The quality of education: some policy suggestions based on a survey of schools

Namibia

by

Friedhelm Voigts
Ministry of Basic Education and Culture
Windhoek, Namibia

Foreword

The Southern Africa Consortium for Monitoring Educational Quality (SACMEQ) is a consortium of Ministries of Education located in the Southern Africa sub-region. For several years these Ministries have worked in close partnership with the IIEP in order to undertake educational policy research with the main aim of generating reliable information that can be used by decision-makers to plan the quality of education.

In January 1997 the Government of Zimbabwe officially registered SACMEQ as an international non-governmental organization. SACMEQ's Sub-regional Co-ordinating Centre is located within UNESCO's Harare Office. The work of the Centre is managed by a Director and is guided by a Committee chaired by Zimbabwe's Minister of Education. The 'founding members' of SACMEQ are the IIEP, Kenya, Malawi, Mauritius, Mozambique, Namibia, Tanzania (Mainland and Zanzibar), Swaziland, Zambia, and Zimbabwe.

SACMEQ's programme of research and training has four features which have optimized its contributions to the field of educational planning in Africa: it provides research-based policy advice concerning issues that have been identified by key decision-makers, it functions as a co-operative venture based on a strong network of educational planners, it combines research and training components that are linked with institutional capacity building, and its future directions are defined by the participating Ministries.

SACMEQ's initial educational policy research project was assisted during 1994/1995 through a Funds-in-Trust (FIT) agreement between the Italian Government and UNESCO. In 1996 SACMEQ's sub-regional activities were financed under an FIT agreement with the Netherlands Government. This arrangement was renewed in 1997 for the launch of SACMEQ's Sub-regional Co-ordinating Centre.

The costs associated with future SACMEQ projects will be financed from two sources. First, the SACMEQ Sub-regional Co-ordinating Centre will support co-operative sub-regional activities which include project design, sub-regional training workshops, construction of data archives, and dissemination of results. Second, the participating Ministries will cover their own within-country research costs related to printing, field work operations, data entry and cleaning, the provision of general overheads for project co-ordination, and the publication of national reports.

This report presents the research results and policy suggestions that emerged from the implementation of SACMEQ's initial educational policy research project. It is offered to other educational planners – not as a final evaluative comment, but rather as a stimulus for constructive discussion of educational policy options, and also as a successful model of productive collaboration among educational planners from many different countries.

Hon. Mr John Mutorwa   Dr Jacques Hallak
Minister of Basic Education and Culture   ADG UNESCO / Director, IIEP
Windhoek, Namibia   Paris, France

Further Information

For further information about SACMEQ and its policy
research programme, please contact:

The Director
SACMEQ
UNESCO Regional Office
8 Kenilworth Road
Harare
Zimbabwe

Telephone:	(263-4) 776 114-5, 776 775, 746 231, 786 598
Fax:	(263-4) 776 055
E-mail:	UHHAR@UNESCO.ORG

For further information about the IIEP's programme of
co-operation with SACMEQ please contact:

Dr Kenneth N. Ross
International Institute for Educational Planning
7-9 rue Eugène-Delacroix
75116 Paris
France

Telephone:	(33-1) 45 03 77 19
Fax:	(33-1) 40 72 83 66
E-mail:	100143.37compuserve.com

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Chapter 1

Background to the study

Introduction

Namibia's Education Ministry set itself five goals after independence in 1990: equitable access to education, improvement of internal efficiency, quality, lifelong learning, and democratic participation. The post-independence reform process was initially spearheaded in the formal education sector by the development of new uniform curricula in the secondary school phase, followed by a reform of primary education curricula. Concern about the efficiency and quality of the Namibian education system has been increasing since shortly after independence. One study (Chuard et al., 1995) emphasized the high costs of the system as compared with other countries, while there were still major disparities in the quality of education and resource allocation. The commitment towards improving the quality of education was manifested by a decree from the Office of the Minister declaring that "during the year 1995 the focus of the Ministry's efforts is on *quality*" (Ministry of Education and Culture, 1995).

Under these circumstances it was essential for the Ministry to study the quality of the education system in a way that would show changes within Namibia between 1992 and 1995, and the position of the system in relation to comparable countries. The Ministry had to obtain a measure of disparities within the system and start to determine the causes for differences in educational quality. Two studies were thus conducted in parallel: Namibia participated in the Southern Africa Consortium for Monitoring Educational Quality (SACMEQ) study of Grade 6 English reading comprehension and factors affecting achievement, and it repeated a study into learner achievement in Grade 7 English and mathematics, conducted in Namibia in 1992 (Ministry of Education and Culture, 1994). This report is a first account of the part of the research undertaken in collaboration with SACMEQ. The Grade 7 survey, i.e. the National Learner Assessment (NLA) survey, will be reported separately.

Aspects of primary education in Namibia

Namibia's education system comprises seven years of primary and five years of secondary education. Education is compulsory from the age of six up to the end of primary school or up to the age of 16, whichever is sooner. This had not been enforced up to 1997, mainly due to a lack of school places. In 1995, the net enrolment rate for the 6- to 16-year-olds was 89 percent[1], and 95 percent of the 7- to 13-year-olds attended school; less than 5 percent of children seemed never to attend school. The Ministry has set itself the goal of providing basic education, defined as the first 10 grades of schooling, to all Namibian children. Pre-primary education is a function of local governments and thus comes under the Ministry of Local and Regional Government and Housing. As a result, only a small number of private schools offer pre-primary education under the auspices of the Ministry of Basic Education and Culture.

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[1] Based on the 'medium' scenario of growth of the Central Statistics Office.

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The Ministry manages its schools through seven regional offices. The two largest education regions are Ondangwa East and Ondangwa West, comprising 24.9 and 28.5 percent of all learners respectively in 1995.

Figure 1.1. Education regions

Pre-independence education in Namibia was administered by 11 education authorities, of which 10 were ethnically based. Four current education regions in the north of the country, Katima Mulilo, Rundu, Ondangwa East and Ondangwa West, cover geographic areas in which the great majority of schools were under three poorly endowed ethnic education authorities until independence in 1990. In each of the remaining three current education regions, pre-independence education was provided by five or six different authorities which had widely differing levels of resources at their disposal. The legacies of the pre-independence system still persist, as will be obvious from the results of this study. Eradicating this problem is a complex process, and this study is intended to provide contributions towards addressing this challenge.

A total number of 471,653 learners attended school in August 1995, of whom 367,249 were in primary grades, 103,149 in secondary grades and 1,255 in other courses, such as in special schools and vocational courses. The number of learners increased by 2.9 percent annually, on average, between 1991 and 1995. In 1995, 50.8 percent of all learners were female, 49.9 percent in the primary phase and 53.9 percent in the secondary phase. Regional differences were significant in the higher grades: for example, the percentage of female learners in the upper primary phase ranged between 47.5 percent in the Katima Mulilo region and 54.2 percent in the Ondangwa East region. In secondary grades, these percentages ranged between 41.2 in Rundu and 58.9 in Ondangwa East.

Repetition rates had been, and in 1997 still were, high, resulting in a very wide age-spread of learners in the same grade. In the primary phase, repetition rates ranged between 13.9 percent in Grade 3 and 24.2 percent in Grade 1 from 1994 to 1995. The age-spread in Grade 6 in 1995 can be illustrated by the fact that only 24 percent of learners in that grade were 'appropriately aged', that is 11 or 12 years old, while 19 percent were older than 16.

Out of the 16,126 teachers serving in government and private schools in 1995 in Namibia, 28 percent had received no formal teacher training. Sixteen percent of all teachers had a qualification lower than Grade 12 and no teacher training. Another 24 percent also had an academic qualification lower than Grade 12, but with some teacher training. Only 12 percent of all teachers had received teacher training and a qualification, academic and/or teacher training, amounting to three or more years post secondary.

Policy concerns of the Ministry of Basic Education and Culture

The broad policy concerns of the Ministry are manifested in its above-mentioned goals. Specific issues pertaining to the formal education system and requiring attention include the following:

Efficiency: The efficiency of the system is broadly determined by its quality and costs, both of which are matters of concern. There are some reports (Fair, 1994; and Wage and Salary Commission, 1995) and much anecdotal evidence of major shortcomings in the quality of primary education in many Namibian schools. Results of national examinations in the secondary phase also point to major differences in the quality of education in that cycle of education. In 1996, the Namibian education sector was consuming 27 percent of government's recurrent expenditure. This is a comparatively large percentage in international terms, especially with many of the deficiencies of the system, constraining the improvement of quality and equity, still persisting.

Equity: The major components of inequitable resource allocation in the formal education system are the number of teachers, the qualifications and salaries of teachers and the extent of hostel accommodation. Some of the apparent disparities are a reflection of the low population densities in large areas of the southern part of the country, demanding smaller class sizes and a high proportion of hostel accommodation. The magnitude of the differences is, however, unacceptable. The availability of educational materials still seems to vary considerably despite a more equitable budget allocation having been introduced in the years after independence. The backlog in physical facilities is being addressed by donor-funded construction projects and by a needs-based allocation of government resources introduced since the 1996/1997 financial year. The last disparity will, for obvious reasons, require many years to be resolved.

Access: Namibia already has a 95 percent net enrolment rate for 7- to 13-year-olds. The major concern about access to education is therefore directed towards so-called marginalized children, including 'street children', children of nomadic parents, and farm workers' children, especially the children of San-speaking farm workers.

Gender equality: While Namibia's national statistics show small gender inequalities, there are significant regional differences which require the introduction of appropriate policies that must address disparities in different regions.

Age spread: High repetition rates, and the absorption of over-age learners, after independence resulted in extreme age differences of learners being taught together in the same classes. The Ministry needs to assess the extent to which this situation impacts upon teaching and introduce appropriate policies to minimize any detrimental effects. Future admission and promotion policies are closely linked to this aspect of education and to the question of how the Ministry can ensure that learners are achieving the goals of the curriculum without repetition.

Teacher competencies: Teacher-training levels are exceptionally low in many schools. The upgrading of teachers has been identified by the Ministry as a priority. The dilemma the Ministry is faced with is that teachers expect improved remuneration if they undergo extensive training, resulting in salary expenditures that the government cannot afford without implementing major cost-recovery and austerity measures.

Support services: Little is known about the effectiveness of the support services provided by inspectors and advisory teachers to teachers and school principals. The general assumption that these services are essential, but insufficiently provided, is probably

true. It is, though, necessary to obtain conclusive evidence before the Ministry decides to withdraw resources, teachers, and funds from schools in order to improve these services.

Curriculum: Curriculum reform is an ongoing process. The society is dynamic and there are always changes in the knowledge, skills, and values required by the employers of those leaving school, and the higher levels of schooling for those continuing in school. Given the new curricula in the schools, one of the first tasks is to establish which of the current objectives are being well, averagely, and poorly achieved. Remedial action is then required to change the teaching materials or make other appropriate adjustments in order to ensure that poorly achieved objectives are adequately addressed. At the same time, work needs to be undertaken to assess the impact of changes in the society on the curriculum.

It is against the background of the above policy concerns that the Ministry decided to invest substantial resources in research to obtain some conclusive quantitative evidence to guide its policy decisions.

Research in response to the policy concerns

In its endeavours to determine suitable policies to address shortcomings in the education system, the Ministry faced several questions:

- What affects learner achievement? To what extent can differences in learner achievement be attributed to factors relating to the learner's characteristics and home background, the teacher, the school, etc.? Are there gender differences in achievement?

- How do achievements vary between education regions within Namibia?

- Do Grade 7 learners perform significantly better than Grade 6 learners? (A longitudinal study in a small number of schools had cast doubts on increased performance.)

- Did learner achievement in primary education change after the National Learner Baseline Assessment (NLBA) study conducted in Namibia in 1992?

- What are the differences in the availability of educational materials in different schools?

- How does the achievement of Namibian primary learners compare with the achievement in comparable countries?

- What are the similarities and differences in factors affecting achievement in different countries?

Namibia conducted a baseline assessment of learner achievement in English and mathematics in Grades 4 and 7 in 1992. The Ministry intended to repeat the study in 1995, then to be referred to as the National Learner Assessment (NLA) study. It was decided later to repeat the 1992 survey only in Grade 7. Analyses of the 1992 study had highlighted the need to collect substantial background information, together with an assessment of learner achievement, to be able to inform policy development. While the repetition of the NLBA study was to provide

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a comparison with achievements in 1992, it could not provide an international comparison of achievement and factors affecting achievement.

It was in this situation that the Ministry took up the opportunity to participate in the initiative of several Southern African countries, guided by the International Institute for Educational Planning (IIEP), to undertake a study into the quality of education in each of the member countries. This initiative developed into SACMEQ, of which Namibia became a founding member.

The first SACMEQ research project was aimed at answering five main policy-related questions:

(a)   What are the baseline data for selected inputs to primary schools?

(b)   How do the conditions of primary schooling compare with the Ministry's own benchmark standards?

(c)   Have educational inputs to primary schools been allocated in an equitable fashion among and within education districts?

(d)   What is the level of reading achievement for Grade 6 pupils?

(e)   Which educational inputs to primary schools have most impact upon the reading achievement of Grade 6 pupils?

The second of these policy questions was not directly applicable to Namibia, as Namibia still had to determine realistic benchmark standards. The fragmented pre-independence education system had left Namibia with diverse standards, some of which were too costly to apply to all schools, while others were inadequate for the provision of quality education. This study should inform the process of determining benchmark standards by providing information on the actual situation in Namibia, and by allowing an international comparison among the SACMEQ countries.

SACMEQ and the IIEP gave their approval for the use of the SACMEQ survey instruments and test items in the Ministry's intended Grade 7 NLA survey. This allowed the Ministry to replace a few of the 1992 NLBA test items with items from the Grade 6 reading study, providing for comparisons between Grades 6 and 7. It also allowed the Ministry to collect the same background information in the SACMEQ and the NLA study. The survey was further enhanced by the addition of a teacher test.

With the combination of the SACMEQ and Namibian tests and questionnaires, the Ministry had sufficient research instruments to address all of its research questions. Participation in SACMEQ's initial educational policy research project provided the Ministry with access to substantial training in research skills and to professional support and advice in this field.

It is intended to analyze the surveys in several stages. This first report presents the results of the SACMEQ survey, including first analyses and policy recommendations. Further analyses of the data, concentrating on the influences of the learner, teacher and school levels, are planned. The Grade 7 survey will be reported in a similar fashion.

Chapter 2

The conduct of the study

Introduction

This chapter provides a broad overview of the way in which the SACMEQ survey was conducted in Namibia. It describes the collaborative work of the SACMEQ countries in planning the study and developing the research instruments. The sampling, data collection, and data-processing methods are also described. The last section of this chapter provides an outline of the structure of this report.

Co-operation with SACMEQ

In 1991 and 1992 the IIEP and the Ministry of Education and Culture in Zimbabwe conducted a research study on 'Indicators of the quality of education' (Ross, 1995). One of the important aspects of this research was its direct application to policy formulation in the form of policy proposals contained in the reports. This work also resulted in a series of training workshops for educational planners from the Southern African region in research and related technical skills. As a further development, a sub-regional co-operative project aimed at monitoring progress towards the achievement of the educational quality goals defined by the 1990 Jomtien conference on 'Education for All' emerged. A formal research plan was adopted during a meeting in Harare in September 1994. On the basis of this plan the Southern Africa Consortium for Monitoring Educational Quality (SACMEQ) was launched in Harare in February 1995 by the SACMEQ National Research Co-ordinators (NRCs) from the Ministries of Education in Kenya, Malawi, Mauritius, Namibia, Tanzania (Mainland), Tanzania (Zanzibar), Zambia, and Zimbabwe. Namibia joined the group only in September 1994.

SACMEQ designed its first collaborative research project in 1994 and early 1995. Five participating countries conducted identical surveys in the period August to October 1995. The consortium intends to conduct further collaborative research projects in various subject areas and school phases in the future. SACMEQ became an NGO in 1997, with a Managing Committee consisting of high-level officials drawn from the member Ministries of Education.

Instrument development

The data collection instruments for SACMEQ's initial research project were constructed in first-draft form at the September 1994 meeting of NRCs in Harare. The NRCs developed the blueprint for a test of reading literacy. Items were supplied by NRCs and some items were taken from the 1991 Zimbabwe study and from an international study of reading literacy conducted by the International Association for the Evaluation of Educational Achievement (IEA). Based on policy issues defined by key decision-makers within the SACMEQ Ministries of Education, the NRCs constructed questionnaires for learners, teachers and school principals. Two supporting data collection documents were developed to facilitate cross-checking the links between the different data collection instruments. The instrument development process included a first pilot study in five schools in the vicinity of Harare. All participating countries later pilot-tested the instruments in at least five schools in each country. An important aspect of the instrument development was the design of blank, or "dummy", tables for the final reporting of research results.

For the purpose of the study, reading comprehension was defined as: "the ability to understand and use those written language forms required by society and/or valued by the individual". This definition was sufficiently general to accommodate the different traditions and cultures represented in the participating SACMEQ countries, but specific enough to provide guidance for the test construction. Writing ability was deliberately excluded from the definition, and only minimal writing ability was required of learners throughout the testing process.

The domains of reading comprehension materials included in the learner test involved the following three dimensions:

(a) **Narrative prose:** Continuous text in which the writer aimed to tell a story, whether fact or fiction.

(b) **Expository prose:** Continuous text in which the writer aimed to describe, explain, or otherwise convey factual information or opinion to the reader.

(c) **Documents:** Structured information organized in such a way that learners were required to search, locate, and process selected facts rather than to read every word of a continuous text.

After examining syllabi from several SACMEQ countries in the subject area of Grade 6 English reading, a common framework or 'blueprint' for the learner reading test was developed. The blueprint was constructed by preparing a 'skills by domain' table (*Table 2.1*). The three domains have been described above. The reading skills were extracted as the most important reading skills mentioned in several syllabi. In order to obtain a balanced test, each of the 21 cells in the table was allocated a number of items in proportion to the emphasis given to it across the syllabi. To illustrate, across the syllabi about one third of the emphasis was on 'narrative' and therefore 21 out of 59 items were allocated to this domain. Within 'narrative' around half of the emphasis in the syllabi was on 'verbatim recall' of information, being reflected by the allocation of 10 of the 21 items to this reading skill.

The test items were specifically written for the test or taken from other tests and were tried out on a judgement sample in five countries. Item analyses were undertaken on each of the five countries' test data and also on the pooled data.[2] This resulted in a 60-item test. The total number of 60 test items was selected in order to avoid learner fatigue during the testing. After the analysis of the final data, one item was dropped, resulting in a 59-item test.

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[2]   A classical item analysis was undertaken on each country's data, and also on the pooled data from all countries. Where the point biserial correlation between the 'correct' answer and the total score was less than 0.20, then either the passage part, item stem, or option answer was improved or, if this was not possible, the item was dropped from the final test. Furthermore, if the point biserial correlation between a wrong answer and the total score was positive, then either the option was reworded or the item was dropped from the final test.

Table 2.1.   Skills by domain blueprint for the learner reading test

Reading skills	Reading domain			Total items
	Narrative	Expository	Documents	
Verbatim recall	10	14	-	24
Paraphrase concept	6	4	-	10
Find main idea	1	1	-	2
Infer from text	4	2	-	6
Locate information	-	-	9	9
Locate and process	-	-	6	6
Apply rules	-	2	-	2
Total items	21	23	15	59

A deliberate decision was taken not to have 'rotated tests' in which different test forms containing subsets of 'common items' are administered to different groups of students within the same school. It had been found in previous research carried out by the International Association for the Evaluation of Educational Achievement that some countries had experienced difficulties in fieldwork operations when employing rotated test forms. Further, since this study was concerned with reading, and not with school subjects that have many subskill areas (for example, mathematics or science), it was argued that around 60 items were sufficient to cover the general construct of reading literacy and, at the same time, the test would have an adequate level of reliability.

All items were prepared in multiple-choice format with four optional answers per item. The possibility of including open-ended questions was considered, and rejected because of financial constraints within countries for the training of scorers and for conducting the scoring. The reliability (Kuder-Richardson formula 20) of the final test was 0.90 for Namibia. The reliabilities of the subscales were 0.80 for narrative, 0.72 for expository and 0.75 for documents.

The questionnaires accompanying the test were prepared to address the data needs established during the design of the blank tables for the final report. During the pilot-testing of the test, the questionnaires were pilot-tested on the learners in the sample, their English teachers, and school principals. The responses were analyzed and, where necessary, revisions were made to the questions. Attention was given to using terminology in the questionnaires that could be understood by all respondents in the participating countries.

Sampling

All sample designs applied in the study were selected so as to meet the standards set down by the International Association for the Evaluation of Educational Achievement (Ross, 1991). These standards required (a) a response rate of at least 90 percent for schools and, where necessary, sampling weights to be calculated to remove the potential for bias that may arise from different probabilities of selection, and (b) to have sampling errors that allow generalizations to be made from the sample to the total learner population with a 95 percent certainty of being correct within plus or minus 5 percent for a percentage, and one tenth of a learner standard deviation unit for a mean.

The desired target population in Namibia was 'all learners at the Grade 6 level in 1995 at the eighth month of the school year who were attending government or registered private schools in the country'. The sample had to be selected early in 1995 at a stage when no information was available on 1995 enrolments. Schools were thus selected on the basis of their August 1994 Grade 6 enrolments. It was decided to exclude two very remote schools which were not typical (Oranjemund Private School and Gam Primary School), the Eluwa school for deaf and blind children, and schools which had fewer than 10 learners in Grade 6 in 1994. The schools with very low Grade 6 enrolment were excluded to avoid the complications of having to create groups of 20 learners by clustering several schools into 'pseudo schools'. The percentage of learners thus excluded was very small, while the number of excluded schools was 37 out of 708 schools; these schools accounted for only 0.7 percent of learners in the desired population. Schools were stratified by education region. A division into urban and rural would have required a subjective classification. There are relatively few private schools in Namibia, of which many are staffed by government, and hence the distinction between private and government schools was not made. The resultant numbers of schools and learners in each of the education regions have been given in *Table 2.2*.

Table 2.2.   The number of schools and learners in the desired, excluded and defined populations

Education region	Desired		Excluded		Defined	
	Schools	Learners	Schools	Learners	Schools	Learners
Katima Mulilo	84	2,665	2	17	82	2,648
Rundu	51	2,525	1	7	50	2,518
Ondangwa East	144	7,258	2	16	142	7,242
Ondangwa West	191	9,750	1	9	190	9,741
Khorixas	63	2,968	4	27	59	2,941
Windhoek	89	6,155	10	63	79	6,092
Keetmanshoop	86	2,852	17	95	69	2,757
Namibia total	708	34,173	37	234	671	33,939

From the defined population a probability sample of schools was drawn, with the probability being proportional to a school's 1994 enrolment in Grade 6. A minimum of 20 schools was chosen in each education region to ensure that the regional population mean scores would be estimated within ±5 percent with a 95 percent probability. Sampling weights were applied in the final analysis to adjust the results in such a way as to adjust for different probabilities of selection which included adjustments for the different sizes of the regions. Corrections were also made for data missing as a result of, for example, absenteeism. The national sample included 158 schools, of which two very large schools each represented a learner enrolment equivalent to two schools, thus bringing the number of 'schools' to 160.

As already stated, the first stage of sampling involved selecting schools with a probability proportional to the number of learners who were members of the defined target population. To achieve this, a 'random start – constant interval' procedure (Ross, 1992) was applied. In one region, Rundu, there were schools with the number of Grade 6 learners exceeding the 'constant interval', and therefore each of these schools was randomly divided into smaller 'pseudo schools' before the commencement of the actual sampling.

In each school selected at the first stage of sampling, two Grade 6 classes were randomly selected with a probability proportional to the number of learners in each class if the school had more than one class, otherwise the single class was included in the sample. Out of each of these classes, 20 learners were randomly selected to avoid overcrowding during the test administration and because the accuracy of sampling does not increase significantly if more learners are tested. This procedure deviated from the technique applied by the other SACMEQ countries, which randomly selected 20 learners out of all Grade 6 learners in each selected school. Namibia had chosen this procedure as it intended to undertake a multi-level analysis (the levels being learner, class, and school) and thus had to test a sufficient number of learners in each class represented in the sample. This, however, implied that where there were more than two classes in Grade 6 in a school, then the within-school variance might be either overestimated or underestimated because there was the possibility of streaming within schools. The planned sample size and the actual number of learners tested have been shown in *Table 2.3*. Between zero percent and 1.7 percent of the differences between planned and achieved learners can be ascribed to small schools in the sample, with less than 20 Grade 6 enrolments; the rest of the differences resulted from learner absenteeism on the day of testing.

Table 2.3.   The planned and achieved samples of schools and learners

Education Region	Schools		Learners		
	Planned	Achieved	Planned	Achieved	%
Katima Mulilo	20	20	500	446	89
Rundu	20	20	600	498	83
Ondangwa East	25	25	640	541	85
Ondangwa West	30	30	900	803	89
Khorixas	20	20	680	631	93
Windhoek	25	25	960	911	95
Keetmanshoop	20	20	660	627	95
Namibia	160	160	4940	4457	90

Calculation of sampling errors

When data are collected using multi-stage sample designs from sources at different levels of data aggregation (learner, class, and school) a great deal of care needs to be taken in interpreting the stability of sample estimates of population characteristics. For this report, all data analyses were undertaken at the between-learner level. That is, all data collected from teachers and school heads were disaggregated across the learner data file before analyses were undertaken.

The interaction of sample design and level of data analysis requires that extra caution should be used in interpreting estimates obtained by using information from teachers or school principals. The sampling error estimates derived from these two 'disaggregated' sources were larger than the figures that were reported when using standard statistical software packages. The 'design effect' of the sampling procedure, which was a cluster sampling procedure as opposed to simple random sampling, must also be taken into account.

In the following chapters of this report the standard errors of sampling have been provided for all important variables. The calculation of these errors acknowledged that the sample was not a simple random sample – but rather a complex two-stage cluster sample that included weighting adjustments to compensate for variations in selection probabilities. The errors were calculated by using the PC-CARP software. This software employs the Taylor's Series Approximation in order to calculate sampling errors and design effects.

The sampling errors have been labelled 'SE' in the tables presented throughout this report. For example, consider the percentages and means presented in *Table 2.4*.

Table 2.4.   Sample percentages and means and their sampling errors

Variable	Mean	%	SE
At learner level:			
Minimum mastery level		25.9	1.77
Desirable mastery level		7.6	1.48
Score on total test	22.0		0.54
Score on essential items	14.9		0.36

(a)   The *sample percentage* of learners, that is the percentage of learners tested, who reached the 'minimum mastery level' was 25.9 percent and the sampling error (SE) was 1.77 percent. These figures indicated that one can be 95 percent confident that the *population percentage* of learners, that is the percentage of all Grade 6 learners in Namibia, was within the following limits: **25.9** ± 2 × **1.77** percent. That is, between a high limit of 29.4 percent and a low limit of 22.6 percent.

(b)   The *sample mean* 'score on total test', that is the mean achieved by learners tested, was 22.0 and the sampling error (SE) was 0.54. These figures indicated that one can be 95 percent confident that the *population mean*, that is the mean score that would have been obtained if all Grade 6 learners in Namibia had been tested, was within the following limits: **22.0** ± 2 × **0.54**. That is, between a high mean score of 23.1 and a low mean score of 20.9.

A cluster sampling procedure, as opposed to simple random sampling, was used in the survey for two reasons: it allowed the survey to be conducted in 158 schools instead of close to 400, and sufficiently large groups of learners were associated with each class and each teacher to allow a multi-level analysis of the data. A much larger number of learners had, though, to be tested with cluster sampling than with simple random sampling to achieve similar sampling errors.

Two measures of the effect of the cluster sampling procedure on the sampling error are the 'design effect' and the 'effective sample size'. The design effect is an indicator of the increase in sampling error that occurs for a complex sample in comparison with a simple random sample of the same size. The effective sample size indicates the size of a simple random sample that would have led to the same sampling error as the cluster sample.

Some values of the design effect and the effective sample size have been given in *Table 2.5*. To illustrate the differences between national and regional samples, figures have been tabulated on the national level and for the Windhoek region.

Teacher and school principal data were associated with each learner, or, teacher and school (principal) data were collected in respect of 4,457 learners. The 4,457 learners were taught by 173 teachers in 158 distinct schools. Due to 12 teachers and 5 principals not having been at their school on the day of data collection, teacher data were collected only from 161 teachers for 4,165 learners, and from 153 principals for 4,338 learners. These numbers constitute the actual sample size at the national level in the table.

The sampling error obtained for the score on the total test on the national level was equivalent to the sampling error that would have been obtained from a simple random sample of 345 learners,

that is, the actual sample size of 4,457 divided by the design effect of 12.9. It is interesting to note that the effective sample sizes for teachers and principals are near to the actual numbers sampled.

The design effect is determined by the sample size within each school and by the extent to which variations of the different variables occur between schools rather than between learners in the schools. This is illustrated by the design effect in respect of the total test score at regional level: in the Windhoek region, where there are major differences between schools, the design effect was 25.0, while it was 2.7 in the Katima Mulilo region, where all schools seem to have performed at a comparable level. By contrast, the design effect on the 'days absent in July' was 3.3 in the Windhoek region and 8.5 in Katima Mulilo.

Table 2.5.   Examples of design effects and effective sample sizes

Sampling level Variable	Design effect	Sample size	
		Actual	**Effective**
National			
At the learner level			
Score on total test	12.91	4457	345
Days absent in July	8.83	4457	505
Speaking English outside school	6.55	4457	680
Total possession index	8.66	4457	515
At the teacher level			
Teacher sex	27.77	4165 (161)	150
Teacher age level	22.63	4165 (161)	184
Teacher academic education	30.00	4165 (161)	139
Teaching materials indicator	31.60	4165 (161)	132
At the school level			
Age level of school principal	30.16	4338 (153)	144
School principal academic education	29.35	4338 (153)	148
Teacher absenteeism problem	31.54	4338 (153)	138
Total school resources index	12.27	4338 (153)	354
Windhoek region (as an example)			
At the learner level			
Score on total test	25.01	911	36
Days absent in July	3.33	911	274
Speaking English outside school	9.84	911	93
Total possession index	15.67	911	58
At the teacher level			
Teacher sex	36.03	852 (30)	24
Teacher age level	29.79	852 (30)	29
Teacher academic education	34.39	852 (30)	25
Teaching materials indicator	38.43	852 (30)	22
At the school level			
Age level of school principal	38.73	853 (23)	22
School principal academic education	38.73	853 (23)	22
Teacher absenteeism problem	38.73	853 (23)	22
Total school resources index	38.73	853 (23)	22

Data collection

The SACMEQ Grade 6 study and the NLA study in Grade 7 data collections were conducted in the same sample of schools in so far as the schools in the SACMEQ sample had a seventh grade. Twenty additional schools were sampled to make up for schools in the sample not offering Grade 7.[3] The NLA study incorporated a mathematics and an English test, which were administered to the same group of Grade 7 learners on two consecutive days. The data collector teams thus had to administer the Grade 6 SACMEQ test to one or two groups of learners, the Grade 7 mathematics and English tests, teacher tests in mathematics and English, teacher questionnaires for the mathematics and English teachers, and the school principal questionnaire. This programme required two days at each school and a group of three data collectors. Twenty-four teams of data collectors undertook the survey over a three-week period from late September to mid-October 1995.

Data collectors were recruited from the Ministry, mainly from the ranks of advisory teachers and education officers from various head office directorates and regional offices. Several temporary data collectors were hired through a local private research firm, SIAPAC-Namibia, which also managed the logistics in areas where the Ministry did not have sufficient resources of its own for a survey of this magnitude.

Training was provided in two stages: all data collectors were initially trained for five days at a central location, with a two-day follow-up training in the region during the week before the actual survey. The training in the regions included a trial run of the survey at a school not included in the sample. The training and instructions to the data collectors were strictly provided according to the procedures agreed upon by the participants in SACMEQ (SACMEQ, 1995).

Details of the training and data-collection processes have been recorded in two separate documents[4] (SIAPAC-Namibia, 1995).

Data entry and cleaning

The data were entered on the Ministry's computer network using data entry routines that were developed for the purpose in Oracle Forms. Stringent valid-range checking was undertaken at the time of data entry. All data were entered twice by different data typists and disagreements were resolved by referring to the instruments. Particular attention was given to cross-checking identification codes with the learner and school forms to ensure that the correct teacher and school questionnaires could be linked to each learner. The learner forms had the dates of birth copied from class registers, which were considered to be a more reliable source than the learners' statements. The dates of birth in the questionnaires were thus replaced by those on the learner forms, except when the dates were missing on the forms. Some information on the teacher and school principal forms was also available from the 1995 Annual Education Census which was conducted early in August 1995. Missing or inconsistent data were replaced from this source when required. Other missing data were only replaced for those data items where it was judged that it was justified to make assumptions in this respect.

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[3]   Schools in Namibia are not strictly divided into primary and secondary schools, and a significant number of them offer incomplete school phases; that is, they might go up to Grade 6 instead of going to the end of the primary phase, Grade 7.

[4]   These documents are held by the Directorate of Planning and Development of the Namibian Ministry of Basic Education and Culture.

The Data Entry Manager (DEM) computer software developed at the IIEP (Schleicher, 1994) was used to generate code books, and the SPSS syntax to convert data into SPSS format. The DEM software was not used for data entry as it did not provide network data entry.

Conclusion

This chapter has summarized the collaborative instrument design of SACMEQ, and the sampling procedures that were employed. The calculation of sampling errors and their presentation in the tables in this report were described. A brief report of the data collection and data entry and cleaning was given.

A wide range of descriptive information obtained from the learner, teacher and school principal questionnaires is presented in *Chapters 3 through 9*. Several of the SACMEQ policy questions are addressed in the discussion of these findings. *Chapter 10* presents the reading test results, and Chapter 11 brings all of these results together as an "Agenda for Action" by the Government of Namibia.

Chapter 3

A note on the interpretation of the data analyses contained in this report[5]

As a starting point, in order to guide the analyses, *Chapters 4 to 9* attempt to address the following six specific questions. These questions were used to develop a structured response to the educational policy issues addressed in this report.

(a) What were the characteristics of Grade 6 learners?
(b) What were the characteristics of Grade 6 teachers and school principals?
(c) What were the approaches, goals, and perceptions of teachers and principals?
(d) What were the teaching conditions in primary schools?
(e) What aspects of the policies designed to improve teaching were in place?
(f) What was the general condition of schools?

Chapters 4 to 9 have presented some examples of baseline data for Namibian primary and combined[6] schools in order to establish a descriptive account of the learners, their teachers and principals, and their schools. These data are important for two reasons. The first is that they provide a 'context' for the analyses described later in this report. The second is that, over time, the levels and distributions of the data may well change. Therefore, when Namibia undertakes a similar Grade 6 reading survey in future, it will be possible to compare the extent to which such context variables have changed. High-quality data that address the two areas of 'context' and 'levels and distribution' provide educational planners with a sound means of mapping the general evolution of the education system and also offer tools for the identification of existing or emerging problems.

A sample survey administered by data collectors visiting each school in the sample allows more questions to be asked than in a census survey, where the forms are normally not filled out in the presence of the data collector. The sample survey also provides for a greater depth in the questions asked. The 1992 NLBA study concentrated on learner achievement and contained hardly any background information. The SACMEQ and NLA surveys conducted in 1995, on the other hand, resulted in a database consisting of baseline information not only about learner achievements, but also about a wide range of input and context data concerning the schools in Namibia.

The first educational policy suggestion to be presented in this report looks to the future in acknowledgement of establishing data collections which can be used to study trends over time.

> **Policy Suggestion 1:** The Ministry should plan to undertake follow-up surveys of the same target population employed during the 1995 SACMEQ project in order to examine changes in important educational indicators over time. (See also Policy Suggestion 11).

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[5] The Namibian Ministry of Basic Education and Culture prefers the use of the term 'learner' rather than 'pupil'. This terminology is used in this report.

[6] In 1995, out of the 1,378 schools in the country, 337 'combined schools' offered primary as well as secondary grades to make relatively small secondary wings viable in areas where there were few secondary learners. Combined schools which had Grade 6 were part of the school population surveyed.

Before presenting the results, three points need to be stressed in order to avoid misinterpretations of the information. The first is that variables presented in the following chapters represent only a subset of the variables for which data were collected.

The second point is that all tables in this report present quantities in terms of learners. That is, learners were the unit of analysis, even though some quantities refer to teachers or schools. Where a percentage for a variable that describes teachers has been presented, this percentage must be interpreted as 'the stated percentage of learners were taught by teachers having the particular characteristic'. Similarly, a percentage for a variable that describes schools must be interpreted as 'the stated percentage of learners were in schools with the particular characteristic'. Where a mean value has been presented for learners, teachers or schools, this must be interpreted as 'the average sixth-grade learner in Namibia (or in a particular region) had...'

The third point is that it is essential to interpret each statistic in association with its sampling error. It will be recalled from *Chapter 2* that the sample was drawn in order to yield standard errors of sampling for learners in Grade 6 in Namibia such that a sample estimate of a population percentage would have a standard error of ±2.5 percent. For this level of sampling accuracy we can be sure 19 times out of 20 that the population value of a percentage lies within ±5 percent of the estimate derived from the sample. The sampling errors for means are also given in the tables and the same principle applies for limits of two standard errors of sampling. Where a percentage or a mean has been presented for a sub-group of learners, such as education regions, then the standard error will normally be greater than for the sample as a whole. This occurs, in part, because the sample sizes for sub-groups are smaller than the total sample sizes. Had smaller standard errors for sub-groups been required, this would have substantially increased the size of the total sample and also the cost of data collection and processing.

To illustrate the interpretation of the values and sampling errors presented in the tables, the percentage of female learners in each education region obtained from the sample, the sampling error, the lower and upper levels of the '95 percent confidence interval' and the population (actual) percentage of female learners have been presented in *Table 3.1*. In the case of Katima Mulilo, the survey had 42.1 percent of female learners with a sampling error of 2.2 percent. One can thus be 95 percent confident that the percentage of female learners for all learners in Katima Mulilo is between 42.1 ± 2 × 2.2 percent, that is between 37.7 and 46.5 percent.

Table 3.1.   Percentage female learners in sample, sampling error and population percentage

Education region	Percentage of female learners in the sample			
	%	SE	Lower %	Upper %
Katima Mulilo	42.1	2.2	37.7	46.5
Rundu	43.6	2.8	38.0	49.2
Ondangwa East	59.2	1.6	56.0	62.4
Ondangwa West	52.1	1.7	48.7	55.5
Khorixas	50.9	1.6	47.7	54.1
Windhoek	48.7	1.6	45.5	51.9
Keetmanshoop	48.1	1.5	45.1	51.1
Namibia	51.2	0.7	49.8	52.6

Chapter 4

The characteristics of learners

What were the characteristics of Grade 6 learners?

A wide range of information about learners has been presented in the following tables. Information has been listed concerning the percentage of female learners, the average age of Grade 6 learners, the frequency of learners speaking English outside school, the place where learners stay, the number of books in the home, parental education, an indication of the wealth of the home, absenteeism, the extent to which learners were given homework and, finally, the number of grade repetitions.

The percentage of female learners in Grade 6

The percentage of female learners in the different regions has been presented in *Table 3.1*. The deviations from equal numbers of males and females were not as strong as have previously been noted in secondary grades. The low percentages of females in Katima Mulilo and Rundu and the low percentage of males in Ondangwa East should be noted. It is known from the Annual Education Census that in Grade 10 only 38.7 percent of learners in Rundu were female, while only 37.0 percent of learners in Ondangwa East were male. While the Ministry must consider action to reduce early school leaving of females in Rundu and males in Ondangwa East and West in the secondary school phase, attention should also be given to the same phenomena, albeit on a smaller scale, in the upper primary phase. What is intriguing about these gender imbalances is that the Ministry has no information to explain "why" many more girls are in Grade 6 in Ondangwa East and many more boys are in Grade 6 in Katima Mulilo and Rundu.

Policy Suggestion 2: The Ministry should analyze available data and undertake any additional research required to establish the causes for gender imbalances in learner enrolments in the upper primary grades. Proposals for action should be made on the basis of these analyses to reduce early school leaving – especially where one sex leaves school in greater numbers than the other.

Age of Grade 6 learners

The ages of Grade 6 learners varied widely in Namibia. Three regions, Rundu, Ondangwa East, and Ondangwa West, had a particularly wide spread of ages and the average age of learners in these regions was between 1.7 and 2.6 years above the average of the other four regions. The percentage distributions of learners by age for the two extremes, Ondangwa East and Keetmanshoop, have been presented in *Figure 4.1*. The data presented in these figures were from the Annual Education Census of 1995. It must be noted that the age pattern of the Katima Mulilo region was similar to the patterns found in the Khorixas, Windhoek and Keetmanshoop regions. This is noteworthy since most other results presented in this report show much similarity between Katima Mulilo and Rundu and the two Ondangwa regions (EMIS, 1996).

The mean ages of Grade 6 learners as obtained in the sample and from the population as reported in the Annual Education Census (AEC) have been reported in *Table 4.1*. Ages in the

sample were calculated according to the dates of birth, accurate to the month, while the numbers in the AEC were by year. The mean values in the sample were thus expected to lie about 0.5 years above the value calculated from the AEC. The population means were again within a confidence interval of the sample mean ± 2 × the sampling error, correcting for the expected difference of 0.5 years.
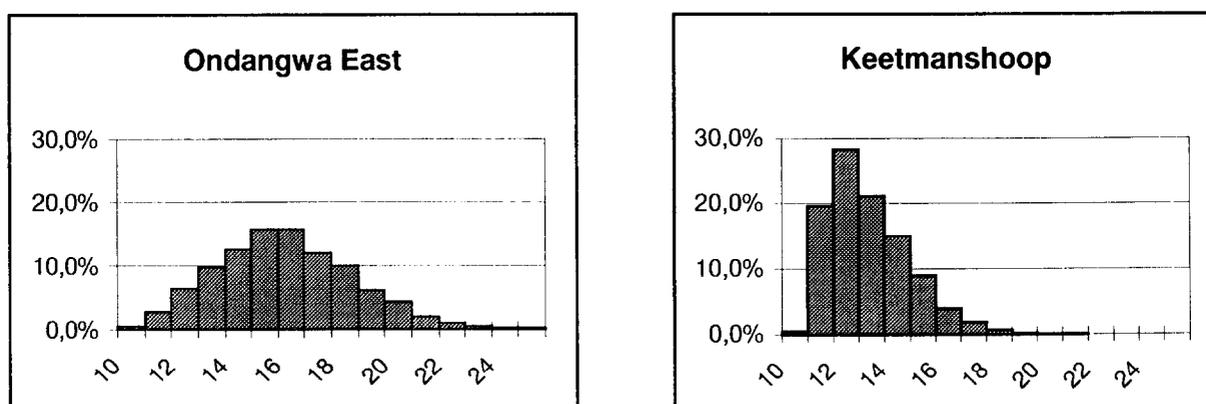
Figure 4.1. Percentage of Grade 6 learners in different age groups in two education regions

The wide age spread of learners within classes in Namibia has been caused by the age spread of learners when they entered school in the first grade, or repetition, and/or transient school leaving. No information was available on the distribution of the entry ages of those learners who were in Grade 6 in 1995. The post-independence 'absorption' of over-age learners occurred mainly from 1991 onwards and thus does not explain the wide age spread – a spread that does not differ much from the spread in earlier years. The number of times learners repeated according to the survey, together with an assumed age spread at the time of entry into Grade 1, seems to account for the mean ages in Katima Mulilo, Khorixas, Windhoek, and Keetmanshoop. There seems to be far more repetition and transient school leaving than reported in Rundu, Ondangwa East and Ondangwa West.

Table 4.1.   Mean ages of Grade 6 learners in the sample and in the population

Education region	Mean age in sample		Population
	Mean	SE	mean age*
Katima Mulilo	13.9	0.34	13.1
Rundu	15.6	0.18	14.9
Ondangwa East	16.3	0.22	15.8
Ondangwa West	15.3	0.15	15.1
Khorixas	14.1	0.30	13.5
Windhoek	13.7	0.14	13.2
Keetmanshoop	13.5	0.17	12.9
Namibia	14.9	0.08	14.4

*   Mean calculated from ages by completed years reported in the AEC. The values are expected to be 0.5 years lower than the survey means.

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It is widely believed that a significant deviation from the appropriate age for a grade has negative influences on the over-age learners themselves and on younger learners in the same class. This is not necessarily perceived to be the case by those who have been accustomed to such a situation for many years. If policies were to be introduced to reduce the detrimental effect of wide age spread, some resistance might be expected from the regions where this situation applies.

The over-age and wide age-spread problem can in the long term only be resolved by limiting the entry age spread in Grade 1 and by lower repetition and transient school leaving rates. Repetition has been discussed later in this chapter, while the percentage of learners who left school at some stage to return again was quite small in comparison.[7] The issues of repetition and transient school leaving will thus not be considered here. Grade 1 entry ages had 'normalized' to a great extent by 1996, with only 1.1 percent of the new entrants in 1996 having been under the age of six and

Figure 4.2. Age distribution of new Grade 1 entrants in 1996

3.2 percent older than nine. It is thus feasible to introduce an upper age limit of nine for enrolment into Grade 1 from the beginning of 1999 onwards. This limit might be brought down to eight by the year 2000, and even to seven, if considered desirable, by the year 2001.

There were 3,030 Grade 6 learners older than 16 in Ondangwa East and 2,887 in Ondangwa West in 1995. A sufficient number of over-age learners in the upper-primary school phase in these regions would appear to make the introduction of an adult education course equivalent to upper-primary education for adults and over-age learners, feasible. Such a course could make provision for accelerated progress. The course referred to here was being developed by the Ministry for adults in 1996/1997. A policy to send over-age learners to such an alternative would, though, have to be accompanied by strict measures to exclude older learners from normal upper primary classes.

In schools with more than one Grade 6 (or any other grade) stream, learners could be streamed according to age to reduce the age differences within each class. The desirability of such a policy should, though, be carefully considered.

Policy Suggestion 3: Gradually introduce upper age limits for enrolment into Grade 1: the maximum enrolment age should be set at nine for the beginning of 1999 and be reduced by one year each year until the maximum permitted age is seven from the year 2001 onwards.

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[7]   Only 0.7 percent of all 1995 Grade 6 learners had left school during or before 1994 and had returned to school in 1995.

Policy Suggestion 4: Investigate the feasibility of sending over-age upper-primary learners to equivalent courses for adults in areas where there are sufficient numbers of youngsters and adults to follow such a course – which might be at least partially based on distance education. If such an approach is feasible, introduce strict policies to exclude learners older than 16 from upper-primary classes in formal schools in identified areas.

Policy Suggestion 5: Introduce streaming by age in schools having more than one Grade 6 class and a wide age distribution – provided that regional offices concerned agree to such a policy.

The frequency of learners speaking English outside school

Many learners had very little opportunity to speak English outside school. In the Katima Mulilo, Rundu and Keetmanshoop regions, more than 40 percent of learners reported that they never spoke English outside school. In Keetmanshoop and Rundu, only 5 and 7 percent respectively spoke English often or all of the time outside school. The responses have been tabulated in *Table 4.2*.

Table 4.2.   Frequency of speaking English outside school (percentage of learners)

| Education region | Speaking English outside school | | | | | |
| | Never | | Sometimes | | Often or always | |
	%	SE	%	SE	%	SE
Katima Mulilo	42.9	5.7	40.9	5.6	16.1	4.2
Rundu	41.7	6.8	51.4	6.9	6.9	3.5
Ondangwa East	18.4	3.4	47.1	4.4	34.5	4.2
Ondangwa West	23.6	3.4	56.1	4.0	20.3	3.2
Khorixas	22.9	4.2	62.9	4.8	14.3	3.5
Windhoek	15.1	3.7	67.4	4.9	17.5	3.9
Keetmanshoop	43.4	6.1	51.4	6.1	5.2	2.7
Total	25.4	1.7	54.9	1.9	19.7	1.5

Where do learners stay during the school week?

Namibia's vast areas with very low population density and the disparate provision of educational facilities, in the past resulted in a great number of children not having a school within walking distance from their parent's home. Thus, a question was asked about where learners stayed during the school week. The responses to this question have been tabulated in *Table 4.3*.

Table 4.3.   Places where learners stay during the school week

Education region	Place to stay during the school week							
	With parents or guardians		With relatives or another family		In a hostel		On their own or with other children	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	68.6	4.4	21.9	3.9	3.7	1.8	5.8	2.2
Rundu	70.3	5.3	14.5	4.1	13.6	4.0	1.5	1.4
Ondangwa East	62.1	6.0	24.5	5.3	5.1	2.7	8.3	3.4
Ondangwa West	77.6	3.3	17.9	3.0	1.7	1.0	2.8	1.3
Khorixas	59.8	6.1	10.6	3.8	24.6	5.3	4.9	2.7
Windhoek	69.8	5.8	6.8	3.2	19.3	5.0	4.1	2.5
Keetmanshoop	67.6	5.5	16.1	4.3	14.1	4.1	2.2	1.7
Total	69.3	2.1	16.6	1.7	9.6	1.4	4.5	1.0

About 70 percent of all Grade 6 learners stayed with their parents or guardians in 1995, while 17 percent stayed with relatives or another family, 10 percent in a hostel, and 4 percent on their own or with other children. From *Table 4.3* it can be seen that there was considerable variation between the regions in terms of learners not staying with their parents or guardians. The mean test scores of learners staying on their own were the second highest out of the four groups in all but the Katima Mulilo and Keetmanshoop regions. The educational implications of learners staying on their own or with other children thus seem not to be as obvious as might easily be assumed. The sociological consequences of this way of staying should, though, be investigated.

Policy Suggestion 6: Identify the reasons for, and occurrences of, learners staying on their own or with other children during the school week or school term. Investigate the sociological consequences of this phenomenon and propose appropriate actions, if required.

Books and other reading materials in the home

Learners were requested to indicate the approximate number of books in the place where they stayed during the school week. To obtain estimates of the mean numbers of books, the learners' responses, which were stated in the categories 0, 1-10, 11-50, 51-100, 101-200 and more than 200, were converted to range averages. The average numbers obtained have been tabulated in *Table 4.4*. In the Katima Mulilo and Rundu regions there were significantly fewer books than in Khorixas, the two Ondangwa regions and Windhoek.

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Table 4.4. Estimated mean number of books in the home

Education region	Mean	SE
Katima Mulilo	15	4.0
Rundu	13	3.7
Ondangwa East	32	4.4
Ondangwa West	27	3.4
Khorixas	30	6.0
Windhoek	36	5.8
Keetmanshoop	23	3.7
Total	28	1.9

Another indication of the amount of reading material available to learners outside school was obtained from questions about whether daily newspapers or magazines could be found in the place where learners stayed during the school week. From *Table 4.5*, it can be seen that, also in this respect, the Katima Mulilo and Rundu regions were worst off. Learners in these two regions had the least number of reading materials available in the places where they stayed during the school week. The availability of reading materials has been seen to be important in several studies and ways must thus be found to provide reading materials, especially in the areas with the greatest shortages.

Table 4.5. Percentage of learners in homes with newspapers and/or magazines

Education region	Percentage of learners in homes where the specific reading materials were found					
	Daily newspaper		Weekly or monthly magazine		Newspaper and/or magazine	
	%	SE	%	SE	%	SE
Katima Mulilo	10.6	3.2	14.4	3.8	19.9	5.2
Rundu	20.8	6.3	15.7	4.5	26.9	6.8
Ondangwa East	37.6	4.9	33.5	4.6	55.3	5.3
Ondangwa West	44.1	3.6	51.5	4.0	71.6	2.9
Khorixas	36.3	5.4	55.4	5.5	66.3	5.6
Windhoek	57.1	4.8	58.5	5.3	76.9	5.6
Keetmanshoop	37.8	5.8	54.7	7.7	64.8	8.6
Total	39.5	1.9	44.0	2.0	60.7	2.0

Policy Suggestion 7: Consider means to increase the amount of reading materials in homes, especially in the Katima Mulilo and Rundu regions. Approach literacy programmes, church organizations, the publishing industry and donor agencies for co-operation and assistance. Mobile libraries have proven to be useful in some countries for allowing homes to have access to more books. If this approach is initiated, teachers could explain to learners how to use it. The availability of reading materials in schools should be improved by supplying schools with classroom libraries where they have not yet been provided.

Possessions in the home

Learners were asked about whether or not certain items were to be found in the place where they stayed during the school week. The purpose of this question was to obtain a measure of the wealth of the home. The Possession Index listed in *Table 4.6* indicated how many of the 14 items listed were marked as being found in the 'home'. The mean value of the index ranged between 4.0 and 5.6 in the Katima Mulilo, Rundu, Ondangwa East and Ondangwa West regions. Whereas the range was 7.4 to 8.8 in the other regions. The difference was mainly due to items such as television set, video-cassette recorder, telephone, refrigerator, piped water and electricity which are commonly found in urban areas, but not often in rural areas. The occurrence of a selection of specific possessions has been tabulated in *Table 4.6*.

Table 4.6.   Possessions in the home

Education region	Percentage of learners having specific possessions or amenities in their home									
	Possessions Index		Radio		Television		Piped water		Electricity	
	Mean	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	4.0	0.32	85.0	3.2	19.2	4.2	10.9	4.2	12.2	4.6
Rundu	4.3	0.49	83.4	2.3	16.8	5.9	26.6	6.7	27.9	7.4
Ondangwa East	5.2	0.33	91.7	1.7	21.5	3.8	16.4	4.6	13.8	4.0
Ondangwa West	5.6	0.22	93.6	1.1	12.1	3.1	17.3	4.5	12.8	3.0
Khorixas	7.5	0.52	77.6	4.4	54.1	7.3	74.6	5.3	71.8	5.9
Windhoek	8.8	0.40	83.5	3.0	67.8	5.1	82.9	3.6	81.9	4.6
Keetmanshoop	7.4	0.53	85.0	2.0	48.8	6.4	75.1	6.2	53.9	7.8
Total	6.2	0.14	87.9	0.9	31.6	1.8	38.7	2.0	34.9	1.8

An index of regular meals

The health and nutritional condition of learners can affect their learning. An attempt was made to obtain a measure of nutrition. An Index of Regular Meals was constructed such that a value of zero indicated that the learner normally did not eat at all, and a value of nine indicated that the learner ate breakfast, lunch and supper every day of the week. From *Table 4.7*, it can be seen that the mean regional rate was between 7.1 (equivalent to one meal every day and another two meals three or four times per week) and 7.9 (two meals every day, and another one three or four times per week).

Table 4.7.   Index of regular meals

Education region	Index of regular meals	
	Mean	SE
Katima Mulilo	7.3	0.21
Rundu	7.1	0.27
Ondangwa East	7.4	0.30
Ondangwa West	7.9	0.09
Khorixas	7.9	0.18
Windhoek	7.8	0.13
Keetmanshoop	7.8	0.19
Total	7.7	0.08

> **Policy Suggestion 8:** Identify specific areas where there is a need to introduce or expand the school feeding programme.

Parental education

Many learners in Namibia reported that they did not know the level of their parents' education. The relevant question was answered as 'don't know', 'I don't have a mother or father', or was not answered at all by 23 percent of the learners for their mothers, and 31 percent of the learners for their fathers. These patterns of response rendered the analysis of parents' education questionable as there may, for example, be many more parents without education among the 'unknowns' than among those whose qualifications were stated. The following three tables (*Table 4.8 to Table 4.10*) provide information on the 77 percent of mothers and 69 percent of fathers where the learners indicated their qualification level.

Table 4.8.   Levels of mother's education (percentage of learners)

Education region	Mother's education											
	Did not go to school		Some primary		All of primary		Some secondary		All of secondary		Post secondary	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	17.0	4.0	23.0	4.5	15.2	3.8	20.4	4.3	13.7	3.6	10.7	3.3
Rundu	24.9	5.4	31.5	5.8	13.2	4.3	19.5	5.0	7.4	3.3	3.5	2.3
Ondangwa East	13.0	3.2	30.8	4.4	20.1	3.8	14.7	3.3	10.1	2.8	11.3	3.0
Ondangwa West	11.3	2.0	34.0	3.0	19.9	2.5	15.5	2.3	9.1	1.8	10.2	1.9
Khorixas	13.3	4.9	17.0	5.5	15.3	5.2	27.6	6.5	14.6	5.1	12.2	4.8
Windhoek	10.3	3.5	14.9	4.1	11.9	3.7	24.9	4.9	15.7	4.2	22.3	4.7
Keetmanshoop	8.0	4.0	25.8	6.4	16.7	5.5	23.3	6.2	14.5	5.2	11.6	4.7
Total	12.9	1.3	26.7	1.8	17.0	1.5	19.3	1.6	11.7	1.3	12.4	1.3

Table 4.9. Levels of father's education (percentage of learners)

Education region	Father's education											
	Did not go to school		Some primary		All of primary		Some secondary		All of secondary		Post secondary	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	11.7	3.4	15.5	3.8	9.4	3.1	22.6	4.4	16.6	3.9	24.2	4.5
Rundu	23.0	4.4	23.8	4.4	14.0	3.6	20.9	4.2	8.9	3.0	9.4	3.0
Ondangwa East	12.7	3.3	23.2	4.2	19.2	3.9	16.9	3.7	13.4	3.4	14.6	3.5
Ondangwa West	12.0	1.9	23.3	2.5	22.2	2.4	16.9	2.2	12.3	1.9	13.3	2.0
Khorixas	15.2	5.8	9.7	4.8	12.5	5.4	21.0	6.6	22.2	6.7	19.5	6.4
Windhoek	8.8	3.0	11.5	3.4	10.8	3.3	21.0	4.4	18.3	4.1	29.5	4.9
Keetmanshoop	8.4	3.8	20.7	5.5	14.3	4.7	20.7	5.5	18.6	5.2	17.3	5.1
Total	12.4	1.3	19.2	1.5	16.3	1.4	19.1	1.5	15.1	1.4	18.0	1.5

An index of the parents' education was constructed by assigning a zero to the mother's or father's education if they did not go to school, a one for 'some primary', and so on. The values assigned to the mother and the father were then added to produce an index ranging between zero (both did not attend school) and 10 (both have some post-secondary education). The mean values for the education regions have been listed in *Table 4.10*. The most striking feature is the low qualifications of parents in the Rundu area, followed by the two Ondangwa regions. The relatively high level of parents' education, compared with the aforementioned regions, reported in Katima Mulilo should be noted.

Table 4.10. Parents' education index

Education region	Parents' education index	
	Mean	SE
Katima Mulilo	5.2	0.34
Rundu	3.7	0.39
Ondangwa East	4.6	0.33
Ondangwa West	4.5	0.18
Khorixas	5.3	0.55
Windhoek	6.2	0.38
Keetmanshoop	5.3	0.46
Total	4.9	0.14

The total school enrolment in Namibia increased on average by 5.2 percent annually during the 20 years before the survey (1974 to 1994), compared to a population growth of about 3 percent. Literacy and other adult education programmes were introduced since independence in 1990. It is thus expected that the level of parents' education will steadily rise in the future.

Parental support of and involvement in their children's schooling

Several questions in the learner questionnaire referred to the support learners received from someone outside school. Two questions related to assistance received with homework: asking whether someone made sure that homework was done, and whether someone helped with it.

The answers to these questions were combined into an indicator which was zero if both answers were 'never', and four if both answers were 'most of the time'. Three other questions related to interest shown in school work and reading. The summed answers ranged from zero, indicating three times 'never', to six for three times 'most of the time'. The sum of these two indicators can be taken as a measure of home involvement, ranging from zero to 10. The mean values of these three indicators have been listed for the education regions in *Table 4.11* below. The general support and interest was moderate, with the average response to all questions being 'sometimes'. The least support and interest was recorded in Rundu, followed by Katima Mulilo. In Rundu, this may be linked to the low level of the parents' education.

Table 4.11. Indicators of parental support and involvement

Education region	Indicator					
	Assistance with homework		Home interest		Home involvement indicator	
	Mean	SE	Mean	SE	Mean	SE
Katima Mulilo	2.0	0.11	2.7	0.07	4.8	0.12
Rundu	1.6	0.12	2.4	0.21	4.1	0.30
Ondangwa East	2.4	0.08	3.5	0.11	5.9	0.17
Ondangwa West	2.4	0.09	3.4	0.10	5.8	0.18
Khorixas	2.3	0.15	3.2	0.11	5.5	0.22
Windhoek	2.4	0.13	3.2	0.12	5.6	0.23
Keetmanshoop	2.4	0.10	3.1	0.08	5.5	0.13
Total	2.3	0.04	3.2	0.05	5.5	0.08

Policy Suggestion 9: Increase parental support for, and interest in, their children's schooling through information campaigns on the importance of such support. Utilize parent meetings, educational forums, radio programmes and political channels for such campaigns. Give particular attention in this regard to the Rundu and Katima Mulilo regions.

Learner absenteeism

Learner absenteeism is a major problem in many schools according to school principals. From *Table 6.9* in a later chapter it may be seen that 50 percent of the Grade 6 learners were in schools where the principal identified learner absenteeism as a 'major problem', another 44 percent were in schools where this was a 'minor problem', and only 6 percent of learners were in schools where absenteeism was 'not a problem at all'.

July 1995 was the last full month of schooling before the survey was conducted, and thus the days when learners were absent in July were determined from the class register in order not to rely on the learners' memories. The mean absenteeism rate in July should have roughly corresponded to the absenteeism rate on the day of the survey, unless special circumstances had caused a higher or lower rate. The mean number of days of absenteeism out of 21 school days for the different regions have been presented in *Table 4.12*. The table also lists the absenteeism rate on the day of the survey. This rate can be compared to the days of absenteeism in July by multiplying the absenteeism rate by 21, the number of school days in July.

Table 4.12.   Learner absenteeism

	Days absent in July		Day of test	
	Mean	SE	Percent	x 21
Katima Mulilo	1.1	0.29	9.7	2.0
Rundu	2.5	0.38	16.0	3.4
Ondangwa East	2.5	0.34	15.5	3.3
Ondangwa West	1.9	0.20	10.8	2.3
Khorixas	0.6	0.11	6.2	1.3
Windhoek	0.7	0.09	4.8	1.0
Keetmanshoop	0.6	0.07	3.5	0.7
Total	1.6	0.10	9.2	1.9

In all regions, the reported days of absenteeism were fewer than expected according to the absenteeism rate on the day of testing. There may thus have been significant under-reporting of absenteeism in the class registers of many schools. The reported mean rates of absenteeism exceeded 10 percent in the Rundu and Ondangwa East regions. Grade 6 learners in these regions were thus probably absent from school for more than 20 days per year on average. The lowest absenteeism rate reported, 3 percent, was in Keetmanshoop, but this still corresponded to six days of absenteeism per year on average.

Policy Suggestion 10: Determine the main causes for learner absenteeism and design programmes and/or measures to curb such absenteeism.

Repetition

The high repetition rates in Namibia, compared with other sub-Saharan anglophone countries, have been identified as a matter for concern for many years (Advieskomitee vir Geesteswetenskaplike Navorsing, 1983). While repetition rates were reported by the Ministry, the survey provided information on the number of times learners had repeated since they started school. The information collected related only to learners in Grade 6. Those learners who left school earlier were naturally excluded, and these figures, therefore, do not represent the repetition patterns of *all* learners in the first six grades.

Table 4.13. Percentage of Grade 6 learners who repeated never, once, twice or more often

Education region	Number of repetitions							
	Never		Once		Twice		Three or more times	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	49.4	2.3	38.6	2.3	9.4	1.4	2.6	0.7
Rundu	45.4	2.6	43.3	2.6	10.2	1.6	1.1	0.5
Ondangwa East	37.5	4.8	33.5	4.7	16.7	3.7	12.2	3.2
Ondangwa West	27.5	1.9	39.6	2.0	25.6	1.8	7.3	1.1
Khorixas	42.7	3.6	39.2	3.6	13.1	2.5	5.0	1.6
Windhoek	45.0	4.1	35.4	3.9	13.5	2.8	6.1	2.0
Keetmanshoop	48.1	4.4	38.2	4.2	11.7	2.8	2.0	1.2
Total	38.8	1.5	37.6	1.5	16.9	1.2	6.7	0.8

Less than 40 percent of Grade 6 learners had never repeated since they started school. Thirty-eight percent had repeated once. In Ondangwa East and West, only 38 and 28 percent respectively of the Grade 6 learners had never repeated. The different patterns in other regions may be due to lower repetition rates in those regions, or to learners leaving school after having repeated a few times.

The Ministry introduced measures to curb repetition after the survey was completed in 1995. Future surveys will allow the Ministry to assess the effects of its revised repetition policies, using the 1995 SACMEQ and NLA surveys as a baseline. According to the Annual Education Census (EMIS, 1997), the 1995 to 1996 repetition rates in Grade 1 in the two Ondangwa regions were much lower than in the previous year. While all regions had a lower repetition rate, the change was less drastic in the other regions. The first group affected by the new policy from Grade 1 onwards is to reach Grade 7, the grade in which the NLA study was conducted, in the year 2001. According to the Annual Education Census, the revised policy has, though, not been implemented in the same manner in all regions. Depending on the repetition patterns in different regions, which are to be routinely recorded in annual education censuses, the year 2002 should thus be targeted for a major monitoring survey. As the revised repetition policy was issued to affect all grades, an interim survey should be conducted in 1999 to monitor changes in respect of the cohort that was not affected from Grade 1 onwards, and to provide a comparison between such a cohort and one affected from Grade 1.

Policy Suggestion 11: Repeat the 1995 SACMEQ and NLA surveys in the years 1999 and 2002 to monitor the effect of the revised repetition policies. (See also Policy Suggestion 1).

Conclusion

A striking feature of Namibia's Grade 6 school population was a very wide age spread, mainly caused by high grade repetition rates, but also by the age-spread of learners when they entered school in 1990 or earlier. The average age of learners in the Ondangwa East region was about four years above the appropriate age of 12. Only about a third of the Grade 6 learners in this region had never repeated, while more than 10 percent had repeated at least three times.

New grade repetition policies were introduced by the Ministry after the survey was completed in 1995, and the entry ages of Grade 1 learners were not spread very widely at the beginning of 1996. These changes should result in a reduced age spread within several years, especially if they are complemented by the gradual implementation of strict age limits for enrolment in Grade 1. It has been proposed to investigate the feasibility of accommodating over-age learners in adult education courses in areas having sufficient numbers of potential participants. The effects of the revised repetition policies should be monitored by repeating the survey in 1999, and then again in the year 2002.

The percentage of females enrolled in Grade 6 was 51 percent nationally, but ranged between 42 percent in the Katima Mulilo region and 59 percent in the Ondangwa East region. These two figures are significantly different from 50 percent – however the reasons why this is so were beyond the scope of the data collected for this study. It has thus been proposed to look into early school leaving on a regional basis by analyzing available information and, if required, undertaking additional research. Proposals for action to curb early school leaving of one sex should be made based on these investigations.

Many learners never spoke English outside school, especially in the Katima Mulilo, Rundu and Keetmanshoop regions, where this applied to more than 40 percent of the learners. In Katima Mulilo and Rundu, the situation was aggravated by a lack of reading materials in the home. A low-cost solution would be to involve various institutions, such as churches and other private organizations, in bringing reading materials to areas where they are required most. More could be achieved with mobile libraries, but at higher costs.

Other characteristics of Grade 6 learners highlighted in this chapter include the possessions in the home, the number of regular meals learners had, and parents' education and their involvement in their children's schooling. Parents' support and involvement could most likely be improved with information campaigns which need not be very costly if existing channels such as parent meetings, education forums, and radio programmes are utilized.

Learner absenteeism rates were disturbingly high in the four northern regions, with the highest rates reported in the Rundu and Ondangwa East regions: 12 percent during the month of July, and 16 percent on the day of the survey. The Ministry should address this issue after looking into the causes for excessive absenteeism.

A prominent feature of the Namibian education scene in 1995 was the extent of disparities – both between and within regions. Many, but not all, of these disparities were a legacy of the pre-independence situation. The Rundu region featured the educationally most adverse conditions in respect of nearly all learner characteristics.

Chapter 5

The characteristics of teachers and school principals

What were the characteristics of Grade 6 English teachers and school principals?

The English teachers of the learners included in the sample and the school principals were requested to provide information about themselves. This included, for example, their sex, age, qualifications, experience and home possessions. As explained previously, teachers and principals were linked to their learners in the analysis, and the analysis was undertaken at the learner level. That is, all figures relating to teachers and principals must be interpreted as the number or percentage of learners being taught by teachers, or having principals, with the specific characteristics.

The proportion of male and female Grade 6 English teachers and school principals

Table 5.1 indicated that, for all regions but the Rundu region, the proportion of Grade 6 learners who had a female English teacher ranged between about 52 percent for Ondangwa East and Keetmanshoop and 89 percent in the Windhoek region. In the Rundu region, only 5 percent of all Grade 6 learners had a female English teacher. Rough estimates based on related information from the Annual Education Census produced values of 73 percent for the Windhoek region, and 7 percent for Rundu, indicating that the extremes obtained in the survey were indeed plausible. The reasons for the low percentage of female teachers in the Rundu region may have been a preference of female teachers to teach in the lower primary phase, and a lack of English language competency among female teachers in the region.

The percentage of learners in schools headed by a female principal ranged from 10 percent in Keetmanshoop and Rundu to nearly 40 percent in Ondangwa East. The proportion of female principals differed significantly from the percentage of female teachers: in the Windhoek region, for example, 89 percent of the learners were taught by a female English teacher, while only 26 percent were in a school with a female principal. In Ondangwa East, where there was the least disparity in this respect, 52 percent of the learners were taught by a female teacher, while 39 percent had a female principal.

Table 5.1. Female Grade 6 English teachers and school principals

Education region	Percentage of learners who were taught by female teachers		Percentage of learners who had a female school principal	
	%	SE	%	SE
Katima Mulilo	70.6	11.4	20.0	9.2
Rundu	5.0	5.0	10.5	8.1
Ondangwa East	52.1	10.2	39.1	10.4
Ondangwa West	64.8	9.2	23.3	7.9
Khorixas	71.1	10.3	15.0	8.2
Windhoek	88.9	6.5	26.1	9.4
Keetmanshoop	52.6	11.8	10.0	6.9
Total	61.4	4.0	23.9	3.6

If the Ministry wishes to have roughly equal representation of male and female teachers at the subject and grade levels, then the finding from this survey indicates that much needs to be done in this respect. There are, though, presumably more fundamental problems to be addressed to improve the quality of education than equal representation of males and females in very specific domains. However, on the basis of the results presented above, the overall representation of female teachers in primary grades certainly needs to be evaluated.

The reasons for the great disparity between the percentage of female teachers and the percentage of female school principals should be established and, if required, measures should be taken to ensure that female teachers are considered for promotion on an equal basis with their male colleagues.

Policy Suggestion 12: Analyze the proportion of female teachers in primary grades on a regional basis. Consider whether action is necessary to improve the gender balance of the teaching corps. Investigate the reasons for the disparities in the percentages of female teachers and female principals and implement measures to ensure equal promotion prospects for female and male teachers.

The age of Grade 6 English teachers and of school principals

The mean ages of Grade 6 English teachers were lower in the four northern regions than in the three southern regions. These mean ages have been compared to the mean ages of all teachers, calculated from the AEC, in *Table 5.2*. While there were no significant differences in the mean age between English teachers and all teachers in the southern regions, Grade 6 English teachers in the north were younger on average than the regional averages for all teachers.

Table 5.2. Mean ages of teachers and principals

Education region	Mean ages				
	Teachers			Principals	
	Mean	SE	Mean age of all teachers	Mean	SE
Katima Mulilo	31.1	1.44	34.9	45.6	2.04
Rundu	29.6	1.48	34.3	43.3	1.74
Ondangwa East	31.9	1.12	34.8	50.1	1.42
Ondangwa West	30.7	1.02	34.5	46.6	1.44
Khorixas	35.5	1.23	36.2	44.7	1.78
Windhoek	37.2	1.90	37.0	49.0	1.22
Keetmanshoop	39.9	1.82	37.2	44.3	1.85
Total	33.2	0.56	35.5	47.0	0.63

There seems to have been less variation between the mean ages of school principals than between the mean ages of Grade 6 English teachers, and there was also no north-south division.

Qualifications and experience of Grade 6 English teachers and school principals

Teachers and school principals were requested to report the number of years of primary, secondary, and post-secondary academic training they had completed. They also stated the total duration of teacher training they had received.

Table 5.3 does not provide much statistically significant information on the differences in the mean number of years of academic education of Grade 6 English teachers between education regions. This table should be read together with *Table 5.4*, the mean years of teacher training. Teachers in the Rundu region were on average the least qualified, while the Windhoek region had the best qualified English teachers in Grade 6. The mean qualification of Grade 6 English teachers in the Rundu region was equivalent to less than a completed Grade 12 plus 'a short course of less than one-year's duration' of teacher training.

Table 5.3. Years of academic education of Grade 6 English teachers and school principals

Education region	Total number of years of academic education			
	Teachers		Principals	
	Mean	SE	Mean	SE
Katima Mulilo	11.3	0.29	10.8	0.28
Rundu	11.0	0.28	11.5	0.56
Ondangwa East	11.7	0.34	10.9	0.38
Ondangwa West	11.6	0.25	11.3	0.30
Khorixas	12.0	0.31	12.0	0.38
Windhoek	12.4	0.40	12.4	0.44
Keetmanshoop	11.4	0.35	13.0	0.50
Total	11.7	0.13	11.6	0.16

Table 5.4. Years of teacher training of Grade 6 English teachers and school principals

Education region	Number of years of teacher training			
	Teachers		Principals	
	Mean	SE	Mean	SE
Katima Mulilo	1.6	0.17	2.3	0.16
Rundu	0.6	0.17	2.3	0.20
Ondangwa East	1.1	0.20	2.0	0.09
Ondangwa West	1.6	0.22	2.1	0.14
Khorixas	1.7	0.33	2.1	0.20
Windhoek	2.6	0.27	2.6	0.20
Keetmanshoop	2.1	0.35	2.9	0.19
Total	1.6	0.10	2.3	0.07

Providing serving teachers the opportunity to improve their qualifications, or replacing them with well-trained teachers, would result in a higher salary bill for the Ministry. Any solution to the problem of less qualified teachers must therefore consider the long-term financial implications. Measures that were proposed in the past included providing training that would not result in increased salaries, and to devise a system where better-qualified teachers would guide and assist their lower qualified colleagues in lieu of a reduced teaching load.

The results presented in *Table 5.5* showed that teachers in the Windhoek and Keetmanshoop regions had, though, attended substantially more in-service training courses during their career than their colleagues in the other regions. On the basis of these figures it would seem reasonable to make a major effort over the next two or three years to re-deploy in-service training resources away from Windhoek and Keetmanshoop towards the other regions.

Table 5.5. In-service courses attended by Grade 6 English teachers during their teaching career

Education region	Number of courses	
	Mean	SE
Katima Mulilo	2.2	0.60
Rundu	2.8	0.81
Ondangwa East	2.8	0.79
Ondangwa West	2.9	0.85
Khorixas	2.7	0.71
Windhoek	4.1	0.70
Keetmanshoop	4.6	0.74
Total	3.1	0.34

Policy Suggestion 13: Design financially sustainable programmes to upgrade the training of primary teachers and to utilize teachers efficiently who have insufficient training. Consider a redeployment of in-service training opportunities to gain greater equity across regions.

The mean number of years of total teaching experience of Grade 6 English teachers had a pattern similar to the age distribution of teachers, as shown in *Table 5.6*. Teachers in the four northern regions had significantly less teaching experience on average than their colleagues in the south. The mean years of experience were 7.1 years in the northern regions, compared with 13.5 years in the southern regions, indicating that teachers had considerable experience on average in all parts of the country.

Table 5.6. Mean number of years of teaching experience of Grade 6 English teachers

Education region	Years of teaching	
	Mean	SE
Katima Mulilo	7.24	1.59
Rundu	7.93	1.35
Ondangwa East	7.48	0.91
Ondangwa West	6.44	0.74
Khorixas	12.24	1.60
Windhoek	12.82	1.87
Keetmanshoop	16.42	1.95
Total	9.31	0.51

The mean years of experience of school principals as teachers and as principals did not exhibit the same variation between regions as for teachers, when considered in relation to the

national average. There were also no clear patterns, as was the case for teachers. The mean years of experience have been tabulated in *Table 5.7*.

Table 5.7.   School principals' teaching experience and total experience as principal

| Education region | Number of years of experience | | | |
| | Teaching experience | | Total years as principal | |
	Mean	SE	Mean	SE
Katima Mulilo	20.5	1.51	12.3	2.08
Rundu	18.4	1.38	11.2	1.74
Ondangwa East	25.0	1.72	14.1	1.79
Ondangwa West	21.3	1.25	16.7	1.41
Khorixas	22.0	1.80	10.4	1.70
Windhoek	26.5	1.62	10.4	1.53
Keetmanshoop	22.6	1.97	9.2	1.67
Total	22.9	0.64	13.1	0.68

Teacher home possessions

A measure of teacher home possessions was obtained in the survey as part of the background information on teachers. The same 14 items that were included in the learner questionnaire were listed for teachers to indicate whether they had those items at home. The Index of Home Possessions was obtained by counting the number of items teachers possessed out of the 14 listed in *Table 5.8*. As with the same index for learners, the inclusion in the index of items such as television set, telephone, piped water and electricity made the index strongly dependent on the infrastructure available at the locality where the teacher stayed.

Table 5.8.   Index of home possessions of Grade 6 English teachers

| Education region | Possession index | |
	Mean	SE
Katima Mulilo	6.7	0.56
Rundu	6.5	0.89
Ondangwa East	4.8	0.48
Ondangwa West	5.5	0.31
Khorixas	8.1	0.75
Windhoek	10.0	0.34
Keetmanshoop	8.2	0.91
Total	6.8	0.20

Teachers' accommodation and distance to school

Information collected on teachers' accommodation consisted of information on who provided their accommodation, the condition of their living accommodation, and the distance between their accommodation and school.

Table 5.9 showed some striking differences in terms of who provided teachers' accommodation in the different regions. In the Katima Mulilo region, about half of the Grade 6 learners were taught by teachers who stayed in accommodation provided by the school

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which, as far as is known, was normally built by the parents. In the Rundu, Ondangwa East and Ondangwa West regions, most teachers stayed in accommodation arranged for by themselves. About half of the learners in the remaining three regions were taught by teachers living in accommodation provided by either a local authority or government. This information is particularly interesting as the shortage of teacher housing in the northern regions is often cited as a major reason constraining the provision of well-qualified teachers to those regions.

Table 5.9.　　Sources of teachers' accommodation

Education region	Source of accommodation									
	Own accommodation		School		Local authority		Government		Other agencies	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	25.1	11.2	49.8	12.9	-	-	12.5	8.5	12.5	8.5
Rundu	86.9	7.6	-	-	-	-	13.1	7.6	-	-
Ondangwa East	91.7	5.8	4.2	4.2	-	-	-	-	4.2	4.2
Ondangwa West	88.4	6.4	3.9	3.9	3.9	3.9	3.9	3.9	-	-
Khorixas	31.6	10.9	10.6	7.2	5.2	5.2	44.7	11.7	7.9	6.3
Windhoek	42.2	10.1	2.2	3.0	17.8	7.8	35.6	9.8	2.2	3.0
Keetmanshoop	47.2	12.5	5.9	5.9	23.5	10.6	23.5	10.6	-	-
Total	68.0	3.3	7.3	1.9	6.5	1.8	15.2	2.6	2.9	1.2

Further investigations should be made to establish whether this situation is only a legacy of the pre-independence system, or whether there are other factors limiting the provision of teacher housing in areas having the greatest need for qualified teachers. Apart from the provision of housing, consideration will also have to be given to the available infrastructure in the areas concerned. According to the home possession items marked by teachers, out of the three items: telephone, piped water and electricity, the average availability ranged between 0.3 and 1.0 in the four northern regions, against between 2.1 and 2.6 in the three southern regions. Other factors, such as the supply of goods in nearby shops, good schools for the teachers' children, and recreational facilities, may also have a decisive influence on whether qualified teachers will be willing to serve in the northern rural areas.

Table 5.10.　　Condition of teachers' accommodation as reported by teachers

Education region	Distribution of accommodation states					
	In a poor state		Requires major or minor maintenance		In good condition	
	%	SE	%	SE	%	SE
Katima Mulilo	43.7	12.8	25.1	11.2	31.2	11.9
Rundu	63.3	11.8	26.2	10.7	10.5	7.5
Ondangwa East	39.6	9.9	29.2	9.2	31.3	9.4
Ondangwa West	32.7	9.1	30.8	9.0	36.6	9.4
Khorixas	31.6	11.0	21.0	9.6	47.4	11.8
Windhoek	6.7	5.1	31.1	9.5	62.2	10.0
Keetmanshoop	-	-	58.8	12.3	41.2	12.3
Total	30.1	3.8	31.0	3.9	38.9	4.1

Table 5.10 indicates the proportion of learners who were taught by teachers staying in accommodation which was in a certain condition. The condition of teaching housing was in the worst state in the Rundu region – where a very high 63.3 percent indicated that the teacher

housing was in a 'poor state'. The best accommodation was reported for the Windhoek region – where 62.2 percent indicated that the teacher accommodation was in a 'good state'. In total, roughly one third of teachers' accommodation was indicated to be 'in a poor state', while another third required some or major maintenance, and one third was in good condition.

Table 5.11.   Mean distance from teachers' accommodation to their schools

Education region	Distance in km	
	Mean	SE
Katima Mulilo	1.3	0.72
Rundu	5.7	1.76
Ondangwa East	4.3	0.56
Ondangwa West	5.1	0.79
Khorixas	2.7	1.13
Windhoek	3.7	0.66
Keetmanshoop	2.1	0.51
Total	4.0	0.34

Table 5.9 indicated that about 50 percent of teacher accommodation was provided by schools in the Katima Mulilo region. Therefore it was not surprising to note in *Table 5.11* that the mean distance teachers had to travel to their schools was relatively small in that region. In the other northern regions, with many schools in rural areas, relatively long distances were reported.

Policy Suggestion 14: Conduct an investigation to establish which factors inhibit the provision of teacher housing – especially government supplied housing in the northern regions. Determine other relevant factors restraining the deployment of qualified teachers to schools where they are required. Prioritize the provision of teacher housing and make appropriate long-term provision for this in the building budget of the Ministry.

Teachers' satisfaction with their work

Teachers indicated how important they considered each of 13 aspects to be for their work satisfaction. They also stated which of the 13 aspects they considered most important. There was not much regional variation in the ratings as 'very important' regarding most aspects, including in particular those aspects which were listed as most important by a significant proportion of teachers (*Table 5.12*).

Table 5.12. Teachers' rating of aspects of work satisfaction (percentage of learners)

Source of work satisfaction	Rated as 'Very Important'		Rated as 'Most Important'	
	Percentage	SE	Percentage	SE
Living conditions:				
Travel distance to school	56	4.3	-	-
Availability of teacher housing	78	3.7	3.1	1.4
Quality of teacher housing	68	4.1	1.3	1.0
School facilities and equipment:				
Quality of school buildings	80	3.5	3.5	1.5
Quality of classroom furniture	75	3.8	1.5	1.0
Quality of classroom supplies	94	2.0	8.6	2.4
Relationships with others:				
Quality of school management and administration	90	2.7	11.9	2.7
Amicable working relationships with other teachers	80	3.4	2.6	1.3
Good relationships with the local community	86	3.0	2.6	1.3
Career advancement:				
Expanded opportunities for promotion	77	3.6	0.5	0.6
Study opportunities	93	2.1	35.4	4.0
Level of teacher salary	80	3.5	8.8	2.4
Educational outcomes of learners:				
Seeing learners learn	90	2.7	20.2	3.4

According to the survey, teachers considered the following factors as the 'most important' for their work satisfaction: 'the provision of study opportunities', 'seeing their learners learn', 'quality of school management and administration', 'level of teacher salary', and the 'quality of classroom supplies'. Details have been recorded in *Table 5.12*, and the regional results for the nine most important aspects in *Table 5.13*.

Table 5.13. Teachers rating specific aspects as most important ones for work satisfaction

Education region	Aspect of work satisfaction (percentage of learners)																	
	Availability of teacher housing		Quality of school buildings		Quality of classroom supplies		Quality of school management and administration		Amicable working relationships with other teachers		Good relationships with the local community		Opportunities for further study		Level of teacher salary		Seeing learners learn	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	-	-	-	-	-	-	35	12	-	-	-	-	29	11	6	6	29	11
Rundu	-	-	-	-	-	-	10	7	5	5	10	7	58	12	10	7	5	5
Ondangwa East	5	4	9	6	9	6	9	6	-	-	5	4	30	9	5	4	23	8
Ondangwa West	4	4	4	4	15	7	8	5	-	-	-	-	61	10	4	4	4	4
Khorixas	11	7	5	5	16	9	19	9	5	5	-	-	13	8	13	8	13	8
Windhoek	-	-	-	-	5	4	11	6	7	5	5	4	14	7	18	7	36	9
Keetmanshoop	-	-	-	-	-	-	7	6	7	6	-	-	13	8	13	8	54	12
Total	3	1	4	2	9	2	12	3	3	1	3	1	35	4	9	2	20	3

Providing more opportunities for further study will result in increased remuneration costs for the Ministry, except in the situation where average real-term salaries of teachers are held constant. In 1996, the Ministry already had salary expenditures that were not sustainable in the long term. A revised salary structure could retain salary incentives for improving teachers' qualifications, however this work would have to be undertaken carefully so as not to impact upon total salary costs.

Policy Suggestion 15: Introduce financially sustainable measures to improve teacher job satisfaction, with particular emphasis on providing study opportunities, improving school management, and administration, and providing sufficient classroom supplies of adequate quality.

Conclusion

This chapter has provided information on the English teachers and school principals of Grade 6 learners. About 60 percent of the learners had a female English teacher, but this percentage varied between 5 percent in the Rundu region and 89 percent in the Windhoek region. In contrast, only 24 percent of learners had a female school principal. It was thus suggested to look into the equity of promotion prospects for male and female teachers.

English teachers were found to be 33 years old on average, and principals 47 years. The English teachers in the four northern regions were typically younger than their colleagues in the rest of the country. In the northern regions, English teachers had between 6.4 and 8.0 years of teaching experience on average, compared to 12.2 to 16.4 years in the southern regions. There was less variation between the regions in the experience of school principals, who had 23 years' teaching experience on average, which included 13 years of experience as principal.

The information obtained from the survey on the academic education of Grade 6 English teachers was not very conclusive. Significant differences were found in the years of teacher training, where the Rundu and Ondangwa East regions had teachers with the least training. The Rundu region had the least qualified teachers of all regions. Opportunities for further studies were cited as the main source of work satisfaction, by more teachers, than any other aspect of work satisfaction listed in the questionnaire. The desire for study opportunities seems to have been warranted considering that the average qualifications of teachers were below the desired 12 years of schooling plus three years' tertiary study. It has, however, been stressed in this chapter that the Ministry must design financially sustainable programmes to improve the teaching skills of its teachers. If great numbers of teachers were to obtain better qualifications that entitled them to higher salaries, the Ministry would not be able to pay them, and other alternatives should thus need to be considered. Finding a solution to this dilemma must be a high priority for the Ministry, and the relevant discussions should not only involve various directorates and offices of the Ministry, but also the teacher unions and teacher education institutions.

Most teachers in the Rundu, Ondangwa East, and Ondangwa West regions stayed in their own accommodation, while these regions were among those with the greatest need for better qualified teachers. The type of accommodation provided by schools in the Katima Mulilo region might not have been conducive to attract qualified teachers. Disparities between the

regions shown by an index of teacher home possessions were partially attributed to a lack of basic amenities in rural areas, which could be another aspect making teaching in rural areas less attractive. It has been proposed that all factors that constrain the deployment of qualified teachers to rural areas be examined and that appropriate priority should be given to the provision of government supplied teacher accommodation. Supplying teacher housing on a large scale would, though, be a high-cost policy, with resultant long-term recurrent expenditures for the maintenance of the buildings.

Chapter 6

The teaching process and school administration

What were the approaches, goals and perceptions of teachers and principals?

Ideally, the survey would have been combined with classroom observations to allow learner outcomes to be linked to the teaching practices of the teachers. Unfortunately, the financial and human resources available for the survey did not allow such an intensive study to be conducted. Teachers' own accounts of their approaches to teaching, their educational goals, and similar information were collected to obtain a limited picture of this aspect of the educational environment.

Several questions in the teachers' questionnaire related to their teaching approaches and perceptions of related matters. These included the importance given to different learner activities concerning the teaching of reading, the goals of reading, teaching approaches, frequency of testing, perceived role of inspectors, and aspects contributing to teacher job satisfaction. Teachers' responses to other related questions have been discussed in a later chapter. School principals' importance ratings of certain activities, and their perception of the severity of specific problems in their schools, are also discussed in this chapter.

The importance of learner activities and goals of reading

In order to obtain a measure of teachers' ratings of the importance of certain learner activities in the teaching of reading, and of some of the goals of reading, teachers were requested to rate the activities as 'not very important', 'of some importance' or 'very important'. They were also asked to indicate the most important activity and goal out of those listed.

Table 6.1.   Teachers' rating of specific learner activities as 'very important'

Education region	Learner activity													
	Listening to someone reading aloud		Silent reading		Learning new vocabulary		Pronouncing or sounding words		Reading for comprehension		Taking books home to read		Reading materials in the home	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	76	11	50	12	82	10	88	8	82	10	59	12	47	12
Rundu	85	8	35	12	95	5	90	7	95	5	63	12	73	10
Ondangwa East	75	9	33	10	96	4	87	7	88	7	75	9	71	9
Ondangwa West	89	6	48	10	96	4	89	6	85	7	72	9	52	10
Khorixas	74	10	84	8	89	7	81	9	89	7	76	10	79	10
Windhoek	89	6	71	9	100	-	87	7	96	4	73	9	82	8
Keetmanshoop	83	9	78	10	100	-	83	9	100	-	88	7	89	7
Total	83	3	54	4	95	2	87	3	90	3	73	4	68	4

While *Table 6.1* provided the impression that most teachers rated most activities as very important, there were some interesting features that should be noted. In the four northern regions, 'silent reading' was rated 'very important' significantly less often than in the remaining regions. Relatively lower ratings were given to 'taking books home to read' in the Katima Mulilo and Rundu regions, and 'reading materials in the home' in the Katima Mulilo

and Ondangwa West regions. The last-mentioned two activities were rated relatively high in the Keetmanshoop region.

Table 6.2. Teachers who rated specific learner activities as most important

Education region	Listening to someone reading aloud		Silent reading		Learning new vocabulary		Pronouncing or sounding words		Reading for compre-hension		Taking books home to read		Reading materials in the home	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	-	-	-	-	44	12	31	12	19	10	-	-	6	6
Rundu	-	-	5	5	37	12	21	10	18	9	16	9	3	4
Ondangwa East	9	6	4	4	35	10	13	7	24	9	13	7	2	3
Ondangwa West	7	5	-	-	33	9	17	7	30	9	4	4	9	5
Khorixas	-	-	5	5	14	8	5	5	50	11	11	7	14	8
Windhoek	2	2	2	2	22	7	11	5	51	8	2	2	9	5
Keetmanshoop	6	5	-	-	11	7	-	-	61	11	-	-	22	10
Total	5	2	2	1	29	4	14	3	35	4	7	2	8	2

The two learner activities rated most important by the greatest number of teachers were 'reading for comprehension' (35 percent) and 'learning new vocabulary' (29 percent). For both activities a clear north-south division can be observed: 'learning new vocabulary' was consistently rated the most important activity by the greatest number of teachers in the northern regions, but not in the south, where the opposite holds true for 'reading for comprehension'.

The proportions of learners who were taught by teachers who rated specific goals of reading as the most important one out of five goals listed, have been stated in Table 6.3 'developing a lasting interest in reading' was rated the most important goal by 34 percent, with 'improving learners' reading comprehension' and 'extending learners' vocabulary' following. More than half of the learners in the southern regions were taught by teachers who considered 'developing a lasting interest in reading' most important, compared to between 12 and 31 percent in the north. The emphasis on vocabulary was the highest in the Katima Mulilo and Rundu regions, with 41 and 39 percent respectively. In Ondangwa West, 'improving learners' reading comprehension' was rated as the most important goal by the teachers of 44 percent of the learners.

Table 6.3.   Teachers who rated specific goals of reading as most important

Education region	Goals of reading (percentage of learners taught by teachers who rated the goal to be most important)									
	Making reading enjoyable		Extending learners' vocabulary		Improving word attack skills		Improving learners' reading comprehension		Developing a lasting interest in reading	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	18	10	41	12	6	6	24	11	12	8
Rundu	-	-	39	13	11	8	19	10	31	12
Ondangwa East	15	7	13	7	13	7	44	10	17	8
Ondangwa West	17	7	22	8	7	5	22	8	31	9
Khorixas	11	7	11	7	-	-	22	10	55	12
Windhoek	16	7	18	8	-	-	14	7	52	10
Keetmanshoop	17	9	11	7	-	-	22	10	50	12
Total	14	3	20	3	6	2	25	4	34	4

Several disparities in the inputs into schools were highlighted in this report. Apart from these disparities, the above-mentioned differences between teachers' beliefs in what is important in their teaching must also be considered in further analyses, to explain some of the differences in achievement observed in the study.

Teaching approaches and testing

Five teaching approaches, reported in *Table 6.4*, were listed in the teacher questionnaire for teachers to indicate which ones they used 'never or rarely', 'sometimes' or 'often'. The teaching approaches used 'often' by the greatest number of teachers (between 75 and 77 percent) were 'asking questions to deepen understanding', 'asking questions to assess text comprehension' and 'reading aloud to the class'. 'Using materials the teacher created him/herself' was indicated only in respect of 28 percent of the learners.

Table 6.4.   Teachers who reported that they used specific approaches 'often'

Education region	Approaches when teaching reading									
	Introducing the background of a passage before reading		Asking questions to assess text comprehension		Asking questions to deepen understanding		Using own materials		Reading aloud to the class	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	94	6	82	10	71	11	53	12	65	12
Rundu	70	11	67	11	78	10	23	11	85	8
Ondangwa East	67	10	70	9	67	10	17	8	75	9
Ondangwa West	72	9	64	9	72	9	30	9	73	9
Khorixas	55	11	76	10	84	9	18	9	76	10
Windhoek	60	10	96	4	96	4	36	9	76	8
Keetmanshoop	44	12	89	7	78	10	33	11	78	10
Total	67	4	76	4	77	4	28	4	75	4

The results listed in *Table 6.5* showed that there was apparently no consistent policy regarding testing. Most learners were given written tests between twice per term and once or more per week. In Katima Mulilo, the most frequent testing was reported, while the

Keetmanshoop and Ondangwa East regions reported the lowest frequencies of writing tests. Nationally, 40 percent of Grade 6 learners were given a written test at least once per week.

Table 6.5.   Frequency of giving learners written tests in reading

Education region	Frequency of testing											
	No test		Once per year		Once per term		Two or three times per term		Two or three times per month		Once or more per week	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	-	-	-	-	-	-	18	10	24	11	59	12
Rundu	-	-	-	-	10	8	25	11	25	11	40	12
Ondangwa East	-	-	-	-	13	7	33	10	21	8	33	10
Ondangwa West	-	-	-	-	-	-	26	9	33	9	41	10
Khorixas	-	-	5	5	-	-	29	10	16	8	50	12
Windhoek	-	-	-	-	2	3	24	8	24	8	49	9
Keetmanshoop	6	5	-	-	22	10	22	10	28	11	22	10
Total	0	1	0	1	6	2	27	4	26	4	41	4

Policy Suggestion 16: Analyze the effect of teachers' approaches to teaching and their perceptions of important goals on learner achievement. Adjust pre- and in-service teacher training programmes according to the findings. (The SACMEQ survey provides information in respect of English reading comprehension only.)

The role of inspectors as perceived by teachers

As the same questionnaire for teachers was used by several countries, an inclusive definition of 'inspector' had to be used. In the Namibian context, the term 'inspector' included inspectors and advisory teachers.

Teachers' perceptions of the roles of inspectors and advisory teachers have been listed in *Table 6.6* as the percentage of learners taught by teachers who had marked the specific perception as 'yes'. The different roles have been classified in the table as pedagogical roles, advisory versus critical roles, and professional development roles. It should be noted that two columns, '...contributes very little to teaching' and '...comes to criticize' represent negative perceptions. A low percentage in these columns must thus be interpreted as being desirable.

Table 6.6. Teachers perceptions of the roles of inspectors and advisory teachers

Education region	The inspector is someone who...																			
	Pedagogical role												Advisory vs. critical role				Professional development role			
	Suggests new ideas		Clarifies educational objectives		Explains curriculum content		Recommends new teaching materials		Contributes very little to teaching		Makes suggestions to improve teaching methods		Comes to advise		Comes to criticize		Provides information for self-development		Encourages professional contacts	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	94	6	94	6	75	11	82	10	24	11	82	10	88	8	24	11	65	12	71	11
Rundu	98	3	87	7	93	6	83	9	48	12	93	6	93	6	10	7	65	12	83	9
Ondangwa East	93	5	85	7	81	8	89	6	29	9	90	6	94	5	23	9	59	10	77	9
Ondangwa West	87	6	98	2	74	9	89	6	39	9	94	4	94	4	25	8	43	10	91	5
Khorixas	100	-	100	-	95	4	100	-	24	10	92	6	100	-	5	5	87	7	87	7
Windhoek	93	5	93	5	83	7	79	8	44	10	75	8	92	5	18	7	81	8	73	8
Keetmanshoop	94	5	100	-	94	5	88	7	24	10	100	-	100	-	6	5	93	5	81	9
Total	92	2	93	2	82	3	87	3	35	4	89	2	94	2	19	3	64	4	81	3

Summarizing, inspectors were perceived as advising, clarifying and explaining policies, suggesting new ideas and improved teaching methods, and recommending new materials. The relatively low percentage of teachers who perceived inspectors as providing information for self-development is worrying, considering the high value given in *Table 5.12* by teachers to opportunities for professional development as a source of work satisfaction.

While the great majority of teachers perceived inspectors as coming to advise, 19 percent also saw them as coming to criticize. This proportion was about 25 percent in the Ondangwa West, Katima Mulilo and Ondangwa East regions. A surprisingly high percentage of teachers in Rundu and Windhoek, 48 and 44 percent respectively, reported that the inspector contributed very little to teaching.

It is interesting to note that, if *Table 6.6* was to be viewed as a rating table, the Khorixas and Keetmanshoop regions would have given their inspectors and advisory teachers the best ratings.

Policy Suggestion 17: Establish the desired roles of inspectors and advisory teachers and inform inspectors, advisory teachers and their supervisors in regional offices about these roles. Design and implement appropriate training programmes for inspectors and advisory teachers that will enable improve teacher perceptions of their role.

Activities perceived to be important by school principals

School principals rated the five activities listed in *Table 6.7* according to the importance to their work. They also indicated which of these activities they considered to be the most important. The results of these analyses have been presented in *Table 6.8*. Both tables showed that 'administrative tasks concerning the school' and 'discussing educational objectives with teaching staff' were considered to be the most important activities out of those listed. 'Using records of learners' progress' was least often rated either as 'very important' or as the most important one.

In all regions except for the Windhoek region, 'administrative tasks' were rated as most important, 'discussing educational objectives with the teaching staff' was considered most important in the Windhoek region.

Table 6.7. School Principals who rated specific activities as very important

Education region	Activity									
	Contacts with local community		Using records of learners' progress		Administrative tasks concerning the functioning of the school		Discussing educational objectives with teaching staff		Activities aimed at the professional development of teachers	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	74	10	61	11	95	5	95	5	68	11
Rundu	94	5	78	11	89	7	100	-	83	11
Ondangwa East	87	7	78	9	95	4	100	-	83	8
Ondangwa West	90	6	70	9	93	5	100	-	90	6
Khorixas	80	9	70	11	95	5	100	-	80	9
Windhoek	96	4	87	7	100	-	91	6	91	6
Keetmanshoop	85	8	95	5	100	-	100	-	95	5
Total	88	3	77	4	95	2	98	1	86	3

Table 6.8. School principals who rated specific activities as most important

Education region	Activity									
	Contacts with local community		Using records of learners' progress		Administrative tasks concerning the functioning of the school		Discussing educational objectives with teaching staff		Activities aimed at the professional development of teachers	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	-	-	-	-	44	11	33	11	22	10
Rundu	16	9	-	-	53	12	21	10	11	7
Ondangwa East	27	9	5	4	36	10	23	9	9	6
Ondangwa West	7	5	-	-	50	9	27	8	17	7
Khorixas	15	8	-	-	45	11	25	10	15	8
Windhoek	9	6	13	7	22	9	43	11	13	7
Keetmanshoop	5	5	10	7	45	11	15	8	25	10
Total	12	3	4	2	41	4	28	4	15	3

Policy Suggestion 18: Determine the desirable functions and activities of school principals, which may depend on the specific setting of the school (primary, combined or secondary school, urban or rural environment, small or large school). Ensure that these functions and activities are contained in the performance appraisal system, and that school principals are made aware of them during in-service training courses.

Problems perceived by school principals

Four general problems experienced in schools were singled out in the school principal questionnaire: teacher absenteeism, teacher laziness, learner absenteeism, and sexual harassment. Sexual harassment included teacher-learner, teacher-teacher and/or learner-learner harassment. Principals were requested to indicate to what extent these were problems at their school.

Table 6.9.   School principals experiencing particular problems

Problem	Region	Not a problem		Minor problem		Major problem	
		%	SE	%	SE	%	SE
Teacher absenteeism	Katima Mulilo	35	11	40	11	25	10
	Rundu	32	12	47	13	21	10
	Ondangwa East	26	9	61	10	13	7
	Ondangwa West	30	9	60	9	10	6
	Khorixas	30	11	60	11	10	7
	Windhoek	22	9	61	10	17	8
	Keetmanshoop	55	11	40	11	5	5
	Total	30	4	56	4	13	3
Teacher laziness	Katima Mulilo	50	11	30	11	20	9
	Rundu	37	12	47	13	16	9
	Ondangwa East	30	10	48	11	22	9
	Ondangwa West	30	9	60	9	10	6
	Khorixas	45	11	50	11	5	5
	Windhoek	45	11	50	11	5	4
	Keetmanshoop	60	11	35	11	5	5
	Total	39	4	49	4	12	3
Learner absenteeism	Katima Mulilo	-	-	35	11	65	11
	Rundu	-	-	63	12	37	12
	Ondangwa East	9	6	26	9	65	10
	Ondangwa West	-	-	30	9	70	9
	Khorixas	10	7	65	11	25	10
	Windhoek	9	6	68	10	23	9
	Keetmanshoop	20	9	60	11	20	9
	Total	6	2	44	4	50	4
Sexual harassment	Katima Mulilo	75	10	15	8	10	7
	Rundu	63	12	16	9	21	10
	Ondangwa East	30	10	39	10	30	10
	Ondangwa West	47	9	53	9	-	-
	Khorixas	70	11	30	11	-	-
	Windhoek	78	9	22	9	-	-
	Keetmanshoop	90	7	5	5	5	5
	Total	58	4	33	4	9	2

The percentages of learners in schools where principals experienced each of the problems as 'not a problem', a 'minor problem' or a 'major problem' have been listed in *Table 6.9*. To simplify the interpretation, the three ratings were given values 0, 1 and 2 respectively, and a 'problem index' was calculated as the mean problem rating. This index, listed in *Table 6.10*, has a value of zero if the school principals did not experienced any problems, and a value of two if a problem was a major one in all schools.

In all regions, learner absenteeism was a serious problem, with 50 percent of learners having been in schools where this was a major problem. The problem was reported as a major problem in the majority of schools in the Katima Mulilo, Ondangwa East, and Ondangwa West regions, while it was reportedly a minor problem in two thirds of the schools in the Rundu region and a major problem in the rest of the schools in that region.

In *Table 4.12* it was reported that the Rundu region had one of the highest learner absenteeism rates of all regions. Many principals in the Rundu region apparently did not perceive the high absenteeism rate in their school as a major problem. Sexual harassment was the problem least often reported as a major or minor problem. In this case too, the northern regions were experiencing the problem more often than the southern regions. Teacher absenteeism was the only problem, according to the index, where a 'southern' region, Windhoek, reported that it experienced a problem more severely than some northern regions. The ratings were based on the principals' judgements and, therefore, these results must be interpreted as perceptions and not as strictly comparable ratings.

Table 6.10. Indexed representation of problems experienced by school principals

Education region	Problem							
	Teacher absenteeism		Teacher laziness		Learner absenteeism		Sexual harassment	
	Index	SE	Index	SE	Index	SE	Index	SE
Katima Mulilo	0.90	0.18	0.70	0.18	1.65	0.11	0.35	0.15
Rundu	0.89	0.18	0.79	0.18	1.37	0.12	0.58	0.20
Ondangwa East	0.87	0.13	0.91	0.15	1.57	0.14	1.00	0.17
Ondangwa West	0.80	0.11	0.80	0.11	1.70	0.09	0.53	0.09
Khorixas	0.80	0.14	0.60	0.13	1.15	0.13	0.30	0.11
Windhoek	0.96	0.13	0.59	0.12	1.14	0.11	0.22	0.09
Keetmanshoop	0.50	0.14	0.45	0.14	1.00	0.15	0.15	0.11
Total	0.83	0.05	0.73	0.06	1.44	0.05	0.51	0.05

It was already proposed in Policy Suggestion 10 to attend to the problem of learner absenteeism. The extent to which school principals experienced three other problems has been discussed above, and it was shown that principals experience problems. The four problems do not constitute a complete list of problems which may have a negative influence on the quality of education, and further enquiries or research in this respect is required.

Policy Suggestion 19: Identify the most important problems experienced by school principals, and design and implement measures to curb these problems.

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Conclusion

Some interesting differences between the education regions were reported in this chapter regarding teachers' views on important learner activities and goals of reading. There were less clear patterns in the teaching approaches reported to have been used 'often' by English teachers. Teachers gave their learners written tests at different frequencies, with more than 90 percent of teachers giving a test at least twice per term, and 41 percent even once a week. While it still needs to be shown whether different teaching processes were associated with learner achievement, the existence of regional and individual differences points to the need for the Ministry to analyze teaching practices and their effect. Qualitative observations by subject specialists and some quantitative analyses of outcomes should already provide valuable information without incurring high expenditures. Further research may, though, be required to enable the Ministry to improve the quality of teaching to the extent that seems to be necessary from the outcomes of this study.

Teachers' perceptions of the roles of inspectors and advisory teachers were generally positive, but they left some room for improvement. A recommendation to review these roles and to train inspectors and advisory teachers to present the desired image has thus been made.

School principals' ratings of important tasks suggested that the Ministry may need to look into the desired functions and activities of principals. An interesting deviation of the Windhoek region from all other regions was observed in the higher rating of 'discussing educational objectives with teaching staff' in that region, while principals in all other regions gave more importance to 'administrative tasks concerning the functioning of the school'.

Learner absenteeism was cited as a major problem by the school principals of 50 percent of the Grade 6 learners. Only 6 percent of learners were in schools where this was not a problem. Other problems that were reported in the survey were teacher absenteeism, teacher laziness and sexual harassment. Some significant regional differences were detected in school principals' perceptions of the problems they experienced. As these four problem areas did not constitute a comprehensive list of common problems, it was suggested to identify the most important problems experienced by school principals, and to take measures to curb these problems.

Chapter 7

Teaching conditions

What were the teaching conditions in primary schools?

Teaching conditions are determined by a variety of factors, many of them difficult to quantify. Information was collected in the survey on a number of educational inputs that impact upon teaching conditions in schools that have Grade 6 learners.

Learners were requested to indicate to what extent they shared their English readers or textbooks with others and to state the number of basic materials they had. They also indicated whether they had sitting and writing places. Teachers also provided information on the number of sitting and writing places in their classrooms, and they indicated which resources out of a list of 14 items they had. School principals also provided information on facilities and equipment in their schools.

There were several questions regarding libraries and the borrowing of books by learners in the questionnaires. Significant inconsistencies were found in the different responses to these questions, and the outcomes are thus not reported. The confusion may have arisen in schools where there was a library room which was not stocked or vice versa, or by confusing descriptions of school and classroom libraries, the latter often having been referred to in common jargon as 'book boxes' rather than 'classroom libraries'.

The provision of educational materials

The provision of educational materials is an issue of much interest, especially as the resources available within the Ministry's budget for materials are competing with increasing expenditure on personnel. Some of the contentious issues were the sufficient and equitable provision of materials to schools, and the actual availability of materials in classes as opposed to having been stowed away in store-rooms at schools or regional offices. Information was collected on the level of sharing of books, but not on whether the books used were approved by the Ministry, and also not on whether additional books were stored somewhere in the school. The extent to which English readers or textbooks were shared is shown in *Table 7.1*. The region with the highest occurrence of learners who had no readers was the Ondangwa East region, where nearly 20 percent of learners reported that there was either no reader in the class or where only the teacher had one. The four regions best provided were Katima Mulilo, Khorixas, Windhoek and Keetmanshoop. The Rundu region could only provide books to each learner in 40 percent of cases, and clearly should be considered as a priority region for assistance.

Between 40 and 64 percent of learners in the different regions used a textbook by themselves. However, up to 19 percent of learners (the sum of 'there are no readers' and 'only the teacher has a reader') had no reader or textbook. These figures point to serious inefficiencies in the ordering or distribution of textbooks and/or to a wastage of books in some schools, rather than to serious general shortages of textbooks.

Table 7.1.   The provision of English readers or textbooks - proportion of learners sharing

Education region	Level of sharing of readers or textbooks									
	There are no readers		Only the teacher has a reader		Learner shares a reader with others		Learner shares a reader with another		Learner uses a reader by him/herself	
	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	1.7	1.8	7.2	3.6	5.7	3.3	23.0	5.9	62.4	6.8
Rundu	0.6	1.6	0.6	1.6	49.4	10.3	9.4	6.0	40.0	10.1
Ondangwa East	5.0	3.3	14.1	5.3	20.5	6.1	15.7	5.5	44.7	7.5
Ondangwa West	1.3	1.2	1.9	1.5	21.3	4.4	28.5	4.9	47.1	5.4
Khorixas	4.7	4.3	3.4	3.7	7.0	5.2	20.9	8.3	64.1	9.8
Windhoek	0.9	1.1	3.5	2.1	12.3	3.8	22.9	4.8	60.5	5.6
Keetmanshoop	2.8	2.5	4.4	3.1	9.4	4.5	20.4	6.2	63.0	7.4
Total	2.4	0.9	5.4	1.3	18.2	2.2	21.6	2.4	52.4	2.9

Policy Suggestion 20: Ensure the adequate and equal provision of textbooks to schools by (a) giving appropriate priority to the purchase of textbooks in the Ministry's budget, (b) designing and implementing measures to provide textbooks to schools on an equal basis, and (c) taking effective measures to ensure that textbooks are well looked after in order for them to be used for as many years as possible.

Learners were also requested to provide information on the number of exercise books, notebooks, pencils, rulers, erasers and pens or ballpoint pens they had. Two problems with this question were discovered after the survey. First, the difference between an exercise and a notebook was apparently not clear. This problem was resolved in the analysis by adding these two categories. Some schools had a system whereby learners used writing pads and then placed loose pages in files. Numbers provided by such schools were thus not strictly comparable to those of other schools. Second, for unknown reasons, several data collectors misinterpreted this question as meaning 'what items did the school provide you with?'. This misinterpretation severely affected the information collected on pencils, rulers, erasers and pens.

The total number of exercise and note-books learners had has been presented graphically in Figure 7.1 to establish what number would constitute a definite short supply in practice. According to the graph, most learners had seven or more books, and having had less than seven was thus considered as short supply.
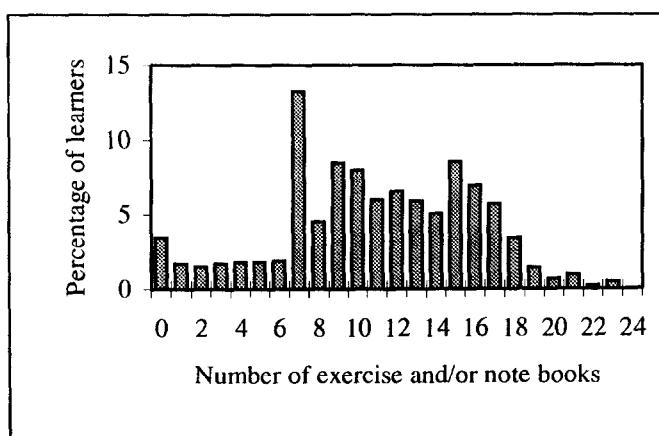
Figure 7.1. Exercise books and/or Notebooks

The proportion of learners who had a low provision of exercise and notebooks according to the above criteria has been listed in *Table 7.2*. It is remarkable that all learners in the Rundu region had at least seven books, while between one fifth and a quarter of learners had six or fewer books in the two Ondangwa regions. The

provision of exercise and notebooks seems to have been reasonably good in the other regions, although the 13 percent of learners in the Keetmanshoop region who reported fewer than seven books is surprisingly high.

Table 7.2.   Percentage of learners who had less than seven exercise books or notebooks

Education region	Percentage of learners with fewer than seven exercise books and/or notebooks	
	%	SE
Katima Mulilo	5.5	3.4
Rundu	-	-
Ondangwa East	20.0	6.5
Ondangwa West	26.4	6.9
Khorixas	0.3	1.0
Windhoek	2.3	2.5
Keetmanshoop	13.3	7.0
Total	13.8	2.1

Policy Suggestion 21: Review existing policies on the provision of educational materials. Identify weak points in the distribution system, and introduce measures to ensure that all learners are provided with at least the minimum quantity of materials.

Sitting and writing places

Learners and teachers were both requested to report on the availability of sitting and writing places. Learners reported whether they were sitting on the floor or on a bench, at a desk or on a chair. They also reported whether they had a place to write on. Teachers reported the number of sitting and writing places in their class. Approximately equal numbers were expected to be reported by teachers and learners as they were referring to the same classrooms. The disparities between the numbers in *Table 7.3* presumably indicate that learners shared sitting and writing places designed for a smaller number of learners. Most learners perceived that they had sitting and writing places, while teachers reported a shortage of about 40 percent of writing places in the Katima Mulilo, Ondangwa East, and Ondangwa West regions.

Table7.3.   Percentage of learners who had sitting and/or writing places

Education region	Sitting places				Writing places			
	According to learners		According to teachers		According to learners		According to teachers	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	99.6	0.3	77.1	7.0	99.6	0.3	60.4	9.3
Rundu	99.7	0.3	74.7	7.0	99.7	0.2	76.9	9.3
Ondangwa East	97.9	1.1	80.2	6.0	94.6	2.1	58.2	6.7
Ondangwa West	99.9	0.1	95.0	3.7	99.1	0.3	60.5	5.8
Khorixas	100.0	-	97.8	2.2	100.0	-	91.2	4.2
Windhoek	100.0	-	96.7	1.8	98.6	0.5	85.1	4.3
Keetmanshoop	99.9	0.1	82.6	7.7	100.0	-	80.0	7.6
Total	99.5	0.2	88.3	2.0	98.3	0.5	69.9	2.6

Resources available in the English classrooms

Two indices were designed as a measure of the provision of resources in the classroom. The first index was a measure of the number of different furniture items, other than sitting and writing places for learners, which were found in the classrooms. The five items included were a chalkboard, a cupboard, bookshelves, a teacher table, and a teacher chair. The second index represented the number of items or materials available in the classroom out of the following eight: chalk, any wall chart, a map of Namibia, a map of Africa, a map of the world, an atlas, a classroom library and an English dictionary. The mean values for the two indices have been listed for the different regions in *Table 7.4*.

Table 7.4.   Classroom resources indicators

Education region	Classroom furniture index		Teaching materials index	
	Mean	SE	Mean	SE
Katima Mulilo	2.8	0.44	5.2	0.53
Rundu	3.4	0.28	4.1	0.66
Ondangwa East	3.3	0.23	4.6	0.34
Ondangwa West	3.4	0.20	3.7	0.45
Khorixas	4.3	0.21	4.4	0.40
Windhoek	4.4	0.22	4.5	0.43
Keetmanshoop	4.4	0.23	5.1	0.46
Total	3.7	0.10	4.4	0.18

In the case of furniture, a north-south division was found, with classrooms in the north having had one item less in the classroom on average than in the Khorixas, Windhoek and Keetmanshoop regions. According to the teaching materials indicator, the Katima Mulilo and Keetmanshoop regions were better supplied than the Rundu and Ondangwa West regions. The other differences were relatively small.

> **Policy Suggestion 22:** Develop a policy on the furnishing of classrooms. Take stock of present shortages, and make provision in the Ministry's budget for the supply of the most essential furniture.

School facilities and equipment

The lack of facilities and equipment has often been cited as a major reason for low educational quality. Further analysis of the outcomes of the SACMEQ study may provide some information on the extent to which the availability of facilities and equipment explains the differences found in learner achievement. The level of availability of certain items has been presented in this section in terms of the proportion of Grade 6 learners who were in schools which had the facilities or pieces of equipment. Additional information on the facilities available in schools has been collected annually by the Ministry in its Annual Education Census (EMIS, 1996).

The percentage of Grade 6 learners who had specific facilities and equipment in their schools has been summarized in *Table 7.5*. Regional breakdowns of the information have been given in *Tables 7.6 to 7.9*.

Table 7.5.   National averages of the provision of school facilities and equipment

Facility or equipment	Percentage of learners in a school having the facility or equipment	
	Percentage	SE
Facilities:		
Library	62.1	4.1
School hall	12.1	2.2
Staff room	52.8	3.6
Principal's office	50.5	3.2
Secretary's office	29.2	2.4
Store room	57.7	3.8
Tuck shop, eating facilities, etc.	16.3	2.5
School grounds:		
Sports area	49.3	4.3
Playground	84.2	3.2
School garden	45.4	4.3
Services:		
Piped water	61.4	3.7
Well, borehole, etc.	22.9	3.5
Electricity	43.3	2.7
Telephone	42.7	2.4
Equipment:		
First-aid kit	20.8	2.9
Fax machine	13.3	2.2
Typewriter	62.0	3.6
Duplicator	51.5	3.6
Radio	25.5	3.9
Tape recorder	43.0	4.2
Overhead projector	32.9	2.7
Television set	16.4	2.5
Film projector	10.9	2.3
Video recorder	15.5	2.7
Photocopier	23.3	2.6
Computer	16.1	2.4

The national figures hide disparities between regions, as can be seen from the following tables. The Katima Mulilo, Rundu, Ondangwa East and Ondangwa West regions had lower levels of provision of most of the listed facilities and equipment than the remaining three regions. The differences were probably due to historical disparities, especially in respect of facilities, differences in available infrastructure, such as electricity, and differences in parental contributions to school funds. Many of the computers in schools, for example, were most likely donated to schools or purchased from school funds, but not provided by government.

Table 7.6. Facilities

Education region	Library		School hall		Staff room		Principal's office		Secretary's office		Store-room		Tuck shop, eating facilities, etc.	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	50.0	11.5	10.0	6.9	40.0	11.2	45.0	11.4	10.0	6.9	55.0	11.4	0.0	-
Rundu	26.3	11.4	0.0	-	52.6	12.9	52.6	12.9	0.0	-	68.4	12.0	0.0	-
Ondangwa East	78.3	8.8	0.0	-	34.8	10.1	26.1	9.4	13.0	7.2	34.8	10.1	0.0	-
Ondangwa West	60.0	9.1	0.0	-	23.3	7.8	16.7	6.9	0.0	-	33.3	8.7	3.3	3.3
Khorixas	55.0	11.4	40.0	11.2	95.0	5.0	90.0	6.9	60.0	11.2	95.0	5.0	45.0	11.4
Windhoek	69.6	9.8	30.4	9.8	91.3	6.0	100.0	-	87.0	7.2	95.7	4.3	43.5	10.6
Keetmanshoop	65.0	10.9	30.0	10.5	90.0	6.9	90.0	6.9	65.0	10.9	75.0	9.9	45.0	11.4

Table 7.7. School grounds

Education region	Sports area		Playground		School garden	
	%	SE	%	SE	%	SE
Katima Mulilo	65.0	10.9	90.0	6.9	50.0	11.5
Rundu	68.4	12.0	73.7	11.4	42.1	12.7
Ondangwa East	43.5	10.6	82.6	8.1	47.8	10.6
Ondangwa West	50.0	9.3	83.3	6.9	40.0	9.1
Khorixas	35.0	10.9	80.0	9.2	50.0	11.5
Windhoek	39.1	10.4	91.3	6.0	39.1	10.4
Keetmanshoop	65.0	10.9	85.0	8.2	65.0	10.9

Table 7.8. Basic services

Education region	Piped water		Well, borehole, etc.		Electricity		Telephone	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	45.0	11.4	40.0	11.2	25.0	9.9	30.0	10.5
Rundu	47.4	12.9	47.4	12.9	63.2	12.4	57.9	12.7
Ondangwa East	30.4	9.8	21.7	8.8	21.7	8.8	8.7	6.0
Ondangwa West	50.0	9.3	20.0	7.4	3.3	3.3	6.7	4.6
Khorixas	90.0	6.9	30.0	10.5	95.0	5.0	80.0	9.2
Windhoek	100.0	-	8.7	6.0	95.7	4.3	100.0	-
Keetmanshoop	95.0	5.0	20.0	9.2	75.0	9.9	95.0	5.0

Table 7.9. Equipment

Education region	First-aid kit		Fax machine		Type-writer		Dupli-cator		Radio		Tape recorder		Overhead projector		Television set		Film projector		Video recorder		Photo-copier		Computer	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	15	8	0	-	50	11	60	11	10	7	20	9	0	-	0	-	0	-	0	-	0	-	0	-
Rundu	0	0	0	-	42	13	32	12	0	-	0	-	11	8	11	8	0	-	5	6	0	-	0	-
Ondangwa East	9	6	0	-	61	10	30	10	30	10	43	11	13	7	4	4	4	4	9	6	4	4	4	4
Ondangwa West	3	3	0	-	30	9	23	8	30	9	40	9	7	5	0	-	3	3	3	3	3	3	-	-
Khorixas	40	11	45	11	90	7	80	9	30	11	60	11	65	11	35	11	30	11	25	10	65	11	35	11
Windhoek	48	11	39	10	100	-	91	6	30	10	52	11	87	7	48	11	17	8	39	10	57	11	43	11
Keetmanshoop	60	11	30	11	100	-	100	-	20	9	75	10	80	9	40	11	40	11	40	11	70	11	55	11

An index of school supplies was calculated by counting how many of the items in *Table 7.5* were found in each school. The mean values of this index have been tabulated in *Table 7.10*. The Ondangwa West region had the lowest mean index, while schools in the Khorixas, Windhoek and Keetmanshoop regions had significantly more of the facilities and equipment. The disparities should, though, be interpreted considering the absence of electricity and telephone services in large parts of the northern rural areas, which account for two basic services and eight types of equipment not being found in schools in those areas.

Table 7.10.   School supplies index

Education region	School supplies index	
	Mean	SE
Katima Mulilo	7.1	0.5
Rundu	7.0	0.8
Ondangwa East	6.6	0.9
Ondangwa West	5.3	0.5
Khorixas	15.4	1.4
Windhoek	16.4	1.0
Keetmanshoop	16.7	1.0
Total	9.6	0.3

Policy Suggestion 23: Review existing policies, or develop new policies where required, on the provision of facilities, services and equipment to schools. Devise a financially viable plan to eradicate existing backlogs.

Class sizes

The mean class sizes in Grade 6 differed strongly between regions, with Ondangwa East having had the highest mean of 47.5 compared to the lowest one, 25.8, in the Keetmanshoop region. *Table 7.11* also indicated that there were significant differences in the class sizes within regions. While the Windhoek region had a mean class size comparable to the Katima Mulilo region, it managed to have 92 percent of its learners in classes smaller than 40, while in Katima Mulilo 77.3 percent of learners were in classes smaller than 40 and 22.7 percent in classes with 40 or more learners. The wide spread of class sizes that was observed in the Ondangwa West region is also notable. The differences in class sizes between and within regions can to a great extent be attributed to differences in population density and the availability of teachers and facilities.

Table 7.11. Mean class sizes and the percentage of learners taught in categories of class sizes

Education region	Mean class size		Class size											
			Less than 30		30 to 34.9		35 to 39.9		40 to 44.9		45 to 49.9		50 or more	
	Mean	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	31.3	1.8	40	11	28	10	10	7	20	9	3	4	-	-
Rundu	34.9	2.9	37	13	18	10	12	9	15	9	8	7	10	8
Ondangwa East	47.5	2.8	8	5	4	4	12	7	24	9	18	8	34	10
Ondangwa West	40.9	2.1	17	7	17	7	10	6	23	8	13	6	20	7
Khorixas	29.1	1.2	47	11	35	11	18	9	-	-	-	-	-	-
Windhoek	32.9	1.1	28	9	32	9	32	9	4	4	4	4	-	-
Keetmanshoop	25.8	1.2	72	10	28	10	-	-	-	-	-	-	-	-
Total	37.4	0.9	27	3	20	3	14	3	15	3	9	2	14	3

Policy Suggestion 24: Develop a programme to reduce the difference in class sizes between and within regions. The programme should address the provision of teachers and facilities, as well as the utilization of facilities, that is, the introduction of the platoon system[1] where there is a shortage of classrooms.

Conclusion

Disparities in the availability of textbooks and exercise books or notebooks were attributed in this chapter to differences between regions, and to inefficiencies within regions in ordering or distributing materials to schools. Some schools may have had a lack of these materials as a result of wastage or learners losing books. It has thus been suggested to look into these aspects as a priority in conjunction with making adequate and equitable provision for materials in the Ministry's budget.

According to teachers' reports on writing places for learners and the availability of certain classroom resources, the Katima Mulilo, Rundu, Ondangwa East and Ondangwa West regions experienced the greatest deficiencies. A need to develop a policy on the furnishing of classrooms has thus been identified, and it has been suggested to make budgetary provision for the supply of the most essential furniture to all schools.

Further disparities were found between and within regions regarding the provision of specific school facilities and equipment. These differences could to some extent be attributed to a lack of basic services, in particular electricity and telephone services, in rural areas. It has also been proposed in this respect to review the Ministry's policies on providing specific facilities and equipment, and then to devise a financially viable plan to eradicate existing backlogs.

Significant differences were found in the Grade 6 class sizes between and within regions. In Ondangwa East, the average class size was 47, followed by Ondangwa West, with an average class size of 41. The smallest mean class size was reported by the Keetmanshoop region.

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[1] A double-session system based on two teachers teaching in two shifts in the same classroom is referred to as a 'platoon system' in Namibia.

Chapter 8

School policy

What aspects of the policies designed to improve teaching were in place?

This study provided an opportunity to obtain information on the implementation of certain policies which were typically in place in SACMEQ member countries. For example, it enabled the researchers to examine the implementation of policies related to the frequency of teacher meetings with parents, the frequency of giving homework, and the provision of advice to the teacher. The provision of certain educational inputs, the minimum qualifications of teachers, and teaching approaches are also policy issues. Aspects of such policies were discussed in *Chapters 5 to 7*. It was, for example, found in those chapters that 8 percent of learners did not have an English reader or textbook, while 52 percent used a reader or textbook by themselves; and that teachers in the Rundu and Ondangwa East regions had little teacher training compared to the Windhoek and Keetmanshoop regions.

Meeting parents

About 60 percent of Grade 6 learners had English teachers who met with their parents at least once per term to discuss the learners' progress. This percentage was more than 80 in the Khorixas region, while between about 30 and 40 percent of learners in the Katima Mulilo, Rundu, and Ondangwa East regions had teachers who never met with parents. A detailed breakdown of these numbers has been given in *Table 8.1*.

Table 8.1.   The frequency of teachers meeting with parents

Education region	Frequency							
	Never		Once per year		Once per term		Once per month or more often	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	29	11	6	6	41	12	24	11
Rundu	40	12	5	6	30	11	25	11
Ondangwa East	33	10	19	8	23	9	25	9
Ondangwa West	19	8	19	8	52	10	11	6
Khorixas	5	5	13	8	77	10	5	5
Windhoek	9	6	31	9	42	10	18	7
Keetmanshoop	17	9	17	9	56	12	11	7
Total	21	4	18	3	44	4	17	3

Apart from the Khorixas region, there seem not to have been well-established policies regarding meetings between teachers and parents. The Ministry's approach to have parents involved in their children's education, and the Ministry's goal of democratic participation of its partners in education, demand that teachers have discussions with parents about their children's progress in school.

Policy Suggestion 25: Review the policy on meetings between teachers and parents and ensure that the policy is implemented. Provide information and, whenever possible, training to teachers to enable them to make optimal use of such meetings to obtain the involvement of parents in their children's schooling, and to allow parents the opportunity to communicate with the teacher.

Homework given

More than 90 percent of the Grade 6 learners reported that they were getting homework at least once per week, the majority getting homework 'most days of the week'. In *Table 8.2* it may be seen that homework was given less regularly in the Katima Mulilo region, while learners in the Khorixas and Windhoek regions were given most homework.

Table 8.2. The frequency of learners getting homework

Education region	Frequency							
	No homework		Once or twice each month		Once or twice each week		Most days of the week	
	%	SE	%	SE	%	SE	%	SE
Katima Mulilo	2	2	19	5	31	6	48	6
Rundu	0	1	7	5	24	8	69	9
Ondangwa East	3	2	10	3	22	4	65	5
Ondangwa West	2	1	8	2	19	3	71	4
Khorixas	1	1	3	2	18	5	79	5
Windhoek	0	0	5	2	14	3	81	4
Keetmanshoop	2	2	7	4	24	7	66	7
Total	2	1	8	1	20	2	70	2

Policy Suggestion 26: Draw up guidelines for teachers on the appropriate frequency of giving homework, and on the integration of homework into the teaching process. These guidelines should be conveyed to school principals and teachers by advisory teachers and inspectors.

Inspector and advisory teacher visits

Inspectors and advisory teachers were grouped together in the questionnaires because of the different systems that were implemented in this respect in the SACMEQ countries. Teachers were requested to indicate how many times an inspector or advisory teacher visited them in their classroom between 1993 and 1995. School principals reported the last year in which their school had a full inspection. The results have been reported in *Table 8.3*. Teachers in Katima Mulilo were least often visited in their classrooms. The mean number of classroom visits for Katima Mulilo was, though, not significantly lower than the mean for Keetmanshoop. The national average frequency of visits was once every one-and-a-half years. The Khorixas, Windhoek and Keetmanshoop regions reported the longest mean periods since the last full inspection of their school. Obviously, classroom visits and full inspections can vary drastically in substance, and a comparison of frequencies should be considered to be only one aspect required for an objective analysis of the situation.

Table 8.3. Inspector and advisory teacher visits

Education region	Total inspector or advisory teacher classroom visits over the last three years		Years since the last full inspection of the school	
	Mean	SE	Mean	SE
Katima Mulilo	0.8	0.30	2.7	0.50
Rundu	2.3	0.45	1.3	0.22
Ondangwa East	2.4	0.77	2.3	0.49
Ondangwa West	2.7	0.59	2.2	0.43
Khorixas	1.8	0.55	3.7	0.41
Windhoek	1.4	0.59	3.2	0.40
Keetmanshoop	1.1	0.31	3.7	0.42
Total	2.0	0.27	2.6	0.19

Policy Suggestion 27: Develop a policy on an adequate frequency of classroom visits of advisory teachers and on the desired frequency of inspector visits to schools and of full school inspections. Review the role of advisory teachers and inspectors and their specific tasks. Establish the number of inspectors and advisory teachers required, develop an effective system of decentralizing the advisory and inspection services, and calculate the resultant remuneration, transport, and other costs. Provide for a sufficient number of advisory teachers and inspectors on the establishment of the Ministry, and for the resultant operational costs in the budget.

Conclusion

Apart from the Khorixas region, where the English teachers of 77 percent of the Grade 6 learners reported meeting with parents once per term, there were significant differences in the frequencies of such meetings between and within regions. The Rundu, Katima Mulilo and Ondangwa East regions had the highest occurrences of teachers never meeting with parents to discuss learners' progress. Action is obviously required to ensure the implementation of a policy on teacher-parent meetings. Such a policy implementation should be linked to training or the provision of information to teachers to ensure that good use will be made of the meetings.

Differences in the frequency of learners getting homework, the largest deviation having been reported by the Katima Mulilo region, may require guidelines in this respect to be drawn up and implemented.

Existing policies on the frequency of inspector and advisory teacher visits should be reviewed. It may be found necessary to allocate more human and financial resources to the inspection and teaching advice services.

As already mentioned in the introductory paragraph of this chapter, the previous three chapters also include policy aspects. This chapter, together with the previous chapters, highlighted the existence of differences between and within regions in the implementation of policies. In some instances, the differences could be ascribed to a lack of clear policies. Distinct circumstances under which the regions were operating may have required different policies, but the Ministry should strive towards consistency in its policies, making explicit provision for deviations where these are warranted.

Chapter 9

School buildings

What was the general condition of school buildings?

Comprehensive information on the number of different facilities in schools is collected annually by the Ministry in its Annual Education Census (EMIS, 1996.) In the SACMEQ survey, school principals reported the condition of the buildings according to their perception, and information was collected on the classroom space available in the school. Related to this information, although not strictly speaking an aspect of the condition of school buildings, is information that was collected to indicate the locality of schools.

The condition of school buildings

According to *Table 9.1*, the schools in the north were perceived by their principals to be in a particularly poor state. Even in the Khorixas and Windhoek regions, nearly one third of the principals reported that their schools required major repairs. Only 8 percent of the Grade 6 learners in the country were in schools which their principals rated to be in good condition. Although the perception of principals in this respect may be very subjective, the significant differences found between the regions should be investigated independently and, if confirmed, they must be taken into consideration with the allocation of resources for repairs and renovations.

Table 9.1: Percentage of learners in schools by condition of school buildings

| Education region | The school requires... | | | | | |
| | major repairs or complete rebuilding | | minor repairs | | is in good condition | |
	%	SE	%	SE	%	SE
Katima Mulilo	68	11	32	11	-	-
Rundu	58	13	32	12	10	8
Ondangwa East	61	10	35	10	4	4
Ondangwa West	77	8	17	7	7	5
Khorixas	32	11	53	11	16	8
Windhoek	30	10	61	10	9	6
Keetmanshoop	10	7	75	10	15	8
Total	54	4	38	4	8	2

Policy Suggestion 28: Develop guidelines for assessing the condition of school buildings. Conduct a full survey of the condition of all schools, and implement procedures to routinely update the relevant information. Take action to repair buildings where required: (a) establish a policy for the provision of funds in the Ministry's building budget for the maintenance of buildings and for the allocation of such funds to regions and schools; and (b) design and implement programmes to involve parents and communities in the maintenance of their schools.

Classroom space

In order to calculate the mean classroom space per learner, the space in permanent and temporary structures was added up. Calculations were made for the school as a whole, not only for the sixth grade. If a school operated in two sessions, the largest one was taken as the basis of the calculation. As can be seen from *Table 9.2*, the two Ondangwa regions had the smallest mean classroom space per learner, 1.0 and 1.2 square metres respectively. In these two regions, one quarter of all learners had classroom space of less than 0.8 square metres, that is less than two-thirds of the 1.2 square metres the Ministry intends to specify as standard. The Katima Mulilo and Windhoek regions had approximately the same mean space per learner. The Keetmanshoop region had a mean space of 2.7 square metres per learner. This was not unexpected as the region had had no growth in learner numbers since independence, and since five educational authorities operated in the area in the years before independence, which led to much duplication of facilities.

Table 9.2.   Mean classroom space per learner

Education region	Classroom space per learner	
	Mean	SE
Katima Mulilo	1.89	0.31
Rundu	1.54	0.19
Ondangwa East	1.03	0.08
Ondangwa West	1.17	0.09
Khorixas	2.27	0.27
Windhoek	2.01	0.27
Keetmanshoop	2.72	0.24
Total	1.61	0.07

Policy Suggestion 29: Review the Ministry's intended classroom space norm, determining its financial viability, and considering alternatives, such as smaller standard furniture, in order for the Ministry to accept a lower norm than 1.2 square metres per learner. The policy should aim at providing more classroom space with available building funds, and at increasing class sizes in existing buildings.

School locality

The location of a school relative to certain amenities was determined in two ways in the questionnaire: as a quantitative measure, the distances from certain facilities were reported, and, as a qualitative indicator, school principals were requested to indicate whether their school location was isolated, rural, in or near a small town, or in or near a large town or city.

Table 9.3, in which regional mean distances have been stated, is not very conclusive in itself. It will, though, be important in the further analysis of the data to determine whether some of the distances have an association with learner outcomes. However, it is worth noting that the average learner in Namibia was 51 kilometres away from a public library and a bookshop, the two sources of books for reading. It has already been proposed in earlier policy suggestions to take steps to increase the amount of reading materials in learners' homes.

Table 9.3. Mean distance from the school to selected facilities

Education region	Facility									
	Clinic		Tarred road		Public library		Book-shop		Secondary school	
	Dist.	SE	Dist.	SE	Dist.	SE	Dist.	SE	Dist.	SE
Katima Mulilo	6	2	32	8	80	15	85	15	32	15
Rundu	4	1	45	16	58	15	58	15	16	4
Ondangwa East	7	1	21	4	42	7	37	5	17	3
Ondangwa West	8	1	11	1	58	13	49	5	17	3
Khorixas	6	4	46	25	91	31	110	33	45	21
Windhoek	6	4	14	8	18	8	27	13	13	5
Keetmanshoop	16	10	47	16	51	16	58	16	62	20
National	7	1	24	3	51	6	51	5	24	3

Conclusion

More than 50 percent of Namibia's Grade 6 learners were in schools which their principals perceived to require major repairs or complete rebuilding. It has thus been recommended that policies for the maintenance of school buildings should be established and funds be made available for the upkeep of the buildings. Communities should assist government in this respect and be involved in the maintenance of their schools.

The average Grade 6 learner was in a school with 1.6 square metres of classroom space per learner. In the Ondangwa East region, this figure was as low as 1.0 square metres. A revision of the classroom space norms has thus been proposed, in particular in view of anticipated increased class sizes, and with the aim of providing as many places in schools as possible with available building funds.

Chapter 10

Outcomes of the reading test

What was the level of reading for Grade 6 learners overall and in the three domains of reading literacy?

Introduction

Several aspects of the outcomes of the SACMEQ reading test have been presented in this chapter. Mean scores have been calculated for the three separate domains of reading, for all test items, and for only those items which were identified by Namibian Reading specialists as being essential in the Namibian context. Scores have also been tabulated by gender, location of schools and a socio-economic indicator.

The development of the test instrument was discussed in an earlier chapter of this report. As the test was based on the syllabi of several countries, there was a need for each country to allow its own English-reading specialists to identify 'those reading items that a learner should be able to master if he or she is to be able to undertake a successful programme of study at the Grade 7 level'. This criterion was chosen as it was argued that in the eighth month of the school year, Grade 6 learners should have acquired the reading skills that would allow them to continue their studies successfully in Grade 7. In Namibia, a group of English teachers and advisory teachers from several education regions identified these 36 'essential' test items and determined what percentage of these items a learner should answer correctly for him or her to be designated as having reached a minimum or a desirable level of achievement.

A note on interpreting the test scores

The test consisted only of multiple-choice items with four choices per item. A mean score of 14.8 (59 divided by 4) would thus have been expected if all learners had ticked one answer per item at random.

Similarly, if all learners had ticked one answer per item at random from the 36 essential items a score of 9 would have been expected. Namibia's English-reading specialists considered that a score of 50 percent correct on the 36 essential items was the 'minimal level of competency', while a score of 80 percent correct was designated as the 'desirable level of competency'.

Table 10.1.   Total mean score and score by reading domain based on all 59 test items

Education region	Narrative (21 items)		Expository (23 items)		Document (15 items)		Total test (59 items)	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Katima Mulilo	6.3	0.12	6.1	0.15	4.2	0.15	16.6	0.32
Rundu	7.1	0.22	7.2	0.21	4.6	0.27	18.9	0.64
Ondangwa East	6.7	0.52	7.3	0.46	4.9	0.36	18.9	1.30
Ondangwa West	6.7	0.15	6.9	0.17	4.6	0.16	18.2	0.40
Khorixas	10.0	0.80	9.0	0.76	7.1	0.59	26.0	2.12
Windhoek	11.8	0.80	10.4	0.77	8.4	0.57	30.6	2.12
Keetmanshoop	10.6	0.73	9.1	0.65	7.9	0.47	27.7	1.82
Total	8.2	0.21	7.9	0.20	5.8	0.15	22.0	0.54

Table 10.2.   Mean scores based on 'essential' items and achievement of levels of mastery

Education region	Mean score on 36 'essential items'		Percentage of learners reaching minimum level of mastery		Percentage of learners reaching desirable level of mastery	
	Mean	SE	%	SE	%	SE
Katima Mulilo	10.6	0.27	3.8	1.0	0.0	0.0
Rundu	12.7	0.55	15.8	3.2	0.1	0.1
Ondangwa East	12.5	0.85	11.8	4.0	3.4	3.4
Ondangwa West	12.3	0.35	10.1	2.1	0.0	0.0
Khorixas	18.2	1.37	44.1	7.3	14.1	6.1
Windhoek	21.0	1.33	60.4	6.3	24.7	6.3
Keetmanshoop	19.4	1.24	53.7	7.1	15.0	4.1
Total	14.9	0.36	25.9	1.8	7.6	1.5

Reading performance at the national level and for regions

The mean scores presented in *Table 10.1* for the total test and the three separate reading domains were extremely low in Katima Mulilo, Rundu, Ondangwa East, and Ondangwa West. Generally much better performances were noted in Khorixas, Windhoek, and Keetmanshoop.

While *Table 10.1* provided some comparative information of levels of reading literacy across regions, it was *Table 10.2* that contained the most important messages in terms of policy. The percentages in this table gave an indication of learner performance in reading literacy against the benchmark standards set down by Namibian reading specialists.

At the overall national level the picture was rather gloomy, with only 25.9 percent of learners reaching the minimum level of mastery in reading literacy and a meagre 7.6 percent reaching the desirable level. In terms of the total population of 37,541 learners who were in Grade 6 in 1995, it was possible to estimate that 27,818 (74.1 percent) of the learners had **not** reached the minimal level, and 34,688 (92.4 percent) of the learners had **not** reached the desirable level.

An examination of the results for regions presented in *Table 10.2* indicated extremely large variations among regions in terms of the percentage of learners that had reached the minimum level of reading literacy. Only around 5 percent of learners in Katima Mulilo reached the minimum level – whereas 60 percent of learners in Windhoek reached the minimum level. The figures for the other regions followed a similar pattern as for the mean scores reported in *Table 10.1* – with Rundu, Ondangwa East, and Ondangwa West having only around 10 to 15 percent

of the learners reaching the minimum level, and Khorixas and Keetmanshoop having around 45 to 55 percent or more reaching the minimum level. These patterns were replicated for the desirable level with practically no learners in the poorer performing regions being able to reach the desirable benchmark score.

The results presented in *Table 10.2* provide a strong message that the task of having a large percentage of Grade 6 learners reach the minimum and desirable reading literacy levels presents a major challenge for the Namibian education system. This challenge will not be addressed by short-term measures. Instead, a long-term systematic approach will be required in which the government, the teachers, the community, and major funding agencies will need to work in partnership over the long term to improve all aspects of the learning environment in schools. This major effort must be undertaken as soon as possible because the capacity to read with high levels of comprehension is a fundamental prerequisite for effective learning in all areas of the school curriculum.

Policy Suggestion 30: Determine the causes for the low achievements found in especially the Katima Mulilo, Rundu, Ondangwa East and Ondangwa West regions. Design programmes to improve the quality of education in these regions and in schools with low performance in the remaining three regions.

Analysis of Mastery levels for sub-groups

In *Table 10.3* the results for the percentages of learners reaching minimum and desirable levels of mastery have been presented for certain sub-groups. The first sub-groups to be examined were males and females. Other sub-groups broken down into different categories of socio-economic background and school location were also considered.

The results for gender showed that slightly higher percentages of males than females were reaching the minimum and desirable levels of mastery. These differences were 3.7 percent at the minimum level and 0.8 percent at the desirable level. Both of these differences were within the bounds of sampling error and therefore could not, at this point of time, be used to support the argument that male learners were reading better than female learners at the Grade 6 level. However, these differences do warrant further investigation at a later stage, perhaps in several years' time, in order to check whether these observed differences have persisted, become larger, or diminished.

A list of 'possessions in the home', as described in an earlier chapter, was used as a surrogate measure of the socio-economic circumstances of the homes from which the learners came. Each learner was given a score from 0 to 14 depending upon the number of possessions located in his or her home. A 'very low' socio-economic level was defined for those learners coming from homes having 3 or fewer possessions; the 'low' level as 4 possessions; the 'moderately low' level as 5 possessions; the 'moderately high' level as 6 to 7 possessions; the 'high' level as 8 to 9 possessions; and the 'very high' level as 10 to 14 possessions. It may be seen from the final column of *Table 10.3* that this classification divided the total sample of 4,457 learners into six groups ranging in size from 575 to 1,024 learners.

Table 10.3. Percentages of learners reaching minimum and desirable mastery levels for sub-groups of learners

	Minimum mastery level		Desirable mastery level		Sample size
	%	SE	%	SE	
Gender					
Boys	27.8	2.58	8.0	2.17	2177
Girls	24.1	2.41	7.2	2.03	2279
Socio-economic level					
Very low (0-3)	9.8	2.67	0.6	0.99	894
Low (4)	13.3	3.81	1.3	1.68	577
Moderately low (5)	14.8	3.99	1.3	1.55	575
Moderately high (6-7)	17.5	3.20	1.9	1.43	1024
High (8-9)	37.9	5.26	7.2	5.74	617
Very high (10-14)	63.8	4.66	33.1	9.28	771
School location					
Isolated	17.7	8.57	6.1	7.46	144
Rural	12.1	1.63	0.5	0.48	2887
Small town	31.3	5.17	10.8	4.80	583
Large city	70.8	4.21	30.1	5.90	843
Namibia	25.9	1.77	7.6	1.48	4457

The results for socio-economic level indicated that for the minimal level of mastery there was a strong relationship between socio-economic level of the six sub-groups and the percentage of learners reaching the minimal level. For the 'very low' socio-economic group (0-3 possessions) only 9.8 percent of the learners reached the minimum level, whereas for the 'very high' socio-economic group 63.8 percent of learners reached the minimum mastery level. The figures for the desirable level of learner performance indicated that a negligible or very low percentage of learners in the first five socio-economic groups reached the desirable level of reading literacy. In contrast, 33 percent of learners in the very high socio-economic group reached the desirable level of reading literacy performance.

The third set of figures presented in *Table 10.3* showed that there were also major differences in reading performance when the learners were classified according to whether their school was located in an isolated rural area, a rural area, a small town, or a city. Major improvements in learner performance were observed as the school location categories changed from isolated school settings towards more urbanized settings. It is important to note that care must be exercised in interpreting these trends because of the possibility of confusion associated with differences in socio-economic levels among school locations.

All of the above analyses provide some preliminary glimpses of the relationships between reading literacy levels and other contextual factors. Clearly, further detailed analyses of these data are required before detailed policy suggestions related to the impact of particular inputs to schooling or reading literacy outcomes can be prepared.

> **Policy Suggestion 31:** Undertake further analyses of the SACMEQ and NLA data to determine factors which are associated with learner achievement. Attempt to identify aspects leading to the extraordinary differences between schools. Propose measures to improve achievement in schools with low performance in order to reduce the differences between schools.

Conclusion

The outcomes of the reading test show that the quality of primary education in Namibia was at a rather low level in 1995. Extreme differences in achievement were observed between education regions. In a multiple-choice test of 59 test items where a mean score of around 15 could have been achieved by chance, that is, by guessing all answers, the national average score was 22.0, the mean in the Katima Mulilo region was 16.6, around 18 in Rundu, Ondangwa East and Ondangwa West regions, and 26 to 31 in the remaining three regions.

The survey highlighted the urgent need to improve the quality of education in isolated and rural areas. It was found that most of the Grade 6 learners in these areas did not reach the minimum level of mastery in English reading that was determined by Namibian reading specialists.

The causes for the low achievement of Namibian learners need to be established as a first step towards remedying the severe shortcomings of the education system. Further analysis of the available survey data can provide valuable information on factors associated with learner achievement, and such an analysis should be given priority.

Chapter 11

From policy suggestions to an Agenda for action

Policy suggestions contained in this report in the context of the Ministry

The Ministry of Basic Education and Culture embarked on a major incentive to improve its efficiency in December 1996. Improving internal efficiency has been one of the 'five great goals' of the Ministry since independence, together with quality, equitable access to education, lifelong learning and democratic participation. Efficiency is determined by, among other factors, the quality of the services provided, and the findings and policy suggestions contained in this report thus support and supplement the proposals in the 'Efficiency Programme 1996' (Ministry of Basic Education and Culture, 1996). While the 'Efficiency Programme' report had to rely to a great extent on anecdotal evidence, the outcomes of the SACMEQ survey provided well-researched information supporting what was based on informal reports. The research findings added new perspectives to a process that was based on workshops involving all managerial staff in the Ministry.

Improving the quality of education more than marginally requires that all consequential shortcomings affecting the teaching process be addressed in parallel. Providing quality education is a complex undertaking comprising many linked components. All major elements of the system have an influence on the system as a whole, and it is thus essential that deficiencies throughout the Ministry are attended to. The policy suggestions in this report need to be incorporated into a holistic approach towards improving the quality of education in Namibia. Consideration must, though, be given to the constraints imposed by the limited financial and human resources of the Ministry.

Proposals to be implemented

The SACMEQ research project was intended to inform policy development in areas where the participating countries had shared policy concerns. Most research findings presented in the previous chapters thus lead to policy suggestions.

The policy suggestions made in this report have been summarized in this chapter. The implementation of these proposals is only expected to have the intended impact if it happens within the holistic approach advocated above, and in the context of the Ministry's efficiency programme which contains about 270 proposed actions covering most components of the Ministry's operations. All directorates of the Ministry, including regional offices, should take note of the findings of this report and incorporate the relevant policy suggestions in their programmes of action.

Table 11.1 contains a list of all policy suggestions, together with an indication of the component of the Ministry which should take the lead in implementing each suggestion, some data sources, the level on which each suggestion should be planned, and estimates of the time-frame and level of costs. It should be stressed that only the leading components within the Ministry have been listed. Most actions will require several other components of the Ministry to participate. The policy suggestions in *Table 11.1* include:

Consultations with staff, communities and experts: The four policy suggestions which have been included under this heading require consultations with staff in regional offices and schools, with parents, and with experts in particular fields. The first proposal is aimed at developing awareness of the value of parental support for their children's schooling, while the other three suggestions are aimed at obtaining information for policy development.

Reviews of existing policies: The largest group of policy suggestions requires a review of specific Ministry policies. These suggestions mainly require desk studies to develop new policy proposals which then need to be verified with regional offices and head office directorates before being implemented. The costs of policy development are relatively low, although the implementation of some of the resultant policies may be costly.

Educational policy research: Policy suggestions depending on research to provide the necessary information for policy development have been grouped under this heading. Except for the further analysis of available research data, suggestions in this group would typically take time to be implemented, and require considerable financial and human resources.

Investment in infrastructure, human resources and materials: The study highlighted several areas requiring the improvement of diverse educational inputs, such as teacher competencies, and the provision of materials, furniture and physical structures. Related policy suggestions have been included in this group.

Within each of the above-mentioned groups, the policy suggestions have been ordered by their time-frame and estimated costs.

The four columns to the right of the policy suggestions in *Table 11.1* contain the following information:

Primary responsibility: The component of the Ministry which should be leading or initiating the implementation of the policy suggestion has been listed here. Only in exceptional cases, where two units should take joint primary responsibility, has more than one component been listed. In most cases, several other directorates or divisions will be required to contribute towards the implementation of the policy suggestion.

Data source: Some sources of relevant information that should be considered in implementing the policy suggestion have been listed under this heading.

Planning level: An attempt has been made in this column to classify the level of decision-making regarding the implementation of each proposal. Regional decision-making within a national framework should be considered in several cases, while decision-making at the regional level could be done in consultation with the Head Office regarding several other policy suggestions. In respect of most policies, regional offices are the implementing agency, while the head office should work towards reducing the disparities between regions and establish an appropriate level of uniformity.

Time and costs: Two aspects of the implementation of the policy suggestions have been tabulated in this column: the approximate time-frame, and a rough classification of the costs of implementing the policy suggestion.

Table 11.1. Summary of policy suggestions including assignments of primary responsibilities, data sources, level of planning, time-frame and estimated level of costs

Policy suggestion	Primary responsibility	Data source	Planning level	Time & costs
Consultations with staff, communities and experts				
Policy suggestion 9:				
Increase parental support of, and interest in, their children's schooling through information campaigns on the importance of such support. Utilize parent meetings, educational forums, radio programmes and political channels for such campaigns. Give particular attention in this regard to the Rundu and Katima Mulilo regions.	Educational programme implementation	Relevant policy documents	National and regional	Short-term; low cost
Policy suggestion 19:				
Identify the most important problems experienced by school principals, and design and implement measures to curb these problems.	Regional offices	Inspectors and school principals	Regional	Short-term; low cost
Policy suggestion 6:				
Identify the reasons for, and occurrences of, learners staying on their own or with other children during the school week or school term. Investigate the sociological consequences of this phenomenon and propose appropriate actions, if required.	Special Education	Regional offices	National and regional	Short-term; low cost
Policy suggestion 10:				
Determine the main causes for learner absenteeism and design programmes and/or measures to curb such absenteeism.	Planning and regional offices	Qualitative study in most affected regions	National and regional	Short-term low cost
Reviews of existing policies				
Policy suggestion 17:				
Establish the desired roles of inspectors and advisory teachers and inform inspectors, advisory teachers and their supervisors in regional offices about these roles. Design and implement appropriate training programmes for inspectors and advisory teachers that will enable them to improve teacher perceptions of their role.	Inspectorate and advisory services	Relevant policy documents; literature	National and regional	Short-term; low cost
Policy suggestion 18:				
Determine the desirable functions and activities of school principals, which may depend on the specific setting of the school (primary, combined or secondary school, urban or rural environment, small or large school). Ensure that these functions and activities are contained in the performance appraisal system, and that school principals are made aware of them during in-service training courses.	Inspectorate and advisory services	Relevant policy documents; literature	National and regional	Short-term; low cost

Table 11.1 continued: Summary of policy suggestions

Policy suggestion	Primary responsibility	Data source	Planning level	Time and costs
Policy suggestion 26: Draw up guidelines for teachers on the appropriate frequency of giving homework, and on the integration of homework into the teaching process. These guidelines should be conveyed to school principals and teachers by advisory teachers and inspectors.	NIED[2] and educational programme implementation	SACMEQ data; relevant policy documents	National	Short-term; low cost
Policy suggestion 29: Review the Ministry's intended classroom space norm, determining its financial viability, and considering alternatives, such as smaller standard furniture, in order for the Ministry to accept a lower norm than 1.2 square metres per learner. The policy should aim at providing more classroom space with available building funds, and at increasing class sizes in existing buildings.	Planning	Literature; visits to a small number of extreme schools	National	Short-term; low cost
Policy suggestion 5: Introduce streaming by age in schools having more than one Grade 6 class and a wide age distribution – provided that regional offices concerned agree to such a policy.	Regional offices	AEC[3] data	Regional	Short-term; low cost
Policy suggestion 12: Analyze the proportion of female teachers in primary grades on a regional basis. Consider whether action is necessary to improve the gender balance of the teaching corps. Investigate the reasons for the disparities in the percentages of female teachers and female principals and implement measures to ensure equal promotion prospects for female and male teachers.	Planning	AEC data; personnel offices	National and regional	Short-term; low cost
Policy suggestion 25: Review the policy on meetings between teachers and parents and ensure that the policy is implemented. Provide information and, whenever possible, training to teachers to enable them to make optimal use of such meetings to obtain the involvement of parents in their children's schooling, and to allow parents the opportunity to communicate with the teacher.	Inspectorate and advisory services; regional offices	Relevant policy documents; regional offices (inspectors)	National and regional	Short-term; low cost
Policy suggestion 3: Gradually introduce upper-age limits for enrolment into Grade 1: the maximum enrolment age should be set at nine for the beginning of 1999, and be reduced by one year each year until the maximum permitted age is seven from the year 2001 onwards.	Planning	AEC and 15th School Day statistics	National	Short to medium-term; low cost

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[2]   NIED: National Institute for Educational Development.
[3]   AEC: Annual Education Census.

Policy suggestion				
Policy suggestion 4: Investigate the feasibility of sending over-age upper primary learners to equivalent courses for adults in areas where there are sufficient numbers of youngsters and adults to follow such a course – which might be at least partially based on distance education. If such an approach is feasible, introduce strict policies to exclude learners older than 16 from upper primary classes in formal schools in identified areas.	Adult education	AEC and relevant policy documents	National and regional	Short to medium-term; low cost
Policy suggestion 8: Identify specific areas where there is a need to introduce or expand the school feeding programme.	Hostel Division	Regional offices (inspectors)	National and regional	Medium-term; medium cost
Policy suggestion 27: Develop a policy on an adequate frequency of classroom visits of advisory teachers and on the desired frequency of inspector visits to schools and of full school inspections. Review the role of advisory teachers and inspectors and their specific tasks. Establish the number of inspectors and advisory teachers required, develop an effective system of decentralizing the advisory and inspection services, and calculate the resultant remuneration, transport, and other costs. Provide for a sufficient number of advisory teachers and inspectors on the establishment of the Ministry, and for the resultant operational costs in the budget.	Inspectorate and advisory services	Relevant policy documents; survey among regional offices	National	Short to medium-term; medium cost
Policy suggestion 28: Develop guidelines for assessing the condition of school buildings. Conduct a full survey of the condition of all schools, and implement procedures to routinely update the relevant information. Take action to repair buildings where required: (a) establish a policy for the provision of funds in the Ministry's building budget for the maintenance of buildings and for the allocation of such funds to regions and schools; and (b) design and implement programmes to involve parents and communities in the maintenance of their schools.	Planning	Consulting architect and national survey of all school buildings	National and regional	Medium-term; medium cost
Policy suggestion 24: Develop a programme to reduce the difference in class sizes between and within regions. The programme should address the provision of teachers and facilities, as well as the utilization of facilities, that is, the introduction of the platoon system where there is a shortage of classrooms.	Planning	AEC; staffing norms	National and regional	Medium-term; low cost

Educational policy research

Policy suggestion 31:

Undertake further analyses of the SACMEQ and NLA[4] data to determine factors which are associated with learner achievement. Attempt to identify aspects leading to the extraordinary differences between schools. Propose measures to improve achievement in schools with low performance in order to reduce the differences between schools.	Planning	SACMEQ and NLA data	National	Short-term; low cost

Policy suggestion 30:

Determine the causes for the low achievements found in, especially, the Katima Mulilo, Rundu, Ondangwa East and Ondangwa West regions. Design programmes to improve the quality of education in these regions and in schools with low performance in the remaining three regions.	NIED	Classroom observations and qualitative study	Regional	Short-term; low to medium cost

Policy suggestion 16:

Analyze the effect of teachers' approaches to teaching and their perceptions of important goals on learner achievement. Adjust pre- and in-service teacher training programmes according to the findings. (The SACMEQ survey provides information in respect of English reading comprehension only.)	NIED	SACMEQ and NLA data, literature (if required, special qualitative or quantitative studies)	National and regional	Short to medium-term; low to medium cost

Policy suggestion 2:

The Ministry should analyze available data and undertake any additional research required to establish the causes for gender imbalances in learner enrolments in the upper primary grades. Proposals for action should be made on the basis of these analyses to reduce early school leaving – especially where one sex leaves school in greater numbers than the other.	Planning	AEC; 1995 early-school-leaving study; regional surveys	National and regional	Medium-term; low cost

Policy suggestion 1:

The Ministry should plan to undertake follow-up surveys of the same target population employed during the 1995 SACMEQ project in order to examine changes in important educational indicators over time. (See also Policy suggestion 11).	Planning	National survey of primary schools	National	Long-term; medium cost

Policy suggestion 11:

Repeat the 1995 SACMEQ and NLA surveys in the years 1999 and 2002 to monitor the effect of the revised repetition policies. (See also Policy suggestion 1).	Planning	National survey of primary schools	National	Long-term; medium cost

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[4]   NLA: National Learner Assessment survey.

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Investment in infrastructure, human resources and materials

Policy suggestion 13:

Design financially sustainable programmes to upgrade the training of primary teachers and to utilize teachers efficiently who have insufficient training. Consider a redeployment of in-service training opportunities to gain greater equity across regions.	NIED and Inspectorate and advisory services	Policy model; literature	National	Short-term; low cost

Policy suggestion 20:

Ensure the adequate and equal provision of textbooks to schools by (a) giving appropriate priority to the purchase of textbooks in the Ministry's budget, (b) designing and implementing measures to provide textbooks to schools on an equal basis, and (c) taking effective measures to ensure that textbooks are well looked after in order for them to be used for as many years as possible.	Planning and general services	SACMEQ data; budget; relevant policies and procedures	National and regional	Short-term; medium cost

Policy suggestion 21:

Review existing policies on the provision of educational materials. Identify weak points in the distribution system, and introduce measures to ensure that all learners are provided with at least the minimum quantity of materials.	Planning and general services	SACMEQ data; budget; relevant policies and procedures	National and regional	Short-term; medium cost

Policy suggestion 15:

Introduce financially sustainable measures to improve teacher job satisfaction, with particular emphasis on providing study opportunities, improving school management and administration, and providing sufficient classroom supplies of adequate quality.	Regional offices	SACMEQ data, inspectors	Regional	Short to medium-term; low to medium cost

Policy suggestion 23:

Review existing policies, or develop new policies where required, on the provision of facilities, services and equipment to schools. Devise a financially viable plan to eradicate existing backlogs.	Planning	Relevant policy documents; AEC	National and regional	Short to medium-term; high cost

Policy suggestion 7:

Consider means to increase the amount of reading materials in homes, especially in the Katima Mulilo and Rundu regions. Approach literacy programmes, church organizations, the publishing industry and donor agencies for co-operation and assistance. Mobile libraries have proven to be useful in some countries for allowing homes to have access to more books. If this approach is initiated, teachers could explain to learners how to use it. The availability of reading materials in schools should be improved by supplying schools with classroom libraries where they have not yet been provided.	Library services	SACMEQ data; inspectors	Regional	Short to medium-term; low to medium cost

Policy suggestion 22:

Develop a policy on the furnishing of classrooms. Take stock of present shortages, and make provision in the Ministry's budget for the supply of the most essential furniture.	Planning and general services	Relevant policy documents; stock control reports; survey of all schools	National and regional	Short to medium-term; medium to high cost

Policy suggestion 14:

Conduct an investigation to establish which factors inhibit the provision of teacher housing – especially government supplied housing in the northern regions. Determine other relevant factors restraining the deployment of qualified teachers to schools where they are required. Prioritize the provision of teacher housing and make appropriate long-term provision for this in the building budget of the Ministry.	Planning and regional offices	Planners and other professional staff in regional offices	Regional	Long-term; high cost

The way forward

This report has highlighted substantial shortcomings in the quality of primary education in Namibia, and it has pointed to exceptional disparities between education regions and between schools within education regions. The Ministry of Basic Education and Culture will have to address these problems under increasing budgetary constraints. A very high priority should thus be given to improving the overall efficiency of the Ministry. It will be necessary to embark on a well-planned programme in this respect which must incorporate the many actions required to improve efficiency, which have already been identified at various levels of the Ministry.

Considering the severe impact of budgetary constraints on all operations of the Ministry, together with the spending of more than 80 percent of the Ministry's 1997/1998 budget on remuneration, requires special attention to be given to aspects affecting the salary bill of the Ministry. The crucial question is, how to improve the quality of education while decreasing the real-term remuneration expenses of the Ministry. It will be necessary to improve teaching skills and teaching performance without increasing costs. If the post-independence tendency of a rapidly increasing percentage of the Ministry's budget going into remuneration is to continue, increasingly less resources will be available to address the shortcomings and disparities of the Namibian education system. If, on the other hand, resources can be diverted from remuneration to other activities, many of the suggestions contained in this and other documents can be implemented in order to achieve quality, efficiency and equity.

It is trusted that the findings and suggestions contained in this report will provide a stimulus for the Ministry of Basic Education and Culture to improve the quality of education in Namibia and to improve its internal efficiency.

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Enquiries about the Institute should be addressed to:

The Office of the Director,
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