Systemic Evaluation

Foundation Phase

Mainstream

National Report

Chief Directorate: Quality Assurance
Department of Education

Pretoria
This report on the Systemic Evaluation at the Foundation Phase level, a first of its kind, marks yet another historic milestone in the transformation of our education system. The report gives a snapshot of the gains made and the challenges that still remain in consolidating a democratic system that provides good quality education.

Besides heavy investment into education, we have put in place democratic laws that redress the legacy of the racially-discriminating education of yesterday and create a conducive climate for continuous improvement. We now have laws that enable all children to access free, compulsory and inclusive primary education.

To ensure success within the system, we have evolved a curriculum that places assessment of clearly-enunciated outcomes at the heart of the learning process, thereby making assessment learner-friendly and success-oriented rather than judgemental. We have established norms, such as teacher:learner ratios, to ensure an equitable spread of human and material resources. By devolving school governance to local communities, we have rekindled a sense of pride and ownership and thus increased responsibility and accountability among role-players.

Evaluating the impact of all these initiatives presented a huge challenge. Part of the challenge was selecting - from a myriad of possibilities, and taking into account the understandable diversity of interests in education - acceptable criteria and indicators against which the performance of the system could be measured. In this regard, the inimitable accomplishment of the various stakeholders in negotiating a credible set of indicators is commended. These indicators emanate from the transformational goals of access, equity, quality and redress. They have been meticulously employed to qualify the inputs, processes outputs and outcomes of the system as well as the context in which teaching and learning occur.

The report accounts for the national resource inputs into the education system. The findings provide valuable baseline data to benchmark the performance of the system at the Foundation Phase. This kind of insight increases public confidence in the system. The report also points to critical areas of improvement. In conjunction with data generated from the Whole-School Evaluation processes, the report will provide a holistic picture of our education.

I wish to thank all those who facilitated this study, and who participated in making it a success.

Professor Kader Asmal, MP
Minister of Education
STATEMENT BY THE DIRECTOR-GENERAL

It is heartening to observe that one of the noble missions we set out to accomplish, namely, taking stock of our education system at the end of the Foundation Phase has, in due season, borne the desired fruit. The scene was set in 1998 when we - through wide consultation, intensive collaboration and cordial consensus - successfully identified a set of indicators of quality education that were considered appropriate in measuring the performance of our education system. That process led to the development and subsequent piloting of the evaluation instruments in 2000. The main Systemic Evaluation study at the Foundation Phase was conducted during 2001/2. This report is, therefore, a culmination of years of dedication and hard work by various role-players. May their kind increase!

We now stand at the threshold of a new phase in the transformation of the system, that of having our own South African frame of reference against which we shall be able to track our progression towards the national goals of access, equity, quality and redress.

I call upon all South Africans to receive this report for what it is, firstly, a bill of health of our education system and, secondly, a benchmark cut to indicate where we should be leveling our intervention strategies for improvement. As such, the report points out strengths and areas that need further development in the system. It is hoped that the report will generate illuminating debates at various levels and that the debates will crystallize in definite actions that seek to sharpen the effectiveness of the education system in schools. Guided by the findings and the recommendations in this report, let us marshal all the resources at our disposal, both human and material, to make good where we appear to have fallen short and excel where we have been strong.

Mr Thami Mseleku
Director-General
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ERRATA

Page 10
3.7.1 Conditions of teaching and learning
Delete entire sentence:
Where applicable, a theoretical mean was also calculated to serve as a basis for comparison.

Page 11 – First paragraph
Add the following before the last sentence
That is, only those scores for which we are 95% certain that there was a “real, non random” effect are reported.
# Glossary of Acronyms Used in This Report

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<td>ABET</td>
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<tr>
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<tr>
<td>CEPD</td>
<td>Centre for Education Policy Development, Evaluation and Management</td>
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<td>ELSEN</td>
<td>Education of Learners with Special Needs</td>
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<td>FRQ</td>
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<td>SGB</td>
<td>School Governing Body</td>
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<td>SRN</td>
<td>School Register of Needs</td>
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EXECUTIVE SUMMARY

Introduction

This historic report on Systemic Evaluation at Foundation Phase (Grade 3 level) lays out an important and useful systemic baseline to reflect subsequent progress made by the education system in achieving the transformation goals in respect of access, redress, equity and quality.

The report provides a snapshot of the gains made and the challenges that remain in ensuring that learners meet national standards in reading, listening, writing, numeracy and life skills. In addition to reporting on learner performance, the report examines the context in which learners experience learning and teaching, and attempts to link the academic performance of learners to their learning context. In so doing, Systemic Evaluation aspires to promote and ensure accountability and thus gain the confidence of the public in education.

The end goal of Systemic Evaluation is to improve education delivery and its outcomes. It is the aim of the Department of Education that all stakeholders will interrogate the information provided by the study for this purpose.

Indicators

The indicators used in this baseline study have been identified by the Department of Education through a major process of research, and consultation with a wide range of stakeholders. The indicators deal with the measurable features of the education system and thus provide an indication of its health. The Department has adopted 26 indicators for this purpose.

Methodology

The Systemic Evaluation study has been led by the Quality Assurance Chief Directorate of the Department of Education. Technical support was provided by the Human Sciences Research Council (HSRC), the Research Institute for Education Planning (RIEP) and the Centre for Education Policy Development, Evaluation and Management (CEPD). The provincial departments of education played a key role in designing the instruments that were used in the study, as well as in the collection and scoring of the data. Comments on the instruments and the study were invited from a number of international sources, and these were used to improve the methodology.

The study involved a random sample of 5% (nearly 54 000 learners) of the Grade 3 learners in the country. The sample included all districts/regions in each province and was stratified to include learners from urban, rural and farm schools.

Findings on Learner Performance

The national average scores achieved by typical Grade 3 learners in the South African education system were as follows:

- Life Skills - 54%;
• Literacy - 54% (with 68% in Listening Comprehension and 39% in Reading Comprehension and Writing); and
• Numeracy - 30%.

The results indicate that learners experience the greatest difficulty in Numeracy. While the performance of learners in Literacy is significantly higher, it must be noted that this is due primarily to the higher scores obtained in Listening Comprehension as opposed to the Reading and Writing aspects of Literacy.

The study found that the performance of learners was similar across all the provinces in all of the three Learning Programmes assessed, and that the average score for girls was slightly higher than that of boys in all three Learning Programmes assessed. Moreover, the scores obtained for the Multiple Choice Questions were significantly higher than those obtained for the Free Response Questions. This result indicates that learners performed better on tasks that required them to identify and select a correct response than on tasks that required them to produce their own response. The language in which learners undertook the tests also had a significant effect on their performance. Learners who undertook tests in their home language obtained significantly higher scores across all Learning Programmes than their counterparts who undertook their assessment tasks in a second or third language. This was particularly stark in Gauteng, where a significant number of learners wrote tests in their second language.

Factors Affecting Learner Performance

This report examined the factors that affected the academic performance of learners through the lens of access, equity and quality indicators.

According to the results of a regression analysis, access indicators accounted for 20% of the variation in learner scores. Of all the access indicators used in the study, the resources at home indicator had the strongest positive influence on learner scores, followed by ease of access to school, number of years taken to complete a phase, utilisation of resource centres at school, early childhood development, pass rates and the education level of parents. An important aspect of the findings is that grade repetition did not improve learner scores, but did the opposite. This implies that repeating a grade does not necessarily help learners to improve their performance.

In general, equity indicators accounted for approximately 9% of the differences in learner performance. Of the equity indicators, discipline, safety and learning atmosphere had the largest positive influence on learner scores followed by private contributions and utilisation of funds, and functioning of SGBs.

The safety and security aspects that were reported to have had a negative influence on the learning environment at schools included the availability and condition of the following: school patrol, security guard/service, alarm system, fire extinguisher, first aid box and boundary wall/fence. An important finding is that the fees levied by schools differ markedly across schools and provinces. The majority of schools in the country charge fees of R100 or less per annum; a significant minority of schools levy fees of more than R1000 per annum.

Quality indicators that had a significant influence on learner scores explained 22% of the differences in learner performance. The facilities indicator had the strongest influence on learner scores followed
by satisfaction rate of stakeholders, learning and teaching materials, teaching practices (learner responses), attendance rates, contact time and time on task, assessment of learners and feedback procedures, teaching practices (educator responses), and school management and leadership.

The indicators that had a negative influence on learner scores included repetition and dropout rates, INSET and SGB training, and record keeping.

**Conclusion**

The major findings are that there is a strong correlation between learner scores and the quality of the facilities available at schools. The same is true of learning and teaching materials - learners in schools that had greater learning and teaching materials obtained higher scores. There was also a correlation between learner scores and attendance rates, contact time and time on task.

From the results reported in this section, it is unclear why critical indicators that are known to influence learner performance - for example, assessment of learners and homework - did not display an influence on learner scores. It is vital that specific reasons for these findings be determined in follow-up studies.
BACKGROUND

1.1 Introduction

The demise of apartheid in 1994 brought with it the urgent need to overhaul an education system that had been designed to exclude the majority from access to quality public education. One of the main transformation goals of the immediate post-apartheid government was to ensure that all children, irrespective of their race, class, gender, religion and/or other characteristics, had access to basic education that was of good quality. This was to be achieved through, among other things, the application of appropriate redress policies. There is a growing recognition, however, of the need to examine whether interventions by the Department of Education (DoE) have been successful in ensuring that the transformation goals of education are met.

The South African National Qualifications Framework (NQF), which sets the broader context for education transformation in the post-apartheid era, makes it quite evident that there is a need to measure educational outcomes against predetermined standards. These standards are provided in the new curriculum framework which, in addition to stating the expected outcomes of education generally, lays down the minimum standards required from the teaching and learning process at the end of each grade. This reflects a shift from the traditional focus on inputs to a concern for the processes and outcomes of schooling.

1.2 The South African Education Context

The process of transforming education in South Africa has taken root visibly at all levels of the system. Part of the evidence for this lies in the establishment of democratically-elected local structures for the governance of schools, a major break from the repressive, centralised-control approach of the past. To ensure that there is order and discipline in public schools, the South African Schools Act of 1996 sets out guidelines for school governing bodies (SGBs) to consider when adopting a code of conduct for learners. Parents, educators and learners are expected to facilitate a constructive teaching and learning atmosphere in a safe environment.

The introduction of outcomes-based education (OBE), and a curriculum that is responsive to the needs of the learners as well as the goals of the country, ought not only make school offerings appealing to learners and parents, but it also affords learners wide opportunities to access various competencies. The Department of Education has identified school effectiveness and educator professionalism as twin factors whose improvement will play a key role in strengthening delivery capacity and improving learning outcomes. The Department has devoted significant resources to encouraging these factors and to induce a stimulating culture of teaching and learning.

The transformation process has not been without challenges. The School Register of Needs (SRN) 2000 Survey (DoE, 2001b) reported that in many parts of the country the system was still haunted by the legacy of disparities - large classes, inadequate or no resources, and a large number of schools that were accessible only by footpath. There are perceptions that the cadre of teachers who are already in the system are encountering challenges in shifting to the new OBE approach to teaching.
and learning. The survey also reported a decline in the number of schools that had buildings in excellent and good condition and an increase in the number of schools that had weak and very weak buildings.

The South African government is faced with the challenge of not only transforming a segregated and authoritarian system, but also of setting in place enabling mechanisms to introduce and sustain continuous improvement in the post-apartheid education system. Furthermore, it is imperative that continual evaluations be conducted to track progression and to ensure that resources are appropriately marshalled to increase systemic efficiency. The legislative mandates for such evaluations are presented below.

1.3 The Legislative Imperatives for Systemic Evaluation

Current education legislation in South Africa mandates the Minister of Education to evaluate and monitor the standards of education provision, delivery and performance. For example, Section 8(1) of the National Education Policy Act of 1996 makes provision for the Minister of Education to “direct standards of education provision, delivery and performance throughout the Republic...”. According to the Act, this monitoring and evaluation is to be carried out with a view to assessing progress in compliance with the provisions of the Constitution of the Republic of South Africa and national education policy.

In addition, Section 48 of the Assessment Policy for General Education and Training (DoE, 1998) makes provision for Systemic Evaluation to be conducted on a nationally representative sample of learners and learning sites in order to evaluate all aspects of the school system and Learning Programmes. The Assessment Policy emphasises that the main objective of Systemic Evaluation is to assess the effectiveness of the entire system and the extent to which the vision and the goals of the education transformation process are being achieved by it.

In presenting its brief for Systemic Evaluation, the Department also draws on its Consultative Paper No. 1 on Special Education, which emphasises the importance of quality assurance for the Education of Learners with Special Education Needs (ELSEN). The discussion paper requires the education system to be monitored and evaluated so as to determine the extent to which the full range of diverse needs of the special learner population are being acknowledged and accommodated.

1.4 What Is Systemic Evaluation?

Systemic Evaluation is the assessment of the extent to which the education system achieves set social, economic and transformational goals. It does this by measuring learner performance as well as the context in which learners experience learning and teaching. The Assessment Policy requires that Systemic Evaluation be conducted in three grades of the education system, namely Grades 3, 6 and 9.

1.5 Objectives of Systemic Evaluation

According to the Department of Education (2001a):

the main purpose of Systemic Evaluation is to benchmark performance and track the progress made towards the achievement of the transformational goals of the education system in respect to
access, redress, equity and quality. In so doing, Systemic Evaluation aspires to promote and ensure accountability and thus gain the confidence of the public in education.

The objectives of Systemic Evaluation are to:

• determine the context in which learning and teaching is taking place;
• obtain information on learner achievement;
• identify factors that affect learner achievement; and
• make conclusions about appropriate education interventions (DoE, 2002).

The learner achievement component of Systemic Evaluation seeks to establish trends with respect to acquisition of key knowledge, skills, values and attitudes by learners at different points in the system. The contextual component is set to provide insight into the environment in which teaching and learning take place and to establish the performance of the education system with respect to the principles of access, redress, equity and quality.

1.6 Focus of the Report

The primary focus of this report is to:

• serve as a baseline for future Systemic Evaluation studies, and
• make appropriate recommendations regarding national education policy implementation.

This report is based on a framework stipulated by the Department of Education (DoE, 2002) in order to focus on the transformation principles of access, equity, redress and quality as noted in the first White Paper on Education and Training (DoE, 1995). The findings are presented in the following chapters, according to the given framework:

• background - Chapter 1;
• Systemic Evaluation framework - Chapter 2;
• conduct of study - Chapter 3;
• findings and recommendations as they pertain to transformational goals:
  • access - Chapter 4,
  • equity - Chapter 5,
  • quality indicators - Chapter 6, and
• assessment - Chapter 7;
• conclusion - Chapter 8.
Chapter 2

THE SYSTEMIC EVALUATION FRAMEWORK

2.1 Systemic Evaluation within Quality Assurance

The establishment of a single, non-racial Department of Education post-1994 has paralleled a need for the development of appropriate and adequate quality assurance systems in education to ensure the achievement of transformation goals. The Department of Education has instituted a number of such quality assurance systems and measures, among which the system of learner assessment and the policy on Whole-School Evaluation are key instruments. While learner assessment evaluates individual achievements for progression and certification purposes, and Whole-School Evaluation assesses conditions of teaching and learning in particular schools, Systemic Evaluation evaluates the performance of the entire education system (DoE, 2001a). One of the key aims of Whole-School Evaluation is to evaluate the effectiveness of a school in terms of the national goals, using national criteria, the end purpose of which is school improvement (DoE, 2000). Systemic Evaluation, on the other hand, monitors whether learners are meeting national standards, especially in reading, listening, writing, numeracy and life skills at the Foundation Phase, and at key transitional stages in the learning ladder, namely Intermediate Phase and Senior Phase.

2.2 The Use of Indicators and What They Intend to Measure

Education indicators are statistics designed to provide information about the condition, stability, functioning or performance of an education system or any part or sub-system thereof. Implicit in this definition is the notion that indicators deal with the measurable features of an education system. Education indicators show the nature, functioning, efficiency or outcomes of the quantifiable facets of an education system at a national, provincial, regional, school or classroom level, and can thus give an indication of the health, quality and potential problems of the education system as measured against set standards.

As early as 1998, the Department of Education started a process of identifying and selecting appropriate indicators which could be used to measure the condition of the South African education system. Through broad consultation with various role-players, a set of 26 indicators of quality education was agreed upon and adopted. These have been classified into:

- context indicators, providing information on the socio-economic context of learners;
- input indicators, providing information on the resources and infrastructure of the system;
- process indicators, providing information on aspects related to the teaching and learning process; and
- output indicators, providing information on the outcomes of the system, one of which is learner performance.

The findings of this report, as well as their interpretation, are analysed in terms of the 26 indicators. It is important to note that these indicators were selected on the basis of their perceived relevance and significance at a particular point during the transformation process. It needs to be borne in mind that, as the transformation process advances over time, some indicators may assume greater pre-
eminence while others may diminish in significance. It will be logical, therefore, to accept that subsequent reports may assume a different focus in terms of the indicators used.

2.3 Policy Principles

Systemic Evaluation is guided by the following principles:

- integration with other quality assurance initiatives;
- practicality of the design of the programme;
- collaboration between the provincial and national departments of education;
- capacity-building for Systemic Evaluation and self-evaluation;
- gathering and using information to improve education provision and delivery; and
- ensuring inclusivity through the active participation of learners with special education needs.

2.4 The Transformation Goals of Education

The research questions for Systemic Evaluation are based on the transformation goals of education - access, equity, redress and quality. Chapter 4 of the White Paper on Education and Training (DoE, 1995) defines the principles of access, equity, redress and quality as interrelated.

The White Paper describes the principle of access as one of the objectives that the education and training system should work towards. It requires of the system to “increasingly open access to education and training of good quality, to all children, youth and adults and to provide means for learners to move easily from one learning context to another”. According to the White Paper, the system must offer learners “an increasing range of learning possibilities, offering greater flexibility in choosing what, where, when, how and at what pace they learn”.

The education system is also required by the White Paper to redress educational inequities among the sections of the people that have “suffered particular disadvantages or were especially vulnerable, including street children and out of school youth, the disabled and the citizens with special educational needs, illiterate women, rural communities, squatter communities and communities damaged by violence”.

The White Paper defines equity in relation to the distribution of resources, human rights, providing equal opportunities and gender. In particular, the White Paper requires the system to allocate resources according to the principle of equity so that the same quality of learning opportunities is afforded to all. It also provides for respect of the rights of learners and teachers, for fair training and advancement in the education service, including an affirmative action policy in order to ensure an effective cadre of leadership which is broadly representative of the population.
CONDUCT OF THE STUDY

3.1 Introduction

Preparations for the study began in 1998 with the Education Quality Indicators Project of the Department of Education’s Quality Assurance Directorate. Following this, in 2000, a pilot study was undertaken to test the appropriateness, relevance and readability of the questions in the contextual questionnaires, and the appropriateness, validity and reliability of the questions in the assessment instruments.

The pilot phase of the Systemic Evaluation Programme comprised three phases:

- The preparatory phase covered contractual and conceptual activities necessary to lay the basis for the implementation of the study.
- The instrument development phase involved the articulation of the conceptualisation of the programme into data capturing instruments and other facilitative material necessary for carrying out the pilot.
- The international benchmarking phase involved solicitation of input from foreign countries that have expertise in this area or have run similar programmes.

The pilot phase, therefore, served to test the instruments developed through the processes outlined above and to test the implementation processes with the objective of preparing for the main study. One of the most important aspects of the pilot phase of the project was that of testing the accuracy and appropriateness of the translation of instruments. Instruments were developed initially in English, and then translated into the ten other official languages of the country. Great care was taken to ensure that no particular language group was either advantaged or disadvantaged in the learner assessment tasks as a result of translation.

3.2 Co-operation between the Department of Education and Service Providers

As a quality assurance initiative, Systemic Evaluation for mainstream schools is being implemented under the leadership of the national Department of Education’s Chief Directorate: Quality Assurance, in partnership with the provincial education departments and a consortium of service providers managed by the Centre for Education Policy Development, Evaluation and Management (CEPD). Other consortium partners include the Human Sciences Research Council (HSRC) and the University of the Free State’s Research Institute for Educational Planning (RIEP).

3.3 Instrument Development

The processes for instrument development were conducted under the auspices of the Department of Education, with consortium members providing technical assistance where required.
3.3.1 Contextual instruments

The constructs that were used in the contextual instruments were based on the 26 education quality indicators that were adopted by the Department of Education. These indicators - developed from the context, input, process and output models of schooling - were placed against the education transformation goals of access, redress, equity and quality in a matrix format as noted in the Framework for Systemic Evaluation (DoE, 2001a). The matrix thus offers a clear perspective on the place of the different indicators within a dual framework.

3.3.2 Assessment instruments

The assessment instruments were based on frameworks drafted by members of the consortium together with the Department of Education and provincial Foundation Phase specialists for the three Learning Programmes covered by this study - Literacy (which comprised two instruments, Listening Comprehension and Reading and Writing), Numeracy and Life Skills. These frameworks were given to the project’s stakeholders for their comments and approval prior to use.

Assessment tasks for the instruments were developed by Foundation Phase specialists, with members of the consortium acting as facilitators. However, the primary responsibility for the Life Skills tasks was taken by the Department, since members of the consortium did not have the capacity to undertake this task. All items developed were edited and formatted into three sets of instruments for Literacy (Reading, Writing, Listening Comprehension), and one each for Numeracy and Life Skills.

3.3.3 National and international input

Before being finalised, all instruments were circulated among the various stakeholders involved in the project as well as international specialists for their comments. Valuable comments were received from Professor Alison Wolf of the International Centre for Assessment Research at the University of London, and from Dr Greg Brooks (Foundation for Education Research in the United Kingdom). Comments were also received from Dr Parson (USA), Dr Nadia Temple (Canada), and from the various provincial departments of education. All comments were considered and changes were made where appropriate.

3.3.4 Translation of instruments

The translation processes were undertaken by national and provincial officials of the education departments. The translated instruments were piloted in 77 schools across seven provinces. The information obtained from the pilot analysis was used to select items for the final instrument.

3.3.5 Finalisation of instruments for the main study

The process of selecting items for the main study was carried out at a workshop held in Pretoria from 19-23 February 2001. Participants in this workshop included Foundation Phase specialists for all eleven official languages from the national and provincial education departments as well as representatives of the consortium (HSRC researchers and a CEPD representative).

Researchers from the HSRC facilitated the Numeracy and Literacy item selection sessions only. A Department official facilitated the Life Skills session; an HSRC researcher attended the session to give
input on technical matters related to item characteristics and their interpretation. Results from the analysis of the pilot data on the difficulty and discrimination values as well as the gender and language bias of the questions were used to select items for the main study. For each Learning Programme, an assessment instrument was developed using the most suitable questions from the two forms applied in the pilot study.

3.3.6 Sampling

A sample of 5% of all the Grade 3 learners from all districts/regions in the country was included in the survey, as reflected in Table 3.1. The schools were categorised according to the administration unit, that is the region in some provinces or districts in other provinces. Five percent (5%) of the total number of Grade 3 learners was calculated in each of the districts/regions. A maximum of 40 learners per school was included in the sample. The number of schools to cover the sampled learners was randomly chosen from an alphabetic list of schools having at least 30 learners each. The total number of learners from the sampled schools made up at least 5% of the Grade 3 learners.

<table>
<thead>
<tr>
<th>Province</th>
<th>Total Number of Learners</th>
<th>5% of Total</th>
<th>Learners Selected</th>
<th>Number of Learners Who Actually Participated</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>213915</td>
<td>10696</td>
<td>10738</td>
<td>9456</td>
<td>4,4</td>
</tr>
<tr>
<td>FS</td>
<td>57699</td>
<td>2885</td>
<td>2927</td>
<td>2889</td>
<td>5,0</td>
</tr>
<tr>
<td>GP</td>
<td>126321</td>
<td>6316</td>
<td>6425</td>
<td>6220</td>
<td>4,9</td>
</tr>
<tr>
<td>KN</td>
<td>245038</td>
<td>12252</td>
<td>12282</td>
<td>11115</td>
<td>4,5</td>
</tr>
<tr>
<td>MP</td>
<td>84725</td>
<td>4236</td>
<td>4279</td>
<td>4048</td>
<td>4,8</td>
</tr>
<tr>
<td>NC</td>
<td>16397</td>
<td>820</td>
<td>939</td>
<td>913</td>
<td>5,6</td>
</tr>
<tr>
<td>LP</td>
<td>164577</td>
<td>8229</td>
<td>8387</td>
<td>8062</td>
<td>4,9</td>
</tr>
<tr>
<td>NW</td>
<td>88979</td>
<td>4449</td>
<td>4554</td>
<td>4524</td>
<td>5,1</td>
</tr>
<tr>
<td>WC</td>
<td>81601</td>
<td>4080</td>
<td>4104</td>
<td>4080</td>
<td>5,0</td>
</tr>
<tr>
<td>Total</td>
<td>1079252</td>
<td>53963</td>
<td>54635</td>
<td>51307</td>
<td>4,8</td>
</tr>
</tbody>
</table>

3.4 Data Collection

Departmental officials from each province were trained at six venues to conduct the survey. The data collection took place over a period of two days in each school, between 10 September and 9 October 2001. The collected data on the assessment tasks was sent to the Department of Education for scoring and coding; the contextual questionnaires were sent to RIEP during November 2001.

3.5 Data Coding and Scoring

Scoring of the assessment tasks was undertaken in November 2001 by district officials representing all official language groups. Technical assistance for the training of scorers and moderators was provided by the HSRC. In addition, HSRC researchers as well as moderators appointed by the Department for the different language groups moderated approximately 5% of the instruments scored.
### 3.6 Data Entry and Cleaning

In order to reduce entry errors, the data entry of the contextual questionnaires was done on a prepared template, which limited the entries to those responses appropriate to each question.

For the assessment tasks, data was captured, verified and cleaned according to a pre-specified format with the assistance of consortium members. The cleaning and verification process was conducted to ensure that data did not contain any errors.

### 3.7 Data Analysis and Reporting

The purpose of the analysis was to report on: the conditions of learning and teaching at schools, the performance of learners and the factors influencing learner performance.

#### 3.7.1 Conditions of learning and teaching

The 26 indicators, as outlined in the Framework for Systemic Evaluation (DoE, 2001a), were used as the basis for reporting on the conditions of learning and teaching in the sample schools. For each indicator a national and provincial average score was calculated. Where applicable, a theoretical mean was also calculated to serve as a basis for comparison. The findings for each indicator are presented by bar graphs and tables and reported in Chapters 4 to 6, as defined by the transformation goals of access, equity and quality.

#### 3.7.2 Learner performance scores

The analysis conducted on the learner performance scores consisted of two stages:

- scores were converted to percentages; and
- means, standard deviations and standard errors were computed.

In most cases, the results are reported by province and presented through graphs, while additional details (such as sample sizes and standard deviations) are provided in the Appendix. In addition, a frequency distribution of learner scores by each of the four areas assessed - Listening Comprehension, Literacy, Life Skills and Numeracy - is also presented.

#### 3.7.3 Indicators influencing learner performance

Indicators that displayed a significant influence on learner performance were identified by applying separate regression analyses on the various access, equity and quality indicators. For this analysis, learner performance was represented by a total score that was obtained by averaging each learner’s Life Skills, Listening Comprehension, Literacy and Numeracy scores.

The analysis was conducted at the learner level and thus information obtained from educators or principals applies to each of the learners in his/her class or school. For example, since every educator is associated with more than one learner, for any analysis that required linking educators and learners, the same response from each educator applied to each of his/her learners.
The strengths of the significant indicators are reported using standardised regression coefficients. For each of the three chapters (access, equity and quality), only those indicators that displayed a significant influence on learner scores are reported, from the most influential to the least. In addition, the R-square value that indicates the percentage of variation in learner scores accounted for by the indicators used in the analysis is reported.

### 3.7.4 Finalisation of this report

This report was finalised over a number of meetings and workshops involving members of the consortium and staff from the Department of Education’s Quality Assurance Directorate. The final format used for the presentation of the findings was specified by the Department of Education (2002).

### 3.8 Limitations of the Study

This report only presents an overview of general trends within the education system in the Foundation Phase, and thus provides no more than an indication of “areas of concern” or areas “in need of further attention”. For specific and detailed information, additional analysis as well as further investigation and research will certainly be required.

The results of the data analysis were significantly influenced by the number and definition of indicators used, the specific questions, the format applied to measure these indicators, and the classification of indicators into access, equity and quality indicators. Different definitions and/or classifications of the data could provide different results.

While inconsistencies and/or shortcomings were detected in the list of indicators as stipulated in the Systemic Evaluation Framework during the analysis of the data, this document was still used as the framework within which the analysis was conducted. For future studies, this framework should be revised and updated.

The analysis is based on self-reported data obtained from learners, educators, parents, school principals and district officials. This information was not verified by any observations and thus should be considered cautiously. This is especially applicable if one is attempting to identify causal links.

The instruments were not administered in a number of schools in Eastern Cape and KwaZulu-Natal due to bad weather which made access to the schools impossible. As a result, the percentage of learners who completed the questionnaire was below 5% (as noted in Table 3.1 above).

Some of the questionnaires, as well as questions within questionnaires, were not completed correctly and thus could not be used in the analysis. For example, in Eastern Cape, KwaZulu-Natal and Mpumalanga, a number of principal questionnaires could not be linked to a school, because the respondents did not complete the required information on the cover page.

Since the heads of the districts/regions were selected to complete the district questionnaire (rather than Learning Area specialists), their responses were mainly aimed at matters relating to the principals. Thus these questionnaires could not provide much information relating to educators.
Incorrect and missing data on the cover pages of the instruments caused delays in the data capturing and cleaning process as it was difficult and time-consuming to rectify incorrect or missing data on the cover pages. Tracking sheets designed to assist in this process were not (correctly) completed by all administrators of the instruments. The data cleaning also took much longer than planned because it was difficult to follow up incorrect identification numbers without names on the cover pages. The date of birth that was to be used instead of names was in many cases missing or incorrect.
Chapter 4

TRANSFORMATION GOAL: ACCESS

4.1 Introduction

The purpose of this chapter is to report on the findings relating to the transformation goal of access in the education system. Access to education refers to the opportunity for learners to attend school and the ability to mediate educational offerings in a meaningful way. This is affected by various factors, including availability of resources at home and at school, the educational level of parents, progression policy, and learner-educator ratios.

According to the White Paper on Education and Training (DoE, 1995), access is one of the objectives that the education and training system should work towards. It requires of the system to “increasingly open access to education and training of good quality, to all children, youth and adults and to provide means for learners to move from one learning context to another” (DoE, 1995:21). The White Paper states that the system must offer learners an “increasing range of learning possibilities, offering greater flexibility in choosing what, where, when, how and at what pace they learn” (DoE, 1995:21).

In this chapter, the findings on the access-related indicators are presented, followed by an overview of learner performance scores, aggregated by province. Next, the findings relating to the analysis of access indicators influencing learner performance are noted, followed by a discussion and analysis of these findings. The chapter concludes with some policy recommendations and a discussion on the way forward.

4.2 Findings: Access Indicators

In this section, findings on the following access-related indicators, as defined in the Systemic Evaluation Framework (DoE, 2001a), are presented:

- parents’ level of education;
- resources at home;
- the nutrition of the learners;
- early childhood development;
- learner-educator ratios;
- utilisation of resource centres by learners;
- repetition rate;
- number of years to complete phase; and
- pass rates.

At the request of the Department of Education, two additional indicators were developed:

- language of learning and teaching; and
- accessibility of school.
4.2.1 Parents’ level of education

The education level of the learner’s parents is an important factor that may affect performance, since educated parents are more likely to provide support to the learner at home. Parents were asked to indicate their highest education level - lower than Grade 7, Grade 7 to Grade 9, Grade 12, training after Grade 12. The average level of education of parents was calculated by using this scale. The results are displayed in Figure 4.1

![Figure 4.1 Level of Parents’ Education, by Province](image)

The national average of 9.6 indicates that the average level of education of parents lies between Grade 9 and Grade 10. Gauteng parents have the highest level of education, while Eastern Cape parents had the lowest level.

More than a quarter of the responding parents indicated that they had an education level lower than Grade 7. According to the Household Survey of October 2000 carried out by Statistics South Africa, 15% of adults in South Africa could neither read nor write. This has major implications for the nature and type of support that learners can expect from parents regarding their schoolwork.

4.2.2 Availability of resources at home

The national indicator for the availability of resources at home is 30.9%, meaning that approximately 31% of households in the survey had items like television, radio, phones, computers, books and magazines that were indicated in the questionnaires of the learners and parents. The different items were not weighted in calculating the average availability.

The availability and reading of newspapers or magazines was low (23%) among learners. Only 30% of the parents and 21% of the learners indicated that they purchased newspapers and magazines. The availability of books was also very low, as 53% of the parents indicated that they had less than 10 books at home. Many learners had access to radio (67.2%), television (57.1%) and a telephone (45.9%).
4.2.3 Nutrition of the learners

The indicator for the nutrition of learners has been developed to determine the food available to learners. They were asked to respond to the following questions:

- Do you usually have a meal before coming to school?
- Do you bring anything to eat with you to school?
- Do you have a feeding scheme at your school?
- Do you have a meal after school?

The average number of meals per learner per day was calculated and is displayed in Figure 4.3. The national average of 2.8 meals per learner per day indicated that learners had, on average, almost 3 meals per day. Learners in Free State had on average just over two meals per day.

Learners were also asked to indicate the number of meals they had per day. A breakdown of the number of meals that each Grade 3 learner had per day is given in Table 4.1. Most learners (76.8%) indicated that they had at least one meal a day.
4.2.4 Early childhood development

The development of a child in the years before entering school is very important as it may influence the child's ability and performance in school. This indicator is based on learner responses regarding attendance of pre-primary classes.

![Graph showing attendance rates by province](image)

**Figure 4.4 Attendance at Grade R or Pre-Primary Classes, by Province**

As reflected in Figure 4.4, attending Grade R or a pre-primary class before entering Grade 1 has an indicator score of 57.9%, which means that almost 58% of the learners in the sample had some kind of preparation for school before they entered Grade 1. In the provinces, this figure ranged from 70.2% in Western Cape to 40.8% in Limpopo (formerly Northern Province). Attendance rates at pre-school facilities are relatively low. An improvement of this indicator can prepare the learners for Grade 1 and also improve the pass rate at this level.

4.2.5 Learner:classroom ratio

The indicator for learner:educator ratios and learner:classroom ratios was calculated by using the average number of learners per classroom reported by the principal and the number of learners as reported by educators. At Grade 3 level, the learner:classroom and learner:educator ratios are almost the same. It could not be determined whether or not educators were teaching more than one grade in the same classroom (multi-grade classroom).

Figure 4.5 lists the learner:educator ratio by province. The three education departments with the most learners - Eastern Cape, KwaZulu-Natal and Limpopo - had ratios greater than 40 while Free State and Gauteng had the lowest ratios. The aggregation of these figures does not reflect the actual situation as far as the extremes are concerned.
According to the publication Education and Manpower 2000 (Strauss et al., 2001), KwaZulu-Natal and Limpopo had the highest primary school learner:educator ratio during 2000. This is reflected in Figure 4.5 where these two provinces have the least favourable indicators.

The learner:educator ratio on aggregate might show an ideal situation, but an analysis of the data shows that there were some schools and classrooms where overcrowding was experienced. Educators indicated that 11.3% of them were teaching classes with more than 50 learners, while an additional 21.9% were teaching classes with 40 to 50 learners. Only 22.4% of educators were teaching less than 30 learners per class.

A high classroom ratio may be caused by a shortage of classrooms. Other possible reasons for this overcrowding will be considered when discussing the repetition rate. Both educators (57%) and principals (68%) indicated that large classes affected learning achievement.

**4.2.6 Utilisation of resource centres by learners**

The utilisation of libraries and resource centres was determined in terms of the number of visits of each learner to libraries during the year. The national indicator for the utilisation of resource centres was very low (3.4 visits per learner per year), due mainly to the non-availability of libraries and books. Nationally, only 27.4% of the learner respondents indicated that they had a library. Just over half (54.4%) of the educators indicated that they had books available in their classrooms. Limpopo and Eastern Cape showed the lowest index due to the low availability of libraries (6.9% and 11.6% respectively), while 71% of the responding schools in Western Cape indicated that they had libraries.
4.2.7 Repetition rate

The average repetition rate for Grade 3 nationally indicates that 10.9% of the learners did not progress to the next grade. Figure 4.7 indicates that repetition rates were below the average in five provinces, of which the lowest were Gauteng (5.8%) and Western Cape (6.5%). They were above average in four provinces, of which the highest were Limpopo (17%) and Mpumalanga (18.5%). A high repetition rate might result in overcrowding of schools and thus prevent access to these schools for other learners.

![Figure 4.7 Repetition Rate at Grade 3 Level, by Province](image)

4.2.8 Average number of years to complete phase

Departmental policy stipulates a learner may not be retained in a phase for more than one additional year. This indicator reflects the average time taken by the Grade 3 learners to complete Grades 1 and 2 as reported by learners. The results are indicated in Figure 4.8. The national average of 2.3 indicates that, on average, learners took slightly more than 2 years to complete Grades 1 and 2. Given that learners still had to complete Grade 3, this finding indicates that the average time taken by learners to complete the Foundation Phase across all provinces was 3.4 years.

![Figure 4.8 Number of Years to Complete Grade 1 and Grade 2, by Province](image)
Principals were also asked to indicate, from records of learner performance, progression trends (pass rates) in the Foundation Phase. Their information was then used to determine the provincial average number of years taken by learners to complete the Foundation Phase (see Table 4.2).

The repetition rate, the number of years to complete a phase and the pass rates are intertwined. The highest average number of years to complete the Foundation Phase is 3,5 years. Extending the time to complete the Foundation Phase can lead to overcrowded classes and prevent new learners from gaining access to school. The extra 0,4 years (beyond the normal three years) that the learners took to complete the Foundation Phase means that 40% of learners - that is, on average 13,3% of the learners per year per grade - repeated a grade in this phase. This prolonged period means an extra 13,3% of learners in each grade if the time to complete the Foundation Phase is 3,4 years. Apart from preventing access by new learners to school, this is also a waste of financial resources.

### 4.2.9 Pass rates

Table 4.3 reflects the pass rates in the Foundation Phase, as given by the principals. It shows that the national average pass rate is 83%; in other words, approximately 17% of all learners in the Foundation Phase in South Africa did not proceed to the next grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>78,1</td>
<td>79,6</td>
<td>86,3</td>
<td>79,5</td>
<td>77,3</td>
<td>92,3</td>
<td>86,8</td>
<td>87,1</td>
<td>87,6</td>
<td>83,4</td>
</tr>
<tr>
<td>2</td>
<td>78,6</td>
<td>78,4</td>
<td>86,1</td>
<td>81,4</td>
<td>78,3</td>
<td>91,5</td>
<td>85,7</td>
<td>87,5</td>
<td>88,5</td>
<td>83,8</td>
</tr>
<tr>
<td>3</td>
<td>77,8</td>
<td>79,2</td>
<td>86,5</td>
<td>81,1</td>
<td>80,0</td>
<td>90,0</td>
<td>80,9</td>
<td>84,7</td>
<td>87,7</td>
<td>82,7</td>
</tr>
</tbody>
</table>

The average pass rate for the Foundation Phase was 83,3%. The pass rates in the Foundation Phase for the provinces varied from 78 to 91%, as indicated in Figure 4.9. Comparing the results shown in Table 4.3 and Figure 4.9, there is a good correlation between the provincial Foundation Phase pass rates and the Grade 3 pass rates.
Because a number of learners are repeating grades, there will be a decrease in the number of learners in the next grade. Table 4.4 indicates the flow of learners from Grade 1 in 1999 to Grade 3 in 2001. The national flow through rate - that is, the number of learners in Grade 3 expressed as a percentage of the learners in Grade 1- is 81.8%. This means that 18% of learners who were enrolled in Grade 1 did not reach Grade 3 after three years. This phenomenon needs more research, because it contradicts the national policy of free and compulsory education until Grade 9. The National repeater rate to calculate the survival rate is not known. Only two provinces, Limpopo and North West, had a flow through rate above 100%. This might be because of the high repetition rate in Limpopo or because of inflow from other provinces, and needs more research.

### Table 4.4

Flow of Learners from Grade 1 in 1999 to Grade 3 in 2001

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gr1(1999)</td>
<td>356 618</td>
<td>60 069</td>
<td>152 586</td>
<td>312 041</td>
<td>86 873</td>
<td>17 540</td>
<td>159 511</td>
<td>83 330</td>
<td>90 364</td>
<td>1 318 932</td>
</tr>
<tr>
<td>Gr2(2000)</td>
<td>231 620</td>
<td>57 681</td>
<td>140 065</td>
<td>247 720</td>
<td>78 328</td>
<td>17 593</td>
<td>153 758</td>
<td>80 028</td>
<td>83 972</td>
<td>1 090 765</td>
</tr>
<tr>
<td>Gr3(2001)</td>
<td>213 915</td>
<td>57 699</td>
<td>126 321</td>
<td>245 038</td>
<td>84 725</td>
<td>16 397</td>
<td>164 577</td>
<td>88 979</td>
<td>81 601</td>
<td>1 079 252</td>
</tr>
<tr>
<td>Survival rate</td>
<td>60,0</td>
<td>96,1</td>
<td>82,8</td>
<td>78,5</td>
<td>97,5</td>
<td>93,5</td>
<td>103,2</td>
<td>106,8</td>
<td>90,3</td>
<td>81,8</td>
</tr>
</tbody>
</table>

#### 4.2.10 Language of learning and teaching at school

Two additional indicators to those listed in the Systemic Evaluation Framework were also created at the request of the Department of Education. First, an indicator for the language of learning and teaching was constructed. The purpose of this indicator was to determine whether the home language of the learner was the same as the language of learning and teaching used at the school attended by the learner. In Figure 4.10 scores are reported as percentages and thus range from 0 to 100.
Country-wide, approximately 76% of the learners indicated that their language of learning and teaching was the same at their home language. This implies, however, that nearly one-quarter of learners received instruction in their second or third language. This situation was particularly “bad” in Mpumalanga (54%) and Gauteng (33%).

### 4.2.11 Access to schools

Access to schools is presented in two ways. Principals indicated the average distance the majority of learners and educators lived from the school (see Table 4.5), and learners indicated how long it took them to reach school from their homes (see Table 4.6).

#### Table 4.5

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners</td>
<td>3,2</td>
<td>3,6</td>
<td>4,0</td>
<td>4,4</td>
<td>3,4</td>
<td>3,9</td>
<td>2,3</td>
<td>3,2</td>
<td>3,4</td>
</tr>
<tr>
<td>Educators</td>
<td>5,5</td>
<td>5,1</td>
<td>6,2</td>
<td>6,3</td>
<td>5,6</td>
<td>4,1</td>
<td>5,7</td>
<td>5,6</td>
<td>5,5</td>
</tr>
</tbody>
</table>

#### Table 4.6

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners</td>
<td>23</td>
<td>23</td>
<td>22</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>23</td>
<td>24</td>
<td>20</td>
</tr>
</tbody>
</table>

In all the provinces, principals indicated that the majority of learners stayed within three kilometers of the school. According to Table 4.6 most of the learners were staying a reasonable distance from the school. Learners indicated that, on average, the schools could be reached within half an hour. However, approximately 20% of the learners indicated that it took up to an hour to reach school.
Approximately 52% of the learners in Western Cape and Gauteng, the most urbanised provinces, indicated that they walked to school. The other most popular forms of transport to school were bus, train and car. In the rest of the provinces, more than 80% of the learners indicated that they walked to school.

### 4.3 Findings: Learner Performance

An overview of the findings indicates the following national average scores obtained by learners:

- **Life Skills** - 54%
- **Literacy** - 54%
- **Listening Comprehension** - 68%
- **Reading and Writing** - 39%
- **Numeracy** - 30%

As indicated in Figure 4.11, the average performance of learners was consistent across all the provinces in all the Learning Programmes assessed. In addition, the difference in mean scores across the provinces in these Learning Programmes was small. This indicates that the scores obtained by learners within the different provinces were similar.

![Figure 4.11 Learner Scores, by Learning Programme and Province](chart)

### 4.4 Access Indicators Influencing Learner Performance

In this section, the influence of access indicators on learner performance is examined using regression analysis. The coefficients calculated denote the relative strength of each indicator’s influence on the total score of each learner. The coefficients and R-square value of the significant indicators are reported in Table 4.7. A general overview of the results indicates the following:

- Only nine access indicators (as noted by the values reported) had a significant influence on learner scores.
- These indicators can only explain 20% of the variation in learner scores - that is, as noted by the R-square value. Thus, at least 80% of the “explanation” for why (and how) learner scores are achieved lies in other factors that are not addressed by these indicators.
- The resources at home had the strongest positive influence on learner scores followed by ease of access to school, number of years taken to complete a phase, utilisation of resource centre at school, early childhood development, pass rates and education level of parents.
In the next section, a detailed discussion on the significant indicators is provided. It must be noted that the nature of the influence of these indicators on learner performance and possible reasons for how they manifest themselves in practice is difficult to determine without additional information or research, especially since this can differ between the various provinces, districts, schools and classrooms.

4.5 Discussion and Interpretation of Findings

In this section, the findings on indicators that relate to access are discussed. These findings are interpreted with a view to establishing baseline information regarding the transformation goal of access.

4.5.1 Availability of resources at home

It is indicated that resources at home had a significant influence on learners’ scores. The Department of Education cannot be judged too harshly, since so much of achievement seems to be explained by factors in the home. The actual education of children has to be seen as part of the whole process of development and cannot be expected to be solved by the education system alone. On the other hand, however, it does suggest that important positive measures have to be taken to overcome the disadvantages faced by some, e.g. via compensatory interventions or funding of various types.

4.5.2 Availability and utilisation of resource centres at school

Project 7 (School Infrastructure) of Programme 2 (School Effectiveness and Educator Professionalism) of the Implementation Plan for Tirisano (DoE, 1999) commits itself to ensuring that all schools meet the minimum physical and infrastructural requirements necessary to establish and support a conducive learning and teaching environment. Although the average national indicator for facilities was 5.35, this survey revealed that seven provinces fell below the theoretical mean. The fact that only 27% of the surveyed schools had libraries or resource centres suggests that learners have limited access to information to enrich their learning experiences. The situation is exacerbated by the finding that learners who attend schools that lack resources invariably also come from homes that are similarly disadvantaged.
Besides limited availability, it was observed that when resources were available they were under-utilised (28.2% utilisation). Curriculum 2005 (C2005) encourages learners to use resources outside of the classroom and to take responsibility for their own learning. The C2005 form of pedagogy cannot be promoted effectively without access to and efficacious utilisation of adequate facilities and resources.

For educators, the non-availability of staff rooms (only 51% of schools had staff rooms) makes it difficult to prepare lessons and hold planning and review meetings. In addition, the inadequacy of communication facilities such as telephones and faxes isolates schools from possible sources of assistance, and causes undue delays in sending to and receiving information from district and provincial offices. This further limits educators’ resourcefulness to the detriment of the learners.

The finding that the facilities available at a school had a significant influence on the assessment scores of learners further highlights the importance of addressing the shortage of resources in order to make learning accessible and to improve its quality. A similar finding was noted for learning and teaching materials (see Chapter 6). In essence, it is important that the plan for dealing with infrastructural backlogs in schools (as stated in the strategic objective of Project 7 of Tirisano), is developed and implemented as soon as possible.

Learners who have greater access to resources in the home, as well as those who have access to resources at school, tend to perform better than learners who do not. Given that South Africa has one of the highest Gini-coefficient values in the world, it is not surprising to note that a significant majority of learners fall into the category that have limited resources in the home.

The national indicator for the utilisation of resource centres was very low (28.2%), due mainly to the non-availability of libraries and books. Nationally, only 27.4% of the learner respondents indicated than they had a library. Just over half of educators (54.4%) indicated that they had books available in their classrooms. Limpopo and Eastern Cape showed the lowest indicator, due to the low availability of libraries (6.9 and 11.6% respectively), while 71% of the responding schools in Western Cape indicated that they had libraries.

4.5.3 Parents’ level of education

The high correlation between parental levels of education and the assessment scores of the learners suggests the need to improve the education levels of parents in instances where such levels are presently low. The current education policies of the national Department of Education are very favourable towards this end. For example, Programme 3 of the Implementation Plan for Tirisano suggests a commitment by the Department to reduce the levels of illiteracy in the country by increasing provision for Adult Basic Education and Training (ABET). The philosophy of the Department that schools should be the centres of their communities is also supportive of this commitment. However, it is evident that the challenges of illiteracy and ABET remain great. These are, in essence, challenges of policy implementation, and it is crucial that this matter be brought to the forefront of the agenda of all the provincial departments of education. Schools, too, should be encouraged to take their own initiatives to facilitate the provision of ABET and literacy classes on their premises.
According to the Household Survey of October 2000 carried out by Statistics South Africa, 15% of adults in South Africa could neither read nor write. This has major implications for the nature and type of support that learners can expect from parents regarding their schoolwork.

4.5.4 Repetition rate and average number of years to complete phase

The findings of this study demonstrate that grade repetition is associated with lower learner scores, but that repetition is not really the cause of low scores. Low scores and repetition of learners are influenced by other factors. The current Departmental policy on learner progression discourages a high repetition rate, by allowing learners to repeat a grade only once in each phase. This is in line with the findings of this study. Despite this, the repetition rate still appears to be too high. It is proposed, therefore, that the Department maintain its current policy on learner progression and ensures that its implementation is monitored closely. Cognisance needs to be taken of the “popular” viewpoint of both parents and educators, who believe that a learner who has “failed” in a grade should not be allowed to proceed to the next grade as it reduces standards. It is important that this issue be researched and investigated further to ensure that the current policy is indeed correct. In the meanwhile, learner-paced education in schools should be encouraged. This could be done through strategies such as the introduction of remedial teaching and remedial classes.

4.5.5 Early childhood development

The existing policy of the Department of Education to make Grade R accessible to all learners is indicative of the Departments’ recognition of the value of Grade R in the life of the learner. Given the high correlation demonstrated in this study between access to pre-schooling and learner performance, it is imperative that departments of education keep to the promise of Grade R provisioning by monitoring its implementation closely.

The proposal by the Department of Education to amend its existing policy on the admission age of learners is also of importance. In terms of current policy, learners are admitted to Grade 1 in the year that they turn seven. The new policy proposes that a learner may be admitted to Grade 1 if she or he turns six by 30 June in the year of admission. The proposed policy appears to favour those learners who do not have access to pre-school, as it means that they will have access to some form of education in the most formative years of their lives. Close monitoring by the Department of this proposed shift in policy is crucial, as it is likely to have an impact on learner enrollment and repetition rate if implemented.

4.5.6 Pass rates

The pass rate is an outcome of the education system. As such, it is influenced by a number of inputs and processes. One aspect that influences the pass rate is the educator in the classroom who is in constant contact with the learner. It is the responsibility of the educator to ensure that good teaching practices prevail, but it is the responsibility of the Department of Education to ensure that educators receive adequate training and support.

Another aspect that influences the pass rate is the school management team who must manage learning activities. Here, the responsibility rests with the principal and the rest of the school
management team. If they manage learning activities well, the pass rate should improve. Other factors discussed in the previous as well as the next chapter also influence the pass rate.

4.6 Policy Suggestions

- Government must build on its policy framework for school libraries, and develop a school library/resource centre policy to ensure that all schools have equal access to resources.
- Government must implement the plan for dealing with infrastructural backlogs in schools (as stated in the strategic objective of Project 7 of Tirisano) as soon as possible.
- Provincial departments of education must be encouraged to promote ABET classes, especially for the illiterate members of their communities.
- Government should maintain its current policy on learner progression, but ensure that its implementation is closely monitored. Learners should not repeat a grade more than once per phase.

4.7 Conclusion

This chapter gave an analysis of the findings pertaining to the transformation goal of access at the Foundation Phase. It looked at the findings on the access-related indicators, as defined in the Systemic Evaluation Framework (DoE, 2001a). It also presented an overview of learner performance scores, aggregated by province.

The major findings were that the number of years taken to complete a phase had the strongest positive influence on learner scores - that is, the fewer the years taken, the higher the scores - followed by resources at home, school facilities, access to school, early childhood development and education level of parents.

Several aspects have been highlighted which can be applied to improve the education system. The present curriculum policy, Curriculum 2005, leans strongly towards a learner-centred and learner-paced pedagogical approach. It attempts to make learning relevant to the everyday lives of learners and hence encourages the use of resources from the home in the teaching and learning process. While this is not a problem in principle, the shortage of resources in learners’ homes makes it difficult to fulfil this requirement. The shortage of resources in the home is compounded by the shortage of resources at school, especially the lack of resource centres from which learners can access materials.

Aspects discussed in this chapter that might improve learner performance and access to quality education are the following:

- the provision of facilities at schools;
- the improvement of existing school facilities; and
- in-service training of educators and principals, especially in OBE.

The following chapter focuses on the findings relating to the transformation goal of equity at the Grade 3 level.
5.1 Introduction

This chapter reports on the findings relating to the transformation goal of equity. Chapter 4, Section 8 of the White Paper on Education and Training (DoE, 1995) notes that “the state’s resources must be deployed according to the principle of equity, so that they are used to provide essentially the same quality of learning opportunities for all citizens”. The White Paper does not limit the notion of equity to the provision of equal opportunities only, but suggests the need for an “affirmative action policy” that would address this country’s legacy of inequality. Hence it emphasises the need for an effective leadership which is broadly representative of the population it serves. The transformation goal of equity, therefore, requires the system to ensure an equitable distribution of resources, as well as the active advancement of previously disadvantaged groups such as women.

In this chapter, the findings on the equity-related indicators as defined in the Systemic Evaluation Framework (DoE, 2001a) are presented, followed by an overview of learner performance scores aggregated by province. The influence of the significant equity indicators on learner performance are then noted, followed by analysis and discussion of the findings. The chapter concludes with some policy recommendations and a discussion on the way forward.

5.2 Findings: Equity Indicators

The findings on the following equity indicators are reported in this section:

- private contributions and utilisation of funds;
- assistance from the Department;
- educator qualifications;
- functioning of SGBs; and
- discipline, safety and learning atmosphere.

5.2.1 Private contributions and utilisation of funds

The financial situation of a school - that is, payment of school fees and the utilisation and administration thereof - is crucial for the existence of a school and its positive financial situation. This indicator is constructed using:

- the proportion of parents paying school fees;
- whether the fees are used to the benefit of the learners; and
- whether the fees are administered properly.

Ninety percent (90%) of the schools indicated that school fees constituted their main income, and 50% of the schools reported that they received government grants for funding their school activities.
Although 87.9% of parents indicated that they were paying school fees, principals responded that, on average, they only received school fees from 59.3% of the parents. Parents agreed that the school fees were used to the benefit of the children. In more than 90% of cases, the school or SGB:

- maintained a bank account;
- had annual income and expenditure statements;
- had audited or examined financial statements; and
- presented an annual budget to the parents.

Table 5.1 indicates that the average indicator for private contributions and utilisation thereof did not differ very much across the provinces. Although the utilisation of the parents’ contributions was at a high level, the rate at which parents were paying school fees influenced the indicator.

<table>
<thead>
<tr>
<th>Province</th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>78,0</td>
<td>78,8</td>
<td>79,3</td>
<td>78,2</td>
<td>78,7</td>
<td>76,2</td>
<td>80,9</td>
<td>80,9</td>
<td>78,9</td>
<td>79,8</td>
</tr>
</tbody>
</table>

5.2.2 Assistance from the Department

The degree of assistance that a school receives from the Department of Education is seen as a factor that may influence its functioning, and therefore also the performance of learners in that school. The principal was asked to indicate whether s/he agreed or disagreed with statements on whether departmental officials were helpful when dealing with the school (see Figure 5.1).

5.2.3 Educator qualifications linked to subjects and level taught

It is well documented that educators who are qualified and experienced in the content area that they are teaching significantly influence the performance of learners. This indicator was calculated from educator responses regarding their level of qualification in the key subjects of Mathematics, General Science and Biology.
Just over 50% of the educators indicated that they had been teaching Grade 3 for five years, while a quarter of them had been teaching between six and 10 years. A quarter of the educators indicated that they had a Teachers Certificate (two years of training), while 60% had a Teachers Diploma.

Figure 5.2 shows the qualifications of educators in terms of grades. The national qualification of educators in Mathematics is 10.5 - that is, on average, educators had a qualification higher than Grade 10 but lower than Grade 11. The Figure also shows that Gauteng, KwaZulu-Natal and Limpopo had values greater than the national average in Mathematics. Approximately 25% of the educators involved in the survey had a qualification in Mathematics at or lower than Grade 9, as did 35% in Science. Biology seemed to be the subject in which the highest qualifications had been obtained, while only 40% of the educators indicated that they had either Grade 11 or 12 Mathematics.

Principals indicated that 89% of the Grade 3 educators were qualified. Table 5.2 shows the qualifications of primary school educators.

<p>| Table 5.2 |
| Qualifications of Educators in Primary Schools, 2000 (expressed in %) |</p>
<table>
<thead>
<tr>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;REQV13</td>
<td>29.9</td>
<td>35.2</td>
<td>13.5</td>
<td>30.2</td>
<td>23.3</td>
<td>26.8</td>
<td>29.8</td>
<td>45.3</td>
</tr>
<tr>
<td>REQV13</td>
<td>47.9</td>
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<td>33.2</td>
<td>35.6</td>
<td>40.1</td>
<td>40.8</td>
<td>44.4</td>
<td>31.3</td>
</tr>
<tr>
<td>&gt; REQV13</td>
<td>22.3</td>
<td>24.6</td>
<td>53.3</td>
<td>343</td>
<td>36.6</td>
<td>32.4</td>
<td>25.8</td>
<td>23.5</td>
</tr>
</tbody>
</table>

5.2.4 Functioning of the SGB

The indicator for the functioning of the school governing body is determined by the responses of the principals and educators on the effective functioning of the SGB in terms of constituting, regular meetings and contribution to effective functioning of the school.
The functioning of SGBs seems to be at a reasonable level, as the national indicator is 79.3%. The functioning of the SGBs at schools in the different provinces shows little variation. Provincial indicators range from 73.1% in Free State to a high of 83.4% in Gauteng. Overall, educators considered that the SGB contributed to the effective functioning of the school, as they rated it at a level of 79.8%.

SGB’s were involved in the following activities:

- maintaining a bank account;
- preparing an annual income and expenditure statement;
- ensuring financial statements are audited and examining financial statements; and
- presenting an annual report to the parents.

When schools obtain Section 21 status, the SGBs receive additional responsibilities. If they are to fulfil these responsibilities, it is essential that members of the SGB receive in-service training.

5.2.5 Discipline, safety and learning atmosphere

This indicator consists of two major parts - discipline, and safety and security at schools. It is necessary to create a disciplined and safe learning environment at school to give the learners the opportunity to access learning and to provide a safe environment for educators to perform their tasks (DoE, 2000). Only 64.6% of the principals and 77.7% of the educators indicated that they felt safe at school. Factors that play a role in determining a good learning atmosphere include the availability of safety fences and good discipline.
The national indicator for discipline, safety and learning atmosphere is calculated at 60,6%. Although discipline at schools (one aspect of the indicator) was rated at a level of 86,7%, safety and security at schools was at a very low level due to the poor condition or lack of fences and the non-availability of school patrols, fire extinguishers and first aid expertise and equipment. (See Figure 5.4.)

According to principals, the most important factors that negatively influenced discipline were the following:

• arriving late at school;
• absenteeism of learners; and
• absenteeism of educators.

The rating of discipline, safety and learning atmosphere was at a level of 60,6%. In all the provinces, maintaining good discipline (one aspect of the indicator) was rated above 80%, but the lack of safety and security matters lowered the final indicator. Safety and security aspects that had a negative influence on the indicator included the availability and condition of the following:

• school patrol (13,9%);
• security guard/service (18,5%);
• alarm system (23,9%);
• fire extinguisher (27,6%);
• first aid box (37,2%); and
• boundary wall/fence (54,4%).

The scale for the above-mentioned factors ranges from not available (0%), poor (33,3%), fair (66,7%) to good (100%) implying, inter alia, that boundary walls and fences that were available were mostly of a poor to fair condition.
5.3 Findings: Learner Performance

An overview of the findings indicates the following national average scores obtained by learners:

- Life Skills - 54%;
- Literacy - 54%:
  - Listening Comprehension - 68%,
  - Reading and Writing - 39%;
- Numeracy - 30%.

As indicated in Figure 5.5, the average performance of learners was consistent across all the provinces in all the Learning Programmes assessed. In addition, the difference in mean scores across the provinces in these Learning Programmes was small. This indicates that the scores obtained by learners within the different provinces were similar.

![Figure 5.5 Learner Scores, by Learning Programme and Province](image)

5.4 Equity indicators influencing learner performance

In this section, the influence of the equity indicators on the performance of the learners is examined using regression analysis. The coefficients calculated denote the relative strength of each indicator’s influence on the total score of each learner. The coefficients and R-square values of the significant indicators are reported in Table 5.3.
A general overview of the findings noted in Table 5.3 reveals the following:

- All the equity indicators (except educator qualifications) had a significant influence on learner scores. These indicators, however, only explained approximately 9% of the differences in learner performance (i.e., R-square value). Thus, at least 91% of the way in which learners differ in their performance is explained by factors that are not addressed by these indicators. The educator qualifications indicator could not be used, since a high number (more than 50%) of responses were not provided.
- Discipline, safety and learning atmosphere had the largest positive influence on learner scores, followed by private contributions and utilisation of funds and functioning of SGBs.
- Assistance from the Department had a negative influence on learner performance.

In the next section, a detailed discussion is provided of the indicators that have a significant influence on learner performance. It should be noted, however, that the findings only point to general trends and practices, and specific reasons for these findings cannot be provided without additional information and/or analysis.

### 5.5 Discussion and Analysis of Findings

In this section, the findings reported above in sections 5.2 to 5.4 are discussed with a view to understanding the extent to which the transformation goal of equity has been attained.

#### 5.5.1 Private contributions and utilisation of funds

The overall findings on this indicator point to a positive “financial environment” regarding the payment, use and administration of school fees. More specifically, the findings show clearly that there is great satisfaction regarding the mechanisms in place to handle funds at schools. However, the findings on the specific variable regarding the payment of school fees is not that clear. There is a difference of opinion between principals and parents about whether or not school fees are being paid. According to principals, only 59.3% of parents were paying fees, while 87.9% of parents indicated that they paid school fees. Hence, although the overall value for the indicator on private contributions and utilisation of funds is high, it does not automatically imply a correspondingly high incidence of payment of school fees.
What is clearly evident, though, is that the actual fees levied by schools differ markedly across schools and provinces (see Table 5.4). The majority of schools in the country (almost 69%), charge fees of R100 or less per annum, of which over 40% levy school fees of R50 or less per annum. On the other hand, a significant minority of schools (almost 18%) levy school fees of more than R1000 per annum. The fee structure across schools thus demonstrates a level of extremism characterised by a large majority of low fee schools, and a significant minority of high fee schools. There are also wide differences in school fee structure across provinces. Over 50% of schools in Eastern Cape, Northern Cape and Free State charge fees that are less than R50 per annum, while a significant percentage of schools in Gauteng, Western Cape, Mpumalanga and Eastern Cape (over 20%) charge fees of R1000 and more.

Given that the overall indicator on private contributions and utilisation of funds has a positive influence on learner scores, one could infer that this is due largely to the effective utilisation and administration of school fees, rather than the actual payment of school fees. This finding could also be reflective of good management practices at schools.

### 5.5.2 Assistance from the department

In defining the indicator for assistance to schools by the officials of the provincial departments of education, principals rated the contribution of departmental officials to certain tasks performed at schools, as well as the quality of assistance they rendered to schools. The results showed that this indicator had a negative influence on learner performance.

There are two possible explanations for this finding. One explanation is that the nature of the assistance provided by districts hindered rather than assisted schools in improving the teaching and learning processes. This might be because the assistance received by principals did not focus directly on the specific needs of the schools - for example, improving teaching and learning conditions. A second, and more likely, explanation is that greater assistance has been rendered to those schools that need it the most - that is, those with the lowest average scores - which is an extremely positive development. As noted in Table 5.5, principals who provided positive ratings of support from the

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### Table 5.4

Annual School Fees, by Province

<table>
<thead>
<tr>
<th>Province</th>
<th>Fee Categories</th>
<th>Less than R50</th>
<th>R50 - R100</th>
<th>R101 - R200</th>
<th>R201 - R300</th>
<th>R301 - R400</th>
<th>R401 - R500</th>
<th>R501 - R1000</th>
<th>R1001 - R2000</th>
<th>Above R2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td></td>
<td>59.6</td>
<td>9.6</td>
<td>1.2</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>7.6</td>
<td>14.4</td>
</tr>
<tr>
<td>FS</td>
<td></td>
<td>50.6</td>
<td>27.3</td>
<td>2.6</td>
<td>0.0</td>
<td>1.3</td>
<td>0.0</td>
<td>0.0</td>
<td>7.8</td>
<td>3.9</td>
</tr>
<tr>
<td>GP</td>
<td></td>
<td>18.5</td>
<td>37.1</td>
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<td>2.0</td>
<td>0.7</td>
<td>1.3</td>
<td>0.0</td>
<td>14.6</td>
<td>13.9</td>
</tr>
<tr>
<td>KN</td>
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<td>46.2</td>
<td>23.6</td>
<td>3.1</td>
<td>6.3</td>
<td>2.8</td>
<td>3.5</td>
<td>0.0</td>
<td>3.1</td>
<td>8.7</td>
</tr>
<tr>
<td>MP</td>
<td></td>
<td>45.5</td>
<td>22.8</td>
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<td>0.0</td>
<td>0.0</td>
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<td>13.9</td>
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<tr>
<td>NC</td>
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<td>58.3</td>
<td>20.8</td>
<td>8.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>8.3</td>
</tr>
<tr>
<td>LP</td>
<td></td>
<td>42.1</td>
<td>37.1</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>16.8</td>
</tr>
<tr>
<td>NW</td>
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<td>27.6</td>
<td>45.7</td>
<td>4.3</td>
<td>6.0</td>
<td>5.2</td>
<td>0.0</td>
<td>0.0</td>
<td>2.6</td>
<td>5.2</td>
</tr>
<tr>
<td>WC</td>
<td></td>
<td>10.0</td>
<td>42.0</td>
<td>17.0</td>
<td>3.0</td>
<td>4.0</td>
<td>2.0</td>
<td>2.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>RSA</td>
<td></td>
<td>40.5</td>
<td>28.4</td>
<td>4.1</td>
<td>2.6</td>
<td>1.5</td>
<td>1.3</td>
<td>0.2</td>
<td>6.1</td>
<td>11.6</td>
</tr>
</tbody>
</table>
Department were from schools where learners obtained the lowest mean scores - that is, in the bottom quartile.

### Table 5.5

<table>
<thead>
<tr>
<th>Responses of Principals from Low-Performing Schools regarding Support Provided by the Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>When dealing with schools, a department official is helpful in assisting the school to solve problems</td>
</tr>
<tr>
<td>provides strong support and guidance on teaching and learning practices</td>
</tr>
</tbody>
</table>

**Note:** SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree

5.5.3 **Educator qualifications linked to subjects and level taught**

While the exact influence of educator qualification levels on learner performance could not be ascertained due to the large number of missing responses, from the results that were received, it is clear that a large number of Mathematics and Science educators are un-qualified or under-qualified (see Table 5.2, above). To counteract this inequity, the Department of Education must provide educators with opportunities to improve their qualifications. For example, the Department could make bursaries available for further study, focusing on the key areas of Mathematics and Science.

5.5.4 **Discipline, safety and learning atmosphere**

The national indicator for discipline, safety and learning atmosphere depicts a generally safe and disciplined learning environment. However, principals did note that the most important factors that influenced discipline negatively were the following:

- arriving late at school;
- absenteeism of learners; and
- absenteeism of educators.

Table 5.6 shows the attendance rate of learners as reported by the principals and educators, as well as the attendance rate of educators as reported by principals. It is clear that an unacceptably high rate (about 15%) of the learners are absent from school on any given school day.

In addition, the safety and security aspects that were reported to have had a negative influence on the learning environment at schools included the availability and condition of the following: school patrol, security guard/service, alarm system, fire extinguisher, first aid box and boundary wall/fence.
### 5.6 Policy suggestions

#### 5.6.1 Private contributions and the utilisation of school funds

It is proposed that the formula for the allocation of funds to schools in terms of the National Norms and Standards for School Funding, be revisited. The formula needs to take into account the funds received by schools through private contributions by incorporating this as a factor in the determination of the socio-economic status of the school community.

#### 5.6.2 Assistance from the department

It is proposed that there be an investigation into the nature of support provided by districts to schools. Such an investigation needs to clarify whether the nature of the support provided by districts is directed effectively towards improved teaching and learning in schools, and whether district support is strategically focused on “poor-performing schools”.

#### 5.6.3 Educator qualifications linked to subjects

Teacher qualifications in Mathematics and Physical Science need to be upgraded. The tremendous improvement in the qualifications of teachers over the past few years is acknowledged; however, there needs to be a shift in the way in which the notion of teacher qualifications is conceptualised. There should be a shift in emphasis from the upgrading of the whole qualifications of educators (although this remains important to some extent), to the upgrading of educators in specific subject disciplines. This is particularly important for Foundation Phase educators, where historically there has been less emphasis on promoting knowledge in specific subject disciplines. Appropriate certification mechanisms and incentives need to be developed to encourage teachers to upgrade themselves in specific subject disciplines.

### Table 5.6

Attendance Rates of Learners and Educators

<table>
<thead>
<tr>
<th>Attendance Rate Of:</th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners as reported by principals</td>
<td>79,8</td>
<td>89,8</td>
<td>92,4</td>
<td>85,2</td>
<td>87,9</td>
<td>90,8</td>
<td>89,1</td>
<td>89,1</td>
<td>89,6</td>
<td>87,6</td>
</tr>
<tr>
<td>Learners as reported by educators</td>
<td>78,7</td>
<td>83,5</td>
<td>88,0</td>
<td>82,5</td>
<td>84,0</td>
<td>84,8</td>
<td>94,5</td>
<td>81,9</td>
<td>85,6</td>
<td>84,4</td>
</tr>
<tr>
<td>Educators as reported by principals</td>
<td>87,5</td>
<td>91,6</td>
<td>94,1</td>
<td>91,7</td>
<td>90,5</td>
<td>93,8</td>
<td>91,7</td>
<td>91,6</td>
<td>93,4</td>
<td>92,2</td>
</tr>
</tbody>
</table>

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5.6 Policy suggestions

5.6.1 Private contributions and the utilisation of school funds

It is proposed that the formula for the allocation of funds to schools in terms of the National Norms and Standards for School Funding, be revisited. The formula needs to take into account the funds received by schools through private contributions by incorporating this as a factor in the determination of the socio-economic status of the school community.

5.6.2 Assistance from the department

It is proposed that there be an investigation into the nature of support provided by districts to schools. Such an investigation needs to clarify whether the nature of the support provided by districts is directed effectively towards improved teaching and learning in schools, and whether district support is strategically focused on “poor-performing schools”.

5.6.3 Educator qualifications linked to subjects

Teacher qualifications in Mathematics and Physical Science need to be upgraded. The tremendous improvement in the qualifications of teachers over the past few years is acknowledged; however, there needs to be a shift in the way in which the notion of teacher qualifications is conceptualised. There should be a shift in emphasis from the upgrading of the whole qualifications of educators (although this remains important to some extent), to the upgrading of educators in specific subject disciplines. This is particularly important for Foundation Phase educators, where historically there has been less emphasis on promoting knowledge in specific subject disciplines. Appropriate certification mechanisms and incentives need to be developed to encourage teachers to upgrade themselves in specific subject disciplines.

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5.6.4 Discipline, safety and learning atmosphere

Strategies to reduce the rate of learner absenteeism need to be developed at all levels of the system - school, district, province and national. The development of such strategies should, however, be context specific and based on an understanding of the reasons behind high levels of learner absenteeism.

The safety of educators and learners should be promoted by ensuring that schools are in a position to organise and provide services and facilities such as school patrols, security guards, alarm systems, fire extinguishers, first-aid supplies, and fences.

5.7 Conclusion

This chapter has presented an analysis of the findings related to the transformation goal of equity at the Grade 3 level. The chapter looked at the findings on the equity-related indicators, as defined in the Systemic Evaluation Framework (DoE, 2001a). It also presented an overview of learner performance scores, aggregated by province.

The results indicate that equity across schools has not been reached on issues such as educator qualifications, private contributions (school fees), learner absenteeism and school safety. The attainment of the transformation goal of equity in the schooling system is thus dependent upon appropriate interventions in the areas of school financing, the upgrading of educator qualifications in specific subjects, learner attendance, and the provision of a safe teaching and learning environment for educators and learners.
Chapter 6

TRANSFORMATION GOAL: QUALITY

6.1 Introduction

The purpose of this chapter is to report on the findings regarding the transformation goal of quality. Provision of basic education for all includes not only securing formal attendance at school but also ensuring that sufficient and quality material and human resources are made available to schools (DoE, 2000). In assessing the quality of the education system, it is important to look at, among others, school management and leadership, the assessment of learners, feedback procedures and homework. In addition, the satisfaction rates of the stakeholders - principals, educators, learners and parents - also give an indication of the quality of education the learners are receiving.

In this chapter, the findings on the quality-related indicators are presented, followed by an overview of learner performance scores, aggregated by province. The influence of the significant quality indicators on learner performance are then noted, followed by analysis and discussion of the findings. The chapter concludes with some policy recommendations and a discussion on the way forward.

6.2 Findings: Quality Indicators

In this section the findings on the following quality-related indicators, as defined in the Systemic Evaluation Framework (DoE, 2001a) are reported:

- school facilities;
- satisfaction rates of stakeholders;
- attendance rates, contact time, time on task;
- learning and teaching materials;
- teaching practices;
- INSET and SGB training;
- record keeping;
- educator morale and attitude;
- school management and leadership;
- assessment of learners and feedback procedures; and
- homework.

6.2.1 School facilities

The factors that were taken into account when calculating the indicator on facilities at school included the availability of:

- additional teaching space;
- school grounds and sport facilities;
- services to the school; and
- equipment used in the school.
The consolidated national indicator for facilities was calculated at 52.6%. This means that, on average, schools had just over half the ideal level of facilities available. As noted in Figure 6.1, four provinces fall below the national average.

When the findings of the survey are aggregated, the availability of the following aspects determine the indicator to a large extent:

- libraries (27%);
- fax facilities (33%);
- sport fields (38%);
- availability of staff rooms (51%);
- availability of playgrounds (53%);
- general condition of schools (56%);
- telephone service (56%); and
- offices for principals (66%).

### 6.2.2 Satisfaction rates of stakeholders

The satisfaction rate of stakeholders was compiled from more than 70 statements put to principals, educators, learners and parents. The responses of the different stakeholders ranged from 75.4% to 78.8%. The range varies from “strongly disagree” (0%), “disagree” (33%), “agree” (67%) to “strongly agree” (100%). As shown in Table 6.1, all provinces’ ratings are above 70%. All responses above 66.7% can be regarded as “strongly agree”.

<table>
<thead>
<tr>
<th>Province</th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
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<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction Rates of Stakeholders, by Province</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76.6</td>
<td>75.8</td>
<td>78.5</td>
<td>78.0</td>
<td>71.5</td>
<td>79.8</td>
<td>73.8</td>
<td>77.2</td>
<td>77.4</td>
<td>77.1</td>
<td></td>
</tr>
</tbody>
</table>
Statements that were rated below 66,7% by the principals were:

• Parents are involved in school activities.
• I feel safe in the school.
• Learners complete the homework.
• Parents attend meetings at the school regularly.

Educators rated the following statements below 66,7%:

• Parents are involved in school activities.
• Learners complete their homework.
• Parents attend meetings at the school regularly.
• Our learners do well in school.

Both principals and educators rated parental involvement as one of the main factors influencing learner achievement at school. Principals rated this aspect at 76% (a great deal) and educators at the level of 60% (quite a lot).

Learners rated only one statement below 66,7%, namely, “my school give prizes or awards to learners who do well in their studies”. Parents also had only one rating below 66,7%, namely, “the child participates in sport or other cultural activities”.

Seventeen percent (17%) of the principals and 25% of the educators suggested that they would change to another career if they had the opportunity. The satisfaction rates indicate that the consequences of this situation might be the following:

• low pass rates;
• learners not doing the homework;
• learners not doing well in school;
• good quality education not provided to learners.

6.2.3 Attendance rates, contact time, time on task

This indicator displayed a high positive influence on learner scores. Learners at those schools that indicated higher attendance rates for educators and learners as well as greater contact time obtained higher scores.

From Table 6.2, it is clear that almost 15% of the learners were not attending classes regularly.
In the time on task category - that is, what is happening in the classroom (rated nationally at a level of 75.3%) - learners revealed that in more than 88% of cases:

- the educators were in the classes;
- the educators did work in the classes; and
- the learners did not go home early.

Only 33.7% of the learners indicated that lessons started on time.

Table 6.3 indicates some of the activities that educators indicated they performed during formal teaching periods.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Administration</th>
<th>Learning Programme Planning</th>
<th>Marking</th>
<th>Learners' Written Tasks</th>
<th>Extra-curricular Activities (sports, drama, choir etc.)</th>
<th>Remedial Teaching (providing additional support to learners)</th>
<th>Meetings with School Principals and Other Teachers</th>
<th>Studying for Self-Development</th>
<th>Professional Development Sessions</th>
<th>Teaching in Other Classes, Leaving Learners Unattended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total percentage</td>
<td>29,0</td>
<td>18,5</td>
<td>56,1</td>
<td>30,2</td>
<td>61,4</td>
<td>26,2</td>
<td>8,3</td>
<td>16,9</td>
<td>3,0</td>
<td></td>
</tr>
</tbody>
</table>

It is clear that some teachers were busy with activities other than those normally performed during teaching periods, namely:

- extra-curricular activities (30%);
- meetings with school principals and other teachers (26%);
- studying for self-development (8%); and
- leaving learners unattended (3%).

Apart from time lost during teaching periods, time is also lost due to other factors. Table 6.4 gives an indication of the average number of days lost due to certain activities during the year. The average number of days lost means that for every school in the survey, these were the number of days on which no teaching took place.
From this table, it is clear that the following are responsible for most of the days lost:

- illness among staff members;
- of teaching and learning materials;
- cultural activities; and
- late registration.

When calculated as part of the number of school days per year (average 200), almost 5% of teaching time was lost in this way.

6.2.4 Learning and teaching materials

The learning and teaching materials indicator displayed a significant influence on learner scores. Learners in those schools that indicated having greater learning and teaching materials obtained higher scores. Information from the survey used to calculate the learning and teaching materials indicator includes:

- materials needed in the classrooms;
- materials needed for the learning programmes;
- issuing of work books for Literacy, Numeracy and Life Skills; and
- ordering of materials.

Gauteng and Northern Cape had the highest indicators for learning and teaching materials (Figure 6.2). The ordering of materials seemed to be a problem; approximately 79% of the respondents indicated that they had ordered learning support materials but only one-third had received the material. The indicator for ordering materials did not deviate much across the provinces from the national average. The figure for receiving the ordered material ranged from 5,1% in Eastern Cape to 47,1% in Western Cape.
The availability of learning support materials for Grade 3 learners ranged from 34% in Mpumalanga to a high of 65.5% in Western Cape and Gauteng, with a national average of 51.4%.

Educators indicated that the shortage of learning and teaching materials had an influence on teaching and learning (a level of 51%). Principals rated the influence even higher, at a level of 72%. The scale of this response ranges from “not at all” (0%), “a little” (33%), “quite a lot” (67%) to “a great deal” (100%).

### 6.2.5 Teaching practices

In calculating the indicator for teaching practices, the following classroom activities were considered as essential for outcomes-based instruction:

- storytelling and rhyming;
- transferring knowledge and skills to everyday life situations;
- developing writing skills;
- discussing and solving problems in pairs or groups;
- encouraging independent problem solving;
- using learning support materials such as newspapers, magazines and so on for activities like interpreting graphs;
- developing logical reasoning skills;
- developing basic skills like counting and measuring, using practical equipment;
- teaching learners to plan, organise and manage themselves;
- developing learners’ self-esteem and confidence; and
- teaching learners to be sensitive to each other’s languages, cultures and religions.

Educators and learners had to indicate, on a given scale, the frequency with which the activities listed above occurred in their classrooms. The scale of the indicator ranged from 0% for “never” to 100% for “every day”. The results are summarised in Figure 6.3.
The following observations can be made:

- The mean frequency of activities per province as given by educators was around 80%, approximately twice that obtained from learners' responses which stood around 40%.
- The national value of this indicator was also 80% as indicated by educators and 40% as given by learners. Thus educators reported more classroom activity than learners perceived.
- The evident disparity between educator and learner responses can be attributed partly to the inherent nature of self-reported data.
- Educator and learner responses displayed relative consistency across provinces.

Further evidence drawn from the findings on learner involvement or otherwise in classroom activities showed that:

- 42% of learners reported that they sat still in class;
- 43% indicated that they repeated what teachers said;
- 30% asked questions;
- 45% were involved in group work;
- 14% used calculators; and
- 9% used computers.

In addition, 40% of the learners indicated that they completed worksheets on their own, and 30% solved problems without assistance from educators. Overall, the frequency with which learners interacted with workbooks in the three Learning Programmes was 52%. This means that workbooks are used by learners at least every second day. However, 30% of the educators indicated that they only worked with these books once or twice a week.

The majority of principals surveyed (90%) indicated that they had a master timetable, and 81% of them indicated that it reflected notional time, which would influence the frequency of work in books.
Experiential learning - for example, field trips and project work - was used by 52% of educators.

6.2.6 INSET and SGB training

The provision of in-service training (INSET) for educators and school governing bodies is one way to ensure that they have access to the latest developments and policies relating to education and governance of schools. Educators can benefit from in-service training in implementing the policy on Curriculum 2005. Through INSET, SGB members can better understand policies being implemented at their schools.

The national indicator for INSET and SGB training as a whole was 68,2%, implying that on average 68% of the respondents attended INSET. Approximately 76% of the principals indicated that SGBs received training, while 70,6% of principals considered the training they received as very useful. It is worth noting that less than 50% of the principals indicated that they attended in-service training courses in school management and administration before they became principals.

On average, 68% of educators indicated that they attended INSET programmes on OBE. The average duration of the INSET courses attended by the educators before and during 2001 is noted in Table 6.5. Across all the provinces, the average number of days of training received before 2001 can be calculated as equivalent to between 3 and 8 full days of training, which seemed to be insufficient to implement a totally new approach to teaching.

The majority of educators evaluated their INSET programmes as useful (60,2%). In-service training programmes presented by fellow educators and outside agencies were regarded as less successful than those presented by departmental officials. Also, nearly two-thirds of educators (62,6%) did not feel fully confident to implement OBE in classes, and rated the integration of the Learning Areas/Programmes and the development of learning material relatively higher.

<table>
<thead>
<tr>
<th>Table 6.5</th>
</tr>
</thead>
</table>

Duration (in hours) of INSET Courses on OBE attended by Grade 3 Educators, by Province

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 2001</td>
<td>30,2</td>
<td>23,8</td>
<td>37,8</td>
<td>34,8</td>
<td>28,3</td>
<td>62,6</td>
<td>28,4</td>
<td>24,8</td>
<td>40,1</td>
</tr>
<tr>
<td>2001</td>
<td>18,3</td>
<td>13,9</td>
<td>17,6</td>
<td>14,8</td>
<td>13,9</td>
<td>19,5</td>
<td>14,3</td>
<td>9,7</td>
<td>14,3</td>
</tr>
</tbody>
</table>

The low level of confidence in implementing OBE can be a result of:

- not all the educators attending in-service training programmes;
- school-based training (by teachers and principals) being rated lower than training by departmental officials; and
- the length of the in-service training courses (see Figure 6.4 for the percentage of educators attending INSET courses of varying duration).
In addition to those findings, it is worth noting that 68% of respondents attended in-service training courses. The attendance rates in the provinces ranged from 50 to 80%. Table 6.6 indicates the percentage of educators who received credits after attending INSET courses.

While most of the in-service training courses are structured in such a way that educators attending these courses will be able to teach according to the prescribed curriculum, very few educators received any credit for their attendance.

**6.2.7 Record keeping**

The indicator for record keeping had a small but negative influence on learner performance. At “lower-performing schools”, any additional time spent on record keeping seemed to have had a negative effect on learner performance, although this issue needs to be further investigated. This indicator takes the following responsibilities of the principal into consideration:

- keeping registers for teachers’ attendance and leave;
- keeping registers for learner attendance;
- maintaining an assets (stock) register;
- maintaining an inventory of textbooks/learning materials;
- maintaining a correspondence file system;
- maintaining a file of circulars;
- keeping written minutes of staff meetings; and
• keeping progress records of learners’ performance.

The following are the educator’s record keeping responsibilities:

• maintaining an attendance register for learners;
• preparing lessons/learning programme plans;
• keeping records of learners’ performance;
• keeping records of continuous evaluation;
• sending signed reports sent home to parents;
• maintaining learners’ portfolios;
• maintaining learners’ profiles; and
• keeping Foundation Phase curriculum policy documents.

Record keeping was rated at a level well above 90% nationally and in the provinces (see Table 6.7). Items that were rated below 90% but above 80% were the maintenance of learners’ portfolios and learners’ profiles (two essential aspects in OBE), as well as the keeping of a correspondence file system.

<table>
<thead>
<tr>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>92,1</td>
<td>95,0</td>
<td>96,7</td>
<td>93,3</td>
<td>92,1</td>
<td>95,0</td>
<td>93,7</td>
<td>97,3</td>
<td>96</td>
<td>95,3</td>
</tr>
</tbody>
</table>

6.2.8 Educator morale and attitude towards school

It is well documented in the different research findings that educator morale and attitude can have a significant impact on how learners perform. This indicator was based on:

• the principals and educators who would change to another career if they had the opportunity; and
• whether other stakeholders appreciated the work of educators.

Surprisingly, the results indicate that there was a negative correlation between educator morale and attitudes towards school and learner scores. Thus, learners performed worse in schools where educator morale was higher and attitudes were more positive. This phenomenon needs further research.

As noted in Figure 6.5, between 15% and 30% of educators across all provinces were unhappy with their jobs. Approximately 20% of principals and 26% of educators would change to another career if they had the opportunity.

Educators and principals differed on the influence of low educator morale on learning achievement. Educators rated it at an average of 35% while principals rated it at 59%. Principals might have judged the influence more objectively, as they were evaluating it from outside the teaching process. The scale
of this response ranges from “not at all” (0%), a “little” (33%), “quite a lot” (67%) to “a great deal” (100%).

Educators indicated that their lack of teaching skills only has a small influence on learner achievement (28%), while principals rated the level of influence of un-qualified and under-qualified educators on learner achievement at a much higher rate of 43% (a “little bit” to a “a great deal”).

![Figure 6.5 Rating of Educator Morale and Attitude to School, by Province](image)

### 6.2.9 School management and leadership

This indicator looks into organisational aspects such as:

- the policies of the school;
- management by the principal; and
- the role of the school management team.

Nationally, the indicator was 80.3% and there is not much deviation from this average in the provinces (see Table 6.8).

<table>
<thead>
<tr>
<th>Indicator for School Management and Leadership, by Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
</tr>
<tr>
<td>78,5</td>
</tr>
</tbody>
</table>

A policy aspect that was not well implemented by the stakeholders was around HIV/AIDS. Nationally, 42% of principals indicated that they had a school policy on HIV/AIDS. The existence of an HIV/AIDS policy in schools varied from 26% to 56% across the provinces.

Aspects that principals rated lower than the average were responses to:

- Does the school conduct appraisals of teachers? (56.8%)
- Does the school have the National Assessment Policy document? (63.2%)
• Does the school have a Provincial Assessment Policy document? (60.9%)
• Does the school have a school development plan? (75.8%)

The evaluation of principals by educators varied in the provinces from 68.9% to 79.6%, with a national average of 77.6%.

Educators evaluated the following managerial aspects of principals below the average:

• displaying adequate competence as a manager (76.4%);
• involving teachers in decision-making (74.4%);
• successful staff development (76.1%);
• monitoring teacher performance (75.7%); and
• dealing with non-performing staff (68.6%).

Principals evaluated the success of their in-service training in management at 75% and in financial management at 67.6%.

6.2.10 Assessment of learners and feedback procedures

The scale on which assessment and feedback procedures were calculated ranges from 100% (equivalent to “daily actions”) to 0% (equivalent to “never”). The national average of 52.4% means that assessment and feedback took place during 52 out 100 days, or every second day on average. The lowest indicator appeared in Northern Cape and Western Cape, and the highest in Eastern Cape. See Table 6.9.

<p>| Table 6.9 |
| Indicators for Assessment of Learners and Feedback Procedures, by Province |</p>
<table>
<thead>
<tr>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
<th>NC</th>
<th>LP</th>
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<th>WC</th>
<th>RSA</th>
</tr>
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<tbody>
<tr>
<td>55.6</td>
<td>52.1</td>
<td>51.5</td>
<td>53.5</td>
<td>53.0</td>
<td>42.1</td>
<td>52.5</td>
<td>54.6</td>
<td>42.3</td>
<td>52.4</td>
</tr>
</tbody>
</table>

6.2.11 Homework

The indicator for homework was calculated in the same way as for the assessment and feedback procedures. According to Table 6.10, the frequency of assigning homework was 47.2% - that is, 47 out of 100 days or almost every second day. The frequency in provinces did not deviate much. Feedback and the correcting of homework took place less regularly, on average “every third day” (33%).

<p>| Table 6.10 |
| Indicators for Homework, by Province |</p>
<table>
<thead>
<tr>
<th>EC</th>
<th>FS</th>
<th>GP</th>
<th>KN</th>
<th>MP</th>
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<th>LP</th>
<th>NW</th>
<th>WC</th>
<th>RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.3</td>
<td>50.0</td>
<td>49.7</td>
<td>46.6</td>
<td>45.0</td>
<td>50.3</td>
<td>45.0</td>
<td>44.1</td>
<td>48.4</td>
<td>47.2</td>
</tr>
</tbody>
</table>
6.3 Findings: Learner Performance

An overview of the findings indicates the following national average scores obtained by learners:

- Life Skills - 54%;
- Literacy - 54%:
  - Listening Comprehension - 68%,
  - Reading and Writing - 39%;
- Numeracy - 30%.

As indicated in Figure 6.6, the average performance of learners was consistent across all the provinces in all the Learning Programmes assessed. In addition, the difference in mean scores across the provinces in these Learning Programmes was small. This indicates that the scores obtained by learners within the different provinces were similar.

6.4 Quality Indicators Influencing Learner Performance

In this section, the influence of the quality indicators on the performance of the learners is examined by using regression analysis. Only the coefficients of the significant indicators and the R-square value are reported in Table 6.11.

A general overview of the results indicates the following:

- The quality indicators that displayed a significant influence on learner scores only explained 22% of the differences in learner performance. This implies that at least 78% of the variation in learner scores can be attributed to factors other than those considered in this analysis.
- The facilities indicator had the strongest influence on learner scores, followed by satisfaction rate of stakeholders, learning and teaching materials, teaching practices (learner responses), atten-
dance rates, contact time and time on task, assessment of learners and feedback procedures, teaching practices (educator responses), and school management and leadership.

- The indicators that displayed a negative influence on learner scores are:
  - repetition and dropout rates,
  - INSET and SGB training, and
  - record keeping.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>.256</td>
</tr>
<tr>
<td>Satisfaction rates of stakeholders</td>
<td>.171</td>
</tr>
<tr>
<td>Learning and teaching materials</td>
<td>.127</td>
</tr>
<tr>
<td>Teaching practices (learner responses)</td>
<td>.125</td>
</tr>
<tr>
<td>Attendance rates, contact time, time on task</td>
<td>.075</td>
</tr>
<tr>
<td>Assessment of learners and feedback procedures</td>
<td>.041</td>
</tr>
<tr>
<td>Teaching practices (educator responses)</td>
<td>.033</td>
</tr>
<tr>
<td>School management and leadership</td>
<td>.067</td>
</tr>
<tr>
<td>Repetition and dropout rates, age by grade</td>
<td>-.058</td>
</tr>
<tr>
<td>INSET and SGB training</td>
<td>-.079</td>
</tr>
<tr>
<td>Record keeping</td>
<td>-.085</td>
</tr>
<tr>
<td><strong>R-square</strong></td>
<td><strong>.223</strong></td>
</tr>
</tbody>
</table>

In the next section, a detailed discussion on the significant indicators is provided. It should be noted, however, that the findings only point to specific trends and practices, and specific reasons for these findings cannot be provided without additional information and/or analysis.

### 6.5 Discussion and Analysis of Findings

In this section, the findings on indicators that related to quality are discussed. These findings are interpreted with a view to establishing baseline information on the quality of education provision.

#### 6.5.1 Facilities

Project 7 (School Infrastructure) of Programme 2 (School Effectiveness and Educator Professionalism) of the *Implementation Plan for Tirisano* (DoE, 1999) commits itself to ensuring that all schools meet the minimum physical and infrastructural requirements necessary to establish and support a conducive learning and teaching environment. Principals of 39% of the schools surveyed reported that their schools were either not suitable for teaching or needed structural repairs. Classrooms that are not suitable for education will hamper the quality of education. Educators indicated that 11.3% of them were teaching classes with more than 50 learners, while an additional 21.9% were teaching classes with 40 to 50 learners. Quality education, especially outcomes-based education with its emphasis on group work and the use of additional resources, cannot take place in overcrowded classrooms. The Department of Education must prioritise the provision of sufficient teaching space to ensure that quality education can take place in all of South Africa’s schools. Before undertaking a classroom building
programme, the Department should perform a needs analysis to determine the available teaching space in neighbouring schools. It might be more cost-effective in the interim to transport learners to schools where teaching space is under-utilised.

6.5.2 Learning and teaching materials

The availability of learning support materials can have an influence on the quality of education that learners receive. The findings of this Systemic Evaluation at the Grade 3 level were that learners in those schools with more learning and teaching materials obtained higher scores than those in schools with fewer materials. An alarming finding was the low percentage of ordered material that had been delivered to schools. The Department of Education must ensure that ordered materials are available at every school from the beginning of the school year to prevent learning time being wasted.

6.5.3 Teaching practices

Teaching methods are dialectically related to classroom organisation and practices in that they have a potential to influence equitable creation of a conducive environment for learning.

It is clear that practices related to outcomes-based education were not fully implemented in Grade 3 classes.

In general, learners’ responses consistently suggested that learner involvement in classroom activities was low.

6.5.4 Attendance rates, contact time, time on task

Quality education cannot take place when the learners and educators are not present every day. The school management team must take responsibility for ensuring that learners and educators are present at all times. There must also be communication with parents regarding the absenteeism of their children. According to the South African Schools Act of 1996, it is the responsibility of the parents to see that their children attend school regularly, and it is compulsory for all learners between 7 and 15 years of age to attend school.

The indication that only one-third of the educators started their lessons on time is a matter of concern. The fact that many educators were not using teaching periods for teaching purposes is also reason for concern, as it undermines the education process. The principals and the school management team must institute a code of conduct to ensure that learners and educators perform their tasks to the best of their ability. Principals must also undertake to deal with educators who do not perform their duties.

The number of days lost for teaching purposes can be decreased by ensuring that:

- teaching and learning materials are delivered on time;
- extracurricular and cultural activities are performed after normal school hours only; and
- professional development and meetings take place after school hours only.
6.5.5 Assessment of learners and feedback procedures

Feedback to learners on their homework assignments took place on average every third day. This is despite the fact that feedback to learners, especially for remediation purposes, forms an integral part of the learning process. Report-back to learners on their progress is pertinently mentioned in the assessment policy documents. Thus, feedback to remedy problems and to encourage learners should be given at more regular intervals.

With regard to assessment, although the national average indicates that these actions took place every second day on aggregate, there were cases where educators reported that assessment took place once a week or once a month. In outcomes-based education, where continuous assessment is propagated, it is essential that assessment of all aspects should take place regularly. It is also necessary to give clear feedback to learners and to remedy problems that might occur. Assessment must be implemented according to the policy documents so that it is more uniform. Principals and Learning Area managers (Learning Area facilitators) must see that these policies are being implemented.

6.5.6 Repetition and dropout rates, age by grade

The policy on the admission age of learners to school should be implemented in such a way that learners are tested to make sure that they are school-ready. According to the South African Schools Act, it is compulsory for children to attend school between the ages of 7 and 15 years, and it is the responsibility of the parents to see that this is done. The principal and the SGB of the school must communicate this responsibility to the parents. When there are dropouts among learners younger than 15 years, the principal must remind the parents of their responsibility.

6.5.7 INSET and SGB training, and school management and leadership

It must become the policy of the Department of Education to award an acknowledged teacher training qualification to educators who have attended in-service training courses. Bursaries must be made available to enable un-qualified and under-qualified educators to attend in-service training. This might enhance the quality of their teaching.

All in-service training courses should be accredited by a recognised institution. This will have the following benefits:

- the quality can be assured;
- the educators should have mastered the content before gaining credits; and
- in-service training courses can be structured according to need.

Strong school management and leadership are crucial to the smooth running of a school. It is essential, therefore, that the school management team is able to function at a high level. Principals rated the success of their in-service training in management at 75% and in financial management at 67.6%. Rather than waiting until principals are already in their leadership posts to provide them with training, they should be trained before they take up their posts.
According to educators, almost 69% of principals did not deal with non-performing educators. This could be a sign that principals have not received sufficient managerial training. They must, among other things, be taught to conduct staff development and to deal with educators who are not performing adequately.

6.5.8 Record keeping

Learner portfolios and profiles do not only form an essential part of OBE, but also reflect the progress that the learner has made during the year. They are an indication of the quality of the education that the learner has received. Teachers must be urged to maintain portfolios and profiles. As stated in the Assessment Policy in the General Education and Training Band, cumulative evidence of learner achievement must be recorded and these records should accompany all learners throughout their learning paths.

6.6 Policy Suggestions

- Government must develop a plan for dealing with the infrastructural backlogs in schools, and ensuring that the backlog is eradicated as a matter of urgency.
- Government must hire additional educators to lower the educator:learner ratios at schools where they are above the norm.
- Government must ensure that learning and teaching materials are delivered to schools on time, before the start of the school year.
- Government must provide in-service training courses through accredited institutions to un-qualified and under-qualified teachers, and ensure that teachers receive credit for these courses. Educators who have attended in-service training courses and gained a higher qualification must be awarded an acknowledged teacher training qualification.

6.7 Conclusion

This chapter gave an analysis of the findings on the transformation goal of quality at the Grade 3 level. The chapter looked at the findings on the quality-related indicators, as defined in the Systemic Evaluation Framework (DoE, 2001a). It also presented an overview of learner performance scores, aggregated by province.

The major findings were that there is a strong correlation between learner scores and the quality of the facilities available at schools. The same holds true for learning and teaching materials - learners in those schools that had more learning and teaching materials obtained higher scores. There was also a correlation between attendance rates, contact time and time on task, and learner scores.

From the results reported in this chapter, it is still unclear why critical indicators that are known to influence learner performance - for example, assessment of learners and homework - did not display greater influence on learner scores. It is vital that specific reasons for these findings be determined in follow-up studies.

Several aspects have been highlighted which can be applied to improve the education system. The pass rates of learners and the satisfaction of stakeholders might be seen as ultimate indicators of the quality of education, but they are only the result of all the actions in the input and process phase of
education. Aspects discussed in this chapter that might improve pass rates, and thus also the satisfaction of stakeholders, include:

- the timely provision of learning and teaching materials;
- the improvement of facilities at school;
- the effective use of time on task;
- further training of educators; and
- in-service training of educators and principals.

The following chapter focuses on learner assessment.
7.1 Introduction

The results reported in this chapter were obtained from a sample of approximately 52 000 Grade 3 learners selected from all provinces and districts. Results are reported for each of the three Learning Programmes assessed:

- Literacy, which comprises two instruments - Listening Comprehension, and Reading and Writing;
- Numeracy; and
- Life Skills.

Results are aggregated by province, gender, item format and, for the Literacy tasks, by reading and writing.

The mean scores were calculated on data weighted according to the sample size for each school, district and province.

7.2 Reliability of Assessment Instruments

Reliability coefficients (in this case, alpha coefficients) were calculated to determine the reliability of the instruments used for assessing learner performance. The alpha coefficient was used as it is widely accepted as a fundamental index of reliability.

As noted in Table 7.1, the alpha coefficients for all the instruments were acceptable, indicating that the results obtained can be regarded as highly reliable.

<table>
<thead>
<tr>
<th>INSTRUMENTS</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Skills</td>
<td>0.89</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>0.79</td>
</tr>
<tr>
<td>Literacy (Reading and Writing)</td>
<td>0.88</td>
</tr>
<tr>
<td>Numeracy</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Additional analysis was conducted on each item used in this study. The results indicated that all items applied were acceptable and thus no items were excluded from the analysis.

7.3 Learner Performance

The national average scores obtained by learners are presented in Figure 7.1. In general, learners obtained the lowest scores for Numeracy (national mean of 30%) and 54% for both Life Skills and...
Literacy. However, for Literacy, learners were assessed for both Reading and Writing and Listening Comprehension, with the national scores averaging 39% and 68% for each of these areas respectively.

![Figure 7.1 National Average Scores, by Learning Programme](image)

The distribution of learner scores for each Learning Programme is presented in Figures 7.2 to 7.6. Literacy scores are presented for both areas assessed.

As can be seen in Figure 7.2, the distribution of Life Skills scores presents a relatively equitable distribution as large numbers of learners obtained scores between 30% and 90%. Figure 7.3 presents a distribution similar to that of a normal curve, indicating that most learners obtained scores between 40% and 70% for Literacy. In contrast, the distribution of Numeracy scores (Figure 7.4) are skewed to the left, as most of the learners scored below 40%. For Listening Comprehension the scores are skewed to the right, indicating that the majority of learners scored 60% or higher.
Figure 7.2 Distribution of Life Skills Scores

Figure 7.3 Distribution of Literacy Scores
Figure 7.4  Distribution of Numeracy Scores

Figure 7.5  Distribution of Literacy (Listening Comprehension) Scores
Figure 7.6  Distributions of Literacy (Reading and Writing) Scores

7.4 Learner Scores by Province

As indicated in Figure 7.7 the pattern of performance of learners was consistent across all the provinces in all three Learning Programmes assessed. In addition, the variation in mean scores across the different provinces was small, indicating that in most cases the average scores across the provinces for each Learning Programme were similar.

7.5 Learner Performance by Gender

The average scores for girls were slightly higher than that of boys in all three Learning Programmes assessed (see Figure 7.8). The pattern of performance, however, is similar to that noted in Figure 7.7 for both boys and girls - that is, the lowest scores were obtained for Numeracy and similar scores for Life Skills and Literacy.
7.6 Learner Performance by Item Format

Additional analyses were conducted to compare the performance of learners on the multiple-choice questions (MCQ) and free-response questions (FRQ) for Numeracy and Literacy tasks. As noted in Figure 7.9, scores obtained for the MCQ were significantly higher than those obtained for the FRQ. This result indicates that learners performed better on tasks that required them to identify and select a correct response than on tasks that required them to produce their own response.
7.7 Literacy Scores by Reading and Writing

Additional analyses conducted on the Literacy scores revealed that across all provinces learners obtained significantly higher scores on the reading tasks than on the writing tasks (see Figure 7.10). Except for KwaZulu-Natal, the mean scores for all provinces were below 50% for the reading tasks and below 35% for the writing tasks. These results support the findings noted in section 7.5, as learners seem to have greater difficulty in producing their own (written) responses.
7.8 Language of Instruction and Home Language

The assessment instruments were administered to learners in the language of learning and teaching used at the school. The data indicates that the majority of learners (75%) did in fact respond to the assessment tasks in their home language. However, as shown in Figure 7.11, there were large variations between provinces. For example, in Gauteng learners who took the instrument in their home language were in the minority - approximately one-third. In other words, about 64% of the learners responded to the assessment tasks in their second or third language. The corresponding figure was 13% for Eastern Cape, 26% for the Free State, 17% for KwaZulu-Natal, 46% for Mpumalanga, 8% for Northern Cape, 17% for Limpopo, 22% for North West, and 10% for Western Cape. This could be attributed to the movement of learners to English-medium schools, the selection of English as a medium of instruction and, to some extent, the increasing enrolment of learners from outside the borders of South Africa.

![Figure 7.11 Language of Assessment Tasks versus Home Language of Learners](image)

Analysis of the effect of home language on learner scores revealed that learners who took the instruments in their home language obtained significantly higher scores across all learning areas than their colleagues who had to respond to the assessment tasks in their second or third language (see Figure 7.12).
This pattern was similar across all provinces for the different Learning Areas and item formats, except for Mpumalanga where the Numeracy scores of second-language learners were higher. The mean percentage difference in scores at the national level varied across the different Learning Programmes, with the greatest difference noted for Listening Comprehension (7.68%), followed by Life Skills (6.2%), Literacy (5.24%) and Numeracy (2.18%). These differences also varied between the provinces (see Figures 7.13 and 7.14).
It is worth noting that large differences in scores across the different Learning Programmes were detected in Gauteng. The score differences between the home and second language learners averaged approximately 18% in favour of the home language learners. This difference is extremely high and suggests a need for further investigation.

### 7.9 Conclusion

The analysis of the learner performance results depicts a typical Grade 3 learner in the South African education system experiencing the greatest difficulty in Numeracy, with average levels of performance of 30%. The performance of learners in Life Skills and Literacy was significantly higher (54%). However, the relatively high Literacy Scores are due primarily to the higher scores obtained by the majority of learners in Listening Comprehension (68%) as opposed to the Reading and Writing section (39%).

There were minimum differences in scores between boys and girls, although the performance of both boys and girls followed the same the pattern of performance for each Learning Programme. Of great concern, though, is the extremely poor performance of learners on questions that required constructed responses.

Two critical issues highlighted by these findings are:

- The poor numeracy and literacy skills of learners within the system point to the need for urgent intervention to address this situation. Two factors that must be addressed in any intervention program relate to:
  - the limited ability of learners to produce their own responses, and
  - improving access of learners to learning and teaching interactions conducted in their first/home languages.
• While the average scores across provinces are similar for the different Learning Programmes (Figure 7.7), the distribution of scores noted in Figures 7.2 to 7.6 as well as the differences in performance due to language highlights the complex nature of the education system and thus points to the need to further unpack the differences manifested within and between schools, districts and provinces.
CONCLUSION

In this final chapter, a conclusive overview of the findings of this report are given. There are a number of different ways in which schools can be effective. Teachers at effective schools expect and ensure high standards of work and behaviour. Teachers are expected to be responsive to learners, and try to include them in the life of the school. This pressure and support make an effective school.

This study on the Systemic Evaluation of the education system raises doubts about the effectiveness of the education system in producing required outcomes - in other words, learner performance. The poor performance of learners, particularly in Numeracy and Literacy, is cause for concern. The study has attempted to understand how various contextual factors have influenced the performance of learners, and these findings can be drawn upon to determine the nature of interventions that are required of the system. However, many questions regarding the factors that influence learner performance remain unanswered and require further investigation.

At the level of policy, much progress has been made in defining the transformation goals of access, equity and quality. The school admissions policy and the National Norms and Standards for School Funding are two examples of this endeavour. However, in practice there are a number of factors that prevent the education system from realising its transformation goals of access, equity and quality. During the next surveys the progress in achieving these goals will be measured.

Despite the many good policies of the Department of Education to promote and encourage greater access to education, many learners have been denied access to quality education as a result of their home environment which cannot provide resources such as reading materials. In addition, the lack of access to pre-school by learners at a crucial stage of their cognitive development is a major factor affecting the performance of learners in their schooling years. The absence of resource centres in many schools also denies learners access to suitable learning opportunities.

The goal of achieving equity in schools, too, has not been attained. The wide disparity in the fees levied by schools indicates that schools have inequitable access to private contributions. There is a clear distinction between “poor” and “rich” schools when comparing their school fees. Although the policy on the norms and standards for the funding of schools is designed to reduce this inequity, this study has not been able to demonstrate the extent to which it has been effective as an instrument of redress.

This study has attempted to understand the quality of education available to Grade 3 learners in a number of ways, one of which was the measurement of learner performance. There are, however, a number of other indicators of quality education, one of which is the quality of teaching in the classrooms. According to the findings of this study, the indicator for teaching practices of educators revealed that outcomes-based education is not being fully implemented in the classrooms. Although educators have received in-service training on OBE, many do not feel confident enough to implement it.

Another factor influencing the quality of education is the educator:learner ratio. Although the average educator:learner ratio was calculated at below 1:40, there are still many schools and classrooms that are overcrowded, which prevents access to schools by learners and can create conditions not
conducive to learning and the implementation of C2005. Both principals and educators agreed that large classes had a negative influence on learner achievement, and that overcrowded classrooms did not contribute positively towards the full implementation of OBE.

The effective use of contact time and time on task was also a problem. The majority of educators surveyed did not use their contact time effectively, with lessons not starting on time and educators performing activities other than teaching. Time was also lost due to late registration, the non-availability of learning and teaching materials, and illness among staff members.

The achievement of quality in education has also been hampered by factors such as unsafe conditions at school, the high level of absenteeism of learners and educators, and the poor attitude and morale of some of the teachers.

To ensure access to quality education, learning support materials must be made available to learners. Access to in-service training by all educators should be prioritised, so that teaching practices can be improved. Provincial departments of education should focus on monitoring school performance and the implementation of OBE.

This report should be viewed as a baseline study for quality assurance purposes. The progress made by the Department of Education in achieving the transformation goals of access, equity and quality will only be seen in the next surveys.


