and qualitative designs. In qualitative designs triangulation is an important tool for increasing both the reliability and validity of any study. Denzin

(1978) identifies four types of triangulation, such as data triangulation, investigator triangulation, theory triangulation and methodological triangulation.

A qualitative case study design was then chosen because it is descriptive and heuristic, meaning making sense of written text, giving a ”fuller picture” of how two public primary schools used the results of two external assessments to improve learner performance. Therefore, the positive of the case study design outweighs the negative, which is that this particular design describes two fairly typical schools in Gauteng, rather than claiming to predict future behaviour, or generalise its findings to other schools (Merriam, 1998). Nevertheless, it is very likely that many of the assessment practices observed in the sampled schools do occur in other schools, at least in the province of Gauteng, and at least in former Model C schools, of which both are examples.

Mirriam mentions Starkey (1994, 1995) defines a case study as “an intensive, holistic description and analysis of a single phenomenon” (Mirriam, 1998, p. 27; Baxter and Jack, 2008, p.1, 2). Harling perceives a case study as “a holistic enquiry that investigates a contemporary phenomenon within its natural setting” (Harling, nd, p. 1). He views “holistic” to involve in-depth, detailed data from multiple sources of information. There is a disagreement in the literature regarding the role of theory in a case study. Harling mentions Stake (1995) who does not see the need for theory where the focus is on describing a case. Gresswell (1994) describes how that theory can be derived from case studies. On the other hand, Yin (1995) believes that theory may guide the case study in an explanatory way. Harling agrees, suggesting that a case study start at existing theory, which is used to give direction and structure to the study. The researcher reacts to the collected data by using theory to filter and organise the data. The researcher is cautioned to be sensitive to differences between the case situation and theory and not to allow theory to influence the result. The investigation then concludes with what was found, adding to the existing theory (Harling, nd, p. 3).

Following Gilgun (1994), this study constructs a tentative theory, starting with the assessment literature and extrapolating research findings in accordance with policy recommendations, anecdotal knowledge concerning common practice and common sense, to arrive at a set of practices that might be expected to be seen in well

functioning schools. The results are summarised in Table 3. We thus started with a theory and set of expectations, or hypotheses about what good assessment practice should look like in our two target schools. To this extent, the study proceeds deductively. However, educational findings are often counter-intuitive, and we maintained an inductive attitude, looking for elements of assessment practices not captured in our proto-theory.

Sampling

A relatively well functioning district was chosen on the assumption that it is here that the systemic use of assessment data is most likely to be observed. In poorly functioning districts, practices are more likely to be of an ad hoc nature and therefore less amenable to systemic study. The national Quality Assurance Directorate provided the results of the provincial systemic assessment (2008). Originally, this helped to select a purposeful sample of the two best schools in the district in terms of both Literacy and Numeracy, two moderate schools and two schools that had the lowest results in both Literacy and Numeracy. However, it became clear that it would be difficult to compare the schools because they have such different contexts. After careful consideration, the thought was that the study would be more productive if the schools were more similar and the district coordinator assisted in selecting two schools with similar, but challenging socio-economic backgrounds and relatively well functioning management systems at the schools. These two criteria then assisted in purposefully selecting the two schools (Baxter and Jack, 2008, p. 556).

The selected schools are different in two ways: in the Language of Teaching and Learning (LOLT) and in their learner performance. School A is underperforming and School B moderately performing. The management systems at both schools are functioning relatively well as indicated by the district coordinator. Most of the permanently appointed personnel had been at the schools for more than 10 years. At both the schools, the Home Language of the personnel is Afrikaans and the work ethic at the school (culture of the school) is that of dedication to help the learners improve. Table 4 indicates the responses of the different participants according to the interviews to their dedication to help learners improve.

Table 4: School culture of sample schools

	School A	School B
Principal	The principal of the School A indicated in the interview, that black learners are enrolled in the school because of the work ethic of the school and they are transported by taxi from the township. The personnel are demoralised, being classified as an underperforming school, because they are "dedicated to help learners from this low socio-economic background, with little parent involvement, learn".	The principal of School B indicated in the interview there is pressure on teachers to perform and they are competent. The learners of the school are not stimulated at home and they are not too far behind other learners in the province. The principal does not set targets for each teacher, but the self-motivated teachers say what they want to achieve. The principal does not carry a whip. Few learners or parents have an attitude of work ethic.
HOD	According to the HOD A, the school had high expectations of the teachers.	It has become more difficult to cover all that is expected of the teacher and she constantly has a sword above her head wondering whether she will complete the work.
Teacher	Teachers support learners by identifying the gaps in the learner's knowledge and close the gaps in the learner's knowledge.	Their Learning Area program was not adapted in the light of the external assessment results, because they were thought to be good enough, and no other programs were introduced.

Both schools were, prior to 1994, Model C schools serving lower middle class Afrikaans communities. Since 1994 the feeder community at both schools have

changed from affluent to very poor, while the teachers remained essentially the same. In the case of School A, the community population is mostly poor and black, while in School B, it is mostly poor and white. Both cultures are trapped in poverty, not highly skilled and are not involved in school activities or the performance of their child.

At School A, the learner population changed from predominantly white to predominantly poor black and the school changed the previously Afrikaans Language of Learning and Teaching (LoLT) to include English as a dual-medium option to cater for the fact that most learners speak little or no Afrikaans. The black learners struggle with the LoLT of the school and the teachers are unable to offer a black language in the Foundation Phase. The school did appoint a black teacher in Grade R, which prepared learners for the LoLT in English in Grade 1. The principal of the school indicated that learners who attend Grade R understand instructions better than learners that entered the school at a later stage. An added challenge is that the policy on the LoLT of a school requires a school to offer one language on a Home Language level (HL) and in School A, it can only be English, because the personnel cannot speak an African language. The principal knows the learners struggle with the English, but has to enrol the learners to avoid losing a permanent member of staff. Further discussion may be observed in the transcription of the interview with the principal of School A. He views it unfair to everybody to test a new learner in Grade 4 on LOLT English when the learner comes from a township school (Appendix B, p. 4). Parents are not involved in school activities. They send learners to school by taxi and many do not know where the school is. They send school fees and stationery with the taxi driver. The HOD at School A indicated some conditions influencing learner performance at the school: Language, low SES, parents uninvolved with a negative attitude. The school helped with a card system. Parents can apply for subsidy in terms of necessities such as school clothes, and the Rotary club supplies the learner with the items they need. There is also a feeding scheme at the school. The Grade 4 teacher in Mathematics indicated during the interview, that parents are not involved in school activities for they stay far from the school. They usually come to the 1st parent evening in Grades 1 and 4.

At School B, the HL of the predominantly poor white learner population is Afrikaans, which is the same as the LoLT of the school. The principal of School B indicated that parents are not ready to support learners. The community is a farm community that has not been successful themselves and cannot help with homework. Parents also do not have the will or interest to help learners with homework. School fees are not paid well. 90% of learners are from the poor, white community. The HOD indicates in the interview, the parents cannot help with consolidation of concepts, as they are cleaners from a low socio - economic background and many have little schooling themselves. Parents struggle to understand letters that go home and ask friends or family to explain the content. These parents are poor and TV is their only stimulation. 30 years ago, there were several millionaires in the community. At present, the people live in other people's garages and in broken caravans. There are only a few proper houses left. The parents are the problem for the learners. They are not always emotionally safe at home. Nevertheless, despite these very unfavourable home conditions, the school classifications at both schools are Quintile 5.

In the two external assessment exercises which form the focus of our study, School B performed moderately well regardless of the difficult circumstances and School A, from the same district, did not score as well. Table 5 indicates the Grade 3 performance of Schools A and B in both the GPA and ANA (2008).

Table 5: The Grade 3 performance of both schools in the GPA and ANA (2008)

	GPA		**ANA**	
School A	**Literacy**	**45%**	**Literacy**	**37,9%**
	Numeracy	**51%**	**Numeracy**	**44%**
School B	**Literacy**	**67%**	**Literacy**	**55%**
	Numeracy	**76%**	**Numeracy**	**66%**

4.4.2 Data Collection

Baxter and Jack view collecting data from multiple sources as the hallmark of qualitative research and suggest sources such as interviews, physical artefacts and observations (Baxter and Jack, 2008, p. 554). Our study took a descriptive-comparative form using data from two sources: semi-structured interviews and

physical artifactual obtained from the district coordinator, school management and teachers. The district coordinator arranged the interviews with the principal, HOD, the only Grade 4 teacher in Mathematics and the only Grade 4 teacher in Languages at each school. Grade 4 teachers were selected, with the expectation that they would interact closely with the results of the two external assessments of the Grade 3 learners. The different participants were viewed to be a "data source" contributing to the understanding of the way the schools used the results to improve learner performance. Baxter and Jack argue: "This convergence adds strength to the findings as the various strands of data are braided together to promote a greater understanding of the case" (Baxter and Jack, 2008, p. 554). Denzin (1978) calls this data triangulation involving persons. Triangulating the data from multiple perspectives makes it more valid than data derived from interviews with any single respondent. The reason being the data from the interviews is self-reporting and dependent on the way in which the particular person participated. Sometimes participants portray events in a better light. For a more accurate perception of the activities that took place, it is desirable to have several participants involved in the same interviews to form a triangulation, strengthening the trustworthiness (Miles and Huberman, 1999) of the data. The question arises how to deal with conflicting accounts. In the case of this study, the district coordinator and four participants at each of the two schools were involved.

4.4.2.1 Semi-structured interviews

The district Foundation Phase coordinator and principal and HOD, as well as two Grade 4 teachers, one for Mathematics and one for Languages at each school, were interviewed separately for about 30 minutes. Both School A and School B have only one HOD per phase and one teacher in Grade 4 Mathematics and one teacher in Grade 4 Languages. The semi-structured interviews were guided by the questions shown in Table 3. The interviewees were relaxed, quite informal and willing to share information. However, the researcher could not give her own opinion on the challenges the participants experienced. Participants were not lead to give a particular answer as seen in the interview with the HOD of School B. She had a lot on her chest and was allowed to talk. The responses on the perceptions of the participants were recorded verbatim, trying to capture what was said as accurately

as possible. Written permission was obtained from each participant prior to the interview (Leedy and Ormrod, 2005, p. 147, 149).

4.4.3.2 Documents/Artifactual evidence

The schools submitted the following artifactual evidence:

- A copy of the GPA (2008) school report and the ANA (2008) school report
- Minutes of the personnel meeting where the school discussed the results
- Agenda or minutes of phase meetings where results were linked to classroom practices
- Minutes of grade meetings where results are linked to classroom practices
- An example of the monitoring tool for class visit by the HOD and by the principal
- Planning of class visits by the principal and HOD
- Evidence of class visits by the principal and HOD
- Planning of moderation by the HOD
- Evidence of moderation report by the HOD
- Copies of end of term statistics (level codes) in Languages and Mathematics for 2008, 2009 and 2010 by the teachers
- School Assessment Team (SAT) minutes where strategies for support were discussed-linked to the results
- A copy of a learner report card
- A copy of a GDE support form (same learner)
- A copy of classroom support plans linked to the results of an external assessment by the teachers
- A copy of daily planning linked to the external results by the teacher

4.5 DATA ANALYSIS

Leedy and Ormrod (2005) believe there is no single way to analyse qualitative data. A problem with qualitative research is that it produces a large amount of data, which may be difficult to interpret. Either an inductive or a deductive approach is a systematic way for analysing qualitative data.

Jain and Ogden (1999) suggest reading several times through the raw data, to sort and categorise the collected data into topics or categories. After a coding scheme is developed, and the transcripts coded, themes are identified for further discussion. If new codes emerge, the scheme is changed and the transcripts are read with the new codes as guide (Jain and Ogden, 1999, p. 159).

As a novice researcher, I chose the deductive technique for analysis described by Yin (2003). This involves aggregation and interpretation of issues into the initial themes derived from the literature (Baxter and Jack, 2008, p. 555; Thomas, 2003, p. 3). One reason being, the analysis is focused on data within the sphere of the research questions. The assumption is that the trustworthiness of the findings is then assessed by comparing the accounts of the interviewees in triangulation (Thomas, 2003, p. 4).

In case of this study, the hand written “raw data” is based on the disaggregated questions in Table 3. The interviewees were purposefully chosen to collect data regarding the pre-determined three sub-questions, or themes, as identified in the literature. These themes were the role of the district, school management, teachers and parents in influencing learner performance. The data analysis consisted of breaking down the fieldwork findings into issues related to the themes or sub-research questions and assembling these issues again to present rich data answering the research questions.

The researcher compared and contrasted the answers from the different interviewees, capturing how the two schools interacted with the external assessment results and arrived at a consensus. The three themes are discussed separately and

will give an account of the different interviewees, strengthening the trustworthiness of the findings.

4.6 RELIABILITY AND VALIDITY

4.6.1. Reliability

Golafshani (2003) builds his understanding of the reliability and validity in qualitative research on renowned researchers, such as Patton (2001), who emphasises that reliability and validity are key factors to determine the quality of quantitative research. Healy and Perry (2000), however, believe that the quality of a qualitative study should be judged in terms of its own paradigm. They recommend terms such as Credibility, Neutrality or Conformability, Consistency or Dependability and Applicability or Transferability. Lincolin and Guba (1985) link “dependability” in qualitative research to “reliability” in quantitative research. Clont (1992) and Seale (1999) relate the concept of “dependability” to the concept of “consistency” in qualitative research. “The consistency of the data will be achieved when the steps of the research are verified through examination of such items as raw data, data reduction products, and process notes” (Cambell, 1996) (Golafshani, 2003, p. 602).

Schumacher and McMillan (1993) describe reliability as the extent to which different researchers could discover the same phenomena and could come to the same conclusions. This is different to the accuracy of the conclusions (Babbie, 2005, p. 145). Constraints in qualitative research, amongst others, are consistency of the design and interpretation of the instrument and in the administration of the test. A second factor clouding the reliability of a qualitative study is consistency, as the researcher interacts with the participants, collects, interprets and analyses the data.

The social context in which the data collection took place would have had an influence on the collected data. It would be the responsibility of the researcher that each participant was comfortable and knew what was expected and had the right to withdraw without any consequences. The data collection strategies that were chosen were informed by the literature and the semi-structured interviews and artifactual evidence of the engagement would give ample information to gain a sound understanding of how schools interacted with the results of the external assessments.

The question arises how to deal with conflicting accounts. For a more accurate perception of the activities that took place, it is desirable to have several participants involved in the same interviews, but separately, to form a triangulation, strengthening the reliability of the data.

4.6.2. Validity

Some researchers argue that validity is not applicable to qualitative research, yet, there is a need of some qualifying measure. Some researchers have used their own terms, such as quality or trustworthiness (Davies and Dodd, 2002). Lincolin and Guba consider this trustworthiness to "establish confidence in the findings" (Golafshani, 2003, p. 602). De Vos and colleagues (2009) describe the credibility of a qualitative report as the equivalent to internal validity in quantitative reports. They quote Neuman (2000) stating, by careful analyses of the accounts of the participants, triangulating the perceptions as described earlier (*cf* 4.5), the readers would have "enough evidence so that they believe the recounted events and accept the interpretations as plausible" (Neuman, 2000, p. 474).

Internal validity refers to the degree to which the conclusions were true to the reality. This includes whether the researcher captured and understood the data correctly and came to the same conclusions as the participants intended. In this study, the researcher captured by hand, the words of the participants as closely as possible to what they actually said, leaving very little open for interpretation. Because it was handwritten and no recording devices were used, it could not be exactly. To strengthen the validity, the interviews with the participants took place in their real setting in the school, to reflect their experiences regarding the implementation of external assessment results with the purpose of enhancing learner performance. The researcher was aware of possible personal biases and constantly strived to record data closely to the truth (Schumacher and McMillan, 1993 p. 391, 392). By triangulating the accounts of the different participants, the validity of the findings in the study improved. This was done by comparing the answers to the questions in Table 3 by the district coordinator and principal, HOD and teachers at each school, to determine the consistency of the accounts. Healy and Perry (2000) view this as "multiple perceptions about a single reality" (Golafshani, 2003, p. 603).

4.7 ETHICAL CONSIDERATIONS

The GDE and ethics committee at the University of the Witwatersrand gave written approval to conduct the study in Gauteng public primary schools. Relevant participants involved gave written consent to be part of the study. The participants were the district coordinator, the principal and HOD of both schools and the Grade 4 Literacy and Numeracy teachers of both schools. The researcher informed the participants of the purpose and benefits of the study and assured them of anonymity, that no risk was involved and that they may withdraw at any stage.

4.8 LIMITATIONS OF THE STUDY

The study did not go in detail into the classroom activities, investigating actual activities that took place indicating the strength of teachers in teaching practices, assessment practices or supporting practice. A second limitation is that the results of the case study method cannot be generalized to all schools in Gauteng, or even in the district from which they were drawn. However, the tradeoff is that this method provides more detail and insights into school level practices.

4.9 CONCLUSION

We adopted a qualitative case study approach to investigating our research question, as this method is most appropriate for gaining insights into how schools deal with complex activities such incorporating the results of external assessment exercises into their normal routines. Since there is a large literature on assessment and its relationship to the activities of schools, we used research findings to derive a set of expectations concerning how schools could and should respond to the GPA and ANA in order to improve teaching and learning. These expectations were then converted into a set of questions or themes for collecting and analysing data through interviews and artifactual evidence such as minutes of meetings and reports. This technique has the danger of restricting data collection to the set of predetermined questions, and hence of missing important information. In order to minimise this risk,

we used semi-structured interview schedules and encouraged interviewees to talk around the questions to assess their real feelings about the external assessment exercises and to probe more deeply the activities they adopted in response. A second kind of risk in case study research on schools (and in many other situations too) is the danger that interviewees produce the kind of response they believe is 'correct' in terms of government policy. We addressed this risk through careful triangulation techniques, posing the same questions to four respondents in each school, and then fitting together the consensus that emerged from these interviews and the artifactual evidence. The results of this exercise are given in Chapter 5.

CHAPTER 5
ANALYSIS OF THE DATA

5.1 INTRODUCTION

District officials, school leaders and teachers are mandated to teach and support learners in improving their performance to a level where they can achieve the expected Learning Outcomes of their Grade. Ideally, the work of these sets of educational actors should be seamlessly linked in delivering their collective mandate. Our interviews produced a lot of data; it can be difficult to see the overall patterns of behaviour through the details of many activities. For this reason, we provide a summary at the end of the chapter. We also categorise the responses of the interviewees according to whether the activities referred to occur at the district, school or classroom levels, and organise the data according to the question matrix shown in Table 3.

5.2 RESEARCH SUB-QUESTION 1

What monitoring and support services does the district provide to schools with respect to the external assessments?

5.2.1. Did the principals receive the external assessment results timeously? (GPA only)

In judging whether the district received and distributed results of the external assessments early in 2008, the focus would be on the GPA (2008) results, because the Quality Assurance Directorate were responsible for administering and marking of the papers externally (GDE, 2008). On the other hand, the teachers administered the ANA in November 2008, marked the ANA (2008) scripts at school, submitted them to the district and the district collated the provincial results in December 2008. This process enabled teachers to have detailed results per learner available within days of the administration, which is the major advantage of this kind of test. District and provincial average scores were available later in 2009.

The district coordinator raised the concern that the district received the final GPA (2008) results as late as 7th December 2009 and could only distribute the results to schools in January 2010, almost two years after the Grade 4 learners wrote the Grade 3 assessment in February 2008. The principal of School A confirmed the Quality Assurance Directorate distributed the initial GPA (2008) results to the principals of all the schools during a presentation at a selected school, in February 2009. The principal and HOD of School A, as well as the HOD of School B remembered receiving the results in February 2009, which was incorrect. Table 6 indicates the responses of participants as per the semi-structured interviews when they received the GPA (2008) results.

Table 6: Responses of when the participants remembered receiving the GPA (Feb. 2008) results - Source: Field interviews

Question	D	School A-Underperforming				School B-Well performing			
		P	HOD	T (L)	T (M)	P	HOD	T (L)	T (M)
When did you receive the results?	GPA results first sent to district Aug 2009. Revised December 2009 (D-17)	GPA-February 2009 (P-A-1)	Early 2009 (HOD-A-1)	It was too Long ago T (L-A-1)	October 2009 T (M-A-3)	October 2009 Too late (P-B-2)	Feb. 2009 (HOD-B-5)	When the school received it (T-B-2)	When the school received it (T-B-2)

Key: D – District coordinator, P – principal, HOD – head of department, T (L) – Language teacher, T (M) – Mathematics teacher.

"One school contested the results and it was found that a problem occurred with all the results of the district". The Quality Assurance Directorate investigated and discovered an error occurred with the scanning and data capturing of Literacy in Grade 3 and adapted the results of all the schools by around 10%, which differed from school to school. The revised results were hand delivered to the district on 7th December 2009 and the district distributed and discussed the new results with the schools at the cluster meetings in February 2010. The principal of School B was not satisfied with the error in their results. The HOD was quite disturbed when they later discovered they received a copy of the wrong report. The teachers of School B did

not know the results were incorrect. None of the participants at School A mentioned corrected results. It seems as if they were not aware that the results were adapted.

The learners were in Grade 6, in a new phase with its own challenges, by the time results were available. This caused schools not to use the GPA (2008) results in their daily planning as the participants at both the participating schools indicated, for the results were too old to use for the planning of interventions for the next year. The GPA results had now been removed for they keep only the work of one year in their file. The results of the GPA did not really influence the classroom practices, “for they were irrelevant after three years. Intervention plans run for one year and learners are usually in the Grade only for one year”. The learners were in Grade 5 when the results came in 2009. The learners were then in Grade 6 when the corrected results were discussed at the cluster meeting in 2010. The mathematics teacher at School A said she knew the scores when the learners were in her classroom, but indicated that those learners were currently (2009) in Grade 5. According to the principal of School B, the GPA was done in February 2008 and the results was received late 2009 in October, which is too late.

5.2.2 In which forums were the results discussed at district level?

When the district received the GPA (2008) results, they went through the results of the schools per phase and discussed them in the Unit meetings, CDS meetings, DMT, SMT of schools and HODs in clusters. The principal of School A confirmed that the results of the GPA (2008) were distributed to clusters of schools, at two primary schools in the district. The principal and HOD of School B agreed that the GPA results were discussed by officials of the Quality Assurance Directorate, at a school in the district.

5.2.3 To what extent did the district assist schools to use the external assessment results to improve learner performance?

The judgement whether the district fulfilled their obligation to monitor and support schools, is influenced by how the district guided schools to use the results of external assessments, such as the GPA (2008) or ANA (2008), to advance learning. The district coordinator, who oversees the Foundation Phase assessment practices in the

schools in their district, indicated they did not consider and discuss every school's progress individually, as it was not significant yet.

GPA

The schools continued implementing the general curriculum and the district supported them in areas of need as part of their normal duties. When the district received the GPA (2008) results, they discussed the results of the schools per phase in the Curriculum Development and Support (CDS) and the District Management Team (DMT) meetings. These GPA results (2008) did not affect their planning because they came too late. The program for 2010 was finalised already. The learners were in another phase and the Grade 4 teachers had to support learners in the Intermediate Phase outcomes. In Grade 4, the workload had increased a lot and learners had to cope with many other challenges, such as more subjects and having different teachers for every subject. The GPA results indicated common challenges per school, which they supported.

ANA

When the 2010 ANA results became available (written in February 2011), the district planned to consider 2008, 2009 and 2010 results to indicate progress and this progress or decline would be discussed with the SMT of the school. Being an annual assessment, it was easier to compare with previous years.

The district supported schools by addressing the School Management Teams (SMTs) in a combined meeting of underperforming schools, introducing a Foundation Phase Academic Improvement Plan for April, May and June 2010 in underperforming schools. A score below 50% in the ANA (2008) results indicated a school as underperforming. These underperforming schools were different from the identified underperforming schools according to the GPA (2008) results, which the Gauteng Provincial Literacy Strategy (GPLS) is focusing on. The district placed the schools into 4 categories according to the ANA (2008) results: very high risk, high risk, low risk and no risk. No risk schools scored above 50%. Table 7 indicates the number of schools in each risk category within the district.

Table 7: Number of schools in each category indicating the risk

	Very High risk 0-20%	High risk 21-40%	Low risk 41-50%	No risk Above 51%
Number of schools in Numeracy Grades 1-3	10	12	10	18
Number of schools in Literacy Grades 1-3	9	14	10	17

According to this scheme, School A was Low risk (41-50% on both tests), while School B was No Risk (around 70% or more) (See Table 6). One would therefore expect our schools both to have at least reasonably well developed management systems for engaging with external assessment exercises.

5.2.3.1 Supporting Underperforming Management Systems

The district found that management systems, such as School Management Teams (SMTs) and School Assessment Teams (SATs) at most underperforming schools did not meet regularly and did not discuss the management issues expected of them, mostly lacking in control and accountability. The SMT as management system was responsible for the curriculum activities of the school during school time, such as the timetable. Circular 41 of 2001 (GDE, 2001) indicates the expected responsibilities of the SAT.

The SAT may be part of the SMT or a school may have a separate committee focusing on assessment processes. The recommended composition of the SAT includes the principal or deputy principal and the HODs of each phase, and a parent from the SGB as observer, as well as a post level one teacher of each phase, being the Foundation Phase (Grades 1-3), Intermediate Phase (Grades 4-6), and Senior Phase (Grades 7-9). It is seldom that a parent or post level one teacher is part of the SMT of the school. According to this particular circular, the role of the SAT is to

develop a School Assessment Policy, as part of the whole school policy. The functions of the SAT include developing an Assessment Plan per Learning Area per grade, called the Teacher Assessment Plan (TAP) in the *National Policy on Assessment and Qualifications for Schools in the General Education and Training Band* (2007). This TAP indicates the planned dates and methods of formal assessment tasks for each grade, evenly spread for enhanced fairness. The SAT sends this TAP to the parents of the grade. The SMT or SAT combines the TAPs of each grade and compiles a School Assessment Plan (SAP) for the whole school. Furthermore, the SAT plans and monitors the continuous assessment or School Based Assessment (SBA) of learners' performance, identifying challenges in learning and ensuring assessment practices accommodate learners' challenges. The SAT ensures that teachers implement a variety of assessment methods, tools and techniques and monitors the effective recording system of each teacher. The SAT verifies the Possible Retention and Progression Schedules and liaises with the School Based Support Team (SBST) to obtain strategies of support for learners experiencing challenges in learning. The SAT discusses the GDE support forms with parents indicating areas of support and manages Learner Profiles (GDE, 2001, p. 4, 6, 7).

The district operated from the assumption that when the management systems did not fulfil their obligations as indicated above, this neglect would influence learner performance negatively. This perception motivated the district to support these underperforming schools by implementing training sessions on strengthening the functionality of their management systems and monitored improvement in the activities of these systems. The assessment management systems of the two participating schools were part of the eight schools where the management systems were functioning according to policy requirements.

Although, School A was an underperforming school, the district coordinator said specifically the management systems of School A was equally good to School B, which was a "no risk" school. It was one of the criteria for selecting the two schools for this case study that their management systems should be the similar. However, School A did participate in the supporting strategies of the district, because their results indicated a score of 49%. This demoralised the personnel of the school for

they have supported the areas of need according to the previous ANA in 2007. Their learner performance improved with 7%, but they were still classified as an underperforming school (high risk) because the cut-off percentage had been lifted to 50%.

GPA

The GPA results (2008) did not affect the district planning. They indicated common concepts that were problematic at schools, which the district supported.

ANA

The district official perceived the ANA results of 2008 to be more useful and reliable than the GPA (2008) and used the results of ANA (2008) for developing annual intervention programmes. The comprehensive district improvement plan (DIP) was completed before the schools re-opened in January 2010, indicating the way forward in schools in the very high, and high-risk and low risk categories as indicated above. A week after schools opened, they met with the SMTs of underperforming schools to discuss the implementation of the Foundation Phase Academic Improvement Plan for April, May and June 2010. The discussion sessions with the SMTs of underperforming schools took place in February, May, August and November 2010. The Foundation Phase Academic Improvement Plan for April, May and June 2010 indicated that the School Improvement Plans (SIP) had to be adapted, schools had to submit monthly progress reports and the district requested underperforming schools to attend the monthly discussions. The district improvement plan indicates the following intervention strategies: effective phase management, policy mediation, correct timetables and daily programs, accountability meetings and setting targets in all three Learning Programs for 2010.

5.2.3.2 Supporting strategies to improve classroom practices

According to the district coordinator, from 2010 the district would consider 2008, 2009 and 2010 results to indicate progress. This progress or decline would be discussed with the SMT of the school. When the district compared the GPA (2008) with the ANA (2008) results they found almost the same schools experienced the same challenges in the two external assessments, which corresponded with what

the district observed during visits to schools. During these visits, the districts identified areas of need, which they supported as part of their normal duties. The district coordinator was of the opinion that not all schools could relate the results to improved teaching practices and indicated that often school management and teachers struggled to find the real reason for their underperformance. The HOD at School A, an underperforming school, indicated they had five school visits by the district during 2010 and perceived this as negative. Their morale was very low, being classified as an underperforming school whilst learner performance improved by 7%. It was still below 50%. The district supported the school personnel by discussing elementary strategies. When a school posed many challenges and was underperforming, the district had a multi-grade meeting with all the teachers and supported the school. The coordinator perceived teachers not to know how to adapt methodology. They focused on superficial challenges, such as teacher/learner ratio, not on strategies in the classroom.

Planning

Teachers had to adapt their planning to guidelines of “Foundations for Learning”. In the Foundation Phase and Intermediate Phase (Grades 1-6), the intervention program is tailored to the ANA results. Interventions such as changing the worksheets or using another method of explaining a concept are used during school time. However, the language teachers indicated that the GPA (2008) results did not affect their planning, because their planning is excellent, they do their best.

Target setting

Every school and learning area teacher set their own realistic targets improving on the results. The intervention plan and adapted methodology enabled teachers to achieve these targets. The principal and HOD of School A was unhappy because they did support the learners according to the identified areas of need in the previous ANA report, improved with 7%, but was classified as an underperforming school.

Level of questioning

The district also conducted workshops on the different levels of questioning as a teaching strategy. They trained the teachers on how to ask effective questions

related to concepts. If they asked only yes/no questions, the learners would not be able to reason. For example, if a learner adds 4 plus 8, he will be able to give the correct answer as 12, but would not be able to explain how he arrived at the answer. The district coordinator was of the opinion that not all schools changed the level of questioning. However, the HOD of School A indicated the level of questioning at School A had changed. “They now used a variety of questions”. Furthermore did the Intermediate phase start to moderate question papers. They looked at the level of questioning, and the types and forms of questioning. The teachers of School A indicated they did change their questioning technique because of this intervention. The mathematics teacher indicated the level of their questioning changed. Only the language teacher did not change her level of questioning.

Supporting language

The district supported the schools in implementing the language policy and specific strategies, such as phonics in FAL. It is surprising that the HOD did not experience the district visits as developmental. During these school visits the school personnel was developed on supporting strategies and teaching methodology, as indicated by the district coordinator. Types of errors were not discussed, an analysis of the tasks were indicated in graphs and discussed at the end of an assessment cycle. No new programs were developed because of the results. They adapted the programs they had. When a school posed many challenges and was underperforming, the district had a multi-grade meeting with all the teachers and supported the school. Districts monitored the implementation of recommendations when visiting schools, when collecting term results and compared end of year results with the previous year.

School B was not part of the intensified monitoring and support by the district because they performed well. There is no individual intervention plan per teacher. The results of the GPA are too old to use. Implementing results from the GPA would be too much, keeping them from teaching. “Their Learning Area program was not adapted for it is good”. “No other programs were introduced’.

5.3 RESEARCH SUB-QUESTION 2

What monitoring and support services does school management provide to the teachers, thus enabling them to use the test results to improve their teaching?

5.3.1 Did school management distribute the test results to teachers? (GPA only)

School A

The teachers at both participating schools agreed that they received the GPA (2008) results as mentioned in the discussion of sub-question 1. A copy of the GPA (2008) results were available in the offices of both principals, but were not in the files in the classrooms. The personnel perceived them to be irrelevant after three years and at both schools, the HOD and teachers indicated that they had a copy of the GPA (2008) results in a file in the storeroom. As the HOD of School A indicated, the results had now been removed for the teachers keep only the work for one year in their file. As soon as the results were distributed at School A, the HOD discussed them with the principal and the personnel. The GPA (2008) results did not really influence their classroom practices, for they were irrelevant after three years. Intervention plans run for one year and learners are usually in the grade only for one year. The language teacher remembered receiving the results, but “could not recall the date for it was too long ago”.

School B

In similar fashion, the teachers of School B said they received the results as soon as they were available and the principal discussed the results with the teachers just after they were released. He though it was a pity the learners were not in Grade 3, when the GPA (2008) was done, because the results came too late to do intervention in Grade 4. The HOD was more specific: “The GPA assessment took place in February 2008 and the results were received in February 2009”. However, according to the district coordinator, the results were only distributed in February 2010.

5.3.2 Were school-level management systems functioning according to policy?

School A

The principal, HOD, mathematics teacher and language teacher at School A, were convinced the composition of the School Assessment Team (SAT) adhered to policy requirements. The School Management Team (SMT) formally met twice a month where minutes were taken or when the need arose. The principal of School A indicated that he collated and analysed the GPA (2008) results and compared them with other results, such as the ANA (2009). The ANA results were on the agenda in the SMT meeting and passed on to the HOD of the Intermediate Phase, who discussed the ANA (2008) results with the HOD and teachers in grade and phase meetings, because they were not all present in the SMT meetings. The HOD indicated the SAT and SBST worked together and minutes were available. The SAT fulfilled their obligations by keeping minutes, drawing up a School Assessment Plan and submitting it to the district. The members of the SAT addressed issues of truancy and ensured the implementation of effective recording and reporting systems. The teachers submitted their assessment files, year plans, intervention plans and GDE support forms to the HOD, who discussed these during the SAT meetings. The school management and teachers analysed the internal performance results and teachers supported learners during class time or activity periods if the learner was free not participating in sport. The school did have a remedial class and the LSEN schools could help with supporting strategies when needed. All learners had profiles and the school had a good management system for keeping them up to date.

School B

School B performed well and as a result, the provincial assessment team did not visit the school. The district coordinator indicated that the assessment management systems of School B were functioning according to the GDE assessment policy, (GDE, 2001) and in all fairness was not verified. The teachers at school B perceived their management to function well. The principal himself perceived the SMT and SAT to be functional and the HOD agreed on this.

5.3.3 Did the HODs convene Phase meetings in order to discuss the results?

School A

Agreeing with the principal, the HOD of School A said they discussed the GPA (2008) results during a staff meeting the morning after the Quality Assurance Directorate distributed them. It was only a broad discussion; therefore, they did not take minutes. A more in depth discussion took place in the phase meetings, once per month. The language teacher indicated that all external assessment results, such as GPA and ANA, was on the agenda of the phase meetings and they discussed ways to improve. All Intermediate Phase teachers were involved because in Grade 6, each Learning Area had a different teacher. Foundation Phase met as a team separate from the Intermediate Phase. After these discussions, the HOD and teachers formulated a plan guiding teachers on which practices to concentrate on. This indicates a systemic interest on a school level. In Grade 3, they never used the results of the GPA (2008), for the ANA results indicated the individual performance of each learner, because the teachers marked the scripts at school immediately after the learners wrote the test.

The GPA (2008) results did not have much influence on the planning of the teachers for they did not give detailed indications regarding areas of concern per learner. The Literacy teacher confirmed that the GPA (2008) results did not affect their planning. She perceived their planning to be excellent.

School B

At School B, the principal explained that the SMT met with the Foundation Phase and Intermediate Phase teachers to discuss the broader gaps in learner knowledge as indicated by the GPA (2008) results. They thrashed out what they taught and how they could improve. The Foundation Phase teachers talked about the gaps in the learner knowledge, enabling Intermediate Phase teachers to build on them. The HOD of School B did not mention discussing the GPA results specifically, but we can assume that they did, because the principal and teachers indicated conversation round the GPA results in the Phase meetings. Minutes of the Foundation Phase meeting indicated this to have happened. As the mathematics teacher confirmed, the

GPA results were discussed in the personnel meeting in the morning, SAT meetings, phase and grade meetings and they did not set targets for improvement, because the GPA (2008) results were good.

5.3.4 How did the principals and HODs use the results of the external assessments?

School A

GPA

The principal and HOD of School A, argued they did not focus on the GPA results, because they were too old when they arrived (the learners were in Grade 6 at the time of the interviews. The principal viewed it a pity that the GPA was not an annual assessment, because intervention programs at the school are reviewed annually. Planning in the files was only for the duration of a year and was then removed from the files for the next year and stored. The HOD and mathematics teacher confirmed the planning had now been removed for they keep only the work of one year in their file. Another concern was the results failed to give information on the specific gaps in learner knowledge in terms of Learning Outcomes (LOs). The GPA results were also not per learner, but an average per school, not giving detailed areas of concern. The principal regretted the results of the GPA (2008) did not indicate an average for the school per LO, which influenced teaching strategies in the school. These supporting strategies were then a general focus on the most experienced gaps in the class, being of systemic value. Whilst valuing the results, the principal argued the results indicated the level of performance of the learners and not the teachers.

ANA

The principal of School A indicated the personnel compared the ANA (2008) results with the ANA (2009) results of the following year. Showing the average learner performance in the school on a yearly base, the results indicated whether support was effective or which the learners needed more support. The HOD deliberated a little further showing the ANA results are more recent and take place every year, which is easier to align with the intervention plan for the year. The learners were also mostly in the class for one year. She believed no systemic assessment gave detailed

results or indicated areas of need in learners. The mathematics teacher indicated that although the ANA results gave a more detailed report, because it was marked at the school, they focused on areas of concern identified in the classroom, rather than those listed in the results of external assessments, such as GPA or ANA. The teachers supported learners according to the results of the ANA. For example, when many learners did not perform well in fractions, the teacher could have a challenge understanding and presenting fractions to the learners. The school would then empower the teacher to teach fractions, either through internal support by the HOD, discussions with colleagues or training by external professionals. All teachers were on a list indicating their training needs. The school benefited from the individual development programs that were developed for Literacy and Numeracy by the district. In agreement with the principal, the HOD and teachers preferred planning according to the ANA results, for the ANA is more recent and takes place every year, which is easier to align with the intervention plan for the year. The learners were mostly in the class for one year and only the ANA results were per learner. The mathematics teacher valued the fact that the ANA question paper could be linked to the "Foundations for Learning" content. After discussions, the HOD and teachers formulated a plan indicating to teachers, which practices to concentrate on introducing interventions, such as changing the worksheets or using another method of explaining a concept.

School B

GPA

At School B, they also did not use the results of the GPA and the principal viewed it a pity the learners were not in Grade 3 when writing the GPA (2008) test, because the results came too late to do intervention in Grade 4. The teachers were out of the classroom for two days and they could not see the question paper or have a copy of the paper after the assessment. "This distanced them from the assessment". He worked through the GPA (2008) results with the SMT and the Foundation Phase to determine which outcomes needed more attention. The GPA results did not make any significant difference to their planning because it came too late. The GPA results indicate broadly, which Learning Outcomes in Literacy need to be focused on in the grade, but the learners were in a different grade by the time the results reached the

school. The average learner did not struggle too much with Numeracy (in the GPA). The most common error was in subtraction, but overall the results were good. The principal thought the Learning Outcomes of the Intermediate phase differed from the Foundation phase because there were more subjects in the Intermediate phase than in the Foundation Phase; therefore, they could not use the results. The principal indicated "no individual intervention plan per teacher." The HOD perceived the learning material of the DBE as too difficult for the teachers and learners. "Implementing results from the GPA would be too much, keeping them from teaching". The report the Numeracy paper (GPA) indicated that the learners struggled with rounding off. The teacher felt she "cannot support the learners for she cannot see how the question was asked". She indicated it would be helpful to see how rounding off was addressed. They did not have any target because the GPA (2008) results of the school were good and although they perceived the ANA results as not good and disappointing. School B performed above 50% and was classified as a "no risk" school. Their Learning Area program was not adapted for it was good and they introduced no other programs.

ANA

The principal indicated in their school, the School Improvement Plan (SIP) was based on the ANA results of the previous year. The ANA results, based on the Foundations for Learning (FFL) is more relevant to the work the learners do in the classroom. There was no individual intervention plan per teacher. He expressed the view that there was enough pressure on teachers to perform and they were competent. Teachers tried to close the gaps before Grade 4. They linked support of learners to the ANA results, which are more detailed than an average on a Learning Outcome (LO). The principal did not set targets for each teacher, because they were self-motivated and set their own targets. He gave the teachers more autonomy because this brought out the best in them. The HOD regularly moderated the work of teachers.

The HOD gave the impression that they did not use the GPA or ANA results, because they were working hard already and considered the results to be good enough. To adapt their programs according to the GPA or ANA results would be expecting too much.

The Numeracy teacher confirmed what the principal said: “Their daily planning is linked to the ANA results for it is based on the Foundation for learning milestones”. She confirmed their Learning Area program was not adapted because it was good. The school introduced no new programs. The teachers viewed the results as important for it indicated where support was needed.

5.3.5 Did school management oversee the adapt ion of learning area programmes, in the light of their school’s test scores?

School A

GPA

Programmes were not adapted according to the GPA results.

ANA

The principal indicated the school has a good staff improvement plan as part of the overall school improvement plan (SIP), which spans over three years. Every year personnel were developed according to the identified needs as indicated in the appraisal system. The principal indicated that the staff development is also linked to the results of the external results. Individual development programs are developed for Literacy and Numeracy by the district. In the Foundation Phase and Intermediate Phase (Grades 1-6), the intervention program is tailored to the ANA results. Every Wednesday teachers have a phase meeting and teachers also plan together in grade meetings. The HOD indicated that the results of the GPA and ANA, as well as the end of term stats were about the same. New classroom practices were monitored continuously, before an assessment task, after an assessment task, after School Based Assessment (SBA), internal moderation at the beginning of the term, middle of the term, book control of assessment tasks and daily planning and the end of term, before the marks are submitted. The mathematics teacher confirmed moderation and classroom visits takes place. Classroom visits are done by the HOD once per term, as well as follow up visits. The principal visits the class twice a year. School management monitored the implementation of systemic assessment results by monitoring worksheets, tests, marking of books (book control) and monitoring projects in the class. The HOD visited the teachers’ class once per term, monitoring

a lesson, and the learners' books were moderated twice a term and the principal attended a lesson in their class once a year.

School B

GPA

The learners at School B struggled a little with LO 1 in Numeracy, particularly with Assessment Standard 1, subtracting of whole numbers. The SMT meet with the Intermediate phase and Foundation Phase and discuss the broader gaps in learner knowledge as the results indicated. They discuss what they teach and how they can improve. The Foundation Phase personnel tell the Intermediate Phase teachers which gaps in the learner knowledge they can expect so they can correct it. An example of a learning outcome that learners struggled with in the GPA is thinking and reasoning, the Grade 3 learners struggled to express themselves. The average learner did not struggle too much with Numeracy, although the most error in the GPA was with subtraction, but the Numeracy results were still good.

However, School B did not adapt their learning programs because their results were still good according to the provincial and national averages. The HOD monitored teachers' classroom practices regularly and indicated a few challenges with the learners, such as their socio-economic background, their attention span and fine-muscle development. She thought the Department of Basic Education expected too much of teachers and thought few teachers understood the learning material. She confirmed that she monitored teachers' classroom practices as part of their normal practices and not the GPA or ANA results.

ANA

The teachers agreed the Learning Area program was not adapted for it was good. The school management introduced no other programs. Most learners made errors in rounding off and estimation. The HOD monitored and moderated their work as part of their normal school practices, which was confirmed by the principal, the mathematics teacher and the language teacher.

5.3.6 Was a comparison of 2008 and 2009 ANA results made and target scores for the next round of testing set?

School A

GPA

The GPA did not inform any of the school's practices.

ANA

The artifactual evidence indicates the principal and personnel compared the ANA (2008) results, with the ANA (2009) and found an increase in performance in Literacy in Grades 1, 2 and 3. The school management determined the Foundation Phase target in Literacy for 2010 as 50-58%. In Numeracy, the Foundation Phase learner performance increased in Grades 2 and 3 and the school management set targets for 2010 as 60-65%. They developed a management plan for curriculum interventions: Literacy/Languages and Numeracy/Mathematics for Grades 1-4 as a way of reaching these targets.

School B

School B performed well and did not set targets. Each teacher set his or her own targets. The principal indicated there is pressure on teachers to perform and they were competent. The learners of the school were not stimulated at home and they were not too far behind other learners in the province. The principal did not set targets for each teacher, but the self-motivated teachers say what they want to achieve. The ANA results were lower and disappointing. They did not set any target because the GPA results were good.

5.3.7 If yes to the last question, did management monitor class room practices?

School A

The principal indicated he teaches and plans for instruction three times a week, which influenced the available time to do class visits for monitoring teaching practices. He values this practice because he keeps in touch with what was

expected of the teachers and with the discipline in the school. The principal participates in the moderation process and does class visits, as well as the HOD, but separately. The time of the HOD is of great concern. They have to teach 85% of the school day and complete the bulk of their work after hours. When the HOD does class visits, her class was divided into other classes. New classroom practices were monitored continuously, before an assessment task, after an assessment task, after School Based Assessment (SBA), internal moderation at the beginning of the term, middle of the term, book control of assessment tasks and daily planning and the end of term, before the marks are submitted. The HOD visits the teachers' class once per term, monitoring a lesson and the learners' books are controlled or moderated twice a term, confirming that work was done and marked. The mathematic teachers agreed that school management monitored the implementation of systemic assessment results by monitoring worksheets, tests, marking of books (book control) and monitoring projects in the class.

The language teacher also confirmed the HOD visits in the teachers' class once per term, monitoring a lesson and the learners' books are controlled or moderated twice a term. She said the principal also attended a lesson in their class once a year. He completed a monitoring tool when visiting classes and identified areas that needed support in the teaching practices of the teacher.

School B

At School B, more or less the same practices were followed. The principal indicated the HOD monitored worksheets and books. They did not develop new programs because the school performed well, but they did adapt existing programs, for example, by asking a wider variety of questions. Worksheets and books were monitored. They perceived the SMT to be fully functional. Learners were monitored, not because of the assessment, but the codes for their assessment tasks are recorded.

5.4 RESEARCH SUB-QUESTION 3

To what extent do the teachers adapt their learning programmes to advance learning, in the light of the results provided by GPA and ANA?

5.4.1 What was the identified area of need in Literacy?

School A

Teachers agreed with both the principal and HOD that a basic understanding of the Language of instruction (LoLT), which was Afrikaans and/or English on a Home Language level, was a major challenge for about a third of the learners in the school. The mathematics teacher indicated the ANA results did influence their practices. The mathematics teachers said the ANA results indicated a challenge in comprehension, but were better in reading and viewing in the ANA. The HOD said they made use of shared reading. However, the language teacher did not agree and said most errors occurred because the learners did not read the question properly or they did not understand the content of the questions. The language teacher seems to have her own philosophy of teaching and did not consider the results of the external assessments or the effort of the district too much.

School B

The principal said the GPA (2008) results identified a challenge in thinking and reasoning at the school and the Grade 3 learners struggled to express themselves, but because the results were still good, their Learning Area program was not adapted and no other programs were introduced. The HOD said the attention span of the learners were a challenge.

5.4.2 What was the identified area of need in Numeracy?

School A

The Mathematics teacher indicated that although the ANA influenced their classroom practices, they preferred to focus on identified outcomes in the classroom and not results of external assessments, such as GPA or ANA. As a general practice they drilled tables at the beginning of each period. The principal indicated he learners

struggled with subtraction and division. The HOD believed challenges, even in Numeracy could be related to language.

School B

In the report of the GPA Numeracy paper it was indicated that the learners struggle with rounding off. The teacher said she could not support the learners if she could not see how the question was asked. It would have been helpful to see how rounding off was addressed. The report could also have been used for self-assessment and self- improvement. The principal said the average learner did not struggle too much with Numeracy and said the error most made was with subtraction, but it was still good. The teachers did not agree with him indicating the errors that most learners made were rounding off and estimation.

5.4.3 How did the results influence the planning in the classroom?

School A

GPA

The GPA was not used for interventions

ANA

The School Academic Improvement Plan (2010) indicated interventions, such as creating a print-rich environment, introducing reading corners, posters for the class rooms and introducing site words on walls in classes and outside the classes. English was drilled to help the learners learn. The HOD confirmed they focused on language reading corners, sight words in the school.

Teachers supported learners by identifying the gaps in the learner's knowledge and start from previous Learning Outcomes (LOs) and Assessment Standards (Ass) and close the gaps in the learner's knowledge. Gaps are identified when marking the books. No new programs were developed because of the external assessment results. The school adapted the programs they had. Only the language teacher said they did not really change their planning. She felt their approach was correct. It seems then that the school knew before the external assessment results were

available that they had to support the learners struggling with the English on a HL level. The external assessment results only confirmed that. The question arises whether introducing reading corners and site words in general was enough stimulation for the need in this regard.

School B

Their average score was 72% in the GPA (2008). Support was given to learners in the remedial class and after school. The Grade 3 classes closed at 13h30 and had 45 minutes until the rest of the school closed. The HOD was of the opinion that discipline and parental involvement were the areas that needed the most support. No other programs were introduced. The feeling here is that the principal and personnel were of the opinion that they did enough and the learners from this low-socio economic background were performing well due to the effort of the teachers. They continued with their normal school practices.

5.4.4 Did teachers' assessment practices change because of the external assessments?

The district coordinator indicated that the district trained the underperforming schools on how to adapt the level of questioning in the classroom. However, regardless of the training, not all schools changed the level of questioning in their classroom.

School A

It was evident that the principal and staff at School A have changed their level of questioning, except for the Literacy teacher. The HOD indicated that the style of questioning had changed, for example, rubrics were pasted into the workbooks. The Numeracy teacher perceived the level of questioning to correspond with the level of understanding of the learners in the classroom.

School B

At School B, only the Principal indicated a change in questioning. Table 10 indicates the responses of the participants as found in the transcriptions of the interviews.

Table 8: Indicating responses regarding the level of questioning at the participating schools

District	School A				School B			
D	P	HOD	T (L)	T (N)	P	HOD	T (L)	T (N)
Not all schools	--	Yes the style of questioning had changed, and for example rubrics were pasted into the workbook.	No, not really	Yes, the level of questioning had to correspond with the level of understanding of the learners in the classroom.	-Yes, worksheets adopted to FFL -questions aligned to that of the ANA type of questions	--	--	--

Key: D – district coordinator, P – principal, HOD – head of department, T (L) – literacy teacher, T(N) – numeracy teacher.

5.4.6 Did the learner performance improve?

It is difficult to prove the performance of learners had improved due to schools using the results of the external assessments to support learners in areas of need. At both schools, it seems that the external assessments had only partially influenced their teaching practices. They continued with their normal activities in the classrooms and adapted their programs to include the findings as the GPA and ANA reports confirmed.

School A

At School A, the principal indicated a 7 % increase in learner performance due to support linked to the ANA results. The school was confident that the learners' performance in language had improved.

School B

The school did not expect more of the teachers or learners. The input was so much more than in the past to achieve what they were achieving. The HOD perceived the learning material to be far too much for the learners to take all in and thought the learners were less receptive currently. We can therefore assume she did not expect more of the learners.

5.5 CONCLUSION

How does one make sense of all the data presented above in the words of our many respondents in each of the two schools? A problem of qualitative research of this

kind is that, while very rich in detail, the big picture tends to get lost, and it is important to find ways of characterising our two schools in a way that brings out and accounts for their differences in performance. We do this in Table 9, where we are to look for patterns across the two schools in terms of their assessment practices with respect to the GPA and ANA.

Table 9: Responses to the research questions

Sub-questions	Disaggregated questions	School A	School B
1. What monitoring and support services does the district provide to schools with respect to the external assessments?	Did the principals receive the external assessment results timeously? (GPA only)	District received the final GPA results on 7th December 2009 and could only distribute to schools in January 2010, almost two years after learners wrote.	Confusion regarding when the GPA results were received, because the revised results came almost two years after the assessment was written.
	In which forums were the results discussed at district level?	The district went through the GPA results of the schools per phase and discussed them in the unit meetings, CDS meetings, DMT, SMT of schools and HODS in clusters	The results were discussed by quality Assurance Directorate at a school
	To what extent did the district assist schools to use the external assessment results to improve learner performance?	GPA not used because of late arrival 2 years after writing, but when the results were compared with those of ANA, the same problems emerged. ANA results used to classify schools into 4 risk categories: (very high, high, low, no).	
		School A was Low risk (41-50% on both tests), which resulted in a loss of motivation on the part of teachers, as there had been a 7% improvement.	School B was No Risk (around 70% or more)
		District observed that schools don't have the capacity to use external assessment findings to improve their systems. Management systems in underperforming schools poor. FP Academic Improvement Plan (AIP) developed for underperforming schools, including School A. School Improvement Plans (SIP) of UP schools had to be adapted to address the FLC framework and gaps revealed by ANA, with monthly progress reports and monthly discussions. At School A, the SIP was adapted, the SMT met twice a month, with minutes. District did in-school development of school personnel on teaching method. Every Learning Area teacher set test improvement targets. District conducted workshops on assessment items (questioning), to include a range of cognitive skills: IP phase at School A endorsed this by moderating question papers in maths.	School B was not part of the intensified monitoring and support by the district because they performed relatively well. SIP based on the ANA results of the previous year. There was no individual intervention plan per teacher, and the school did not set specific targets. Contradictory evidence as to whether they adapted their learning programmes in the light of ANA.
2. What monitoring and support services does school management provide to the teachers enabling them to use the	Did school management distribute the test results to teachers?	Agreement at both schools that the GPA results were not used directly in planning because of the length of time they took to become available. However, school management did analyse the results and found them to be similar to those of ANA.	
		Teachers generated ANA results themselves, so receiving immediate feedback on their learners' results.	
	Were management systems functioning	Consensus at both schools that management systems were functioning according to the expectations of policy.	

test results to improve their teaching?	according to policy?		
	Did the HODs convene Phase meetings in order to discuss the results?	Phase meetings took place and the results of external assessments and internal quarterly statistics were compared.	
	How did the principals and HODs use the results of the external assessments?	GPA results came too late to be useful to planning, and that in any case the results were not detailed per learner and therefore of limited usefulness	
		ANA results did influence planning and SMT support to teachers. This was confirmed by maths teacher.	SIP was based on the ANA results of the previous year, but no targets were set.
	Did school management oversee the adapting of learning area programmes, in the light of their school's test scores?	Improvement programs developed for Literacy and Numeracy by the district, taking account of ANA results. School A was part of the district improvement plans and therefore several adaptations in their planning were introduced. This was monitored by the district coordinator and internal school monitoring and moderation by principal and HOD.	HOD and teachers said their programme was not adapted because they performed well, and normal school management functions continued.
	Was a comparison of 2008 and 2009 ANA results made and target scores for the next round of testing set?	Did compare the results of the ANA 2008 and 2009 and set targets for the following year.	Did not set target for the GPA results were good. The ANA was lower and disappointing according to the principal, but teachers seemed satisfied and did not set targets.
	If yes to the last question, did management monitor classroom practices?	School management monitored classroom practices in the hope of advancing leaner performance. However, this was not linked to the external assessment results, but rather part of their normal school practices.	
3 To what extent do the teachers adapt their learning programmes to advance learning, in the light of the results provided by GPA and ANA?	How did the results influence the planning in the classroom?	No new programmes were developed, teachers adapted their existing programmes	Teachers agreed with the principal that they focused on the ANA results because these were immediately available and because they correlated with the "Foundations for Learning "milestones. Their Learning Area program was not adapted for it was good.
	What was the identified area of need in Literacy?	The biggest challenge in the school was English as LOLT	Thinking and reasoning Attention span of the learner
	What was the identified area of need in Numeracy?	The learners struggled with subtraction and division, and poor language comprehension, which affect their maths proficiency.	Rounding off, estimation and subtraction, although most learners did not struggle
	Was this supported sufficiently?	The analysis did change classroom practices, for example, multiplication tables drilled. In language teachers focused on practicing sight words and developed reading corners.	Only their normal classroom practices
	Did the level of questioning change because of the external assessments?	Two interviewees said yes, that both their questioning technique in class changed and they took account of a wider range of cognitive demand in their tests. The language teacher said she had not changed her practice.	The principal noted that teachers took their cue from ANA making use of a wider range of question types.
	Did learner performance improve?	Yes, the school achieved a 7% improvement on ANA scores.	The principal and HOD indicated the learners have exceeded their expectations and do not expect more.

The first point to note about Table 9 is that there is a high level of agreement within both schools and between the district and the school on most issues regarding assessment practices and the use of the results of the two external assessment exercises. Where there is disagreement, it is usually between school management

and the teachers, or between the school and the district coordinator. Such relatively minor disagreements are to be expected, since management and teachers have very different experiences within the school.

A second point about the patterns reflected in Table 9 is that Schools A and B are very similar in their assessment practices. Significant differences do occur in two areas. The first concerns the extent to which the schools used the external assessment results to modify their teaching practices. It seems that School B is complacent about its performance and does not see the need to improve. The second difference between the two schools is on the question of whether learner performance improved: School A thought it did, and School B saw no improvement. Again, School B sounds complacent.

We now turn to a discussion on the implications of our findings for policy and practice with respect to external assessment.

CHAPTER 6
CONCLUSION

6.1 INTRODUCTION

In this final chapter, we link the information gained from the district and two participating schools to the literature, highlight what we found, and indicate what we have learnt from the investigation. But first, we reflect on the extent to which our research design and method was fit for the purpose of this study.

6.2 RESEARCH QUESTIONS

6.2.1 The main research question:

How did two Gauteng public schools engage with the results of two external assessment exercises (GPA and ANA) to improve learner performance?

6.2.2 Sub-questions

The three factors discussed in 4.2 above give rise to three research sub-questions:

1: What monitoring and support services does the district provide to schools with respect to the external assessments?
2: What monitoring and support services does school management provide to the teachers enabling them to use the test results to improve their teaching?
3: To what extent do the teachers adapt their learning programmes to advance learning, in the light of the results provided by GPA and ANA?

6.3 RESEARCH DESIGN AND METHOD

A few factors stand out from this investigation. Firstly, the different accounts given by the district assessment coordinator, the principal, HOD and two teachers at each school essentially “told the same story” of how their interaction with the external assessment results occurred. We conclude that our triangulation techniques produced a trustworthy account.

Secondly, the sampling of the investigation was done in a well-functioning district and two fairly well functioning schools working under difficult conditions with learners from very poor homes. We selected these institutions purposely in order to bring out a best case scenario: most other districts and schools in the province would in all likelihood be operating far less effectively, and therefore could learn from our case studies.

6.4 PURPOSES OF EXTERNAL ASSESSMENTS

Both external assessment exercises investigated in this study focused on Literacy/Languages and Numeracy/Mathematics through population testing in certain primary school grades, but differed in a number of important ways, and it would be useful for policy makers to understand these differences. In Chapter 2 we noted a primary distinction in the literature between assessment *of* learning and assessment *for* learning. A number of differences between the GPA and ANA revolve around this distinction.

6.4.1 GPA (2008)

The GPA (2008) has three distinct purposes, firstly to inform policy, secondly to assist in improving teaching and learning, and finally to hold schools accountable for improved learner performance. It seems from the information gained in this investigation that the GPA is best suited to inform policy and to hold schools accountable for improved learner performance. For various reasons the schools did not use the GPA to inform their teaching practices, as Chapter 5 shows.

Our investigation shows the GPA to be primarily suited to measure assessment of learning, but was not used well as an assessment for learning. However, its utility for both purposes would be enhanced, firstly, if the results could be more accurately captured. The fact that the results had to be revised influenced the credibility of the assessment. Second, would the results be more useful for both purposes if they were available soon after being written. The participants repeatedly said the results were not used because they “were too late”. The participants expected them to be relevant to the learners in the classroom to be useful. A third factor influencing the utility was the fact that the results were reported as an average per school and not detailed per learner. A fourth factor influencing the usefulness of the GPA results is

the fact that it does not take place every year and the intervention plans for the schools are adapted yearly as mentioned several times by the different participants. If the GPA results can be produced alleviating these factors it could also be useful for assessment for learning.

6.4.2 ANA (2008)

Abundant evidence in the accounts of the district and schools shows the ANA (2008) to be more amenable to assessment for learning purposes. The district firstly, used the results to classify schools according to their performance. Then, secondly, they used the results to plan improved practices for underperforming schools. In the third place, the district identified specific challenges in terms of the schools' particular learning outcomes. The ANA (2008) aimed at indicating specific directives on minimum expectations regarding learner performance and measured progress towards achieving set targets.

6.4.3 CONCLUSION

It is clear that the district interacted seriously with the results from both tests, and found that they told essentially the same story. They analysed the scores, identified the schools that most needed support and developed an intervention program to achieve the set targets for these schools. School management and teachers were part of a training plan to support the underperforming schools in their weaknesses.

In contrast, the two schools did not respond with much purpose to the assessment results. They seemed somewhat resentful that the province should presume that they needed external testing to guide their practice. They dismissed the GPA scores, and used the ANA results in conjunction with their internal performance statistics, mostly in a confirming capacity. In general, both schools were complacent about the assessment results, and needed to be driven by the district. Nevertheless, they did respond positively to the ANA results, for example, changing the level of questioning, both in class and in their internal assessment practices in response to the training provided by the district, which emphasised that balanced assessment requires the probing of items reflecting different levels of cognitive demand. Teachers also identified areas of need in language and mathematics and designed activities to address these.

6.5 ADVANTAGES AND DISADVANTAGES OF EXTERNAL SSESSMENTS

6.5.1 GPA

6.5.1.1 Advantage

All the learners in Grades 4 and 7 in all the public primary schools wrote the Grades 3 and 6 GPA test early in 2008. The main advantage in the design of the GPA (2008) is that an external agent administered and marked the test, enhancing the reliability of the results.

6.5.1.2 Disadvantage

Although the external administration of the GPA (2008) enhanced the reliability of the results, it distanced the teachers from the test, which undermined the use for improvement of teaching and learning in the classroom.

It seems that schools did not use the GPA results to inform teaching and learning for a number of reasons. First, because the results only indicated average scores per LO per school and not individual scores per learner. The teachers would have preferred details by learner. Black (1998) strongly believes that only detailed results are useful.

It could happen that in a certain context, a 50% score can indicate improvement, but the school is still not achieving the minimum requirements, which causes some to perceive the school as underperforming as was the case of School A, who improved by 7% but was still underperforming. This shows the importance of considering the background when judging teachers' performance for accountability.

A second factor influencing the use of the GPA (2008) is that the results of the GPA came almost two years after the learners wrote the test. Schools did not understand the systemic value of these scores and thought the test scores to be irrelevant to the learners in the next phase. It is important to highlight this misconception on the part of school personnel regarding the meaning and function of systemic tests. It seems that teachers, HODs and principals understand a set of results to apply only to the learners who actually wrote them, and not to the quality of teaching and school

management, which remain after each cohort of learners move on. It would be to the advantage of the system if the Department of Basic Education could guide schools on how to use the results of external assessments such as the GPA.

6.5.2 ANA

6.5.2.1 Advantage

All the learners in Grades 1 - 6 wrote the ANA (2008) test in all the public primary schools in November 2008. The main advantage of an assessment such as the ANA is that the teachers administer and mark the test themselves. They felt part of the process and had detailed results for each child in their class. Another advantage of the ANA is that feedback to the teacher is immediate, and the teacher can give feedback on the results to the learners shortly after writing, pointing out general and individual errors and good answers.

6.5.2.2 Disadvantage

The main disadvantage of the ANA is that the conditions were not consistent at all schools, as the teachers administered and marked the test themselves. These factors compromise the reliability of the scores and undermine their usefulness in assisting policy makers and administrators. Therefore, while ANA was welcomed by teachers as useful in the classroom, it is not a good instrument for systemic purposes. This poses a challenge for the DBE, which is planning to use the ANA results for school accountability purposes. The danger of the high priority given to the ANA test might have consequences for schools, in which case the reliability and validity of the results will become more suspect.

6.6 DIFFERENCES AND SIMILARITIES BETWEEN THE TWO CASE STUDY SCHOOLS

The district coordinator of the participating district reported that, of the 30 underperforming schools in the district, eight had management systems functioning well, the others were mostly lacking control and accountability. The assessment management systems of the two participating schools were part of the eight schools where the management systems were functioning according to policy requirements.

Information gained from this study indicates well functioning assessment systems in place in the two schools. There are also interesting differences and similarities between them, notably in their scores on both tests, where School A is doing significantly worse than School B.

Significant differences in the assessment practices of the two participating schools can be seen in two areas. The first concerns the way in which the two schools used the external assessment results to adapt their teaching practices. It seems that School B is complacent about its performance and does not see the need to improve. The second difference between the two schools is the perception of the two schools whether the learner performance improved. School A noted an improvement in its scores, while School B saw no improvement, possibly they did not expect any because they thought they were doing fine.

Parental involvement at both schools is a problem, with very little parental activity. The one small difference is that, while in School B the principal and HOD perceived the parents to be uninvolved, the teachers perceived the parents to help with the schoolwork. This may be part of the explanation for the difference in performance between the two schools. However, the present study does not have sufficient data to explain with any certainty why School B performed better than School A on both tests.

One significant factor influencing the difference in performance of the schools could be related to the LOLT of the schools. School A admits predominantly African learners, who are obliged to learn in English at HL level, because teachers at the school are unable to speak an African language. School B admits predominantly white Afrikaans learners, who learn in their mother tongue throughout. This situation is identified as the most probable cause of the performance difference between the two schools. On the other hand, in the long run learning in English (HL) may give the learners at School A an advantage at high school over other African learners who learn English at First Additional Language level. The situation at School A highlights the very complex language problems faced by learners in Gauteng. Because of the mix of home languages spoken by most learners in most schools in the province, the

choice of LOLT by any school in the FP is something of a lottery. Whichever language is chosen it will not be the language spoken at home by a significant number of learners in the class, and may also not be the language in which the teacher is most proficient. We therefore end with a recommendation concerning an issue which is central to improving learning for most African children in the country.

Recommendation: It is recommended that schools not compare themselves to the provincial average, but to the average of the socio-economic group they belong to. The province should develop SES measures for all schools.

6.7 WHAT WE HAVE LEARNT

We consider the perceptions of the participants as presented in the semi-structured interviews to determine what we can learn from the study.

In terms of the GPA, most participants expressed the view that it came too late to be useful in the classroom. Therefore, the DBE may consider training the districts and schools on the systemic value of the assessment and the uses for the schools. An added factor causing teachers not to use the results is that they were not detailed per learner and therefore not relevant for the classroom. The assessment is also administered only occasionally and the school intervention plans are adapted yearly to suit the needs of the learners in the classroom. There is the possibility that the teachers might have "owned" the assessment if they could see the paper beforehand and could have a copy to know how the questions were asked and use this as teacher development. The trade off is that it might compromise the reliability of the test. All these concerns could have been explained in an orientation session by the DBE, enhancing the "buy into" of the teachers and thus the usefulness of the assessment for the classroom.

In terms of the ANA the teachers "owned" the assessment and used the results each in their own way. At the time of the research, the exercise was quite new and very little guidance was given by the DBE as to how the results could be used. Some districts, such as district we chose for the present study, used the results in an innovative way as they thought best, but it was by no means individual intervention

per school or learner. In 2011 the DBE started to guide districts and schools how to use the results by proving a guideline document and conducted a needs analysis in Literacy and Numeracy. This questionnaire was completed by the teachers per school. In December 2011, the needs analysis had not been processed by the DBE yet and the hope is that the valuable information will be released soon for further teacher development. Teacher development could also take place in forums for discussion where the results and the uses of the results could be discussed and used to improve teaching and learning. Districts may determine the most challenging LOs in their district and together with the curriculum specialists, guide teachers in addressing the challenges. The schools could also learn a lot from investigating the errors made.

The district co-ordinator indicated that only 8 of the 40 schools in their district have School Assessment Teams (SATs) adhering to the requirements of the national and provincial policy. The provincial office conducted a survey in 2010, which indicated that although district officials conduct SAT meetings in schools on paper, in a substantial number of schools, the SAT needs guidance on how to support learners with challenges. The provincial office could guide and monitor the use of the ANA results and the intervention programmes more closely, linking it to formative assessment. The process may include target setting, but also the adaptation of learning area programmes, in the light of the specific school's test scores. The district officials could monitor classroom practices in order to see that plans were implemented. It is also a possibility to follow the teacher development as a result of the 2011 ANA assessment.

BIBLIOGRAPHY

Altinay, L. and Paraskevas, A. (no date): Planning Research in Hospitality and Tourism. Butterworth-Heinemann. ISBN 9780759681100

Assessment Reform Group (2006): The role of Teachers in the Assessment of Learning. Newcastle Document Services.

Babbie, E. R. (2005): The Basics of social research. Third Edition. Thomson: Wadsworth.

Baxter and Jack (2008): Qualitative Case Study Methodology: Study design and Implementation for Novice Researchers. *The Qualitative Report.* Vol 13 no 4. December 2008.
http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf

Bem, D. J. (2003): Writing the Empirical Journal Article. Cornell University.

Berman, P. and McLaughlin, M. (1974): *Federal Programs supporting Educational Change,* Vol. 1. Model of educational change. September 1974.

Best, J. W. and Kahn, J. V. (1993): *Research in Education*. Ally and Bacon. Boston.

Black, H. (1986); 'Assessment for Learning' in Nuttall, D. L. (ed) *Assessing Educational Achievement,* The Falmer Press, London.

Black, P. J. (1998): Testing: Friend or Foe? Theory and Practice of Assessment and Testing. The Falmer Press. London.

Black, P. and Wiliam, D. (1998): Inside the Black Box. Raising Standards through Class room Assessment. King's College School of Education. London.

Buntting, D. C. L. (2010): Educators' Perceptions on the Integrated Quality Management System (IQMS). February 2010. University of the Witwatersrand. Johannesburg.

Bush, T., Joubert, R., Kiggundu, E., and Van Rooyen, J. (2009): Managing Teaching and Learning in South African Schools. *International Journal of Educational Development.*

Busher, H. and Harris, A. (1999): Leadership of School Subject Areas: tensions and dimensions of managing in the middle. *School Leadership and Management.* 19(3).

Chappuis, S., Stiggins, R. J., Arter, J. and Chappuis, J. (2005): Assessment for Learning. An Action Guide for School Leaders. Second Edition. Educational Testing Service. Portland. OR.

Cohen and Ball in Elliot, R. L. (2005): Professional Development of Professional Developers: Using Practice-Based Materials to foster an Inquiring State. Oregon State University and Research for Quality Schools. Oregon.

Crabtree, B. F. and Millar, W. L. (1999): Doing Qualitative Research. Second Edition. Sage Publications. Thousand Oaks, California.

Culham, J. (2008): How to Write a Journal Article. University of Western Ontario. http://psychology.uwo.ca/culhamlab/HTWrite.html

Daugherty, R (2009): Designing systems of teacher-based Summative Assessment. School of Social Sciences. Cardiff University.

Denzin, N. (2006): *Sociological Methods: A sourcebook.* Fifth Edition. Aldine Transaction. SBIN 9780-202308401

Department of Basic Education (1996): *National Education Act 27 of 1996*. Pretoria.

Department of Basic Education (2003): *Plan of Action. Improving access to free and quality Basic Education for All.* Pretoria.

Department of Basic Education (2005): *The South African Standard for Principalship. Leading and Managing South African Schools in the 21st Century.* Draft Discussion only. Pretoria.

Department of Basic Education (2007a): *National Policy on Assessment and Qualifications for Schools in the General Education and Training Band* (Government gazette, No. 29626). Pretoria.

Department of Basic Education (2007b): *Systemic Evaluation. Foundation Phase, Grade 3 National Assessment.* Data collection Manual. Pretoria.

Department of Basic Education (2008a): *Assessment Guidelines for Foundation Phase, Grades R-3.* Pretoria.

Department of Basic Education (2008b): *Annual National Assessments*. *Grades 3 and 6 Results*. Pretoria.

Department of Basic Education (2008c, 14 March): *Foundations for Learning Campaign: 2008-2011.* Pretoria.

Department of Basic Education (2008d): *Foundations for Learning Annual Assessment Report: 2008.* Pretoria.

Department of Basic Education (2009): *Foundations for Learning Analysis of 2009.* Pretoria.

Department of Basic Education (2010a): *Call for comments on Action Plan to 2014: Towards the Realisation of Schooling 2025.* Notice 752 of 2010. No 33434. Pretoria.

Department of Basic Education (2010b): *National Curriculum and Assessment Policy Statements. Vol. 543. No. 784.* Government gazette, No. 33528. Pretoria.

Department of Basic Education (2010c): *Foundation Phase Training Toolkit manual.* Pretoria.

Department of Basic Education (2011a): The *Guidelines to the Administration of Annual National Assessments.* Pretoria.

Department of Basic Education (2011b): *A guideline for the interpretation and use of ANA results.* Pretoria.

Department of Basic Education (2011c): *The National Protocol for Assessment Grades R-12.* Pretoria.

De Vos, A.S., Strydom, H., Fouché, C. B. and Delport, C. S. L. (2005): Research at Grass roots. Third Edition. Van Schaik Publishers. Pretoria.

Earl, L. M., and Timperley, H. (2009): *Professional Learning Conversations*. Higher Education. Vol 1. ISBN: 978-1- 4020-6916-1

Elmore, R, (1996): *Getting to scale with Good Educational Practice*. Harvard Educational Review. Spring. 66:1-6.

Elmore, R. and Burney, D. (1997): Investing in Teacher Learning: Staff Development and Instructional Improvement in Community School District #2. New York: National Commission on Teaching and America's Future 7the Consortium for Policy Research in Education.

Elmore, R, (2003): Accountability and capacity, in N. Taylor (2009): *Standards-based accountability in South Africa.*

http://dx.doi.org/10.1080/09243450902916704

Elmore, R, (2008): Leadership as the practice of improvement, in B. Pont, D. Nusche and Hopkins (Eds.), *Improving school leadership, Vol. 2*: *Case studies on system leadership* (pp. 37-67). Paris: OECD

Fraenkel, J.R. and Wallen, N.E. (1990): How to design and evaluate research in Education. New York. Mc Graw-Hill.

Fereday, J and Muir-Cochrane, E. (2006): Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods 5* (1) March 2006.

http://www.ualberta.ca/~iiqm/backissues/5_1/pdf/fereday.pdf

Frempong, G. and Kanjee, A. (2008): Conference paper. *Centre for Education Quality Improvement*. HSRC Library.

Fullan, M. (2001): *The New Meaning of Educational Change*. Teacher's College Press. NY.

Gauteng Department of Education (2001, May 22): *Establishment, Supporting and Monitoring Provincial Assessment Quality Assurance Structures*. (*Circular 41*). Johannesburg.

Gauteng Department of Education (2008): *The Gauteng Provincial Assessment. Report; A Baseline Study of Grades 3 and 6 Learner Performance in Literacy/Language and Numeracy/Mathematics.* Pretoria.

Gauteng Department of Education (2009a*): Foundations for Learning Analysis of 2009 Annual Assessment Report.* Johannesburg.

Gauteng Department of Education (2009b*): Gauteng Primary Literacy Strategy (GPLS) 2010-2014.*

Golafshani, N. (2003): Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*. Volume 8. 4 December 2003. pp. 597-607

http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf

Gresswell, J. (1998): Qualitative inquiry and choosing among five traditions. Thousand Acres: Sage Publications.

Gilgun, J. F. (1994): A Case for Case Studies in Social Work Research. Social Work, 39, 4, 371-381.

Guskey, T. R. (2005): Formative Classroom Assessment and Benjamin S. Bloom. Theory, Research and Implications. College of Education. University of Kentucky.

Handy, C. (1984): 'Taken for Granted? Understanding Schools as Organisations' in *Purpose and Planning in Schools*, Longman.

Hargreaves, D. (2002): 'Helping Practitioners Explore Their School's Culture' in *School Culture.* J. Prosser (Ed), Paul Chapman Publishers. London.

Hargreaves, A. (2007): Extending Educational Change. International Handbook of Educational Change. SpringerLink.

Harling, K. (nd): An Overview of Case Study 1. Wilfrid Laurier University. Waterloo. Ontario, Canada.

Herbert, G. (2009): Methods for Ensuring Reliability of Teacher Assessments. Chartered Institute for Educational Assessment. Britain.

Hopkins, D. (2008): Realising the potential of system leadership. In B. Pont, D. Nusche & Hopkins (Eds.), *Improving school leadership, Vol. 2*: *Case studies on system leadership* (Chapter 2). Paris: OECD.

Independent Examination Board (2010): Continuous Assessment in the Foundation Phase. Johannesburg.

Independent Schools Queensland (2005): Professional learning: Developing professional learning for instructional improvement. *Curriculum Leadership.* Vol 3. Issue 24. ISSN: 1448-0743
http://www.curriculum.edu.au/leader/professional_learning:_developing_professional

Kellaghan, T., Greaney, V. and Murry, T. S. (2009): National assessments of Educational Achievement Vol 5: Using the results of a National Assessment. The World Bank. Washington DC.

Koopman, P. (1997): How to write an abstract. Carnegie Mellon University. http://www.ece.cmu.edu/_koopman/essays/abstract.html

Leedy, P. D. and Ormrod, L. E. (2005): Practical Research Planning and design. Eighth Edition. Pearson Education International. New Hampshire.

Lees, P. J. (2007): *Beyond Positivism. Embracing complexity for social and educational change.* Available from
http://education.waikato.ac.nz/files/etpc/2007v6n3art3.pdf

Lim, E.P.Y. and Tan, A. (2010, 9 June): Educational Assessment in Singapore. *Assessment in Education: Principles, Policy and Practice.* Routledge. London.

Looney, J.W. (2011): Integrating Formative and summative assessment. Progress toward a seamless system? OECD Education Working Papers No. 58. OECD publishing.
doi: 10.1787/5kghx3kbl1734-en

Marks, H. and Printy, S. (2003): Principal Leadership and School Performance: An Integration of Transformation and Instructional Leadership. *Educational administration Quarterly, 39*(3), 370-397.

Mc Millan, J. H. and Schumacher, S. (2006): *Research Methods in Education. Conceptual introduction. Sixth Edition.* Longman. New York.

Merriam, S. B. (1998): *Qualitative Research and Case study Applications in Education. Revised and Expanded from Case Study Research in Education*. Jossey-Bass Publications. San Francisco.

Miles, M. (1964): *Education innovation: the nature of the problem in Miles, M. Education innovation in Education*. Teachers College Press. New York.

Miles, M. B. and Huberman, A. M. (1999): Drawing valid meaning from qualitative data: Toward a shared craft. *Educational Researcher*, 13, 20-30.

Moloi, K. C. (2005): *The school as a Learning Organisation. Reconceptualising school practices in South Africa*. Second Edition. Van Schaik Publishers. Pretoria.

Moloi, M. Q. and Strauss, J. (2005): The SAQMEQII Project in South Africa: A study of the Conditions of Schooling and the Quality of Education. Downloaded T: http:// www.saqmec.org/links.htm

Nfer (2009): *OCA-Qualifications and Curriculum Authority. South Africa: System Summery.* www.inca.org.uk/south-africa-system-mainstream.html.

Northern Ireland Curriculum (2000): Assessment for Learning. Key Stages 1 & 2. Council for the Curriculum, Examinations and Assessments (ACCEA). UK.

Ogden, J. and Jain, A. (2003), in Thomas, D. R. (2003): A general inductive approach for qualitative data analysis. University of Auckland. New Zealand.

Parks, C. and Maughan, S. (2009, 2 June): Methods for Ensuring Reliability of Teacher Assessments. Policy Seminar.

Perrenoud, P. (1998): From Evaluation to Controlled Regulation of Learning Processess: Towards a Wider conceptual Field, *Assessment in Education: Principles, Policy and Practice,* CARFAX, Oxfordshire, Vol. 5, pp.85-102. *Phi Delta KAPPAN*, October 1998, vol. 80, pp. 139-148.

Raudenbush, S. W. (2009): The Brown Legacy and the O'Connor Challenge: Transforming Schools in the images of children's Potential. *Educational Researcher 2009*; 38:169.

Sarason, S. (1971): *The Culture of the School and the Problem of Change*. Allyn and Bacon. Chapter 4.

Schumacher, S. and McMillan, J. H. (1993); Research in Education. A conceptual introduction. Third Edition. HarperCollins College Publishers. New York.

Scriven, M. (1967): The methodology of Evaluation, *AERA Monograph Series on Evaluation*, Vol. 1, pp. 39-83.

Soobrayan, B. (2010, October 26): Teachers, textbooks and time. The Star.

Spillane, J. P. (2005): Distributed Leadership. Jossey-Bass. Illinois.

Stake, R. E. (1995): The Art of Case Study Research. Sage Publications, Thousand Oaks, California.

Stiggins, R. J., Griswold, M. M. and Wikelund, K. R. (1989): Measuring Thinking Skills through Classroom Assessment. *Journal of Educational Measurement*, Vol. 26, pp. 233-246.

Taylor, N. (2009): *Standards-based accountability in South Africa.* http://dx.doi.org/10.1080/09243450902916704

The Writing Centre (no date): How to write a Literature Review. The Writing Centre. Academic Services. Downloaded 16-08-11.

www.unc.edu/depts/wcweb/

Thomas, D.R. (2003): A General Inductive Approach for Qualitative data analysis. School of Population Health. University of Auckland. New Zealand.

Thompson, L. (2010): Tips on How to write a paper for an Academic Journal. http://www.leighthompson.com/tips/write_a_paper.htm

Thornton, B., Shepperson, T. and Canavero (no date): A systems approach to school improvement: Program evaluation and organisational learning. Department of Education Leadership. University of Nevada Reno.

Tuckman, B. W. (1994): Concluding Educational Research. Fourth Edition. Harcourt Brace Company. New York.

UK-STUDENT.NET (2006, 20 September): What is a literature review? Downloaded 16-08-11. http://www.uk-student.net/modules/wfsection/article.php?articleid=122

University of Oxford (2008): Oxford Popular School Dictionary. Oxford University Press.

University of Reading (Internal, open access): Starting a literature review. Downloaded on 16-08-11. http://www.reading.ac.uk/internal/studyadvice/StudyResources/Essays/sta-startinglitr...

University of the Witwatersrand and Gauteng Department of Education (2010): Data-Informed Practice Improvement Project. University of the Witwatersrand. Johannesburg.

Van der Berg, S. and Shepherd, D. (2008): *Signalling performance: An analysis of continuous assessment and matriculation examination marks in South African schools*. UMALUSI. Pretoria.

Western and Northern Canadian Protocol for Collaboration in Education (2006): Rethink Classroom Assessment with Purpose in Mind. Assessment for Learning. Assessment as Learning. Assessment of Learning. ISBN 0-7711-3478-9.

Wiliam, D. (2006): Formative assessment: Getting the focus right. *Education Assessment*, Vol.11, pp. 283-289.

Yin, R. K. (1994): Case Study Research: Design and Method. Second Edition. Sage Publications. Thousand Oaks. California.

Zorn, D and Boler, M. (2007): Rethinking emotions and Educational Leadership. *Leadership in Education.* April – June 2007, Vol 10, no 2. Routlege.