

SACMEQ Educational Policy Research Series

The SACMEQ II Project in Namibia:
A Study of the Conditions of Schooling
and the Quality of Education.

Namibia
Working Report

by

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Foreword

The origins of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) date back to 1991, the year when several Ministries of Education in Eastern and Southern Africa started working closely with UNESCO's International Institute for Educational Planning (IIEP) on the implementation of integrated educational policy research and training programmes.

In 1995 these Ministries of Education formalized their collaboration by establishing a network that is widely known as SACMEQ. Fifteen Ministries are now members of SACMEQ: Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania (Mainland), Tanzania (Zanzibar), Uganda, Zambia, and Zimbabwe.

SACMEQ is registered in Zimbabwe as an Independent Intergovernmental Non-profit Organization. Its Coordination Centre is located within UNESCO's Harare Cluster Office and is managed by a Director who works under the guidance of a six-member Managing Committee. SACMEQ's Assembly of Ministers meets every two years and provides overall policy guidance concerning SACMEQ's mission and programmes.

The focus of SACMEQ's capacity building programmes has been on building the capacity of Ministries of Education to monitor and evaluate the quality of their basic education systems. SACMEQ employs innovative training approaches that include a combination of face-to-face training, hands-on experience, computer laboratory sessions, and on-line support via the Internet. SACMEQ also encourages a unique form of collaboration among SACMEQ National Research Coordinators in the fifteen member countries as they share and exchange skills and successful experiences.

In September 2004 SACMEQ was awarded the Comenius Medal for its innovative approaches to delivering cross-national educational research and training programmes.

This report provides a description of the results of the SACMEQ II Project - SACMEQ's second major educational policy research project. The results of the SACMEQ I Project were reported in seven national reports for Kenya, Malawi, Mauritius, Namibia, Zambia, Zimbabwe, and Tanzania (Zanzibar).

The SACMEQ Data Archive was launched in June 2004. This valuable information resource contains data, data collection instruments, manuals, technical papers, and related publications from both SACMEQ projects. Copies of the archive may be obtained by completing the registration form on the SACMEQ Website (www.sacmeq.org).

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Chapter 1

The Setting for the Study

Introduction

The second SACMEQ project on conditions of schooling in Namibia was conducted in September/October 2000, - five years after the first SACMEQ project of 1995 and 10 years after Namibia's attainment of national independence from South African apartheid colonial rule. Namibia made strides in the provision of basic education, over the past 10 years, which by 2001 had resulted in a primary education net enrolment of 94 percent of all children aged 7-13 (in Grades 1-7). While much has been achieved in terms of access to schooling, the quality of education, efficiency and equity issues have taken centre stage in the years following the publication of the first SACMEQ report. There has been increasing concern about the quality of the education that is being provided, in relation to the increasing expenditure on education. There are growing demands about efficiency in the administration and management of education at the various levels of the educational system and the need for a more equitable distribution of educational resources.

These and other related concerns prompted the cabinet and the President of the Republic of Namibia to institute the “Presidential Commission on Education Culture and Training” in 1999, to spearhead a national review of the entire education sector. While acknowledging the achievements of the past decade, the commission in its final report observed among other things that inefficiency, inequity and the low quality of teaching and school management, were rife and proposed measures to address them.

Measures aimed at addressing inherited and emerging problems in the development of education have to be seen in light of the vision for education in an independent Namibia guided by the broad goals of access, equity, quality and democratic participation. Proceeding from the above perspective, with the quest for solutions to current educational problems the Ministry of Basic Education, Sport and Culture took into account the results of the first SACMEQ project (1998), and the recommendations of the Presidential

Commission on Education and Training (1999), in designing a 5 year strategic plan. After a review of numerous other ministerial policy documents, as well as intensive consultations within the ministry and with stakeholders, the MBESC came up with 8 national priority areas in its “Strategic Plan” for the period 2001 to 2006. The priority areas are:

- Equitable Access
- Education Quality
- Teacher Education And Support
- Physical Facilities
- Efficiency And Effectiveness
- HIV/AIDS
- Lifelong Learning
- Sport, Arts And Cultural Heritage

Many changes took place between 1995 and 2000. There were more learners and more schools in 2000 than in 1995. The department of Sport was added to the Ministry of Basic Education and Culture. The HIV/AIDS pandemic became a national problem that is likely to have an adverse effect on education in terms of administrators, teachers, learners and/or parents who will either be infected or affected. This could lead to prolonged periods of absenteeism due to sickness by any member of the groups mentioned above, high attrition rates for teachers and a growing number of HIV/AIDS orphaned school going children. Although this report did not directly deal with the impact of HIV/AIDS, the researchers were mindful of this problem as part of the contextual background.

This report attempts to provide a bridge between 1995 and the year 2000. However, it does not only aim to inform the current policy dialogue concerning education in Namibia, but will also identify emerging challenges and policy considerations centred on the national priority areas for education during the course of the Second National

Development Plan (NDP 2) 2001/2-2005/6, and the implementation of the Ministry of Basic Education, Sport and Culture (MBESC) strategic plan for the period 2001-2006.

Brief description of Namibia

The republic of Namibia, situated on the south west coast of Africa attained national independence from the former apartheid South African government on 21 March 1990, after many years of political, diplomatic and armed, national liberation struggle. Namibia is bordered by the Atlantic Ocean to the west, the republics of Angola and Zambia to the north and north-east respectively and the republics of Botswana and South Africa to the east and south respectively.

The country spreads over an area of 824,269 square kilometres (sq. kms) marked by big contrasts consisting of the Namib desert along the entire west coast and the Kalahari desert along the central eastern border with Botswana, making it the driest country south of the equator, characterised by frequent droughts.

The northern parts of the country receive an average of about 700 mm of rain per year during good rains, while the average rainfall along the coast and the southern part varies between 50 mm and 100 mm. This means that crop cultivation is more favourable in the northern parts of the country than the southern parts. Cattle farming can be found in the north and central regions and in the drier southern parts of the country, only sheep and goat farming are common.

The distribution of the population follows the rainfall pattern, with over 60 percent of the 1.8 million people living in the northern parts of the country, where the population density in some areas, is 100 people per square. The remaining 40 percent of the population is sparsely distributed in the rest of the country with isolated concentration of population in towns like Windhoek, Swakopmund, Walvis Bay and Keetmanshoop.

The southern parts of the country have less than 10 percent of the population or 0.5 persons per square kilometre. With a population growth rate of between 2.6 – 3.0 percent

per annum, the demand for school places is ever increasing and exerts further pressure on the available resources.

Even if the country is well endowed with good deposits of uranium, diamonds, and other minerals as well as having rich fishing grounds, there are wide disparities in the distribution of incomes. With a per capita income of US\$2,000 Namibia may be regarded as a middle income country but the “richest 10% of society still receives 65% of incomes leaving only 35% for the remaining 90%. In other words, half of Namibia’s population survives on approximately 10% of the average income, while 5% enjoys incomes that are five times the average. The ratio of per capita income between the top 5% and the bottom 50% is about 50:1.”¹ This provides a brief understanding of the socio-economic context under which the education system has to develop in Namibia.

The structure of the school system

Ideally the formal school system in Namibian government schools consists of 12 years of schooling broken down as follows:

- 4 years of lower primary, using mother tongue as medium of instruction;
- 3 years of upper primary, (English as a medium of instruction starts in Grade 5 at upper primary, up to Grade 12, the end of senior secondary school);
- 3 years of junior secondary; and,
- 2 years of senior secondary.

However the formal school system may also be divided into the following phases, some of which have combined phases:

- Pre-Primary Phase

This phase was transferred from the Ministry of Education to local communities under the jurisdiction of the Ministry of Regional, Local Government and Housing in 1995. With the creation of the Ministry of

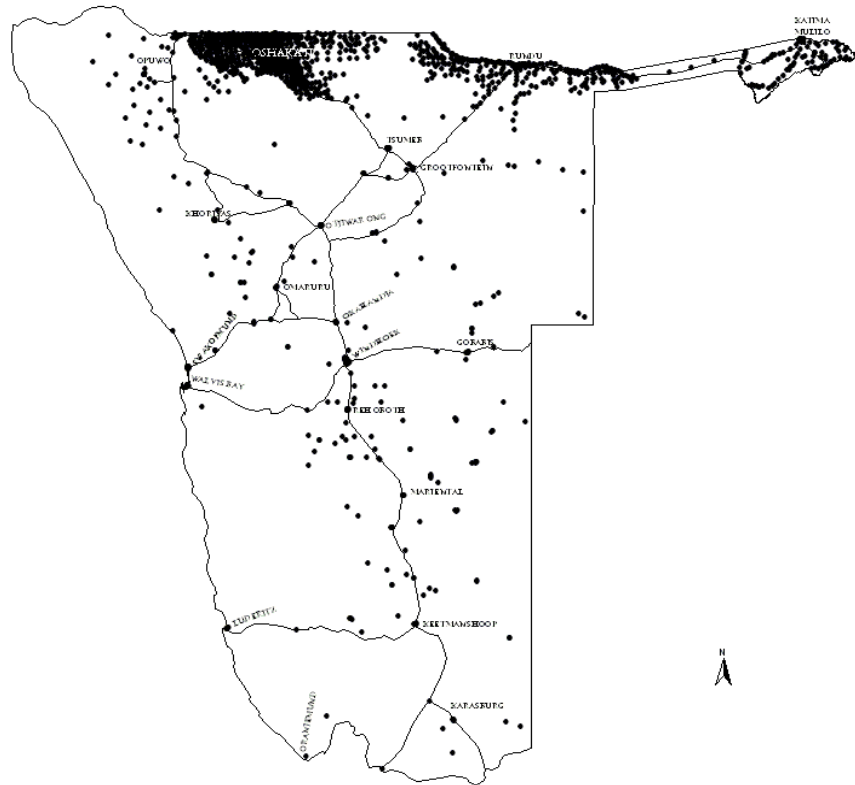
Women Affairs and Child Welfare in 2000, pre-primary education and broader aspects of early childhood development catering for the under 6 years-old age group were assigned to the new Ministry.

- Primary Phase

This phase consists of the Lower Primary (Grades 1 - 4) and Upper Primary (Grades 5 – 7). By the year 2000, there were 998 primary schools, of which, 952 were government schools and the rest were private schools. These schools catered for a total of 406,623 learners at this phase. The policy of continuous assessment based on a set of competencies that learners are expected to acquire, provides the basis for the promotion of learners from one grade level to the other. A national Grade 7 examination in Maths, English and Science was introduced for the first time in 2000, to help monitor learner acquisition of the basic competencies at the end of the primary phase.

The distribution of all primary schools in Namibia from which the SACMEQ II sample was selected has been presented in **Map 1(a)**. It can be seen from the map that nearly two thirds of all the primary schools were located in the 6 northern regions of Caprivi, Kavango, Ohangwena, Oshikoto, Oshana and Omusati. It goes without saying that a bigger proportion of all learners also comes from these regions.

¹ UNDP, Namibia Human Development Report 1998, pp 7.



Map 1(a): The distribution of Primary Schools in Namibia

- Secondary Phase

The secondary phase consists of Junior Secondary, catering for Grades 8 – 10 and the Senior Secondary school, which caters for Grades 11 and 12. There were 129 secondary schools in the year 2000, enrolling 132,698 learners. Learners write the Junior Secondary examinations at the end of Grade 10 and the Senior Secondary School "International General Certificate of Secondary Education" and the "Higher International General Certificate of Secondary Education" (IGCSE/HIGCSE) examinations at the end of Grade 12.

- Combined Schools

These are schools “offering both primary and secondary grades.” Very few of the combined schools offer all primary and secondary grades.

According to the 1998 school statistics, only 761 schools offered a complete school phase, while 480 schools were “partially in-phase” and 244 schools were reported to be “out of phase.” Out of phase schools are schools that “do not offer a complete phase of any kind,” and partially in-phase schools are “those that offer one complete phase, for example, lower primary, but also offer part of another phase.” Many of the out-of-phase schools were to be found at the primary school level, especially lower primary.

The overall total enrolment of learners in Grades 1-12, at 1,377 schools in 1995, was 486,252. In the year 2000 there were 1,508 schools with a total enrolment of 530,554 learners, representing an average enrolment growth rate of 1.8 percent per annum. The number of teachers also increased from 15,531 in 1995 to 17,332 by the year 2000. However, about 10 percent of the teachers did not have “any formal teacher training.”

The administration of school education

A single ministry of education was created at independence by unifying the previous racial and ethnically based education authorities. The single ministry of basic education has its head quarters in Windhoek. The Permanent Secretary is the administrative head of the ministry assisted by a deputy Permanent Secretary and two Under Secretaries. In 1995 the Ministry of Higher Education, Vocational Training Science and Technology (MHEVTST) was created thus making a clear separation between basic, and higher education. The administration of the Ministry of Basic Education, Sport and Culture (MBESC) is carried out through the department of Formal Education programmes and the department of Culture and Lifelong Learning, which are headed by the two Under Secretaries.

The department of Formal Education Programmes consists of the following Directorates:

- Directorate of Educational Programme Implementation and Monitoring
- Directorate of Inspectorate and Advisory Services
- Directorate of Special Education Programmes
- Directorate of National Examination and Assessment

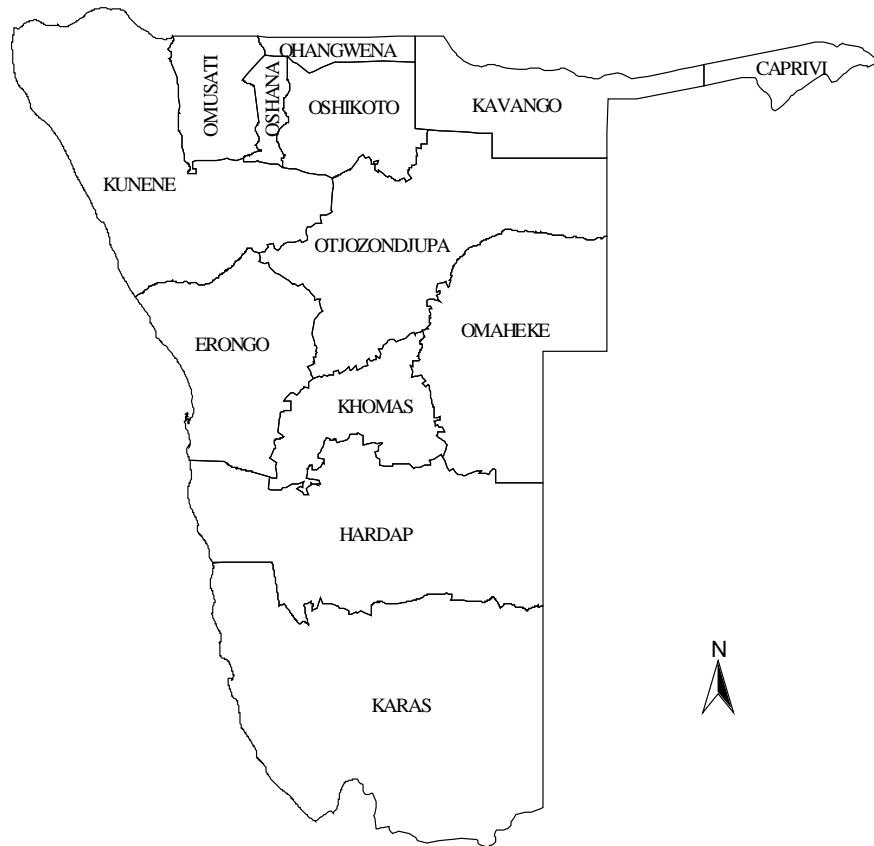
The department of Culture, Arts and Lifelong Learning consists of the following Directorates:

- Directorate of Adult Basic Education
- Directorate of Arts and Culture
- Directorate of Library and Archives Services

Working closely with the two departments are the Directorates of General Services, National Institute for Educational Development (NIED), Planning and Development as well as the Directorate of Sport, which fall under the office of the Deputy Permanent Secretary.

The whole country was originally divided into 7 educational regions which at the end of 2002 were sub divided into 13 regions headed by Regional Directors of Education, in compliance with the central government policy of decentralising central government functions to the 13 political/administrative regions. While the Ministry is overall responsible for the running of the education system, it is the regional education offices that shoulder the bulk of the implementation of educational programmes on a day to day basis by working closely with schools and communities in their respective regions. The 13 Educational regions that were created in December 2002 in have been presented in **Map 1(b)**. The decentralisation of the Ministry's administrative structures was in compliance with the central government policy to devolve some functions of line Ministries to the 13 national administrative regions.

Map 1(b): The 13 Educational Regions in 2003



A description of each of the 13 educational regions is given below:

Caprivi region

This region is the furthest from the capital city - Windhoek. Apart from Katima Mulilo town, the rest of the region is rural and most of the people are subsistence farmers. According to the Ministry of Health and Social Services this is a region which had the highest infection rate of HIV/AIDS in 2002. It has an area of 14,538 square kilometres of land, a total population of 79,826 in 2001. The region has a total of 95 schools, 23,277 learners and 1,062 teachers. The region briefly experienced some political disturbances in 1999, but calm has since returned to the region.

Erongo region

This region is found along the central western side of Namibia. The major towns of Swakopmund and Walvis Bay are found in this region. Like other regions along the west coast, the western part of this region is covered by the Namib desert. It has an area of 63,579 square kilometres and a population of 107,663 people with 57 schools, 21,574 learners and 828 teachers.

Hardap region

This is the second largest region with a population of 68,249 people, spread over an area of 109,651 square kilometres. The region has 58 schools with 19,731 learners and 792 teachers.

Kavango region

Much of this region is mainly rural, and inhabited by subsistence crop farmers. The only urban centre is Rundu town. The region has seen a rapid increase in the number of learners since 1995 partly due to migration. The region spread over an area of 48,463 square kilometres with a population of 202,694 people. Most of the people are concentrated along the Kavango River for easy access to water. The region has 313 schools, with 62,441 learners and 2,179 teachers.

Karas region

This is the biggest region, with a landmass of 161,215 square kilometres and a population of about 69,329 people. It covers almost one third of the country, spreading over much of the southern part of Namibia. However, this area is sparsely populated with concentration of population in towns such as Keetmanshoop, Karasburg, Oranjemund and Luderitz. The people in the countryside are mainly subsistence small livestock farmers.

Khomas region

This is the region in which Windhoek, the capital city of Namibia is located. It has an area of 37,007 square kilometres and it is the most populated region with a total

population of 250,262, most of whom are urbanised. It is an area with a mixture of occupations from the urban working class to farm workers employed on a few large commercial farms, in addition to small-holdings and subsistence livestock farmers.

Kunene region

Situated in the north-western corner of the country is covered by the Namib desert along the west coast. It has an area of 115,293 square kilometres, and a total population of 68,735 people. It is home to the semi-nomadic people of Namibia. The Ministry has had to introduce mobile schools in this region to cater for the children of the nomadic community. It has a total of 51 schools, with 14,934 learners taught by 557 teachers.

Ohangwena region

This is one of the smaller regions in size, covering an area of 10,703 square kilometres, but it is the 3rd most densely populated region with a total population of 228,384 people, and 21 persons per square kilometre. It is situated in the central northern most part of the country. It has 209 schools and 80,302 learners with 2,204 teachers.

Omakeke region

This region is located in the central -eastern part of the country. It has an area of 84,612 square kilometres and 68,039 people. It has 42 schools, 14,256 learners and 556 teachers.

Omusati region

This is another northern most region which has a size of 26,573 square kilometres. It is the second most populated region with a total population of 228,842 people. Ninety-nine percent of the people are rural dwellers and women head more than 60 percent of the households. The region has 263 schools, 88,901 learners and 2,897 teachers

Oshikoto region

Oshikoto is one of the northern regions with an area of 38,653 square kilometres and a total population of 161,007 people. Farming is the main source of income for 56 percent of the people. There are 150 schools in the region, with 50,675 learners and 1,581 teachers.

Otjozondjupa region

The region has a landmass of 105,185 square kilometres and 135,384 people. Most of the households (67%) are headed by males and 55 percent of the population are wage/salary earners. The region has 56 schools, 30,911 learners and 1,001 teachers.

Oshana region

This is the smallest region covering an area of 8,653 square kilometres, but has a total population of and 161,916, with a population density of 19 persons per square kilometre. Seventy percent of the people live in rural environment. The region has 53,041 learners who go to 122 schools and taught by 1,702 teachers.

The financing of education in Namibia

Article 20 of the constitution of the republic of Namibia provides for free and compulsory education for all learners between the ages of 6 and 16 or learners from Grade 1 up to the end of Grade 7, depending on which comes first. The government has declared education to be a priority among all other priorities in Namibia. Because of this, education has continued to receive the largest share of the national recurrent budget since independence. For example, out of the estimated total government current expenditure of N\$8.35 billion for the 2001/2002 financial year N\$1.86 billion was earmarked for basic education only, representing about 20 percent of the budget.

Of the total amount allocated for basic education, N\$986.56 million was earmarked for primary education, and the rest for secondary education. However, almost 90 percent of the money allocated for primary education was to be spent on personnel costs, leaving only about 10 percent for all the other services and school supplies. The personnel costs

incurred by the government include salaries and/or subsidies to teachers in a number of private schools. This means that only a very little amount of the money allocated to primary education is actually spent on learner classroom resources such as textbooks. Because of this, a calculation of the financial allocation per learner, per education region appears to be favourable for the regions that have more qualified staff and less learner numbers, than rural regions that have more unqualified teachers with large teacher–learner ratios.

The government allows schools and school boards to collect “school development fund” from parents. This means that schools in urban areas where most of the parents have jobs and earn a monthly income, are able to collect more money from parents than schools situated in remote parts of the country where the majority of the parents are peasant farmers, with no income. For example, one government primary school in Windhoek collects N\$260 per learner per term and most of the parents are able to pay this but a rural primary school in the Caprivi region collects only N\$10, but some parents are not even able to pay this small amount. So, while it is possible for some urban schools to generate additional funds for their operations some schools in rural areas are solely dependent on the meagre government funding which may not be enough to meet all their needs at the classroom level.

Recent educational policy reviews

The Presidential Commission Report (1999) provides a most recent and broad review of educational policy and practice on a national scale and sets the agenda for policy consideration and dialogue in the next 5 to 10 years. Over “ten thousand people” took part in the commission’s focused “discussion groups, written submissions and public hearings”. The broad consultative nature of the work of the commission makes it more representative of the needs, challenges and aspiration of education in the country and it would be folly for any policy considerations to ignore this reality. Here, it would suffice to mention only some of the (key) pertinent policy issues highlighted by the report:

- A re-affirmation that education is the first priority of government development policy, and that to meet the challenges of globalisation and the twenty-first century Namibia should commit itself to ‘becoming a learning nation.’
- As Namibia has achieved a high level of access to education, there should now be a shift towards greater equity and quality of education. Also as a step towards decentralisation, a system of unit costs should be introduced in terms of which a region would be allocated a fixed amount per learner per phase of education. This system should be introduced over a three year period.
- Teacher Education, pre-service and in-service, should be revitalised...
- Teachers should be required to be at school from 07:00 to 16:00 each school day, with allowance for a lunch break.
- School principals should in future only be appointed for four years at a time.
- The regions that receive increased funding in terms of the unit cost approach should give priority to textbooks, library books, toilets, electricity, telephones and upgrading of their facilities.
- A national inspectorate should be established.²

The SACMEQ II study provides additional information that will inform debates some of the above mentioned policy areas. Earlier in the year 2000 the MBESC published the “Customer Service Charter for Primary and Secondary Schools in Namibia,” in which the Ministry reiterated that it will provide “through government schools, free primary education to all children between the ages six (6) and sixteen (16).” In the foreword to the charter the Minister of education declared his ministry’s commitment to offer “... the best education possible.” The expectations of the nation for the MBESC to deliver what it has promised, especially in the previously neglected areas, are quite high.

² Draft Report of the Presidential Commission on Education and Training, page 181 - 182

Main policy concerns of the Ministry of Basic Education Sport and Culture

The main policy concerns of the Ministry of Basic Education Sport and Culture (MBESC) have been consistent since independence. These have been discussed in several documents such as the following:

- “Towards Education for All,” (1993)
- The first SACMEQ report for Namibia, entitled “The Quality of Education: Some policy Suggestions Based on a Survey of Schools,” (1998)
- "The Presidential Commission Report on Education and Training," (1999), and other ministerial documents.
- The MBESC Strategic Plan 2001-6
- The EFA National Plan of Action 2003-15

Generally there is very little educational research in Namibia that has been conducted by Namibians, especially educational policy-related research. This may be attributed to a number of reasons, one of which is limited research capacity among Namibian educators. The other reason as observed by the Presidential Commission on Education, Culture and Training is limited funds for educational research, considering the large proportion of government budget that is already being spent on education.

Besides “there is no independent educational research institution and only in exceptional cases has NEPRU or the Multidisciplinary Research Centre at the University of Namibia carried out research in the sector of education, culture and training. ...This general lack of research has lead to a number of misconceptions, which the Commission has come across repeatedly, and there is a risk of uninformed decisions being made in such a situation.

The Commission recognised that building research capacity is a long-term activity and that academic qualifications are only one aspect of this

activity. Practical experience in co-operation with experienced researchers is important in the capacity building process³

It is in view of the above mentioned that SACMEQ is regarded as a very important exercise in Namibia because it practically aims to fulfil the identified gaps of limited research capacity and limited policy research in the Ministry of Basic Education, Sport and Culture.

Therefore, arising from all the policy documents, issues, debates and analyses culminating in the recommendations of the Presidential Commission, the MBESC carried out further focused consultations within and outside the ministry, in coming up with eight national priority areas. . The eight national priority areas are not only expected to guide policy and programmes but they form the basis of the goals and objectives of ministry's strategic plan for the period from 2001 to 2006. Five of the national priority areas directly reflect the main policy concerns of the ministry that were already taken into account at the design stage of the SACMEQ II project. These are:

- Equitable access
- Education Quality
- Teacher Education and Support
- Physical Facilities
- Efficiency and Effectiveness

(The other three, national priority areas are HIV/AIDS, Lifelong Learning, Sport including Arts and Cultural heritage).

However, there were also other policy concerns for which pertinent information was needed. Some of the major concerns for which "hard" facts were needed are:

1. How different are the inputs to schools in the various regions in terms of the kinds of homes that the learners come from?

³ Draft Report of the Presidential Commission on Education and Training, page 186

2. How different are the conditions of schooling in the regions in terms of textbooks and other supplies available to learners, the adequacy of accommodation in the classrooms, the resources in the classrooms and the resources in the schools? Where are the conditions deemed to be inadequate and what action should the Ministry take?
3. How do the conditions of schooling in Namibia compare with the Ministry's own benchmark standards or norms? In which regions are there large gaps? Did the ministry's benchmarks seem to be reasonable or are changes required?
4. How equitably have the educational inputs (both material and human) to primary schools been allocated? For which types of input was there inequity? Is any action required by the Ministry?
5. What is the level of achievement of Grade 6 learners in Reading and Mathematics? Can the achievement levels be said to be adequate or were there major problems? If so, where? What is the level of achievement of the teachers of Grade 6 learners in Reading and Mathematics? Is there any overlap in achievement between learners and teachers?
6. What were the differences in selected inputs to schools between the 1995 study and the 2000 study? What were the differences in learner s' achievement in Reading literacy between 1995 and 2000? Was there an increase, a decrease, or stability in the learner achievement between the two points?

The structure and contents of this report

The rest of this report is devoted to supplying information from the SACMEQ II study for the above listed questions. In Chapter 2, a brief summary of the conduct of the study

has been provided. This involves the establishment of the policy research questions, the development of the instruments and the subsequent scaling procedures, the population tested, the sampling procedures used and the calculation of sampling errors, the data collection, the data entry and the cleaning and weighting of the data.

Data on learners and their homes have been reported in Chapter 3. Information on the learners and their teachers and schools have been given in Chapter 4. The analyses of the extent to which the schools have met the Ministry's benchmark standards have been reported in Chapter 5. In Chapter 6, the results of the analysis of equitable allocation of educational inputs to regions and also to schools within regions have been given. The achievement results of both learners and teachers in Reading and Mathematics have been reported. The differences between the levels and distributions of selected inputs and achievement between 1995 and 2000 have been provided in Chapter 7. In Chapter 8, the major results have been summarised and suggestions for action by the Ministry have been made

As already intimated there had been many developments in the 5 years between 1995 and 2000. At the time of data collection in 2000 there were 7 educational regions. The Ministry has, since December 2002, decentralised its operations from the original 7 educational regions to the 13 political regions. Therefore, the presentation of the results that has been made in this report has been made according to the 13 new political regions instead of the seven old educational regions. It is hoped that in this way, the Ministry will have some kind of benchmarks for the quality of education in each educational region under the new decentralised structure.

Chapter 2

The Conduct of the Study¹

In this chapter several crucial issues about the conduct of the study have been described. These are the planning of the study, instrument construction, sampling, data collection, data entry, cleaning and merging, data analysis and the writing up of the results.

Planning of the study

The very first step was to identify the major policy concerns that were of interest to the ministries of education in the fourteen countries actively participating in SACMEQ II. These policy concerns and the specific research questions emanating from them had to be identified before the study could begin. In each of the countries the SACMEQ National Research Coordinators (NRCs) were responsible for discussing with the senior members in their ministries of education about the high-priority policy concerns associated with their education systems. The responses were then analysed in order to identify groups of ‘General Policy Concerns’. In all, there were twenty general policy concerns which can be summarised under five themes:

- Learners’ characteristics and their learning environments
- Teachers’ characteristics and their views about reaching, classroom resources, professional support, and job satisfaction
- School Head’s characteristics and their views about educational infrastructure, the organisation and operation of schools, and problems with learners and staff
- Equity in the allocation of human and material resources among regions and among schools within regions
- The reading and mathematics achievement levels of learners and their teachers

¹ A very detailed account of the conduct of the SACMEQ II study has been presented on the SACMEQ website: sacmeq.org

Each of the general policy concerns for the SACMEQ II study has been presented below under the respective themes:

Theme A: *Learners' Characteristics and Their Learning Environments*

General Policy Concern 1: What were the personal characteristics (for example, age and gender) and home background characteristics (for example, parent education, regularity of meals, home language, etc.) of Grade 6 learners that might have implications for monitoring equity, and/or that might impact upon teaching and learning?

General Policy Concern 2: What were the school context factors experienced by Grade 6 learners (such as location, absenteeism (regularity and reasons) grade repetition, and homework (frequency, amount, correction, and family involvement)) that might impact upon teaching/learning and the general functioning of schools?

General Policy Concern 3: Did Grade 6 learners have sufficient access to classroom materials (for example, textbooks, readers, and stationery) in order to participate fully in their lessons?

General Policy Concern 4: Did Grade 6 learners have access to library books within their schools, and (if they did have access) was the use of these books being maximised by allowing learners to take them home to read?

General Policy Concern 5: Has the practice of Grade 6 learners receiving extra lessons in school subjects outside school hours become widespread, and have these been paid lessons?

Theme B: *Teachers' Characteristics and their Viewpoints on Teaching, Classroom Resources, Professional Support, and Job Satisfaction*

General Policy Concern 6: What were the personal characteristics of Grade 6 teachers (for example, age, gender, and socio-economic level), and what was the condition of their housing?

General Policy Concern 7: What were the professional characteristics of Grade 6 teachers (in terms of academic, professional, and in-service training), and did they consider in-service training to be effective in improving their teaching?

General Policy Concern 8: How did Grade 6 teachers allocate their time among responsibilities concerned with teaching, preparing lessons, and marking?

General Policy Concern 9: What were Grade 6 teachers' viewpoints on (a) learner activities within the classroom (for example, reading aloud, pronouncing, etc.), (b) teaching goals (for example, making learning enjoyable, word attack skills, etc.), (c) teaching approaches/strategies (for example, questioning, whole class teaching, etc.), (d) assessment procedures, and (e) meeting and communicating with parents?

General Policy Concern 10: What was the availability of classroom furniture (for example, sitting/writing places, teacher table, teacher chair, and bookshelves) and classroom equipment (for example, chalkboard, dictionary, maps, book corner, and teacher guides) in Grade 6 classrooms?

General Policy Concern 11: What professional support (in terms of education resource centres, inspections, advisory visits, and school head inputs) was given to Grade 6 teachers?

General Policy Concern 12: What factors had most impact upon teacher job satisfaction?

Theme C: *School Heads' Characteristics and their Viewpoints on Educational Infrastructure, the Organisation and Operation of Schools, and Problems with Learners and Staff*

General Policy Concern 13: What were the personal characteristics of school heads (for example, age and gender)?

General Policy Concern 14: What were the professional characteristics of school heads (in terms of academic, professional, experience, and specialised training)?

General Policy Concern 15: What were the school heads' viewpoints on general school infrastructure (for example, electrical and other equipment, water, and basic sanitation) and the condition of school buildings?

General Policy Concern 16: What were the school heads' viewpoints on (a) daily activities (for example, teaching, school-community relations, and monitoring learner progress), (b) organisational policies (for example school magazine, open days, and formal debates), (c) inspections, (d) community input, (e) problems with learners and staff (for example, learner lateness, teacher absenteeism, and lost days of school)?

Theme D: *Equity in the Allocation of Human and Material Resources Among Regions and Among Schools Within Regions*

General Policy Concern 17: Have human resources (for example, qualified and experienced teachers and school heads) been allocated in an equitable fashion among regions and among schools within regions?

General Policy Concern 18: Have material resources (for example, classroom teaching materials and school facilities) been allocated in an equitable fashion among regions and among schools within regions?

Theme E: *The Reading and Mathematics Achievement Levels of Learners and Their Teachers*

General Policy Concern 19: What were the levels (according to descriptive levels of competence) and variations (among schools and regions) in the achievement levels of Grade 6 learners and their teachers in reading and mathematics – for my country and for all other SACMEQ countries?

General Policy Concern 20: What were the reading and mathematics achievement levels of important sub-groups of Grade 6 learners and their teachers (for example, learners and teachers of different genders, socio-economic levels, and locations)?

For each of the twenty general policy concerns specific research questions were developed. For each specific research question a dummy table (blank table) was developed. In Chapters 3-7 in this report the results have been presented in a series of tables. The blank versions of these tables were the dummy tables. The main reasons for producing the dummy tables were that this process forced the NRCs to (a) check that the data collection instruments covered all information needs, (b) ensure close linkages between the specific research questions and the

questions on the data collection instruments, (c) reach agreement on the selection of variables and the types of data analyses to be applied, and (d) design and justify the data tabulation templates to be used in reporting the data analyses. It is important to note that this meant that the study was based solely on what the participating ministries had deemed to be important general policy concerns. In all, there were 20 general policy concerns that encompassed 75 specific research questions that resulted in around 150 dummy tables.

Instrument construction

Each of the 150 dummy tables included the names of variables to be used as well as the form in which they would be analysed. These variables were listed. Most of them could be regarded as variables for which information would be required from learners, teachers, or school heads using questionnaires. A few of the variables required information to be collected from learners and teachers using tests.

Questionnaire construction

The variables in the dummy tables were listed and for each variable a decision had to be made about the number of questions that would be required to construct each variable. In some cases (e.g. learner gender) only one question was needed. For another variable (e.g. school enrolment) two questions had to be added together (boys' enrolment and girls' enrolment). In yet other cases, several variables had to be formed into a construct (e.g. 'possessions in the home', 'quality of home' and 'parental education' to form a construct known as 'home background'). Since many of the variables were to be used for examining change over time, then it was important to use, as far as possible, the same questions as had been used in SACMEQ I.

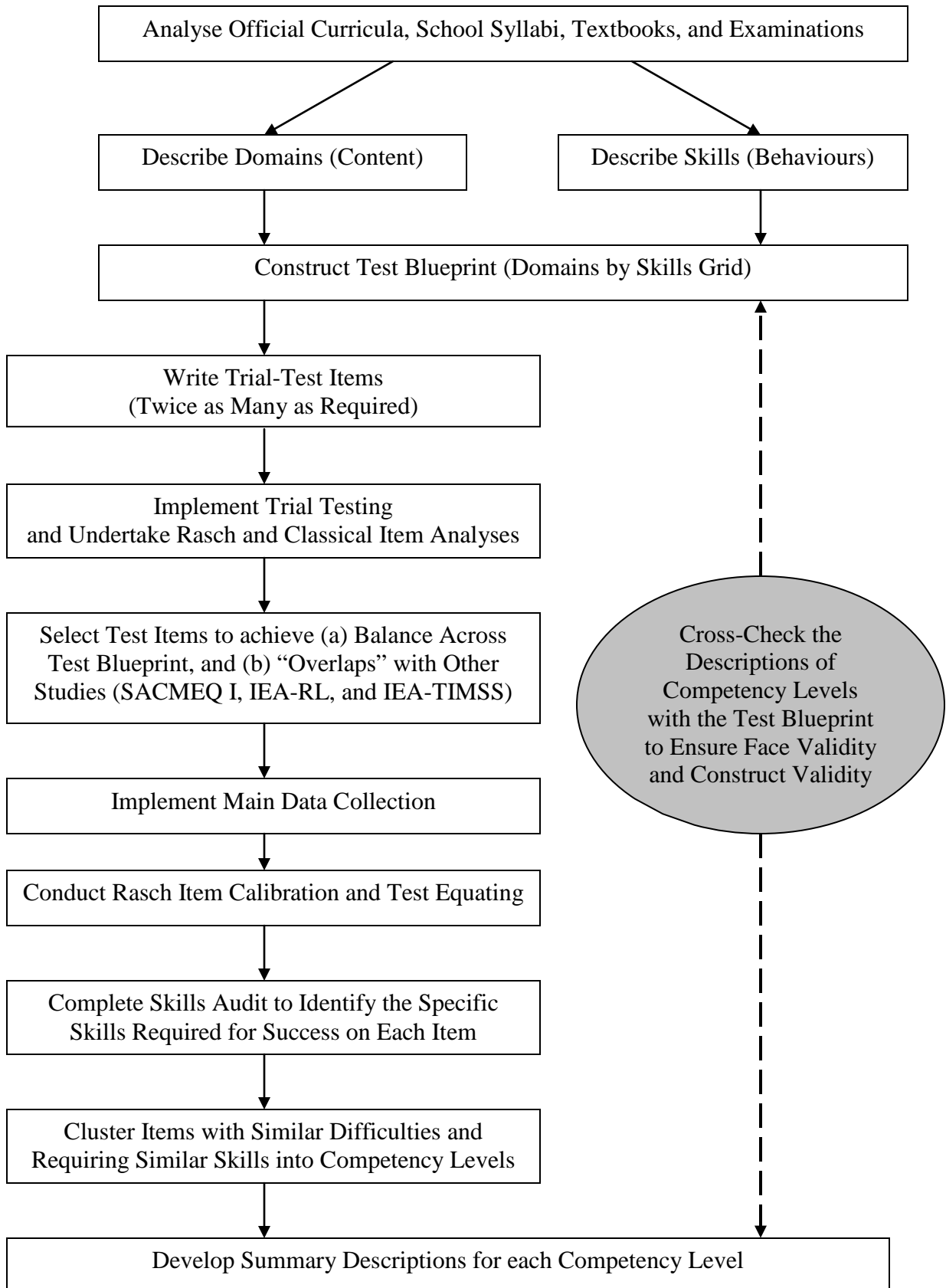
Questions were developed for each variable or each sub-part of a variable required. These were then trialled in the pilot study and, where necessary, revised.

Test construction

Tests had to be constructed in reading and mathematics both for learners and for teachers. The two sets of tests (for learners and teachers) had to be calibrated so as to be on the same scale. For the learner tests there was also the wish to be able to compare reading scores with the International Education Association (IEA) Reading Literacy study and mathematics scores with the IEA's Third International Mathematics and Science Study (TIMSS). Hence there had to be common items with these tests from the other studies. Most importantly, however, the structure of the learner tests was congruent with the content (domains) and behaviours (skills) derived from detailed analyses of the curricula, syllabi, exams, and textbooks used in the SACMEQ countries. The selection of teacher test items had to cover the full range of learner item difficulties – but did not contain too many easy learner test items. In addition, in order not to antagonize teachers with an extended testing session, the teacher tests had a much smaller number of test items than the learner tests.

Main Steps Involved in Test Construction for the SACMEQ II Project

The main steps in constructing any test have been given in the self-explanatory diagram below.



The reading tests

“Reading literacy” was defined as “the ability to understand and use those written language forms required by society and/or valued by the individual.” This was the definition that had been used in SACMEQ I and also in the IEA Reading Literacy Study.

The reading domains that were agreed were:

Narrative prose: Continuous texts in which the writer aims to tell a story – whether this be fact or fiction.

Expository prose: Continuous text in which the writer aims to describe, explain, or otherwise convey factual information or opinion to the reader.

Documents: Structured information organised by the writer in a manner that requires the reader to search, locate, and process selected facts, rather than to read every word of a continuous text.

At the same time a hierarchy of skills was proposed (a dimension of increasing competence) that could be applied to both of the SACMEQ studies.

A blueprint of the test in terms of items and domains by hierarchy has been presented below:

Test Blue print for SACMEQ II Reading test

	Narrative	Expository	Documents	
Level 1	Word/picture association involving positional or directional prepositions requiring the linkage of a picture to a position or a direction in order to answer the question	Word/picture association involving positional or directional prepositions requiring the linkage of a picture to a position or a direction in order to answer the question	Word/picture association involving positional or directional prepositions requiring the linkage of a picture to a position or a direction in order to answer the question	
Items	2	2	2	6
Level 2	Recognising the meaning of a single word and being able to express it as a synonym in order to answer the question	Recognising the meaning of a single word and being able to express it as a synonym in order to answer the question	Linking simple piece of information to item or instruction	
Items	7	6	9	22
Level 3	Linking information portrayed in sequences of ideas and content, when reading forward	Linking information portrayed in sequences of ideas and content, when reading forward	Systematic search for information when reading forward	
Items	8	10	8	26
Level 4	Seeking and confirming information when reading backwards through text	Seeking and confirming information when reading backwards through text	Linking more than one piece of information in different parts of a document	
Items	9	5	4	18
Level 5	Linking ideas from different parts of text. Making inferences from text or beyond text, to infer author's values and beliefs	Linking ideas from different parts of text. Making inferences from text or beyond text.	Use of embedded lists and even subtle advertisements where the message is not explicitly stated	
Items	6	3	2	11
Total Items	32	26	25	83

In the final version of the SACMEQ II reading test there was a total of 83 test items, with (a) 32, 26, and 25 items allocated to the narrative, expository, and documents domains, respectively; and (b) 6, 22, 26, 18, and 11 items set at skill levels 1 to 5, respectively.

Skills Competence Levels for Reading

As a result of the item analysis using Rasch it was possible to identify clusters of items according to their difficulty levels. These clusters were examined by specialists who then were able to describe the thinking behind the items in a cluster. Each cluster formed a

level from easy to difficult. These levels have been described below and examples of the thinking ion the test items given.

Level 1: Pre Reading (Linked with Level 1 in the Test Blueprint)

(a) Skills: Matches words and pictures involving concrete concepts and everyday objects. Follows short simple written instructions.

(b) Example Test Items

- locate familiar words in a short (one line) text
- match words to pictures
- follow short and familiar instructions

Level 2: Emergent Reading (Linked with Level 2 in the Test Blueprint)

(a) Skills: Matches words and pictures involving prepositions and abstract concepts; uses cuing systems (by sounding out, using simple sentence structure, and familiar words) to interpret phrases by reading on.

(b) Example Test Items

- read familiar words and identify some new words
- use simple and familiar prepositions and verbs to interpret new words
- match words and very simple phrases

Level 3: Basic Reading (Linked with Level 3 in the Test Blueprint)

(a) Skills: Interprets meaning (by matching words and phrases, completing a sentence, or matching adjacent words) in a short and simple text by reading on or reading back.

(b) Example Test Items

- use context and simple sentence structure to match words and short phrases
- use phrases within sentences as units of meaning
- locate adjacent words and information in a sentence

Level 4: Reading for Meaning (Linked with Level 4 in the Test Blueprint)

(a) Skills: Reads on or reads back in order to link and interpret information located in various parts of the text.

(b) Example Test Items

- interpret sentence and paragraph level texts

- match phrases across sentences
- read forwards and backwards in order to locate information in longer texts

Level 5: Interpretative Reading (Linked with Level 5 in the Test Blueprint)

(a) Skills: Reads on and reads back in order to combine and interpret information from various parts of the text in association with external information (based on recalled factual knowledge) that “completes” and contextualizes meaning.

(b) Example Test Items

- locate, interpret, and read forward to join two pieces of adjacent information
- use multiple pieces of information to interpret general purpose of a document
- paraphrase and interpret a single non-adjacent piece of information

Level 6: Inferential Reading (Linked with Level 5 in the Test Blueprint)

(a) Skills: Reads on and reads back through longer texts (narrative, document or expository) in order to combine information from various parts of the text so as to infer the writer’s purpose.

(b) Example Test Items

- interpret, and make inferences from, different types of texts by reading backwards and forwards to confirm links between widely separated information pieces
- extract information from a non-traditional (left to right) document
- make judgements about an author’s intentions or purpose beyond the text content

Level 7: Analytical Reading (Linked with Level 5 in the Test Blueprint)

(a) Skills: Locates information in longer texts (narrative, document or expository) by reading on and reading back in order to combine information from various parts of the text so as to infer the writer’s personal beliefs (value systems, prejudices, and/or biases).

(b) Example Test Items

- combine several pieces of information from a range of locations in complex and lexically dense text or documents
- analyse detailed text or extended documents for an underlying message
- identify meaning from different styles of writing

Level 8: Critical Reading (A New Level Generated from the Skills Audit)

(a) Skills: Locates information in a longer texts (narrative, document or expository) by reading on and reading back in order to combine information from various parts of the text so as to infer and evaluate what the writer has assumed about both the topic and the characteristics of the reader – such as age, knowledge, and personal beliefs (value systems, prejudices, and/or biases).

(b) Example Test Items

- use text structure and organisation to identify an author's assumptions and purposes
 - identify an author's motives, biases, beliefs in order to understand the main theme
 - link text to establish multiple meanings including analogy and allegory
-

The Mathematics test

For mathematics a similar exercise was undertaken except this time there had been no SACMEQ I test in mathematics. The resultant domains were:

Number: Operations and number line, square roots, rounding and place value, significant figures, fractions, percentages, and ratios.

Measurement: Measurements related to distance, length, area, capacity, money, and time.

Space-Data: Geometric shapes, charts (bar, pie, and line), and tables of data.

The proposed blueprint with levels and items has been presented below:

SACMEQ II Mathematics Test Blue print

Skill Level	Mathematics Domain		
	Number	Measurement	Space-Data
Level 1	Recognise numbers. Link patterns to numbers.		
Items	6	0	0
Level 2	Apply single operations to two digit numbers or simple fractions. Recognise units of measurement. Apply basic calculations using simple measurement units. Link patterns and graphs to single digits. Recognise and name basic shapes.		
Items	8	8	4
Level 3	Extend and complete number patterns. Convert measurement units when undertaking one-step operations. Translate shapes and patterns. Identify data in tabular form.		
Items	6	4	7
Level 4	Combine arithmetic operations in order to link information from tables and charts when performing calculations. Apply two and three-step arithmetic operations to numbers. Use and convert measurement units. Combine arithmetic operations in order to link information from tables and charts.		
Items	4	4	4
Level 5	Combine operations in order to make calculations involving several steps and a mixture of operations using combinations of fractions, decimals, and whole numbers. Combine operations in order to make calculations involving several steps and a mixture of operations using a translation of units. Link data from tables and graphs in order to make calculations involving several steps and a mixture of operations.		
Items	3	2	3
Total Items	27	18	18

Skills Competence Levels For Mathematics

The levels derived from the item analyses were as follows.

Level 1: Pre Numeracy (Linked with Level 1 in the Test Blueprint)

(a) Skills: Applies single step addition or subtraction operations. Recognises simple shapes. Matches numbers and pictures. Counts in whole numbers.

(b) Example Test Items

- count illustrated objects
- recognise basic numbers and shapes
- carry out simple single operations of addition and subtraction

Level 2: Emergent Numeracy (Linked with Level 1 in the Test Blueprint)

(a) Skills: Applies a two-step addition or subtraction operation involving carrying, checking (through very basic estimation), or conversion of pictures to numbers. Estimates the length of familiar objects. Recognises common two-dimensional shapes.

(b) Example Test Items

- link simple verbal, graphic, and number forms with single arithmetic operations on whole numbers up to two digits
- recognise common shapes or figures in two dimensions
- estimate accurately lengths of simple shapes

Level 3: Basic Numeracy (Linked with Level 2 in the Test Blueprint)

(a) Skills: Translates verbal information presented in a sentence, simple graph or table using one arithmetic operation in several repeated steps. Translates graphical information into fractions. Interprets place value of whole numbers up to thousands. Interprets simple common everyday units of measurement.

(b) Example Test Items

- recognise three-dimensional shapes and number units
- use a single arithmetic operation in two or more steps
- convert in single step units using division

Level 4: Beginning Numeracy (Linked with Level 3 in the Test Blueprint)

(a) Skills: Translates verbal or graphic information into simple arithmetic problems. Uses multiple different arithmetic operations (in the correct order) on whole numbers, fractions, and/or decimals.

(b) Example Test Items

- convert units in two steps and count tabulated data
- analyse a visual prompt and interpret triangular shapes
- translate verbal to arithmetic form using two operations on fractions

Level 5: Competent Numeracy (Linked with Level 3 in the Test Blueprint)

(a) Skills: Translates verbal, graphic, or tabular information into an arithmetic form in order to solve a given problem. Solves multiple-operation problems (using the correct order of arithmetic operations) involving everyday units of measurement and/or whole and mixed numbers. Converts basic measurement units from one level of measurement to another (for example, metres to centimetres).

(b) Example Test Items

- convert basic measurement units
- understand the order of magnitude of simple fractions
- conduct multiple steps with a range of basic operations in a strict sequence using an analysis of a short verbal or visual prompt

Level 6: Mathematically Skilled (Linked with Level 4 in the Test Blueprint)

(a) Skills: Solves multiple-operation problems (using the correct order of arithmetic operations) involving fractions, ratios, and decimals. Translates verbal and graphic representation information into symbolic, algebraic, and equation form in order to solve a given mathematical problem. Checks and estimates answers using external knowledge (not provided within the problem).

(b) Example Test Items

- perform complex and detailed mathematical tasks (involving considerable abstraction of verbal, visual, and tabular information into symbolic forms and algebraic solutions) using knowledge not supplied with the task
- use of an extended verbal or graphic prompt (involving an analysis of steps) to identify the correct sequence of calculations
- convert, and operate on, units of measurement (time, distance, and weight)

Level 7: Problem Solving (Linked with Level 5 in the Test Blueprint)

(a) Skills: Extracts and converts (for example, with respect to measurement units) information from tables, charts, visual and symbolic presentations in order to identify, and then solves multi-step problems.

(b) Example Test Items

- use multiple verbal order of steps with conversion of time units
- translate verbal to arithmetic form, apply units conversion with long division
- convert from mixed number fractions to decimals

Level 8: Abstract Problem Solving (A New Level Generated from the Skills Audit)

(a) Skills: Identifies the nature of an unstated mathematical problem embedded within verbal or graphic information, and then translate this into symbolic, algebraic, or equation form in order to solve the problem.

(b) Example Test Items

- identify the nature of a problem, translate the information given into a mathematical approach, and then identify the correct mathematical strategies to obtain a solution
-

In the final version of the SACMEQ II learner mathematics test there was a total of 63 test items, with 27, 18, and 18 items allocated to the number, measurement, and space-data domains, respectively, and 6, 20, 17, 12, and 8 items set at skill levels 1 to 5, respectively.

Immediately after the test blueprints had been developed the NRCs worked in teams to either select or write all of the required test items for the SACMEQ II tests. As items were prepared they were classified according to the cells in the test blueprints. For each cell *twice* as many items as required were prepared so that the rejection of poor items after the trial testing did not result in a shortage of items in some cells. Most test items were in multiple-choice format with four options per item. The item pools were then sent to all countries for review by panels of curriculum specialists. This resulted in editorial changes to the items and recommendations for additional items by the panel members who made sure that the items met the requirements of the respective national curricula. In Namibia, English and Mathematics curriculum/subject specialists from the National Institute for Educational Development (NIED) assisted by experienced Windhoek based Grade 6 teachers reviewed the test items and ascertained that they were in harmony with the Namibian Grade 6 curricula.

The main challenge in the construction of the reading and mathematics tests for teachers was to “fine-tune” the difficulty range of test items so that it would suit the higher levels of competence that were expected of teachers. At the same time it was important to ensure that there was sufficient “item overlap” with the learner tests to permit the performance of teachers and learners to be measured on the same scale.

In the reading test for teachers, several passages were selected because of the more subtle nature of the messages that they conveyed, and the less-visible underlying assumptions of the writers. For example, one passage on the topic of “smoking” required the teachers to identify the unstated values and beliefs of the writer. Another passage on the topic of “effective thinking” required the teachers to identify assumptions made by the writer about the readers and their knowledge of the topic. These kinds of skills were far beyond the competencies that had been identified from the analyses of Grade 6 curricula.

The “extra” reading and mathematics items for teachers were expected to assess the higher competence levels of teachers – but not to be so difficult that the teachers would be daunted by the challenge. In addition, the selection of easier test items that “overlapped” with the learner tests had to be made with extreme care because the teachers may have felt degraded if these items were ridiculously easy or if they were concerned with issues that would only interest young children.

In the teacher reading test the extended levels of competence mainly focussed on expository texts – rather than on documents or narratives. It was felt that the use of narratives and documents at this level would have required very complex and long texts that would have generally extended the time required to complete the test.

In the teacher mathematics test the extended levels of competence mainly emphasised problem solving strategies that required the extraction of information from verbal, graphic, or tabular presentations. For these items, the teachers were expected to follow three steps: to identify the nature of the problem, to transform the problem into mathematical language, and

to solve the problem. In some cases this required the rearrangement of information, and in others it meant translating the problem into one or more equations and then solving the equations.

The tests (and questionnaires) were piloted in all countries. In Namibia the pilot study was conducted in 30 schools selected from the former Windhoek, Khorixas and the Ondangwa regions, comprising 600 learners. The pilot study took place in August 1999. The pilot study also provided an opportunity for the training of the first 10 data collection team leaders, who took part in the main study at the end of September 2000. The data were returned to a central data processing centre at IIEP in Paris.

Three kinds of scores

It was decided to derive and use three kinds of scores from the tests. These have been described below.

The calculation of scale scores (Rasch)

The data from the trial-testing phase were subjected to Rasch and Classical item analyses in order to detect items that did not “fit” the relevant scales, or that were “behaving differently” across subgroups of respondents defined by gender and country. The poor quality test items were rejected – keeping in mind the need to prepare a “balanced” test across skill levels and domains. The Rasch and classical item analyses were also undertaken a second time after the main testing.

In the case of the measurement of reading performance, there were three groups of respondents: the SACMEQ I learners, the SACMEQ II learners, and the SACMEQ II teachers. Each group completed a reading test that was “different but overlapped”. That is, each group completed a reading test that contained some unique test items and some items that also appeared on one or both of the other two tests. In the case of numeracy measurement, the tests were also “different but overlapped”, however there were only two groups of respondents: the SACMEQ II learners and SACMEQ II teachers.

Although data were gathered at different time points for the SACMEQ I (1995-1997) and SACMEQ II (2000-2002) projects, it is possible to think of the reading and mathematics tests used in the projects as two “artificial” or “composite” tests of 148 different reading items and 91 mathematics items, respectively. This conceptualisation of the tests implies that the three sets of reading test respondents and the two sets of mathematics test respondents can each represent a single group of respondents for the purposes of undertaking “concurrent” scaling of the tests using the Rasch Model.

For the 148-item “composite” reading test there were 36 items that came only from the SACMEQ I learner reading test, 52 test items that came only from the SACMEQ II learner reading test, and 26 items that came only from the SACMEQ II teacher reading test. An additional 34 items were located in more than one test, with 9 of these items being located in all three tests, and 3 sets of items associated with pairs of tests. For the 91-item “composite” mathematics test described in Figure A 2.11 (in the appendices) there were 50 items that came only from the SACMEQ II learner mathematics test, and 28 items that came only from the SACMEQ II teacher mathematics test. An additional 13 items were located in both tests.

Both the reading and mathematics data matrices were analysed using computer software that applied the Rasch Model of measurement (Andrich and Luo, 2000). The first step was to calibrate the test items by calculating the Rasch difficulty values for each item within the 148-item reading test and the 91-item mathematics test. The results of the calibration were then used to calculate reading and mathematics scores for all learners and teachers in all countries.

The final test was deemed to be valid. In each of the SACMEQ countries the Ministry specialists were asked to identify those items that were in the curriculum. These items were named ‘essential’ items and formed a subset of all the items in the test. However, for SACMEQ I in Namibia the correlation between the ‘essential’ items and all items was 1.00 and for SACMEQ II the correlation was 0.98. Indeed, in order to ensure that it was fair to compare all countries on the total test score the correlations between the ‘essential’ items and

all items were calculated in every country and in all cases the results was between 0.98 and 1.00. This is proof that the tests were valid for Namibia and also for other countries.

The mean for all SACMEQ countries was set at 500 and the standard deviation at 100. For Namibia, the mean learner score for reading was 450. The mean teacher reading score for all SACMEQ countries 733, while the mean for Namibian teachers was just below this. This meant that in reading, both Namibian learners and teachers scored below the SACMEQ means.

The identification of ‘derived’ skill competence levels

For each set of tests (learner and teacher for reading and learner and teacher for mathematics) the items were first arranged in order of difficulty, and then examined item-by-item in order to describe the specific skills required to provide correct responses. When items had been linked to specific skills, they were placed into groups or clusters of test items such that the items in each group had similar difficulty values and shared a common “theme” with respect to the underpinning competencies required to provide correct responses.

The three tasks of defining specific skills for each test item, identifying groups of items with similar difficulties, and then naming the “theme” (or competency level) linked to each group were extremely difficult because it required the NRCs to first reach agreement on how the respondents arrived at correct solutions, and to then name the competency required. This required the NRCs to use their practical knowledge of the ways in which learners solve problems, and then to portray this with a meaningful description of the thought processes that had been applied. The skills audit for the reading and mathematics tests resulted in the identification of eight levels of competence for each test. This was more than had been proposed in the test blueprints. For both tests there was a strong correspondence between the descriptions of the five blueprint levels and most of the derived levels arising from the skills audit – which suggested that the three “extra” levels were defining more detail on the same reading and mathematics scales.

The skill levels *with examples of items* characterising each level have been presented earlier in this chapter. An abbreviated version has been presented in Table 2.1. It will be seen that the levels are hierarchical. It is then possible to calculate the percentage of learners reaching any one level. These have been presented in Chapter 7 in this report. These can be regarded as being more meaningful than other scores because the competency levels indicate exactly what learners can and cannot do.

Table 2.1: The final skill levels for the SACMEQ reading and mathematics tests

Level	Reading	Mathematics
1	Pre-reading: Matches words and pictures involving concrete concepts and everyday objects. Follows short simple written instructions	Pre-numeracy: Applies single step addition or subtraction operations. Recognises simple shapes. Matches numbers and pictures. Counts in whole numbers.
2	Emergent reading: Matches words and pictures involving prepositions and abstract concepts; uses cueing systems (by sounding out, using simple sentence structure, and familiar words) to interpret phrases by reading on.	Emergent numeracy: Applies a two-step addition or subtraction operation involving carrying, checking (through very basic estimation), or conversion of pictures to numbers. Estimates the length of familiar objects. Recognises common two-dimensional shapes.
3	Basic reading: Interprets meaning (by matching words and phrases, completing a sentence, or matching adjacent words) in a short and simple text by reading on or reading back.	Basic numeracy: Translates verbal information presented in a sentence, simple graph or table, using one arithmetic operation in several repeated steps. Translates graphical information into fractions. Interprets place value of whole numbers up to thousands. Interprets simple common everyday units of measurement.
4	Reading for meaning: Reads on or reads back in order to link and interpret information located in various parts of the text.	Beginning numeracy: Translates verbal or graphic information into simple arithmetic problems. Uses multiple different arithmetic operations (in the correct order) on whole numbers, fractions, and/or decimals.
5	Interpretive reading: reads on and reads back in order to combine and interpret information from various parts of the text in association with external information (based on recalled factual knowledge) that 'completes' and contextualizes meaning.	Competent numeracy: Translates verbal, graphic, or tabular information into an arithmetic form in order to solve a given problem. Solves multiple-operation problems (using the correct order of arithmetic operations) involving everyday units of measurement and/or whole and mixed numbers. Converts basic measurement units from one level of measurement to another (for example, metres to centimetres)
6	Inferential reading: Reads on and reads back through longer texts (narrative, document, or expository) in order to combine information from various parts of the text so as to infer the writer's purpose.	Mathematically skilled: Solves multiple-operation problems (using the correct order of arithmetic operations) involving fractions, ratios, and decimals. Translates verbal and graphic representation information into symbolic, algebraic and equation form in order to solve a given mathematical problem. Checks and estimates answers using external knowledge (not provided within the problem).
7	Analytical reading: Locates information in longer texts (narrative, document, or expository) by reading on and reading backing order to combine information from various parts of the text so as to infer the writer's personal beliefs (value systems, prejudices, and/or biases).	Problem solving: Extracts and converts (for example, with respect to measurement units) information from tables, charts, visual and symbolic presentations in order to identify, and then solve multi-step problems.
8	Critical reading: Locates information in	Abstract Problem Solving: Identifies the nature of an

	longer texts (narrative, document, and expository) by reading on and reading back in order to combine information from various parts of the text so as to infer and evaluate what the writer has assumed about the topic and the characteristics of the reader – such as age, knowledge, and personal beliefs (values systems, prejudices, and/or biases)	unstated mathematical problem embedded within verbal or graphic information, and then translate this into symbolic algebraic, or equation form in order to solve the problem.
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The specification of minimum and desirable levels of reading

In SACMEQ I each of the Ministries of Education established expert national committees that included inspectors, teacher leaders, and teachers. In Namibia the committee consisted of curriculum specialists, subject panellist/advisory teachers and experienced teachers. The committees were asked to identify the reading performances that they would expect from a learner who (a) would *barely survive* during the next year of schooling (the “Minimum” level), and (b) was *guaranteed to succeed* during the next year of schooling (the “Desirable” level). It was the average cut-off levels that were established in SACMEQ I that were used in SACMEQ II. This was only for reading because this was the only subject matter tested in the SACMEQ I Project. It was thought that this would be one further indicator of importance for policy-makers.

Sampling

The “best” sample design for a particular project is one that provides levels of sampling accuracy that are acceptable in terms of the main aims of the project, while simultaneously limiting cost, logistic, and procedural demands to manageable levels. The major constraints that were established prior to the preparation of the sample designs for the SACMEQ II Project have been listed below.

Target Population: The target population definitions should focus on Grade 6 learners attending registered mainstream government or non-government schools. In addition, the defined target population should be constructed by excluding no more than 5 percent of learners from the desired target population.

Bias Control: The sampling should conform to the accepted rules of scientific probability sampling. That is, the members of the defined target population should have a known and non-zero probability of selection into the sample so that any potential for bias in sample estimates due to variations from “epsem sampling” (equal probability of selection method) could be addressed through the use of appropriate sampling weights.

Sampling Errors: The sample estimates for the main criterion variables should conform to the sampling accuracy requirements that the standard error of sampling for the learner tests should be of a magnitude that is equal to, or smaller than, what would be achieved by employing a simple random sample of 400 learners.

Response Rates: Each SACMEQ country should aim to achieve an overall response rate for learners of 80 percent. This figure was based on the wish to achieve or exceed a response rate of 90 percent for schools and a response rate of 90 percent for learners within schools.

Administrative and Financial Costs: The number of schools selected in each country should recognise limitations in the administrative and financial resources available for data collection.

Other Constraints: The number of learners selected to participate in the data collection in each selected school should be set at a level that will maximise validity of the within-school data collection for the learner reading and mathematics tests.

The Specification of the Target Population

For Namibia, the *desired* target population was all learners enrolled in Grade 6 in the ninth month of the school year (i.e. in September 2000). The net enrolment ratio for the age group 7-13 years old who were enrolled in Grades 1 to 7 in Namibia in 2000 was 91.3 percent. However, in Namibia it was decided to exclude certain learners. These were learners in schools having fewer than 15 Grade 6 learners in them, learners in ‘inaccessible schools, and learners in special schools. In all 884 learners from 82 schools were excluded but this only amounted to 1.8 percent of all learners. In Namibia there were 849 primary schools having 48,567 learners. After excluding the 1.8 percent of learners the defined population from which a sample had to be drawn consisted of 47,683 learners from 767 schools.

The number of schools required in the sample is in part a function of the intra-class correlation (ρ) which is an indicator of the proportion of variation (in achievement in this

case) among schools of total variation. The following is the formula often used for estimating the value of rho in situations where two-stage cluster sampling is employed using (approximately) equal sized clusters.

$$\text{estimated rho} = (\mathbf{b} \cdot \mathbf{s(a)}^2 - \mathbf{s}^2) / (\mathbf{b} - 1)\mathbf{s}^2$$

where $\mathbf{s(a)}^2$ is the variance of cluster means, \mathbf{s}^2 is the variance of the element values, and \mathbf{b} is the cluster size. In SACMEQ I the rho had been 0.60 in Namibia. That is 60 percent of the variation was among schools and only 40 percent within schools. Therefore, in the case of Namibia a rho of 0.60 was used. This meant drawing a sample of 248 schools.

In Table 2.2 the numbers of schools and learners in the planned and achieved samples have been presented. The sample was stratified into the 13 educational regions and the number of schools required for each region can be seen. The actual number of schools was 270. However there were 5 very large primary schools. A double sample was drawn from each of the 5 big schools and thus creating 275 schools.

In all 91.8 percent of the planned number of learners were in the final sample and 100 percent of the schools. The reason for the shortfall in learner numbers was absenteeism by some learners in some of the schools on the day of data collection. However, sampling weights were used to correct for disproportionality among strata in the calculation of all statistics.

It will be recalled that the major aim of the sampling was to have the equivalent of a simple random sample of 400 learners. In Namibia, this was 767 for reading achievement and 810 for mathematics. Hence the sample was a very good one for Namibia. For SACMEQ I it had been 335 which was below the required 400. This was because SACMEQ I was the first sample survey in Namibia and at that time it was assumed that the rho was 0.30. It was not. In SACMEQ II the rhos were 0.60 for reading and 0.53 for mathematics. Thus, in 2000 the variation among schools was slightly lower than in 1995.

Table 2.2. Number of schools and learners in the planned and achieved samples

Region	Schools Planned	Learners planned	Schools Achieved	Learners Achieved	Schools %	Learners %
Caprivi	15	300	15	258	100	86.0
Erongo	15	300	15	278	100	92.7
Hardap	15	300	15	297	100	99.0
Karas	15	300	15	281	100	93.7
Kavango	25	500	25	456	100	91.2
Khomas	25	500	25	483	100	96.6
Kunene	15	300	15	279	100	93.0
Ohangwena	35	700	35	614	100	87.7
Omaheke	15	300	15	281	100	93.7
Omusati	35	700	35	653	100	93.3
Oshikoto	25	500	25	434	100	86.8
Otjozondjupa	15	300	15	292	100	97.3
Oshana	25	500	25	442	100	88.4
Namibia	275	5500	275	5048	100	91.8

Throughout the report wherever a percentage or mean has been presented the accompanying sampling error has been presented. This has been explained at the beginning of Chapter 3.

The main data collection

The main data collection took place between 25 September and 06 October 2000. Data collection manuals had been written indicating what the data collectors had to do from when they entered a school to when they returned the package of instruments to the regional office. A team of 80 data collection team leaders were centrally trained in Windhoek from 11 to 14 September 2000 to ensure uniformity in data collection through out the country. The training of data collectors included going through the data collection manual, followed by actual data collection in a few Windhoek schools that were not included in the SACMEQ II sample. The training was repeated in the regions for data collectors to be more familiar with the data

collection manual and for the benefit of the assistant data collectors. The schools were notified about the data collection several weeks in advance. When the data collectors arrived at the school, they had to meet with the school head to verify the details of the school and what was required. They had to ensure a testing room with 20 well placed sitting and writing places was available. They then had to further ensure that the class registers were available and that the selected learners were present.

Data were collected on two consecutive days. On the first day, data collectors administered the learner questionnaire and reading test in addition to the school head questionnaire as well as the teacher questionnaire and teacher tests. Upon leaving the school, data collectors had to check all the information collected, before returning to the school the following day for the administration of the learner mathematics test.

Data entry and data cleaning

A team of five persons from the University of Namibia Multi-Disciplinary Research Centre computer lab was appointed and trained in the use of WINDEM, a special data entry package to be used in SACMEQ.

The numbers of keystrokes required to enter one copy of each data collection instrument were as follows: learner questionnaire: 150; learner reading test: 85; learner mathematics test: 65; teacher questionnaire: 587; teacher reading test: 51; teacher mathematics test: 43; school head questionnaire: 319; school form: 58; and learner name form: 51.

In the case of Namibia the total number of keystrokes was as follows: learner questionnaire: 762,600; learner reading test: 429,080; learner mathematics test: 328,250; teacher questionnaire: 358,657; teacher reading test: 15,504; teacher mathematics test: 14,061; school head questionnaire: 86,130; school form: 39,150; and learner name form: 259,284. That is, a total of 2,292,716 keystrokes were required to enter all of the data for Namibia.

An experienced keyboard operator can work at a rate of 25 keystrokes per minute (working from multi-paged questionnaires and stopping occasionally to clarify individual questionnaire entries with the supervisor). Assuming that this kind of work rate could be sustained for, say, around a maximum of six hours per day, then the whole data entry operation for Namibia was estimated to amount to around 255 person days of data entry work. This implied an estimated 10 weeks of work for the 5-person data entry team that operated in Namibia. However, the work was completed in 7 weeks because the data enterers worked extra hours.

At the end of this procedure the data files were sent by email to the unit 'Monitoring Educational Quality' at the IIEP in Paris. Many consistency checks were made for many variables as well as for the identification codes used. The IIEP team had many queries. The first data files were sent to Paris in May 2001 and after nine to-ing and fro-ing the files were finally declared to be clean on 25 January 2002.

Merging, weighting, and the statistical analyses

The merging process required the construction of a single data file for each school system in which learners were the units of analysis. This was achieved by "disaggregating" the teacher and school head data over the learner data. That is, each record of the final data file for a country consisted of the following four components: (a) the questionnaire and test data for an individual learner, (b) the questionnaire and test data for his/her mathematics and reading teacher, (c) the questionnaire data for his/her school head, and (d) school and learner "tracking forms" that were required for data cleaning purposes.

The merged file enabled linkages to be made among learners, teachers, and school heads at the "between-learner" level of analysis. To illustrate, with the merged file it was possible to examine questions of the following kind: "What are the average reading and mathematics test scores (based on information taken from the learner tests) for groups of learners who attend urban or rural schools (based on information taken from the school head questionnaire), and who are taught by male or female teachers (based on information taken from the teacher questionnaire)?"

The calculation of sampling weights could only be conducted after all files had been cleaned and merged. Sampling weights were used to adjust for missing data and for variations in probabilities of selection that arose from the application of stratified multi-stage sample designs. There were also certain country-specific aspects of the sampling procedures, and these had to be reflected in the calculation of sampling weights.

Two forms of sampling weights were prepared for the SACMEQ II Project. The first sampling weight (RF2) was the inverse of the probability of selecting a learner into the sample. These “raising factors” were equal to the number of learners in the defined target population that were “represented by a single learner” in the sample. The second sampling weight (pweight2) was obtained by multiplying the raising factors by a constant so that the sum of the sampling weights was equal to the achieved sample size.

The Rasch scaling could only be conducted after all countries data files had been cleaned. Some countries took a long time over this and it was only in May, 2003 that the final country was ready and the scaling and scoring could begin. This is not an easy process and took some time. Once this had been completed then all of the calculation required for the dummy tables could be undertaken. This was done by the Paris ‘Monitoring Educational Quality’ team and sent out to countries.

It was only then that the author began writing this report.

Chapter 3

Learners' Characteristics and their Learning Environments

Introduction

The aim of this chapter is to present information on some of the characteristics of learners and their homes. These data have been presented for three reasons. The first is that they present a 'context' for the later analyses to be presented in this report. The second is that since, over time, the levels and distributions of the data may change, the data can be used to compare the types of learners in Grade 6 at different time periods. The third reason is that home background is an important variable in all analyses of educational data. From the home context variables a socio-economic scale can be constructed and it is important for the reader to know exactly which variables are included in this scale. It is common sense that schools that have an intake of learners from 'better' home backgrounds should achieve better than schools that have an intake of learners from less well-off home backgrounds. Indeed, research literature abounds with such examples. It is schools that have high scores but have an intake of low Socio-Economic-Status (SES) children that are remarkable. Many of the school and teacher variables that appear in later chapters in this report will be examined for their effect on learner achievement. It will be important to examine their pristine relationship with achievement but also their effect once the SES intake of learners has been taken account of.

A note on the interpretation of the data analyses

Before presenting the results, two points should be stressed. The first is that the variables presented in this chapter represent a small subset of the larger number of variables for which data were collected. The Ministry will make a separate publication containing descriptive statistics for all variables in the study available to interested readers.

The second point is that it is very important 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 is presented for a sub-group of learners (such as for different educational regions, for boys and girls, or learners from different socio-economic groups) then the standard error will 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 increased the size of the total sample and also of the budget required to undertake much larger field data collections and data analyses.

To illustrate, consider the first column of entries in Table 3.1(b). The average age of learners in months at the time of data collection has been presented separately for each region and for Namibia overall. The standard error (SE) of each average has also been presented. For the first region, Caprivi, the average learner age was 155.0 months at the time of the data collection, and the standard error for this estimate was 1.83 months. That is, there were 19 chances in 20 that the average age of the population of Grade 6 learners in the Caprivi region was $155.0 \pm 2(1.83)$. In other words it can be said that we can be 95 percent confident that the population value for Caprivi was between 151.34 months and 158.66 months.

It is important to note that the value of the standard error for each estimate was different from region to region. The variation was caused by two main factors: differences in the distribution of learners among schools within regions and the structure of the sample design within each region. The smallest standard error of 0.57 months occurred for the sample estimate of average age for the whole population of Grade 6 learners in Namibia. This result was to be expected because the overall sample estimate was based on a much

larger sample of schools and learners than the corresponding estimate for any single region.

In interpreting the values in Tables 3.1(a) and (b) and other tables throughout this report, it is important to remember that the percentages and means have been presented in terms of learners. That is, learners were the units of analysis - even though some variables in this report referred to teachers or schools. Where a percentage for a variable that describes teachers has been presented, this percentage should be interpreted as 'the stated percentage of learners who were in schools with teachers having the particular characteristic'. Similarly, a percentage for a variable that describes schools should be interpreted as 'the stated percentage of learners who were in schools with the particular characteristic.'

General and specific policy questions related to educational inputs

As a starting point, in order to guide the data analyses, the very broad educational policy question posed in the title to this chapter was divided into five general policy concerns. These in turn were further subdivided into a set of specific questions. The five areas of general concern were:

1. What were the personal characteristics (for example, age and gender) and home background characteristics (for example, parent education, regularity of meals, home language, etc.) of Grade 6 learners that might have implications for monitoring equity, and/or that might impact upon teaching and learning?
2. What were the school context factors experienced by Grade 6 learners (such as location, absenteeism, (regularity and reasons), grade repetition, and homework (frequency, amount, correction, and family involvement) that might impact upon teaching/learning and the general functioning of schools?
3. Did Grade 6 learners have sufficient access to classroom materials (for example, textbooks, readers, and stationery) in order to participate fully in their lessons?

4. Did Grade 6 learners have access to library books within their schools, and (if they did have access) was the use of these books being maximised by allowing learners to take them home to read?
5. Has the practice of Grade 6 learners receiving extra lessons in school subjects outside school hours become widespread, and have these been paid lessons?

Each of these five general policy concerns has been taken up in the next section.

General Policy Concern 1:

What were the personal characteristics (for example, age and gender) and home background characteristics (for example, parent education, regularity of meals, home language, etc.) of Grade 6 learners that might have implications for monitoring equity, and/or that might impact upon teaching and learning?

The personal attributes of learners such as age, gender, ability as well as motivation have an important role to play in the teaching/learning process. Equally important are the learners' home background characteristics. Walberg and Paik (2000), argue that the home background characteristics have strong influence on learners because from early childhood up to the age of 18 years children spend about 92 percent of their time under the influence of their parents/home rather than the school. Home characteristics such as parental level of education, wealth, nutrition and health, possession of books and other educational materials, as well as parental interest on the education of their children help create enabling conditions for learning. Specific questions were therefore asked, to obtain data on personal characteristics of learners and their homes.

What was the age distribution learners?

In Table 3.1(a) and (b), the ages in months of the learners in Grade 6 have been given for SACMEQ I (data collection in 1995) and SACMEQ II (data collection in 2000) respectively.

Table 3.1(a): Means, percentages, and sampling errors for the learner age, sex, and home-related characteristics (SACMEQ I)

Region	Age (months)		Sex (female)		Books at home (number)		Possessions at home (index)		Meals (index)		Parent Education	
	Mean	SE	%	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	166.5	4.09	42.0	2.20	15.2	3.99	3.9	0.29	10.3	0.21	3.5	0.15
Erongo	161.7	2.42	49.5	1.78	38.2	9.62	8.3	0.56	11.0	0.19	4.1	0.15
Hardap	159.1	3.40	48.1	2.55	19.7	5.75	7.1	0.37	10.6	0.32	3.5	0.26
Karas	164.6	2.28	47.7	1.83	25.5	5.15	6.7	0.86	10.9	0.23	3.6	0.23
Kavango	186.5	2.24	43.8	2.82	12.9	3.81	4.2	0.46	10.1	0.27	2.9	0.13
Khomas	160.9	1.99	46.7	2.57	42.0	8.86	8.6	0.54	10.9	0.11	4.2	0.20
Kunene	179.6	6.32	52.5	3.10	20.1	6.12	5.2	0.37	10.7	0.37	3.1	0.30
Ohangwena	196.9	3.00	59.5	2.17	30.2	5.06	4.7	0.25	10.3	0.39	3.1	0.10
Omahake	170.8	3.15	47.6	3.05	8.8	7.31	6.8	1.37	11.2	0.50	3.4	0.19
Omusati	184.9	1.86	51.6	2.18	28.3	4.56	5.2	0.19	10.9	0.10	3.2	0.08
Oshikoto	190.1	7.11	58.7	2.53	35.8	9.44	5.7	0.92	10.5	0.51	3.6	0.27
Otjozondjupa	167.1	3.13	52.7	1.40	40.8	8.23	7.7	0.37	10.5	0.35	3.6	0.28
Oshana	178.3	4.29	53.6	2.70	22.1	4.00	6.0	0.53	11.0	0.22	3.3	0.15
Namibia	178.3	0.98	51.2	0.74	27.6	1.86	5.8	0.13	10.7	0.08	3.4	0.05

It can be seen that the average age of learners in Grade 6 had decreased from 178.3 in 1995 to 166.4 in 2000. This is a decrease of one year of age. The Ministry's policies of having learners enter school at the appropriate age and of trying to decrease grade repetition has had an effect. The decrease had taken place in all educational regions. Nevertheless, if all learners had entered school at the official age of entry and there had been no grade-repeating, then the expected average age would have been 150 months. Learners enter school in January if they are already 6 years old or will turn 6 years by 31 January of the year of commencement of Grade 1. The figure of 150 months was derived by adding 6 years of study to 6.5 years (the average age of entry). Thus, even though substantial progress has already been made there is still a long way to go for the situation to become 'normal'. In SACMEQ II it could be seen that the learners in Kavango and Ohangwena were eight months older, on average, than all learners in Namibia. This could partly be due to the fact that some learners in the Kavango generally start school a little older due to long walking distances to school and a higher repetition rate in Ohangwena.

Policy suggestion 1. Further effort may be required by the regional education authorities in Kavango and Ohangwena to have learners enter school at the right age and that they repeat less frequently.

What was the gender distribution of learners?

From Tables 3.1(a) and 3.1(b), it can be seen that the percentage of girls in school in Grade 6 remained the same for the country as a whole but there had been some interesting shifts in some educational regions. For example, the percentage of girls had increased (implying that the percentage of boys had decreased) in Karas, Kavango, and Khomas but decreased in Oshikoto and Otjozondjupa. Although in Ohangwena, the percentage of girls was the same as in 1995 it was still too high in that too few boys were in school at the Grade 6 level in this region.

Policy suggestion 2. The Regional Director of education in Ohangwena may wish to consider conducting a special study in the region in order to find out why insufficient boys were attending Grade 6.

Table 3.1(b). Means, percentages, and sampling errors for the learner age, sex, and home-related characteristics (SACMEQ II)

Region	Age		Sex		Books At home (number)		Possessions at home (index)		Meals (index)		Parent Education	
	(months)		(female)									
	Mean	SE	%	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	155.0	1.83	46.4	2.28	11.7	3.10	4.6	0.51	11.1	0.14	3.6	0.24
Erongo	156.2	1.32	48.6	2.15	21.3	4.92	8.7	0.51	11.5	0.16	4.2	0.17
Hardap	156.3	1.38	48.1	1.97	26.8	6.09	7.3	0.48	11.0	0.26	3.8	0.18
Karas	158.8	1.31	53.1	2.57	21.6	5.07	7.5	0.51	10.8	0.13	3.9	0.17
Kavango	173.4	1.72	48.0	1.93	14.6	2.08	3.9	0.35	9.6	0.22	3.0	0.10
Khomas	154.2	1.32	51.5	2.07	42.7	6.45	8.8	0.28	10.9	0.14	4.6	0.13
Kunene	161.7	2.70	53.0	2.40	27.0	19.07	5.7	0.83	11.3	0.25	3.0	0.22
Ohangwena	174.7	1.62	57.5	1.97	15.3	2.00	4.2	0.19	11.0	0.18	3.1	0.09
Omahake	160.0	1.65	47.3	1.65	32.2	7.69	5.8	0.58	10.2	0.42	3.4	0.15
Omusati	169.4	1.39	53.5	1.37	19.0	1.65	4.6	0.18	10.8	0.15	3.2	0.09
Oshikoto	167.5	2.22	51.6	1.67	21.9	5.37	4.7	0.40	10.5	0.19	3.3	0.13
Otjozondjupa	159.6	1.81	46.6	1.98	37.2	5.83	6.4	0.69	10.8	0.19	3.8	0.21
Oshana	166.2	1.60	51.8	1.85	20.6	1.85	5.2	0.30	10.9	0.16	3.5	0.13
Namibia	166.4	0.57	51.9	0.61	22.0	1.16	5.4	0.10	10.7	0.06	3.5	0.04

What was the level of the parents' education?

The home consists of several components such as the educational level of the parents, the material care for the child, the language spoken in the home, where the learners actually lived during the week, how many books and other reading materials were in the home,

and finally the socio-economic status of the home as measured by the wealth of the parents. Each will be taken up in turn.

First the education of parents has been taken up. It is to be expected that parents with more education will provide a home atmosphere that is more conducive to learning than parents with lower levels of education. They will help their children in many ways with their learning. Separate questions were asked of the mother's and father's educational level. The results were summed and then divided by 2. A score of '1' indicated that neither parent had received any school education and a score of 6 indicated that both parents had completed senior secondary and had had some tertiary education. The average was 3.4 indicating that the average level of education was primary education and some secondary. Even the highest educational region for parental education (Komas) had a score of only 4.6 and in the regions of Kavango, Kunene, Ohangwena, and Omusati the education levels were low. The problem of this average is that it can mask large differences between mothers and fathers. In Table 3.2 the percentages of mothers married to fathers with different levels of education have been presented.

Table 3.2 Percentage of mothers and fathers with different levels of education

		Mother Education levels						Total
		No school	Some primary	All primary	Some secondary	All secondary	Some tertiary	
Father education Levels	No school	44.5	33.8	8.9	5.6	4.2	3.0	100.0 (6.7)
	Some primary	7.9	62.2	11.2	9.8	5.1	3.8	100.0 (32.5)
	All primary	4.4	35.9	29.5	15.0	10.1	5.2	100.0 (7.7)
	Some secondary	2.9	13.0	22.4	39.7	13.5	8.6	100.0 (22.9)
	All secondary	3.1	19.0	10.9	21.6	36.1	9.3	100.0 (14.0)
	Some tertiary	1.8	10.7	8.8	14.4	27.3	37.1	100.0 (16.3)
	Total	7.3	32.6	14.6	19.1	15.3	11.2	100.0

There were 6.7 percent of fathers with no schooling. Of these, 45 percent were married to mothers with no schooling, 34 percent were married to mothers who had some primary but very few were married to mothers with higher levels of education. Most learners had

mothers (32.6%) who had some primary education only. But, 11.2 percent of the mothers had some or more tertiary education. Most fathers (32.5%), too, had only some primary school and they were married to mothers with some primary. The largest percentages are in the diagonal indicating that men tended to marry women with one level of education below their own.

As more children receive more education and become parents, then more parents will have higher levels of education. However, in 2000, the general level was low.

How regularly did the learners eat meals?

The material care of the children was measured by the children having regular meals. A question concerned the nutrition of the learners at least in terms of having three meals a day, even if the nutritional value of each meal was not known. The question asked about a morning meal, a midday meal and an evening meal and how many times a week they ate each of the meals. A score of 3 meant that they did not eat at all while a score of 12 indicated that they ate every meal each day. In 2000, most of the learners in Namibia had sufficient meals per week (average = 10.7) although in Kavango the children only had 9.6 meals.

Policy suggestion 3. The educational authorities in Kavango may well wish to consider extending the “school feeding programme” or any other supplementary food programme to more schools for the children from very poor families.

What percentage of learners spoke the language of the test at home?

What language is spoken mostly at home? Is it the same as the language of instruction of the school? In Table 3.3 (a) the percentages of learners speaking the language of the test have been presented. In all, 75 percent of learners spoke the language of the test. But, in Caprivi, Hardap, and Karas the figures were somewhat low.

Table 3.3(a). Percentages, and sampling errors for learners speaking English at home

Region	SACMEQ I		SACMEQ II	
	Speak English		Speak English	
	%	SE	%	SE
Caprivi	56.8	5.35	63.6	8.52
Erongo	78.6	5.20	77.7	7.81
Hardap	50.9	9.62	66.7	5.25
Karas	61.3	9.00	62.0	5.57
Kavango	58.1	7.23	74.9	3.95
Khomas	85.9	5.55	88.9	2.16
Kunene	75.4	5.67	88.9	4.73
Ohangwena	79.1	2.99	78.0	3.17
Omaheke	72.4	17.12	80.3	3.80
Omusati	76.2	3.92	79.6	3.37
Oshikoto	88.5	5.60	78.0	3.63
Otjozondjupa	90.0	2.80	84.2	4.44
Oshana	75.6	8.41	75.6	4.34
Namibia	74.5	1.62	78.0	1.25

Where did learners live during the school week?

The first question is how many learners actually lived at home or with relatives. Figures have not been presented in tabular form for this variable but it can be said that seventy-three percent of learners lived with their parents or guardians, seventeen percent lived with relatives while attending school, eight percent lived in hostels and only two percent lived by themselves. Thus, when describing homes, ninety percent of the children were referring to their own homes in the sense that it was either their parents' homes or those of relatives (the extended family). However, it should be noted that forty-five percent and slightly over fifty three percent of learners in Omaheke and Kunene regions respectively, lived in hostels.

The policy of the Ministry is to provide more schools close to where learners live so that all school-going age children have the opportunity to attend school within walking distance from their homes. The Ministry provides hostel accommodation in areas where learners would otherwise not be able to attend school without a hostel. The relatively high percentages of Grade 6 learners living in hostels in Kunene and Omaheke is partly due to the sparse population in these regions which makes it difficult to provide schools close enough for every learner. The hostels in the two regions can be classified into three categories. There are government hostels, private hostels and community hostels which

cater for the children of sparsely spread marginalised communities such as San children and children of farm workers who would otherwise not be able to go to school. In Kunene, the hostels are complemented by mobile schools which cater for the children of the semi-nomadic Ovahimba people. It is not known whether all the community/informal hostel in the two regions are registered with the Ministry of Education.

Policy suggestion 4. The Hostels Division at head office as well as the education authorities in Kunene and Omaheke should investigate the operations of hostels in the two regions to determine the number, and investigate the conditions of all informal or community hostels to ensure that their operations is in conformity with the expectations of the Ministry.

How many books were there in the learners' homes?

The educational example set by parents was, in part, measured by the number of books in the home. As can be seen in Tables 3.1 (a) and (b) the number of books at home had declined from 27.6 to 22.0 books per home. In general, however, the number of books was small and it should be recalled that many schools in Namibia do not have school libraries. Most of the schools have book boxes or class libraries which learners can make use of. The educational regions of Caprivi and Ohangwena were particularly disadvantaged in terms of reading materials at home. Given that it is important for learners to be able to read at home if they are to perform well in reading tests (Elley, 1994¹), it is disappointing to learn that there were so few books in homes.

Policy suggestion 5. If there are few books in the home, then the Ministry may wish to overcome this deficit by ensuring that there are *enough* books in the classroom and that it is possible for learners to *take books home* from school to read. Regional Directors in conjunction with the Directorate of National Libraries can also extend the operations of community libraries to include mobile libraries that visit villages at least once every two weeks.

What other reading materials and electronic media did learners have at home?

A number of questions were asked of learners about possessions in their homes. Some of these were to do with learning. Some were reading materials and others were about electronic media. The availability of a newspaper or magazine allows learners to read

¹ Elley, Warwick B (1994) *The IEA Study of Reading Literacy: Achievement and Instruction in Thirty-Two School Systems*. Oxford: Pergamon.

widely at home. The availability of a radio or TV and the like allows children to learn from these sources. The results have been summarised in the Table 3.4.

Table 3.4 Percentages of learners in homes with the following possessions

IDEDREG	News paper	Magazine	Radio	TV	VCR	Cassette	Telephone
Caprivi	29	17	92	49	16	39	14
Erongo	62	61	87	82	53	67	67
Hardap	49	47	74	68	31	55	60
Karas	42	47	91	60	31	75	54
Kavango	33	17	88	26	15	38	15
Khomas	66	60	92	89	53	64	72
Kunene	29	43	66	51	30	37	38
Ohangwena	46	13	93	21	08	36	06
Omaheke	32	22	73	56	26	40	51
Omusati	51	24	94	23	07	34	12
Oshikoto	51	27	95	28	16	35	18
Otjozondjupa	39	35	82	71	32	44	46
Oshana	56	27	94	40	16	42	21
Namibia	48	28	90	40	19	42	26

Namibian learners in Grade 6 were not well-off for reading materials and electronic equipment for learning at home. Reading materials are important to be able to have practice in reading. Electronic equipment is useful to receive messages from outside, some of which will be informative and educational. Ninety percent of learners were from homes with a radio, 48 percent with a newspaper, 28 percent with a magazine, about 40 percent with a TV set or a cassette player, but only about 20 percent from homes with a Video cassette recorder and 26 percent with a telephone. Caprivi, Kavango, Omaheke, and to some extent Kunene were poorly off for reading resources. It is perhaps in these regions where a first attack on book supply would be useful.

What was the socio-economic status of learners' parents in terms of possessions, housing conditions (lighting, floor, wall, and roof), and livestock?

The wealth component of a home has to do with how much money is available. It is impossible to ask children what their parents earn. Thus proxy or indirect methods of assessing the wealth of a home must be used. One indicator is the goods they possess at home (home possessions). A question was asked on the 'Learner questionnaire' about

fourteen possessions they might possess in the home. These were: daily newspaper, weekly or monthly magazine, radio, TV set, video cassette recorder (VCR), cassette player, telephone, refrigerator, car, motorcycle, bicycle, piped water, electricity (mains, generator, solar), and a table to write on. The number of possessions owned in the home was summed for each learner. The lowest score possible was zero and the highest 14.0. The average number of possessions was 5.4 items. The parents of the learners in Caprivi, Kavango, Ohangwena, Omusati and Oshikoto tended to be less well off in terms of possessions in the home. It was the parents in Kavango who were the least well off. Overall, there had been a slight decline from 1995 to 2000.

Only forty-nine percent of the learners came from homes that had floors that were covered by wooden planks, cement, carpet or tiles. The rest of the learners came from homes that had earth, clay or canvas covered floors. Seventy-nine percent of the learners came from homes with walls made of sticks, grass, mud, wood or metal sheets, while fifty-six percent came from homes with roofs made of either, grass thatch or cardboard and other materials. These data, together with the amount of livestock in children's homes, have been presented in the appendices as Appendices A3.1 to A3.4

An index of the quality of the homes of the children was constructed as follows:

<u>Index of Quality of home</u>	
Light at home:	No light or only firelight = 1 Candlelight or paraffin or oil light = 2 Gas light = 3 Electric light = 4
Floor of home:	Earth/clay or canvas = 1 Wooden planks = 2 Cement = 3 Carpet or tiles = 4
Wall of home:	Cardboard/plastic/canvas/reeds/sticks/grass = 1 Stones/mud bricks = 2 Metal/asbestos/wood = 3 Cut stone/concrete/bricks = 4
Roof of home:	Cardboard/plastic/canvas/grass thatch/mud = 1 Metal/asbestos = 2 Cement/concrete = 3 Tile = 4
The above were summed thus making a scale from 4 (minimum) to 16 (maximum)	

The average scores for each educational region in terms of quality of homes have been presented in Table 3.5. This information is for SACMEQ II only since the question had not been asked in SACMEQ I..

Table 3.5. Means and sampling errors for the general quality of learners' homes (SACMEQ II)

Region	General quality of learner's homes (Index)	
	Mean	SE
Caprivi	7.5	0.51
Erongo	12.6	0.39
Hardap	12.4	0.21
Karas	11.9	0.30
Kavango	7.5	0.33
Khomas	12.8	0.21
Kunene	11.4	0.57
Ohangwena	6.3	0.18
Omaheke	11.1	0.50
Omusati	6.5	0.19
Oshikoto	7.1	0.43
Otjozondjupa	11.3	0.40
Oshana	7.6	0.33
Namibia	8.4	0.10

It can be seen that learners in the educational regions of Caprivi, Kavango, Ohangwena, Omusati, Oshikoto, and Oshana lived in poorer quality homes than learners in regions like Khomas and Hardap. In general, there was a slight decline for some aspects of the children's homes between 1995 and 2000.

Learners in Caprivi, Kavango, Ohangwena, Omusati, Oshikoto and Oshana had low socio-economic statuses compared to other regions because they either had the least number of books and other reading materials in their homes, fewer possessions and generally poor quality of homes. They also had less educated parents, and in the case of the Kavango, less meals as well.

Policy suggestion 6. Noting that it will take a while for the government to help improve the general socio-economic conditions in these regions, the Ministry and the local regional education authorities should make concerted efforts to supply schools in these regions with enough qualified/experienced teachers, textbooks and other reading/learning materials to compensate for the inadequacies in the home background characteristics of learners.

In summary, the results show that there were big differences in the personal characteristics of learners as well as in their home background characteristics. These differences were observed within regions and between regions. The learners in Kavango and Ohangwena in particular, were generally older than learners in all the other regions. There was relative gender equity in the number of boys and girls in Grade 6 in all regions except for Ohangwena where the number of boys was much lower than the number of girls. A large percentage of learners in Kunene and Omaheke lived in hostels, while learners in Kavango were low on the regular meals index. Generally, learners in the Caprivi, Kavango Ohangwena, Omusati, Oshikoto, Oshana, Kunene and to some extent Otjozondjupa were disadvantaged in nearly all the home background characteristics such as parental education, quality of homes, possessions/wealth and reading materials.

General Policy Concern 2:

What were the school context factors experienced by Grade 6 learners (such as location, absenteeism, (regularity and reasons), grade repetition, and homework (frequency, amount, correction, and family involvement), that might impact upon teaching/learning and the general functioning of schools?

The local contexts of where the learners live will also differ in terms of the schooling that learners receive and the kinds of facilities available in the communities where the learners lived. How often learners are absent from school will affect their school learning. Grade repeating is normally associated with lower learning levels. Homework is important and how much the family helps in their children's learning will also affect the learners' learning. Each of these aspects of the environment has been taken up below in this section.

What was the location of the school?

Two questions were asked of the school head about the school. The first was if the school was in an isolated area, a rural area, a small town or a large city. The first two categories were summed in order to provide a category 'rural' and the last two to form

the category ‘urban’. A second question asked how many kilometres it was from the school building to health clinic, a tarmac road, a public library, a bookshop, and a secondary school. These distances were summed and then divided by 5 in order to provide an index of the average number of kilometres from such amenities. The results have been presented in Table 3.6.

About 35 percent of learners were in urban areas in both 1995 and 2000. This implies that 65 percent were in rural areas. In 2000, the percentage of learners in urban areas ranged from 9.8 percent in Omusati to 96 percent in Khomas.

It can be seen that the average learner in Namibia was about 30 kilometres from such amenities in 1995 and in 2000. In 2000, learners in Caprivi, Kunene, and Omahake were much further from such amenities than learners in other regions. Again, it is these areas that need more amenities in the schools such as books.

The high percentage of learners in rural areas and the average distance of 30 kilometres from ordinary amenities mean that there is much to be done to build the infrastructure and amenities for all.

Table 3.6. School location (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	Urban		Distance (km)		Urban		Distance (km)	
			Mean	SE			Mean	SE
Caprivi	15.0	8.19	44.5	6.84	21.4	11.55	65.0	14.58
Erongo	90.9	9.29	26.1	13.07	84.5	8.88	20.5	6.34
Hardap	88.9	11.49	23.4	14.64	87.6	8.62	16.8	7.37
Karas	18.2	12.47	65.7	17.56	83.5	9.32	31.7	12.15
Kavango	35.0	12.41	36.0	9.23	31.6	9.88	32.3	7.03
Khomas	92.9	7.26	5.8	2.61	96.0	4.03	4.5	1.24
Kunene	44.4	18.16	99.0	33.70	39.6	13.41	109.7	27.77
Ohangwena	11.1	7.68	24.1	3.23	15.5	6.11	35.0	5.83
Omahake	75.0	28.28	38.9	32.35	26.3	13.14	75.5	18.24
Omusati	4.5	4.57	33.9	4.42	9.8	4.84	31.4	3.00
Oshikoto	14.3	15.12	26.1	6.96	24.3	8.93	28.1	4.73
Otjozondjupa	71.4	19.52	21.6	11.92	73.7	11.85	37.2	15.52
Oshana	12.5	13.14	13.1	2.71	31.6	9.71	11.8	1.33
Namibia	33.4	2.92	31.2	2.58	36.5	2.57	30.8	2.02

How many days were learners absent in the previous month, and what were the reasons for these absences?

The quality of the home influences the extent to which children are absent from school. Do parents see the value of schooling such that it is important for the children to go to school or are there other family duties that are deemed to be more important than school? Repetition is a function of being absent and enough progress not having been made during the school year. The data for these variables for 1995 and 2000 have been presented in Table 3.7(a) and (b).

Table 3.7(a) and (b). Mean, percentages and sampling errors for the learner days absent, and repetition for SACMEQ I and II

3.7(a) SACMEQ I

Region	Days absent		Repetition	
	Mean	SE	%	SE
Caprivi	1.1	0.29	46.0	3.07
Erongo	0.5	0.07	53.8	6.27
Hardap	0.7	0.11	46.7	7.51
Karas	0.5	0.12	53.8	5.45
Kavango	2.4	0.39	51.9	2.45
Khomas	0.8	0.12	47.5	5.17
Kunene	0.6	0.24	58.4	3.44
Ohangwena	2.2	0.36	62.4	3.90
Omaheke	0.2	0.14	71.6	10.19
Omusati	2.0	0.23	70.5	2.42
Oshikoto	1.7	0.61	53.8	11.50
Otjozondjupa	0.6	0.17	56.3	7.96
Oshana	1.7	0.48	66.0	4.08
Namibia	1.4	0.10	58.7	1.40

3.7(b) SACMEQ II

Region	Days absent		Repetition	
	Mean	SE	%	SE
Caprivi	1.0	0.17	44.1	4.50
Erongo	0.5	0.07	43.2	4.90
Hardap	0.6	0.13	38.8	4.02
Karas	0.5	0.08	38.8	4.79
Kavango	1.6	0.17	48.5	2.96
Khomas	0.4	0.07	34.9	3.38
Kunene	0.8	0.30	43.9	5.32
Ohangwena	2.1	0.19	58.6	3.01
Omaheke	0.4	0.11	56.1	4.61
Omusati	1.8	0.22	63.6	3.36
Oshikoto	2.2	0.30	60.1	3.59
Otjozondjupa	0.4	0.12	56.4	3.89
Oshana	2.0	0.41	60.2	3.69
Namibia	1.5	0.08	54.1	1.16

Learner absenteeism can sometimes be a problem. In Namibia, learners were absent 1.5 days in the month before the testing took place. This was over two days per month in the educational regions of Ohangwena, Oshikoto, and Oshana. Over the whole year, this can be quite a few days. Although absenteeism was low, a question was asked about the reasons for absenteeism. The results have been presented in Table 3 7(c).

Table 3.7(c). Percentages and sampling errors for reasons of learners absenteeism (SACMEQ II)

Region	Illness		Family reasons		Fees		Work	
	%	SE	%	SE	%	SE	%	SE
Caprivi	26.6	3.32	3.9	2.05	0.0	0.00	0.0	0.00
Erongo	14.0	2.35	2.4	1.03	0.3	0.29	1.3	0.64
Hardap	18.9	3.47	1.8	0.88	0.4	0.38	1.2	0.95
Karas	20.2	2.93	2.8	0.76	0.8	0.56	0.6	0.41
Kavango	33.6	3.75	11.8	1.92	2.8	0.83	6.5	1.44
Khomas	10.3	1.64	1.8	0.87	0.8	0.47	0.1	0.10
Kunene	20.6	5.57	0.7	0.75	0.9	0.64	0.6	0.57
Ohangwena	33.8	3.10	13.1	2.06	5.7	1.98	13.5	1.96
Omaheke	5.7	1.70	2.8	0.97	1.5	0.69	1.9	1.36
Omusati	30.9	2.96	13.5	2.03	2.6	0.89	9.3	1.47
Oshikoto	35.8	3.22	15.2	3.12	3.7	1.48	20.8	3.52
Otjozondjupa	10.1	2.92	3.9	1.19	0.4	0.39	0.0	0.00
Oshana	34.9	2.82	9.8	1.49	2.8	0.88	9.7	2.15
Namibia	27.4	1.05	9.6	0.69	2.7	0.45	8.2	0.64

Most absenteeism was associated with illness and occasionally with family reasons or work. It was rarely associated with learners having to pay fees. However in the Oshikoto region almost 36 percent of learners were absent due to illness, 15 percent due to family

reasons and nearly 21 percent had to work. These figures are cause for concern because they are rather high.

Policy suggestion 7. The education authorities in Oshikoto region should further investigate the reasons for high learner absenteeism to determine the type/s of illness, the type of family reasons and the type of work associated with learner absenteeism.

How many learners had repeated a grade, and were they currently repeating Grade 6?

From Tables 3.7 (a) and (b) it can be seen that slightly more than 54 percent of learners had repeated a grade once or more. This was only a small decline from 1995 when 59 percent of learners had repeated a grade. However, the repetition rates were still high in Ohangwena, Omaheke, Omusati, Oshikoto, Otjozondjupa and Oshana. More than 63 percent of learners had repeated a grade in Omusati. This percentage was very high given that the policy of the Ministry encourages the semi-automatic promotion of learners from one grade to another, and where necessary learners shall be allowed to repeat only once at each phase i.e. lower primary and upper primary. The high repetition rate could partly be due to regular “drop-out” and “drop-in” of learners, who are made to repeat a grade because they do not complete the work for a particular school year.

Policy suggestion 8. Education authorities in Ohangwena, Omaheke, Omusati, Oshikoto, Otjozondjupa and Oshana should investigate the reasons for the high repetition rates in their regions.

How frequently did learners receive homework in reading and mathematics?

Homework can be considered as further practice over and above ordinary schoolwork. In this sense it is part of schooling and from what is known from other research it is a very important part. In SACMEQ I, a question was asked about receiving homework in any subject area. In SACMEQ II the question was more specific and was about reading and mathematics homework separately. If learners said that they received homework once or twice a week or more, then they were deemed to be receiving regular homework. The results have been presented in Table 3.8.

Table 3.8. Percentages and sampling errors for the frequency of homework given most days (SACMEQ I and SACMEQ II)

Region	SACMEQ I		SACMEQ II			
	Homework on any subject		Reading homework		Mathematics homework	
	%	SE	%	SE	%	SE
Caprivi	48.5	6.56	32.9	11.21	40.4	11.00
Erongo	86.7	6.07	48.0	9.74	80.0	4.59
Hardap	71.3	10.67	40.0	8.03	80.4	6.40
Karas	61.8	8.84	33.8	5.83	67.8	7.83
Kavango	68.5	9.24	37.8	5.10	58.8	4.39
Khomas	83.9	3.33	35.8	4.54	72.9	4.05
Kunene	69.5	10.08	36.4	9.74	84.2	7.91
Ohangwena	62.0	5.59	56.8	4.20	69.6	3.49
Omaheke	96.6	2.36	47.8	4.48	61.3	4.66
Omusati	70.6	4.61	47.3	2.96	68.3	2.76
Oshikoto	71.7	8.77	41.3	4.48	58.7	5.54
Otjozondjupa	65.0	10.17	49.2	6.45	72.1	5.39
Oshana	72.3	9.75	52.9	5.74	63.4	4.61
Namibia	69.8	2.02	46.0	1.54	66.9	1.38

It can be seen that in 1995 about 70 percent of learners said that they received homework regularly. In 2000 the figures were 67 percent for mathematics and 46 percent for reading. For mathematics it would seem that the teachers in Caprivi need to be reminded that homework is part of schooling. In general however all learners should be receiving homework once or twice a week in both subjects. It would seem that the matter of giving homework needs to be re-emphasised in pre- and in-service training courses for teachers.

Did teachers correct assigned homework?

When the homework is marked by teachers and worked through with the learners either collectively or individually then those learners achieved more than those who did homework but did not have it marked by the teachers and worked through with them.² The results have been presented in Tables 3.9 (a) and (b) for SACMEQ I and II respectively. In 1995 there were 14.5 percent of learners who either never received homework or who never had it corrected. By the year 2000 this percentage had dropped to 5.9 percent. In general the percentage of learners getting homework marked was

² Walberg Herbert J & Paik Susan J (2000) *Effective educational practices*- 3. International Academy of Education and International Bureau of Education (UNESCO) Geneva: IBE see also <http://www.ibe.unesco.org>

higher. This is certainly a move that is to be applauded. Nevertheless, it would be desirable if all homework was marked for all learners.

Table 3.9(a). Percentages and sampling errors for the frequency of reading homework being corrected by teacher (SACMEQ II)

Region	No homework Given		Never Corrected		Sometimes Corrected		Mostly/always Corrected	
	%	SE	%	SE	%	SE	%	SE
Caprivi	19.3	6.53	15.8	10.40	26.5	5.60	38.4	9.69
Erongo	7.7	2.98	4.6	2.07	30.0	5.39	57.7	5.51
Hardap	12.2	3.89	2.7	1.24	39.8	5.42	45.4	6.27
Karas	14.7	4.03	1.4	1.01	21.3	3.66	62.5	7.29
Kavango	9.4	3.47	2.6	1.10	22.1	2.89	65.9	4.40
Khomas	15.9	3.41	6.8	1.37	29.3	2.13	48.1	3.72
Kunene	5.9	4.55	1.5	0.84	29.9	9.80	62.7	10.54
Ohangwena	7.8	1.65	7.2	1.37	22.8	3.05	62.2	3.91
Omaheke	12.4	2.40	8.4	4.13	26.5	3.12	52.7	4.65
Omusati	9.4	1.59	3.5	0.91	17.9	2.65	69.1	3.75
Oshikoto	7.5	1.66	2.4	0.95	19.9	3.66	70.3	3.83
Otjozondjupa	11.7	3.31	3.0	1.03	36.7	4.75	48.6	5.28
Oshana	8.5	2.37	3.9	1.00	13.0	2.14	74.7	3.56
Namibia	9.9	0.78	4.6	0.51	23.0	1.05	62.4	1.41

Table 3.9(b). Percentages and sampling errors for the frequency of mathematics homework being corrected by teacher (SACMEQ II)

Region	No homework Given		Never Corrected		Sometimes corrected		Mostly/always Corrected	
	%	SE	%	SE	%	SE	%	SE
Caprivi	13.1	7.13	15.1	10.05	21.6	6.36	50.2	10.84
Erongo	2.6	1.33	1.4	0.82	23.2	4.06	72.7	4.54
Hardap	0.4	0.38	0.8	0.51	28.1	6.84	70.8	6.79
Karas	2.3	1.95	0.3	0.32	14.8	3.79	82.6	4.75
Kavango	1.0	0.45	0.3	0.29	19.3	4.05	79.4	4.07
Khomas	1.8	0.72	2.5	0.85	25.4	2.30	70.3	2.60
Kunene	0.9	0.65	2.9	2.18	21.8	8.86	74.3	9.93
Ohangwena	4.1	1.00	2.8	1.10	19.5	4.00	73.5	4.66
Omaheke	7.3	2.97	5.6	1.88	23.9	4.23	63.2	5.39
Omusati	1.7	0.52	0.8	0.46	12.8	2.38	84.7	2.80
Oshikoto	5.0	1.75	1.8	0.73	14.8	3.45	78.4	3.46
Otjozondjupa	4.7	1.53	4.7	1.48	16.1	3.15	74.4	4.52
Oshana	5.6	2.06	2.5	1.38	8.3	2.02	83.6	4.17
Namibia	3.5	0.43	2.4	0.43	17.4	1.16	76.8	1.38

From table 3.9(b) above, it can be seen that in the Caprivi region, 13 percent of the learners were in schools where mathematics teachers did not give homework, and 15 percent were in schools where the teachers never corrected homework.

Policy suggestion 9. Regional education authorities, advisory teachers and school principals in Caprivi region should encourage mathematics teachers to give homework and correct it more often.

Did family members monitor, assist with, request demonstrations, ask questions about, and/or look at, learners' homework?

One important aspect of the home is how much the parents or some other adult interacts with the child or children in order to show an interest in their schoolwork or to help the child with schoolwork. This is part of the intellectual milieu of the home. Education is, or should be, a joint effort of the home and the school. Learners replied to questions about the interaction they had with their parents or someone else in the home. The results have been presented in Tables 3.10 to 3.12.

Table 3.10. Home assistance with school related work (SACMEQ I and II)

Region	Home assistance 'most of the time' with school work											
	SACMEQ I *						SACMEQ II *					
	Ensure homework done		Help with the homework		Look at school work done		Ensure homework done		Help with the homework		Look at school work done	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	24.1	3.21	19.0	2.96	17.2	2.10	22.8	5.57	13.9	4.40	9.4	3.03
Erongo	58.9	5.75	27.0	2.92	38.9	3.78	56.3	6.14	30.3	4.06	38.5	3.79
Hardap	44.7	5.31	19.9	2.70	29.2	2.83	49.1	5.71	31.8	5.54	28.3	3.70
Karas	49.7	5.44	22.8	2.60	33.0	3.97	57.9	5.70	35.6	3.89	45.1	5.88
Kavango	28.9	4.33	9.8	3.01	18.9	3.75	31.8	3.40	25.3	4.80	26.6	3.40
Khomas	61.1	2.31	28.5	3.74	40.1	3.00	59.0	3.03	38.4	3.81	44.0	2.65
Kunene	31.4	5.76	23.7	5.22	30.2	4.23	35.2	10.09	14.8	3.63	20.8	6.15
Ohangwena	42.0	4.17	28.1	3.21	40.5	3.15	40.7	3.26	35.9	2.78	38.9	2.40
Omaheke	33.8	18.86	8.1	3.85	22.5	9.33	42.0	6.69	30.9	4.73	32.7	5.63
Omusati	52.1	4.35	31.1	3.33	40.8	3.16	48.4	3.50	36.9	3.14	36.5	2.44
Oshikoto	56.2	7.52	38.0	3.98	55.9	5.74	51.2	4.14	33.0	2.56	36.6	3.80
Otjozondjupa	46.3	5.80	22.1	3.53	43.0	2.50	57.6	5.34	36.7	5.11	36.1	4.69
Oshana	38.3	6.24	23.8	2.85	33.7	5.25	50.2	3.64	40.7	3.83	40.9	1.60
Namibia	45.0	1.62	25.3	1.14	35.9	1.19	46.5	1.29	33.9	1.18	35.7	0.97

In Table 3.10 reference has been made to parental behaviours such as ensuring that the homework is done, actually helping with homework in general, and also looking at the work once it had been done. About half of the learners had parents who ensured that the homework had been done. But, this means that half did not ensure this. There had been no change between 1995 and 2000. About 33 percent of the parents helped with the homework (quite an improvement over 1995) and 36 percent actually looked at the work once it had been completed. All of this is encouraging but it still leaves room for

improvement. It is through the school boards and teacher-parent meetings that these parental behaviours can be affected.

Policy suggestion 10. Given the importance of homework in improving learning outcomes, school boards, school inspectors, school principals as well as teachers should ensure that learners are regularly given homework, that the homework is corrected, and take every opportunity of encouraging the parents of their learners to ensure that homework has been done, and show an interest in the homework by helping if they can and certainly looking at the schoolwork of their children.

Learners were asked the extent to which a person other than the teacher asked them to read to him or her. The percentages of learners who said that this happened ‘most of the time’ have been presented in Table 3.11.

Table 3.11. Home assistance with reading work (SACMEQ I and SACMEQ II)

Region	Home assistance ‘most of the time’ with school work							
	SACMEQ I				SACMEQ II *			
	Ask to read		Questions on school reading work		Ask to read		Questions on school reading work	
	%	SE	%	SE	%	SE	%	SE
Caprivi	18.7	2.57	16.5	2.57	8.0	2.93	7.3	1.99
Erongo	17.6	2.46	25.2	4.69	23.7	3.60	21.0	3.06
Hardap	21.0	4.67	17.1	4.70	23.3	4.08	18.4	3.13
Karas	21.1	2.68	22.3	2.60	31.8	4.48	28.8	4.51
Kavango	13.8	2.83	13.8	3.03	16.5	2.59	23.2	2.33
Khomas	18.5	3.08	22.3	3.35	23.8	2.73	29.3	2.92
Kunene	24.7	2.47	24.9	3.35	12.2	4.28	15.0	3.54
Ohangwena	24.5	3.04	30.5	3.02	33.1	3.48	33.9	2.56
Omaheke	9.1	6.72	13.3	5.33	32.8	4.53	26.9	4.96
Omusati	31.7	3.36	36.7	3.17	32.9	2.58	30.7	2.56
Oshikoto	33.3	3.28	41.5	5.22	30.2	2.82	35.2	3.63
Otjozondjupa	26.5	3.76	23.4	3.11	24.6	4.00	27.5	4.41
Oshana	27.5	4.18	29.9	7.06	33.9	3.28	41.1	2.91
Namibia	24.0	1.09	27.1	1.18	27.9	1.06	29.8	0.96

The extent to which learners said that someone else asked them to read to them ‘most of the time’ has also been presented in the same table. It can be seen that for both variables there was a slight increase between 1995 and 2000. However, the percentages were not high in any region and parents could do much more. The situation in Caprivi and Kunene was particularly bad.

The same questions were asked of learners but this time about mathematics and these results have been presented in Table 3.12. There was no significant improvement between 1995 and 2000 and in general the situation of parent involvement was unsatisfactory. Again, the regions of Caprivi and Kunene left a great deal to be desired.

Table 3.12. Home assistance with mathematics work (SACMEQ II)

Region	Home assistance 'most of the time' with school work			
	Do mathematical calculations		Questions on school mathematics work	
	%	SE	%	SE
Caprivi	6.1	3.05	8.8	2.57
Erongo	21.0	2.59	22.3	4.36
Hardap	36.5	6.19	23.2	3.66
Karas	34.6	5.53	34.5	3.77
Kavango	18.2	3.00	20.9	2.87
Khomas	37.8	3.24	34.3	3.03
Kunene	9.1	3.91	12.9	4.01
Ohangwena	30.5	2.67	33.6	2.56
Omaheke	28.4	4.28	28.1	3.96
Omusati	30.0	3.60	30.8	2.38
Oshikoto	30.8	2.34	34.3	3.12
Otjozondjupa	30.1	4.74	23.4	3.73
Oshana	31.6	2.94	34.5	2.79
Namibia	28.6	1.10	29.3	0.94

It is clear that learning is something that does not happen at school alone and that the home has an important influence of learning. In other countries the school intervention programmes have worked well in changing parental behaviour.

Policy suggestion 11. It is suggested that the Ministry should initiate some in-depth study into the different kinds of parental involvement programmes that have proven successful in other parts and that some pilot studies be begun in Caprivi and Kunene

As indicated under the first general policy concern, the SES or home background characteristics of learners in the six northern educational regions of Namibia did not provide adequate enabling environments for successful learning. Some of the less enabling home background characteristics of learners were low parental level of education, poor nutrition, little or no assistance with homework, poor health and frequent absenteeism. These factors may contribute to the observed high repetition rates in the six regions. Given this background, the school environmental factors such as regular class

attendance, regular homework that is regularly corrected by teachers would help improve the situation. The situation would even be better if parents or someone else at home took sometime to see to it that learners did their homework.

Policy suggestion 12. It is suggested that education authorities in Caprivi, Kavango, Ohangwena, Omusati, Oshikoto and Oshana as well as the regional education forums in these regions should ensure that the disadvantaged schools in these regions get the support they need from inspectors and advisory teachers. School principals should see to it that learners are given enough homework regularly, and monitor that, teachers actually mark the homework. School boards should mobilise parents to be more involved in the education of their children, by seeing to it that their children get food before going to school, and that they attend school regularly without recourse to repetition.

General Policy Concern 3:

Did Grade 6 learners have sufficient access to classroom materials

(e.g. textbooks, readers, and stationery)

in order to participate fully in their lessons?

If learners are to be able to learn it is essential that they have textbooks and the wherewithal to write. A number of questions were therefore asked of the learners about these matters.

What percentage of learners had reading and mathematics textbooks?

First the learners were asked if they had their own textbook, if they had to share or if they had no textbook at all. The percentages of learners responding that they had their own textbook for reading in 1995 and 2000 as well as those having their own mathematics textbook in 2000 have been given in Table 3.13.

Table 3.13. Percentages and sampling errors for learners having own reading textbook (SACMEQ I and SACMEQ II)

Region	SACMEQ I		SACMEQ II			
	Own reading Textbook		Own reading textbook		Own mathematics textbook	
	%	SE	%	SE	%	SE
Caprivi	62.5	7.67	53.3	9.54	60.4	11.04
Erongo	74.9	10.24	42.4	12.59	50.7	10.79
Hardap	48.5	12.51	75.1	8.90	72.5	9.00
Karas	74.6	11.83	44.5	10.31	71.8	9.31
Kavango	40.0	10.74	23.9	4.86	25.6	6.58
Khomas	72.1	7.22	63.2	6.44	74.5	6.04
Kunene	50.1	14.66	47.2	13.10	54.7	12.27
Ohangwena	41.8	9.16	46.0	5.27	39.8	5.49
Omaheke	48.9	14.52	45.0	8.67	48.6	10.18
Omusati	46.5	7.16	48.4	4.70	44.7	5.46
Oshikoto	51.9	17.30	51.4	6.40	50.8	7.06
Otjozondjupa	43.6	12.32	43.1	8.26	49.0	9.70
Oshana	48.5	14.18	41.6	5.95	49.3	7.77
Namibia	52.3	3.02	46.6	1.99	48.3	2.23

In general, it can be seen that about half of the learners had their own textbooks. However there were wide disparities among regions in 1995 and 2000. Three-quarters of the learners in Hardap had reading textbooks but only 24 percent in Kavango had them. There was a very similar picture for mathematics textbooks. The shortages in the supply of textbooks to schools in Namibia was highlighted in SACMEQ I. It was then suggested that there should be an appropriate allocation for textbooks in the Ministry's budget, an equal distribution of textbooks to all schools and that good care should be taken of textbooks to ensure that they are used for longer periods. However very little has been done since then, while the number of learners has continued to increase each year. A snap survey conducted by the directorate of Educational Programmes Implementation (EPI), in 1999 revealed that while some schools did not have enough textbooks, other schools had new textbooks locked up in boxes in storerooms while learners had none.

Policy suggestion 13. The financial services division of the directorate of General Services and EPI may wish to consider conducting an audit of the budgetary allocations for textbooks for each educational region and determine how this money was actually distributed among schools in the regions. Regional education authorities may wish to request school principals and their teachers to conduct annual audits on the situation of textbooks in schools. School inspectors should verify the information during their school visits so that corrective measures can be taken in time.

What percentage of learners had adequate basic classroom supplies for writing, ruling, erasing, etc.?

Learners were also asked about their possession of an exercise book, a notebook, a pencil, an eraser, a pen, and a ruler. The percentages of learners NOT having these items have been presented in Tables 3.14 and 3.15. In general, the situation had improved a great deal. The Ministry of Education and parents have been very active in terms of increasing these kinds of supplies to schools and it has clearly paid off. At the same time, there were still some deficits in the year 2000 that would need to be overcome. Notebooks and erasers may need some further attention.

Table 3.14. Percentages and sampling errors for learners NOT having basic classroom materials: Exercise books, notebook, and pencil. (SACMEQ I and II)

Region	SACMEQ I						SACMEQ II					
	Exercise books		Notebook		Pencil		Exercise books		Notebook		Pencil	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	1.4	1.41	33.1	8.79	67.9	7.11	3.1	2.20	46.4	11.79	24.3	4.69
Erongo	1.2	1.22	26.3	12.01	68.2	14.08	1.4	0.78	29.0	8.82	12.4	5.35
Hardap	0.0	0.00	33.9	17.09	40.7	11.25	1.8	1.19	22.6	7.13	8.3	2.87
Karas	0.2	0.25	13.8	6.17	39.6	12.95	1.4	0.71	24.4	7.17	8.8	3.18
Kavango	0.1	0.13	5.3	4.97	38.0	11.57	8.3	4.15	34.3	7.83	32.7	6.06
Khomas	0.4	0.26	24.3	8.39	45.7	13.48	12.5	5.13	34.8	5.57	18.0	6.18
Kunene	0.0	0.00	39.0	14.38	61.3	16.73	1.8	0.86	43.9	12.12	38.5	11.21
Ohangwena	2.5	1.42	7.5	2.67	50.3	10.03	2.4	0.68	14.8	3.29	18.2	2.31
Omaheke	0.7	0.81	0.0	0.00	75.2	26.23	8.5	3.59	39.5	6.54	13.6	3.02
Omusati	16.9	6.78	21.8	7.47	47.9	9.04	1.5	0.47	7.7	1.44	19.0	2.49
Oshikoto	1.6	1.68	5.3	2.31	59.4	18.30	3.6	1.46	9.8	3.06	15.3	2.48
Otjozondjupa	0.0	0.00	19.7	12.48	38.5	17.56	9.0	3.28	43.6	8.81	13.4	3.24
Oshana	9.5	6.46	14.9	9.58	43.1	13.39	1.5	0.74	11.2	2.42	19.3	3.30
Namibia	5.0	1.51	18.2	2.40	50.4	3.59	4.1	0.69	21.1	1.48	19.1	1.20

Table 3.15. Percentages and sampling errors of learners NOT having basic classroom materials: Eraser, pen, and ruler. (SACMEQ I and II)

Region	SACMEQ I						SACMEQ II					
	Eraser		Pen		Ruler		Eraser		Pen		Ruler	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	82.9	5.63	52.9	8.09	59.2	8.20	50.1	8.28	16.2	5.54	39.4	6.39
Erongo	85.7	9.64	81.6	12.43	73.2	12.19	28.1	5.44	12.8	5.89	20.2	5.28
Hardap	50.9	11.52	33.2	10.57	39.4	9.88	28.7	4.22	10.8	3.16	16.9	4.00
Karas	53.6	12.31	38.3	11.85	32.6	11.43	30.8	5.17	12.9	3.32	23.0	5.15
Kavango	74.6	9.32	15.0	8.34	29.6	10.05	52.0	5.94	26.1	6.30	24.4	5.49
Khomas	61.7	12.17	42.8	11.63	43.2	12.62	34.6	5.59	26.4	5.96	22.2	5.95
Kunene	94.0	5.87	44.6	15.88	72.1	15.23	45.0	10.73	6.0	1.74	31.6	8.97
Ohangwena	64.0	7.80	54.9	9.07	30.0	8.56	41.6	3.22	15.7	3.07	24.3	2.64
Omaheke	79.3	23.44	52.7	30.91	76.4	26.67	29.1	5.00	19.4	5.04	18.8	4.09
Omusati	69.1	6.70	40.2	8.81	48.7	9.22	45.1	3.17	17.5	2.77	22.2	3.04
Oshikoto	66.6	14.90	32.5	14.49	55.1	16.52	33.2	4.43	10.7	2.61	17.6	3.64
Otjozondjupa	61.5	15.84	31.1	18.89	38.8	18.26	28.1	4.55	19.5	4.57	19.7	5.24
Oshana	59.7	12.15	43.4	14.86	29.5	10.03	39.2	4.93	16.1	3.35	22.5	3.57
Namibia	68.5	2.88	43.3	3.42	44.9	3.43	39.7	1.44	17.3	1.27	22.6	1.29

The percentages of learners in 1995 and 2000 NOT possessing the materials have been presented graphically in Figure 3.1. For each item the first bar represents the situation in SACMEQ I (1995) and the second bar represents the situation in SACMEQ II (2000). It can be seen that in all cases except two (reading book and notebook) the second bar is lower than the first depicting an improvement in the situation.

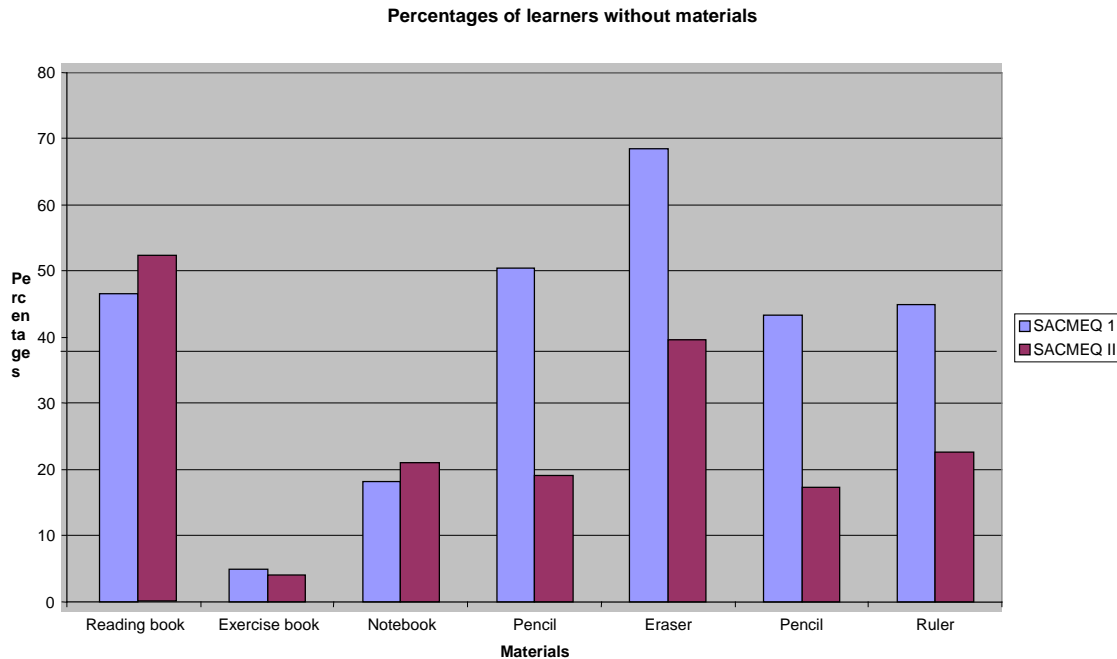


Figure 3.1. The differences in percentages of learners without materials in 1995 and 2000
Teaching and learning will be enhanced when all learners have textbooks which they can use at school and take home to read, in addition to other materials that they have to work with, in the classroom environment. Even if there have been some improvements in the supply of textbooks and the other classroom materials to schools, much still needs to be done to overcome the regional disparities.

Policy suggestion 14. Regional education offices and School Inspectors should constantly monitor the budgetary allocation for textbooks and classroom materials. School boards should also mobilise parents to contribute to the education of their children by buying less expensive materials such as pencils, erasers and rulers.

General Policy Concern 4

**Did Grade 6 learners have access to library books within their schools, and
(if they did have access) was the use of these books being maximised
by allowing learners to take them home to read?**

One of the best predictors of reading comprehension ability is the number of books that learners have read. It is of utmost importance that an abundance of books is available so that the learners can read. This is important at school and at home. Data were sought on learner access to books and also if learners could take books home to read.

What percentage of learners had access to school and/or classroom library facilities?

Teachers were asked about the existence of a book corner in the classroom and the existence of a school library. In Namibia there were 35 percent of learners who were in classrooms with a book corner in SACMEQ I and by SACMEQ II this had risen to 46 percent as stated by the reading teachers. In SACMEQ I, 84 percent of learners were in schools that had a school library but this figure had declined to 66 percent in SACMEQ II. Thus, although the percentage of learners in classrooms with book corners had risen, the percentage in schools with school libraries had declined. This is an aspect of school and classroom resources that should be examined in more depth by those conducting the school audits.

Were the learners permitted to take library books home?

Learners and school principals were asked if the learners could take books home to read. The results have been presented in Table 3.16.

Table 3.16. Percentages and sampling errors for learner and school head responses to whether learners are permitted to borrow books from a classroom or a school library (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	Learner*		School Head		Learner*		School Head	
	%	SE	%	SE	%	SE	%	SE
Caprivi	40.0	13.21	40.0	13.21	57.8	13.20	71.8	15.89
Erongo	55.6	18.16	55.6	18.16	76.5	13.70	93.9	6.14
Hardap	44.4	18.16	44.4	18.16	47.3	11.77	88.6	8.02
Karas	60.0	16.78	60.0	16.78	73.1	11.00	91.2	8.89
Kavango	22.2	22.75	22.2	22.75	68.5	7.51	78.4	12.24
Khomas	50.0	14.10	50.0	14.10	67.5	7.39	89.6	7.32
Kunene	14.3	15.04	14.3	15.04	75.0	11.49	89.8	10.79
Ohanwena	52.9	12.60	50.0	13.06	71.6	6.80	92.0	5.62
Omahake	33.3	40.00	0.0	0.00	42.9	9.71	62.8	19.83
Omusati	21.1	9.71	21.1	9.71	72.3	6.49	82.9	9.48
Oshikoto	66.7	22.63	66.7	22.63	65.5	8.66	90.7	6.54
Otuzonodjupa	57.1	21.38	57.1	21.38	53.0	10.32	90.0	10.09
Oshana	60.0	26.93	60.0	26.93	76.4	5.79	93.9	6.17
Namibia	43.2	4.61	42.5	4.67	68.2	2.50	87.8	2.57

The results in Table 3.16 are reassuring because it can be seen that in schools where there were libraries learners could borrow the books and take them home at the time of

SACMEQ II. There would appear to have been an improvement since SACMEQ I. However, the EMIS statistics for 2000 indicate that there were only 384 schools had school libraries out of 1545 schools. A further 850 schools had bookstores, but class libraries are not mentioned. The provision of school libraries to schools in Namibia is inadequate. Even if many schools may have bookstores or classroom libraries only, there are clearly still some schools where the learners may not borrow the books. This situation should be rectified.

Policy suggestion 15. The EMIS division should collect data on classroom libraries for all schools and then after that steps should be taken to ensure that all schools have either a school or classroom library. At the same time school principals should be instructed to provide a borrowing system that will enable all learners to borrow books to take home and read.

General Policy Concern 5

How widespread was the practice of learners receiving extra tuition in school subjects outside of school hours and was such tuition paid for?

What percentage of learners received extra tuition?

It is common in many countries for learners to take extra tuition outside of school time. The question had been asked in 1995 and at that time 35 percent of learners had been taking extra tuition in at least one subject. By the year 2000 this had risen to 45 percent. The data for all the regions have been presented in Table 3.17.

Table 3.17. Percentages and sampling errors for the extra tuition taken by learners outside school hours (SACMEQ I and SACMEQ II)

Region	Extra tuition on any subject			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
Caprivi	60.1	6.58	26.7	8.06
Erongo	29.8	7.62	25.6	10.46
Hardap	12.2	3.48	5.9	2.18
Karas	34.9	8.75	26.1	9.61
Kavango	19.8	4.49	52.2	8.00
Khomas	38.1	8.10	43.0	6.93
Kunene	29.8	11.17	19.3	9.45
Ohangwena	35.6	5.59	46.4	6.45
Omaheke	33.2	24.27	81.8	10.71
Omusati	29.8	4.98	43.1	6.13
Oshikoto	46.0	8.96	62.1	7.04
Otjozondjupa	53.9	6.00	57.7	10.08
Oshana	24.7	7.98	40.7	6.06
Namibia	34.6	2.07	44.7	2.33

The large percentage of learners receiving extra tuition in Omaheke, Oshikoto, Otjozondjupa and Kavango is surprising. Extra tuition is believed to be more prevalent at the junior secondary and senior secondary phases where learners sit for school leaving examinations and not at the primary school level. The wide variations among regions are even more surprising. This phenomenon is believed to be common in urban areas where working parents are able to pay the providers of extra tuition and not in rural areas, but the highest percentage is in Omaheke, where there are no big urban areas.

Policy suggestion 16. Given the magnitude of the occurrence of extra tuition, EPI and PAD should conduct in-depth studies, starting with a pilot study in Omaheke, Oshikoto and Otjozondjupa regions to determine the reasons for the extra tuition, who provides it and how it is organised.

Was payment made for receiving extra tuition?

It was not known in 1995 whether or not the extra tuition was paid for. In the SACMEQ II study a question was asked about this. It can be seen from Table 3.18 that nearly half of the learners did not know if payment was made or not. Forty percent said that such tuition was not paid for and 17 percent said that it was paid for.

Table 3.18. Percentages and sampling errors for the payment of extra tuition taken by learners outside school hours (SACMEQ II)

Region	There is payment		There is no Payment		Don't know	
	%	SE	%	SE	%	SE
Caprivi	0.0	0.00	52.2	19.53	47.8	19.53
Erongo	19.7	5.10	57.7	12.46	22.7	10.12
Hardap	5.3	6.05	17.0	8.70	77.7	10.66
Karas	12.5	5.96	56.3	19.32	31.2	16.40
Kavango	8.5	2.17	50.2	7.83	41.3	7.79
Khomas	38.2	4.79	22.9	3.27	38.9	3.64
Kunene	5.9	4.64	42.6	37.52	51.5	33.34
Ohangwena	10.3	3.21	50.7	5.71	39.0	4.34
Omaheke	25.8	4.92	33.0	7.95	41.2	6.42
Omusati	13.0	2.22	31.5	7.29	55.5	6.67
Oshikoto	19.7	5.03	41.7	4.86	38.6	3.93
Otjozondjupa	33.5	7.59	19.4	5.12	47.1	6.95
Oshana	18.0	4.62	40.6	8.51	41.3	8.16
Namibia	17.3	1.42	39.6	2.37	43.1	2.08

Given the differences in the learner responses to the issue of extra tuition, it may be possible that some learners could be mixing up two things. Firstly, there is extra tuition that is given by individual teachers or teachers who work part time for some institutions that provide extra tuition to learners who want to improve their examination grades especially at grades 10 and 12. Such extra tuition is common in urban centres such as Windhoek and is often paid for. Secondly, due to difficult circumstances in most learners' homes, some schools in rural areas arrange for supervised study time mostly in the afternoons. Such study enables learners to catch up on their schoolwork or do their homework at school under the supervision of a teacher. To help clear the uncertainties surrounding the issue of extra tuition, a full investigation into this matter by the Ministry of Education, Sport and Culture is necessary.

Conclusion

The learner is the focal point in the teaching/learning process. The Ministry of Basic Education, Sport and Culture in Namibia upholds this as one of the pillars of the post independence policy of Learner Centred Education (LCE). Therefore, the analysis made in this chapter is fitting in that it highlights some of the characteristics of learners, their home backgrounds and some school context factors because the understanding of learner characteristics and their environments is crucial to the realisation of learner centred

education. The analysis made in this chapter shows that even if there had been some improvements in some aspects of learners characteristics between 1995 and 2000, disparities between regions still persisted. These disparities have been identified by differences in learner age distribution, behaviours, SES, school location, classroom materials and some elements of teacher classroom practices such as frequency of homework and its correction. These factors have an influence on teaching/learning and subsequently on learner achievement as well. The next chapter focuses on teacher characteristics in more detail.

Chapter 4

Teachers' Characteristics and their Views about Teaching, Classroom Resources, Professional Support, and Job Satisfaction

Introduction

In one sense this chapter is a continuation of the previous chapter. Chapter 3 was concerned with the homes from which Grade 6 learners came. This chapter is concerned with some of the characteristics of Grade 6 teachers. The reasons for presenting these data are exactly the same as in the previous chapter, namely to present the context variables for interpreting the achievement data later and also to have such information available to see how such inputs to Grade 6 classes change over time. At the upper primary phase in Namibia, teachers normally teach one or two specialised subjects only. In this study the two aspects of learner achievement that were measured were reading comprehension and mathematics. Unlike some other countries where there are same teachers for reading and mathematics, in Namibia there were separate teachers who taught each subject.

The major general policy concerns that have been taken up in this chapter are:

1. What were the personal characteristics of Grade 6 teachers (for example, age, gender, and socio-economic level), and what was the condition of their housing?
2. What were the professional characteristics of Grade 6 teachers (in terms of academic, professional, and in-service training), and did they consider in-service training to be effective in improving their teaching?
3. How did Grade 6 teachers allocate their time among responsibilities concerned with teaching, preparing lessons, and marking?

4. What were Grade 6 teachers' viewpoints on (a) learner activities within the classroom (for example, reading aloud, pronouncing, etc.), (b) teaching goals (for example, making learning enjoyable, word attack skills, etc.) (c) teaching approaches/strategies (for example, questioning, whole class teaching, etc.), (d) assessment procedures, and (e) meeting and communicating with parents?
5. What was the availability of classroom furniture (for example, sitting/writing places, teacher table, teacher chair, and bookshelves) and classroom equipment (for example, chalkboard, dictionary, maps, book corner, and teacher guides) in Grade 6 classrooms?
6. What professional support (in terms of education resource centres, inspections, advisory visits, and school head inputs) was given to Grade 6 teachers?
7. What factors had most impact upon teacher job satisfaction?

General Policy Concern 6:

What were the personal characteristics of Grade 6 teachers
(for example, age, gender, and socio-economic level),
and what was the condition of their housing?

Several important characteristics of teachers were measured. These concerned the age of teachers, sex of teachers, whether they were specialist or general class teachers, academic qualifications, professional qualifications, years of teaching experience, and the number of in-service courses attended. A sub-sample of a maximum of three Grade 6 teachers was taken in each school that had three Grade 6 classes or more, thus ensuring that nearly all of the teachers actually teaching Grade 6 answered the teacher questionnaire. However, most of the schools had only one Grade 6 class. In this chapter it must be

remembered that a mean value is the mean characteristic of teachers for the average learner in Namibia and a percentage is the 'the stated percentage of learners who were in schools with teachers having the particular characteristic'.

What was the age distribution of teachers?

The mean ages of teachers, the percentage female teachers and the mean number of possessions in the home have been presented in Table 4.1 (a) for SACMEQ I and Tables 4.1 (b) for SACMEQ II.

Table 4.1(a). Means, percentages, and sampling errors for age, gender, and socio-economic background of reading teachers (SACMEQ I)

Region	Age		Gender		Possession at home (index)	
	(years)		(female)			
	Mean	SE	%	SE	Mean	SE
Caprivi	31.1	1.44	70.6	11.44	6.2	0.50
Erongo	35.6	1.93	85.0	10.96	9.4	0.73
Hardap	43.4	1.72	55.6	18.16	9.2	0.59
Karas	36.8	2.91	50.0	17.12	5.8	1.32
Kavango	29.6	1.49	5.0	5.02	6.2	0.81
Khomas	38.1	2.39	92.3	7.84	9.7	0.40
Kunene	35.3	1.72	55.6	18.16	5.6	0.79
Ohangwena	31.9	1.42	50.5	12.26	4.4	0.44
Omaheke	33.6	2.03	66.7	40.00	7.3	2.23
Omusati	30.5	1.37	65.0	11.04	5.1	0.30
Oshikoto	31.3	1.80	57.1	21.38	5.3	1.30
Otjozondjupa	37.5	4.97	85.7	15.12	8.1	0.29
Oshana	31.3	0.76	57.3	18.04	6.4	0.64
Namibia	33.2	0.57	60.7	3.99	6.4	0.19

Table 4.1(b). Means, percentages, and sampling errors for age, gender, and socio-economic background of reading and mathematics teachers (SACMEQ II)

Region	Reading teacher						Mathematics teacher					
	Age		Gender		Possession at home (index)		Age		Gender		Possession at home (index)	
	(years)		(female)				(years)		(female)			
	Mean	SE	%	SE	Mean	SE	Mean	SE	%	SE	Mean	SE
Caprivi	36.8	2.16	53.3	13.60	6.6	0.75	39.5	2.14	47.2	14.19	5.0	0.43
Erongo	38.9	2.22	62.9	14.38	9.7	0.62	40.8	1.95	55.1	12.50	9.5	0.63
Hardap	38.5	2.22	77.8	12.46	10.4	0.31	37.1	2.16	45.6	13.98	9.8	0.53
Karas	38.0	2.74	56.6	13.18	9.5	0.53	39.7	1.86	6.0	6.00	9.3	0.66
Kavango	31.4	0.93	37.9	10.15	6.0	0.47	32.5	1.03	19.0	9.07	5.8	0.53
Khomas	37.4	1.83	58.2	9.96	9.7	0.35	39.2	1.17	61.4	9.48	10.1	0.22
Kunene	35.8	1.67	23.0	10.91	6.6	0.78	35.6	1.70	37.6	12.93	7.7	0.81
Ohangwena	33.8	1.23	55.1	8.60	5.8	0.48	34.4	1.34	36.7	8.57	4.7	0.56
Omaheke	34.3	3.69	85.6	10.05	7.7	0.66	37.8	3.14	43.6	15.42	7.6	0.38
Omusati	33.6	1.09	49.2	8.64	5.6	0.40	38.2	1.28	67.6	7.35	5.4	0.29
Oshikoto	33.2	1.24	43.0	10.00	5.5	0.62	35.7	1.76	64.8	9.87	5.3	0.47
Otjozondjupa	38.8	1.89	50.6	12.64	9.1	0.70	42.5	2.02	42.7	12.13	8.1	0.69
Oshana	34.6	1.64	53.9	9.88	7.2	0.51	35.5	1.48	56.8	10.03	6.4	0.48
Namibia	34.7	0.47	52.1	3.22	6.9	0.17	36.8	0.48	48.9	3.07	6.5	0.15

In 2000 the average learner had reading teachers who were 1.5 years older than in 1995. However, given the standard errors, these two values were not significantly different. The average age of Grade 6 reading teachers ranged between 31 and 39 years and that of mathematics teachers ranges between 32 and 42 years. In 1995 the teachers in Kavango were the youngest and those in Hardap the oldest. In 2000 it was still the teachers in Kavango who were the youngest but the teachers in Hardap and Otjozondjupa were the oldest. The mean age differences among regions were only seven years. The mathematics teachers tended to be slightly older than the reading teachers and the range among regions was from 32.5 years to 42.5 years in Otjozondjupa.

In Kavango, there was a considerable increase in the number of learners having female reading teachers between 1995 and 2000, but nationally there was a decrease in the percentage of learners having female reading teachers. There were more learners having male mathematics teachers than female teachers in eight of the 13 regions. The mathematics teachers were also generally older than the reading teachers. Nearly 61

percent of all the Grade 6 teachers were female in 1995 but in 2000 only 52 percent of reading teachers and 48.9 percent of mathematics teachers were female. The percentages of female teachers in reading and mathematics have been presented in Figure 4.1. In Figure 4.2 the mathematics achievement of boys and girls has been presented according to whether the learners were taught by a male or female teacher.

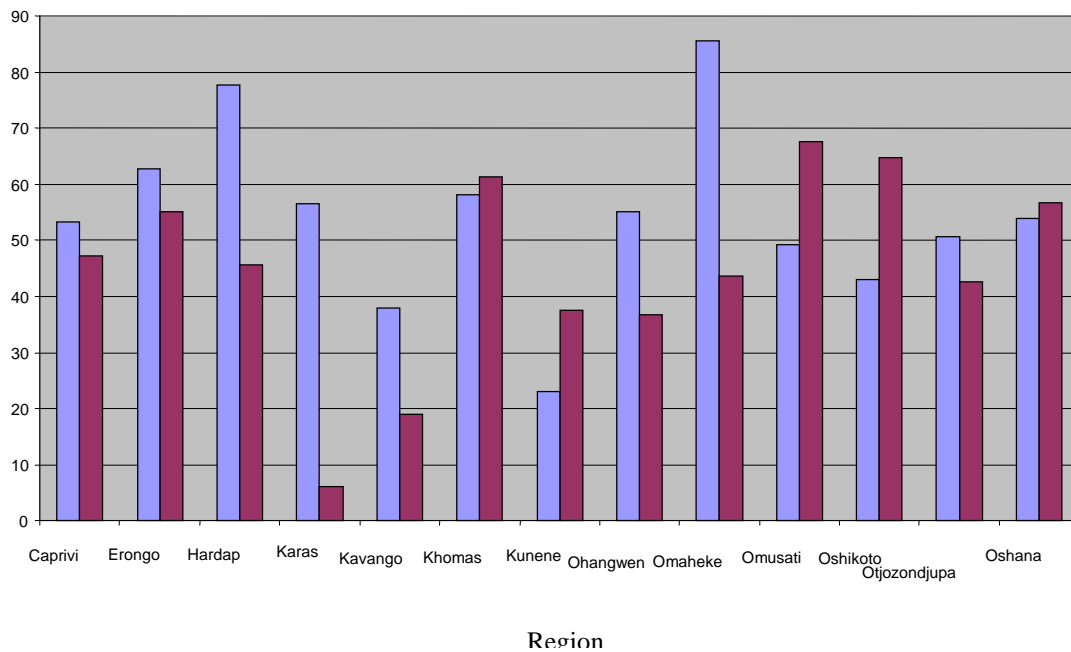


Figure 4.1: Percentage female reading and mathematics teachers in 2000
(blue = reading teachers and red mathematics teachers)

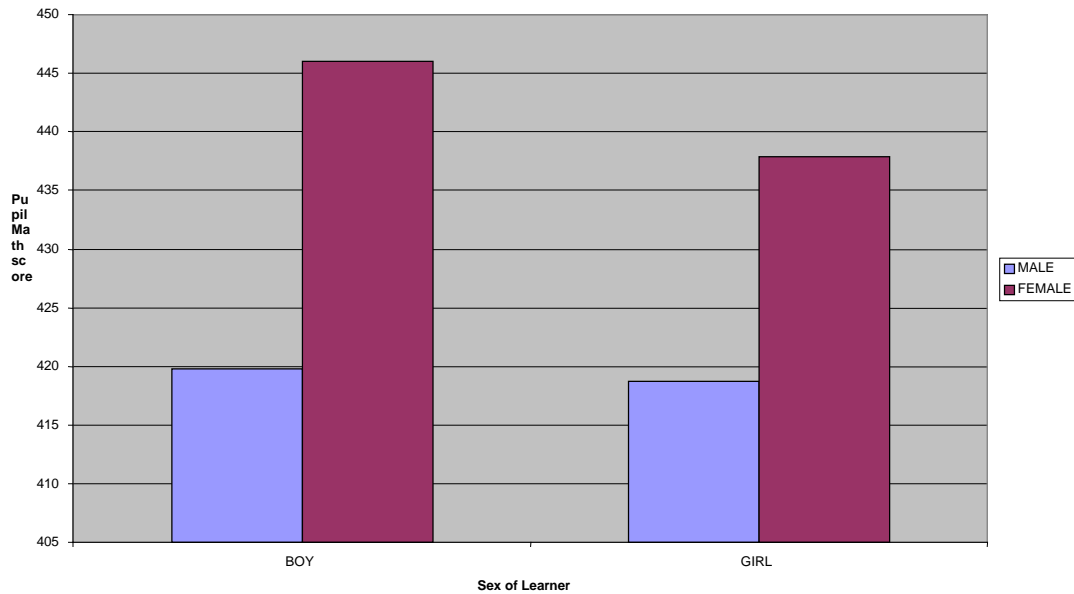


Figure 4.2: Boys and girls learner achievement in mathematics by sex of teacher

It can be seen that female teachers had learners with higher mathematics achievement than male teachers. It will be recalled that 52 percent of teachers were female and 48 percent male. Karas and Kavango educational regions had many more male than female teachers.

What was the socio-economic status of teachers in terms of possessions and livestock?

The possessions for teachers were exactly the same as for the learners. These were: daily newspaper, weekly or monthly magazine, radio, TV set, video cassette recorder (VCR), cassette player, telephone, refrigerator, car, motorcycle, bicycle, piped water, electricity (mains, generator, solar), and a table to write on. The number of possessions owned in the home was summed for each teacher. The lowest score possible was zero and the highest 14.0. In 1995 the number of possessions was 6.4 and in 2000 it was 6.9 for reading teachers and 6.5 for mathematics teachers. At first sight this sounds implausible because the reading teachers were younger than the math teachers. But more of the math teachers were men and it was probably their salary that the family lived on whereas the female teachers had husbands who also earned. However, the average teacher was not well off in terms of the possessions at home.

The tables concerning the teacher ownership of livestock have been presented in the appendix as Tables A4.1 and A4.2. Many teachers in Namibia have their villages in the former "reserves" within the regions in which they teach. Livestock are an important form of traditional wealth in the villages. Livestock can also be exchanged for cash when a need arises. The overall picture was similar for reading and mathematics teachers. Namibian teachers had, on average, eleven cattle, 15 goats and 11 chickens together with a few sheep and pigs. In Caprivi and Omahake the teachers had more cattle, in Hardap more sheep and goats, and in Caprivi, Kavango, and Oshikoto more chickens. In Erongo and Khomas the teachers seemed to have fewer livestock.

What was the general condition (repair, status and lighting) of teacher housing?

It is a reasonable argument to think that if teachers are not worried about the state of their homes then they will be able to devote more energy to their teaching. A question was asked in the Teacher questionnaire about how they perceived the condition of their housing. The responses were 1=generally poor; 2=major repair; 3=minor repair; 4=generally good. All of those answering minor repairs or generally good were grouped together and the percentages in this group in each region have been reported in Table 4.2. In 1995, 55.3 percent of reading teachers stated that their homes were in a generally good state or only needed minor repairs whereas in 2000 it was 51.2 percent of reading teachers and 43.6 percent of mathematics teachers who said that this was so. Given the large standard errors for this variable it cannot be said that there was a significant difference between the two dates. Nothing can be said about the differences by region for reading teachers because of the large standard errors. However, in 2000 it should be noted that in Caprivi only 15 percent of mathematics teachers professed themselves to be happy with their housing. In Ohangwena, Omusati and Oshana an eye should be kept on the conditions of the teachers' housing.

The information on lighting in teacher homes has been presented in the appendices as Table A4.3 and Table A4.4. All teachers said that they had some kind of lighting. About half of the teachers had candle or oil lamps and about half had electricity. Very few had gas lamps.

Table 4.2. Percentages and sampling errors for teacher housing in acceptable conditions (SACMEQ I and SACMEQ II)

Region	Teacher housing in acceptable conditions					
	SACMEQ I		SACMEQ II			
	Reading teacher		Reading teacher		Mathematics teacher	
	%	SE	%	SE	%	SE
Caprivi	29.4	11.44	43.6	13.87	15.4	9.19
Erongo	70.0	15.69	74.4	12.31	95.1	4.92
Hardap	88.9	11.49	74.4	11.75	85.4	9.90
Karas	60.0	16.78	92.7	7.37	85.4	8.35
Kavango	12.7	7.32	44.6	10.10	30.3	8.97
Khomas	100.0	0.00	84.3	7.53	91.7	5.67
Kunene	33.3	17.23	54.8	14.00	67.3	13.33
Ohangwena	32.9	11.47	34.7	8.41	26.7	7.60
Omaheke	66.7	40.00	38.5	15.53	61.8	14.88
Omusati	47.3	11.26	56.8	8.50	28.6	7.57
Oshikoto	71.4	19.52	36.2	9.63	45.1	10.07
Otjozondjupa	85.7	15.12	67.8	12.78	36.1	11.84
Oshana	78.6	15.79	36.2	8.61	33.2	8.93
Namibia	55.3	4.01	51.3	3.08	43.6	2.84

There were large variations between regions and within regions in the conditions of teacher housing, because there are different providers of teacher housing. The Ministry does not provide teacher accommodation in all schools. In urban areas, a teacher may obtain a mortgage loan and buy his/her own house or lease one. In some rural areas, teachers come from their own homesteads or live in accommodation provided by the community. The Ministry of Basic Education sport and Culture, continues to experience problems in allocating teachers to rural schools because of lack of accommodation.

Policy suggestion 17. The Executive Management Team (EMT) of the Ministry, through the Directorate of Planning and Development should maximise its efforts in soliciting for resources to continue to provide teacher housing, in the rural areas, in order to equitably reallocate qualified and experienced teachers between the rural and urban areas.

General Policy Concern 7:

What were the professional characteristics of Grade 6 teachers (in terms of academic, professional, and in-service training), and did they consider in-service training to be effective in improving their teaching?

There were two main reasons for examining the extent to which all teachers had had a certain number of years of academic training, good professional training and in-service training. The first reason was that the Ministry had set down minimum requirements for each of these (Grade 12 with Basic Education Teachers' Diploma - BETD), and hence it was important to know to what extent these benchmarks had been met. The second reason was to relate the different amounts of training to the achievement of the learners. This is because there are many arguments about how much training is needed. The hypothesis that has been tested in this chapter is that the more training the teachers received the more would their learners learn/achieve. The results have been presented in Tables 4.3(a-c).

How many years of academic training had teachers completed?

The academic training of teachers in 1995 has been presented in Table 4.3(a). It can be seen that the average number of years ranged from 15 in Khomas to 11.1 in Kavango and Ohangwena.

Table 4.3(a). Academic education of reading teachers (SACMEQ I)

Region	Average years of academic education	
	Mean	SE
Caprivi	12.8	0.42
Erongo	13.9	0.66
Hardap	11.6	0.75
Karas	12.0	0.53
Kavango	11.1	0.29
Khomas	15.0	0.61
Kunene	12.3	0.60
Ohangwena	11.1	0.45
Omaheke	12.3	1.74
Omusati	12.4	0.48
Oshikoto	11.6	0.86
Otjozondjupa	12.1	0.70
Oshana	11.9	0.81
Namibia	12.3	0.18

Unfortunately, the same result was not calculated for 2000 but rather the percentages reaching different levels of education were left as they were. These have been presented separately for reading and mathematics teachers in Tables 4.3(b) and (c).

Table 4.3(b). Academic education of reading teachers (SACMEQ II)

Region	Primary		Junior Secondary		Senior secondary		A-level		Tertiary	
	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	17.2	11.81	6.9	6.92	62.8	13.69	13.1	9.07	0.0	0.00
Erongo	5.6	5.67	0.0	0.00	33.6	14.51	42.9	14.68	17.9	10.91
Hardap	11.0	7.66	6.8	6.78	50.3	13.83	18.1	10.02	13.8	9.46
Karas	14.5	9.86	0.0	0.00	26.4	12.07	19.6	9.55	39.6	14.19
Kavango	18.0	7.58	20.0	8.50	51.5	10.21	10.5	5.95	0.0	0.00
Khomas	7.9	4.69	9.1	5.60	16.6	7.19	18.8	7.88	47.5	9.75
Kunene	5.6	5.58	0.0	0.00	40.7	13.26	33.6	13.94	20.2	11.02
Ohangwena	11.3	5.53	7.7	4.53	53.3	8.87	13.0	6.14	14.6	6.13
Omaheke	24.9	13.60	9.2	9.29	21.9	14.38	43.9	16.12	0.0	0.00
Omusati	17.8	6.32	5.7	3.46	58.6	8.31	14.1	5.68	3.8	3.78
Oshikoto	4.9	3.63	18.6	7.79	45.6	9.79	23.7	8.51	7.1	5.36
Otjozondjupa	23.2	12.23	3.1	3.14	30.4	12.07	9.7	6.89	33.5	12.85
Oshana	15.0	6.84	9.8	5.41	50.7	9.56	19.2	7.67	5.3	4.05
Namibia	13.6	2.18	9.2	1.81	46.5	3.18	17.8	2.38	13.0	1.96

From Table 4.3(b) it can be seen that the modal level of education for reading teachers was senior secondary (46.5% of teachers). There were still 13.6 percent of teachers who only had completed primary education. Of particular note were the high percentages of reading teachers who had only primary education in Caprivi, Kavango, Omaheke,

Omusati, and Otjozondjupa. There were unexpectedly high percentages of junior secondary only in Kavango and Oshikoto. There were high percentages of teachers having tertiary education in Karas (40%) and Khomas (47%).

Table 4.3(c). Academic education of mathematics teachers (SACMEQ II)

Region	Primary		Junior Secondary		Senior secondary		A-level		Tertiary	
	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	4.5	4.57	4.5	4.57	84.0	9.18	6.9	6.92	0.0	0.00
Erongo	18.8	9.70	20.5	11.52	41.5	12.86	19.2	11.27	0.0	0.00
Hardap	5.7	5.71	0.0	0.00	69.3	11.59	4.0	4.05	21.0	10.39
Karas	0.0	0.00	5.5	5.51	48.6	13.94	20.7	11.88	25.2	13.00
Kavango	11.6	5.66	1.3	1.27	52.0	10.19	32.2	9.56	3.0	3.01
Khomas	8.3	5.05	4.8	4.84	28.2	8.85	15.5	6.66	43.2	9.84
Kunene	4.2	4.25	13.9	9.58	45.0	13.42	24.8	11.61	12.1	8.39
Ohangwena	20.7	6.92	8.3	5.01	50.4	8.85	14.2	6.22	6.3	3.92
Omaheke	6.8	4.95	22.0	14.74	41.9	16.05	20.8	11.78	8.5	8.57
Omusati	36.8	8.18	10.0	4.49	39.4	8.04	10.5	4.68	3.2	3.18
Oshikoto	18.7	7.78	8.2	4.94	41.9	9.95	17.3	6.49	13.9	6.75
Otjozondjupa	15.1	10.23	21.1	10.45	30.0	11.23	18.1	9.90	15.7	9.39
Oshana	10.6	4.91	5.9	4.30	49.7	10.54	30.0	9.67	3.8	3.83
Namibia	17.8	2.42	8.5	1.72	45.6	3.19	17.9	2.39	10.2	1.70

For mathematics teachers the percentages of those having only primary or junior secondary in Erongo, Ohangwena, Omaheke, Omusati, Oshikoto and Otjozondjupa (18.7-36.8%) would seem to need to be improved. Again, Khomas had 43.2 percent of mathematics teachers who had had tertiary education. The disparity among regions seems to be higher than acceptable. The English Language Teacher Development Project (ELTDP, 1999) reported that 43 percent of upper primary teachers in Namibia did not have levels of proficiency in English usage that is desirable to teach at that level. The concentration of teachers who have low academic education in Omaheke, Omusati, Oshikoto, Otjozondjupa, Ohangwena, Caprivi and Kavango may have a negative impact on learning outcomes in these regions.

Policy suggestion 18. Regional education directors and their respective advisory teachers should in consultation with National Institute for Educational Development (NIED) investigate the subject competencies of these teachers and design courses to upgrade the subject knowledge of these teachers.

How many years of teacher training and how many years of teaching experience had teachers completed?

The number of years of teacher training required to become a primary teacher has changed over the years. At independence in 1990, there were several primary teachers from the previous ethnic educational authorities who had different years of teacher training, ranging from no training at all to three years and above. After independence primary teachers were expected to have the Basic Education Teachers' Diploma (BETD) which comprises Grade 12 and at least 3 years full time training.

The relevant data regarding teacher training have been presented in Tables 4.4(a) and (b). In SACMEQ I it could be seen that the reading teachers had had an average teacher training of 1.9 years but that the teachers in Kavango and Omaheke had only 0.8 years of training. There was inequity among regions.

Table 4.4(a). Means and sampling errors for experience and training of reading teachers (SACMEQ I)

Region	Reading teacher			
	Experience		Training	
	(years)		(years)	
	Mean	SE	Mean	SE
Caprivi	7.2	1.60	2.0	0.22
Erongo	13.2	2.47	2.6	0.41
Hardap	20.2	2.11	2.8	0.29
Karas	13.0	2.97	1.7	0.61
Kavango	7.9	1.35	0.8	0.22
Khomas	12.0	2.21	3.3	0.25
Kunene	11.1	2.22	1.0	0.42
Ohangwena	7.7	1.09	1.6	0.31
Omaheke	11.1	6.60	0.8	0.72
Omusati	6.4	0.99	1.7	0.28
Oshikoto	6.4	1.49	1.4	0.56
Otjozondjupa	15.4	4.67	2.0	0.52
Oshana	6.7	0.86	2.6	0.31
Namibia	9.3	0.52	1.9	0.11

By 2000, the length of teacher training had risen to 2.7 years for reading teachers. Those in Kavango and Oshikoto had had only 2.2 years of training. In Erongo and Khomas they

had had 3.2 years. The variation among regions was less than in 1995. The average length of teacher training for mathematics teachers was 2.6 years and the range was from 2.2 years in Oshikoto and 3.1 years in Hardap.

Table 4.4(b). Means and sampling errors for experience and training of reading and mathematics teachers (SACMEQ II)

Region	Reading teacher				Mathematics teacher			
	Experience		Training		Experience		Training	
	(years)		(years)		(years)		(years)	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	11.0	1.76	2.5	0.21	13.6	2.04	2.4	0.30
Erongo	14.9	2.18	3.2	0.25	18.3	2.00	3.1	0.23
Hardap	16.8	2.65	3.0	0.30	13.9	2.36	3.1	0.17
Karas	13.5	2.28	2.8	0.26	16.8	1.90	2.9	0.28
Kavango	6.8	0.79	2.2	0.24	8.7	1.01	2.6	0.15
Khomas	11.7	1.48	3.2	0.18	14.5	1.21	3.1	0.19
Kunene	12.3	1.64	2.9	0.23	10.8	1.43	2.9	0.29
Ohangwena	7.5	1.05	2.8	0.15	9.2	1.23	2.6	0.15
Omaheke	11.5	3.27	3.1	0.21	13.5	2.82	2.3	0.29
Omusati	9.6	1.08	2.6	0.13	12.2	1.44	2.5	0.11
Oshikoto	9.0	1.19	2.2	0.25	10.5	1.71	2.2	0.21
Otjozondjupa	14.3	1.70	2.9	0.24	17.8	2.08	2.8	0.24
Oshana	10.1	1.47	2.6	0.15	9.0	1.13	2.6	0.17
Namibia	10.0	0.42	2.7	0.06	11.7	0.48	2.6	0.05

For teacher training the level was higher in 2000 than in 1995 and the variation less among regions. Progress had been made in up grading the qualifications of teachers. This has largely been due to a combination of three processes taking place concurrently. Firstly, old teachers with low qualifications have been leaving the Ministry through retirement. Secondly, a number of unqualified teachers have heeded the Ministry's directive to upgrade their qualifications through in-service distance courses. Some of these teachers have already completed their courses while others are still in the process of doing so. Thirdly, even if some qualified teachers have left the service for other jobs, they have been replaced by new graduate teachers from the colleges.

Generally, there were still variations in the academic qualifications of teachers but it is gratifying to note that in 2000 there were about 77 percent of reading teachers and 74 percent of mathematics teachers who had at least senior secondary education or above with an average of at least 2.6 years of teacher training for both reading and mathematics teachers. In Omaheke and Otjozondjupa, nearly 25 percent of the Reading teachers and 37 percent of the Mathematics teachers in Omusati had primary education only. The low academic qualifications of teachers may have an effect on their mastery of the subject matter of the teaching subject.

Policy suggestion 19. Regional education authorities in Omaheke, Otjozondjupa, Oshikoto, Erongo, Omusati and Ohangwena should see to it that teachers who have primary education only should firstly upgrade their academic qualification and enrol only for the distance teacher training courses which have the same minimum entry requirement as the BETD.

In 1995, the average years of teaching experience of the reading teachers was 9.3 years and the range was from Omusati and Oshikoto with 6.4 years, and 20.2 years in Hardap. Again there was great inequity among the regions. There was a slight increase from 1995 to 2000 when the figures were 10 years for reading teachers and 11.7 for mathematics teachers. For reading teachers the range was from 7.5 years to 16.8 years and for mathematics teachers it was from 9 years to 18.3 years. Again the range had decreased among regions but some would say that the range is still too great and should be corrected.

Policy suggestion 20. Regional education officials should strive to allocate teachers to schools in their regions in a way that promotes a balance between experienced qualified teachers and new graduate teachers in all schools.

How much in-service training had teachers completed?

If teachers are to be upgraded it is clear that they should go to an in-service course or even several. Indeed, continuous retraining is what is desirable. In Namibia the situation for in-service courses has been different in different time periods. After independence in 1990 a number of short in-service courses were regularly conducted to acquaint teachers with the contents of the curriculum reforms. Other in-service courses have targeted

specific aspect such as learner centred education, continuous assessment or specific subject content and teaching methodologies. The Instructional Skills Certificate (ISC) a longer in-service course, was designed as a bridging course for teachers who did not have Grade 12 to enrol for the Basic Education Teachers' Diploma (BETD) . The six-year BETD in-service course which started in 1994 was aimed at upgrading the professional qualification of teachers.

Unfortunately, there was a change of question between SACMEQ I and II. In SACMEQ I a question was asked about how many in-service courses that the teachers had attended in all of their teaching careers. It was felt that some of the data that were returned were not accurate. Hence it was decided to ask about the number of in-service courses in the last three years in SACMEQ II as well as the number of days in all. The results have been presented in Tables 4.5 (a) and (b).

Table 4.5(a). Means and sampling errors for teacher in-service courses attended during career (SACMEQ I)

Region	In-services courses	
	Mean	SE
Caprivi	2.2	0.61
Erongo	2.4	0.65
Hardap	3.3	1.09
Karas	5.7	0.98
Kavango	2.9	0.82
Khomas	3.9	0.90
Kunene	2.9	1.40
Ohangwena	3.4	1.08
Omaheke	2.2	1.56
Omusati	3.4	1.12
Oshikoto	1.3	0.64
Otjozondjupa	5.0	1.53
Oshana	1.4	0.73
Namibia	3.1	0.34

It can be seen that in SACMEQ I the average number of courses attended was 3.1 but that this varied from 1.3 courses per teacher in Oshikoto to 5.7 in Karas. This was quite a large variation.

Table 4.5(b). Means and sampling errors for teacher in-service courses and days attended in the last three years (SACMEQ II)

Region	Reading teacher				Mathematics teacher			
	In-services courses		Days		In-services courses		Days	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	5.1	2.65	22.2	10.29	4.2	1.64	32.4	12.86
Erongo	1.5	0.36	5.6	1.21	2.5	0.76	17.1	7.99
Hardap	1.4	0.59	4.1	1.43	1.8	0.51	7.4	2.00
Karas	2.5	0.33	8.6	2.44	1.7	0.40	7.4	1.73
Kavango	1.4	0.42	18.4	9.45	1.9	0.51	114.6	46.38
Khomas	2.9	0.58	42.9	23.40	2.6	0.57	26.7	13.21
Kunene	4.5	1.71	82.4	53.17	3.3	0.71	37.4	14.88
Ohangwena	3.8	0.63	51.3	26.48	3.6	0.95	37.6	14.58
Omaheke	2.8	0.66	23.3	7.01	2.7	0.86	91.3	56.19
Omusati	2.7	0.54	60.0	26.28	3.5	0.74	61.5	25.89
Oshikoto	3.1	0.64	30.3	11.34	4.2	1.10	40.7	15.99
Otjozondjupa	3.4	0.70	17.4	4.62	2.0	0.55	7.6	1.85
Oshana	1.5	0.46	4.4	1.56	1.4	0.25	45.6	33.82
Namibia	2.7	0.21	34.4	7.48	2.9	0.27	47.4	8.61

In SACMEQ II, it can be seen that reading teachers said that they attended an average of 2.7 courses in the last three years and mathematics teachers said 2.9 courses. The range for reading teachers was from 1.4 in Hardap and Kavango to 5.1 in Caprivi. The range for mathematics teachers was from 1.4 in Oshana to 4.2 in Caprivi and Oshikoto. There is no policy on the number or type of in-service courses that a teacher should attend within a prescribed period. Individual educational regions often initiate in-service courses depending on the needs of teachers in the region. As a result some teachers in some regions may attend several in-service courses while other teachers in the same region or another region may have none.

Policy suggestion 21. The National Institute for Educational Development (NIED) may wish to consider providing policy guidelines on the type and frequency of in-service courses for all teachers.

It would appear that the mathematics teachers had more days of in-service courses but because of the very large standard errors of sampling it is impossible to say anything about variation among the regions.

Did teachers consider that in-service training improved their teaching?

Another problem is how effective the in-service courses were. One thing is to ask the teachers what they thought of the in-service courses but another is to follow the teachers up into the schools and observe if there were any differences in what the teachers actually did. Bloom (personal communication) used to say that an in-service course was worth only twice its own length. By this he meant that if a course lasted a week, then for the first two weeks back in the school the teachers would do what they were taught in the course but then give up either because it was too much work or because of peer group pressure from the other teachers who had not been to the course.

The teachers were asked if they thought that the in-service courses that they had attended were effective in terms of improving their teaching. Those teachers saying that they thought that the in-service courses were reasonably effective, effective or very effective were summed together. The percentages of learners with teachers who said that the courses were effective as just described have been presented for reading and mathematics teachers in Table 4.6.

Table 4.6. Percentages and sampling errors for the teachers' perception of effectiveness of reading and mathematics in-service courses (SACMEQ II)

Region	Effectiveness of the in-service courses			
	Reading in-service courses		Mathematics in-service courses	
	%	SE	%	SE
Caprivi	62.8	12.80	61.3	13.68
Erongo	52.8	13.29	69.3	12.95
Hardap	37.6	13.45	35.7	13.12
Karas	58.4	13.33	51.2	13.95
Kavango	45.3	10.26	58.8	9.99
Khomas	50.6	9.55	55.5	9.23
Kunene	65.5	13.46	64.0	13.03
Ohangwena	61.2	8.98	58.4	8.45
Omaheke	66.6	14.84	53.9	16.24
Omusati	60.2	8.32	61.3	8.30
Oshikoto	59.4	9.68	57.7	10.15
Otjozondjupa	63.4	11.56	49.0	12.20
Oshana	28.4	8.65	54.3	9.74
Namibia	53.8	3.17	57.2	3.18

Again there was great similarity between the reading and mathematics teachers. About half of the teachers thought that the courses were effective. This means that there were many who either had not been to an in-service course or did not think that the courses they had attended were particularly effective. It was the teachers in Hardap and Oshana who thought that the courses were not particularly good.

General Policy Concern 8:

How did Grade 6 teachers allocate their time among responsibilities concerned with teaching, preparing lessons and marking?

Although the number of hours taught by primary school teachers varies quite a lot among countries, it should not vary much within countries. The length of time to prepare lessons for beginning teachers is a lot but as teachers become used to teaching it is only when they are teaching something new that they need to prepare a lot. The marking of homework always takes a long time. What then was the situation for Grade 6 teachers in Namibia?

How many periods did teachers teach and how long were these periods?

Ideally, all teachers are expected to teach the same number of periods per week. However, different subjects are allocated different numbers of periods per week. The number of periods per week that are taught by a particular teacher depends on the number of different grades taught and the number/type of subjects taught. For example, a teacher of English may teach all Grades, i.e. 5, 6 and 7 English classes or teach Grade 6A English and Grades 5A and 5B History. English has more periods per week than History. So at the upper primary phase, the number of periods and the hours that a teacher may teach per week will vary from one teacher to another and from one school to another depending on the number of Grades/classes taught, the number/type of subjects taught as well as the teacher: learner ratio in a particular school/region.

The mean number of periods taught per week was about the same in 2000 as in 1995. However, the number of hours had increased in this period of time. Reading and Mathematics teachers taught about the same number of periods and hours in 2000. In the Caprivi region, both Reading and Mathematics teachers taught fewer hours than in other regions. This is because there were more teachers and fewer classes in schools in the region. However, the fewer teaching hours reported by Mathematics teachers in the Oshana region needs to be further investigated

Policy suggestion 22. The education authorities in Oshana may wish to investigate the possible reasons why Mathematics teachers in the region taught fewer hours.

Table 4.7: Means and sampling errors for the periods and time spent on teaching per week (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II							
	Reading teacher				Reading teacher				Mathematics teacher			
	Periods per week		Hours per week		Periods per week		Periods per week		Periods per week		Hours Per week	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	27.7	2.81	14.1	1.42	29.6	2.12	19.1	1.43	26.8	2.80	17.4	1.96
Erongo	36.8	4.45	20.5	2.47	39.7	4.10	32.0	7.65	30.2	3.72	19.2	2.83
Hardap	41.3	4.78	20.6	2.38	32.1	2.44	21.4	1.62	32.9	2.28	22.0	1.52
Karas	46.1	0.98	23.0	0.50	31.5	2.74	21.0	1.83	31.2	2.22	20.8	1.48
Kavango	27.2	3.72	14.7	1.85	28.5	2.41	18.5	1.58	32.4	1.60	22.1	1.51
Khomas	40.4	3.17	20.6	1.51	33.5	1.29	22.2	0.94	33.5	1.05	22.3	0.79
Kunene	40.9	3.61	21.6	1.57	31.8	3.81	19.6	2.17	35.5	3.15	22.3	1.86
Ohangwena	34.7	4.10	18.0	2.25	33.1	1.26	22.2	0.86	34.1	1.37	22.7	0.91
Omahake	41.1	1.73	22.9	1.88	33.6	3.43	22.1	2.26	33.4	2.04	21.4	1.35
Omusati	28.0	3.45	14.7	1.80	31.6	1.83	21.2	1.25	32.6	1.75	21.8	1.20
Oshikoto	35.1	6.91	19.5	3.77	33.4	1.77	22.3	1.28	31.1	2.13	20.7	1.47
Otjozondjupa	37.1	5.39	19.6	3.09	32.8	2.82	21.8	1.94	30.4	2.46	19.9	1.66
Oshana	32.6	4.34	17.5	2.60	30.6	1.67	20.3	1.12	27.5	2.33	18.1	1.54
Namibia	34.0	1.22	17.9	0.66	32.2	0.62	21.6	0.50	31.9	0.62	21.2	0.44

How many hours did teachers spend in lesson preparation and marking?

Unfortunately the data for preparing lessons and marking homework and schoolwork were not collected separately. The question asked ‘How many hours, on average, do you spend in a typical school week working on **lesson preparation and marking** for this school? The results have been presented in Table 4.8 for reading and mathematics teachers separately.

Table 4.8. Means and sampling errors for the teacher time spent on lesson preparation and marking (SACMEQ I and SACMEQ II)

Region	Time spent on lesson preparation and marking					
	SACMEQ I			SACMEQ II		
	Reading (hours)		Reading (hours)		Mathematics (hours)	
	Mean	SE	Mean	SE	Mean	SE
Caprivi	8.6	0.83	11.5	2.80	14.2	2.70
Erongo	9.3	1.20	15.0	3.46	15.6	4.08
Hardap	13.0	2.55	11.8	1.34	12.3	2.06
Karas	15.0	1.68	12.6	1.93	11.6	1.25
Kavango	14.5	2.51	20.6	3.59	20.9	2.53
Khomas	11.5	1.48	13.0	1.69	13.3	1.47
Kunene	10.1	2.89	12.2	3.49	14.7	2.52
Ohangwena	11.1	2.15	16.8	2.53	15.6	2.03
Omaheke	7.9	2.51	16.5	4.02	24.5	6.93
Omusati	9.6	1.41	13.6	2.44	12.7	2.01
Oshikoto	5.7	1.36	15.7	2.37	14.7	2.77
Otjozondjupa	12.4	2.53	12.1	2.33	13.9	1.82
Oshana	5.2	1.14	14.6	2.30	19.8	4.09
Namibia	10.2	0.57	15.0	0.87	15.6	0.86

The teachers in 2000 said that they prepared and marked for 15 hours per week whereas in 1995 they said that they only prepared and marked for 10 hours. The range remained much the same. The high values for Kavango may be attributed to the predominance of generally young teachers (<30 years old) with less than 7 years of teaching experience, but the same cannot be said for Omaheke. Perhaps the Education authorities in Omaheke may wish to find out more about the competencies of Mathematics teachers in the region.

General Policy Concern 9:

What were Grade 6 teachers' views about (a) learner activities within the classroom (for example, reading aloud, pronouncing, etc.), (b) teaching goals (for example, making learning enjoyable, word attack skills, etc.), (c) teaching approaches/strategies (for example, questioning, whole class teaching, etc.), (d) assessment procedures, and (e) meeting and communicating with parents?

Teachers vary their teaching behaviours according to the particular educational objectives and according to which particular learners they are teaching. Indeed, teachers are taught

to do this in their teacher training. Nevertheless, an attempt was made to ask questions on the teacher questionnaire that would elicit some average views about teaching.

What did teachers consider to be the most important learner activities for teaching reading and mathematics?

In the data collection in 2000 one more learner activity had been added, namely 'reading aloud in class'. It can be seen from Table 4.9(a) that the most popular activity planned for learners was 'reading for comprehension'. This was followed by 'learning new vocabulary' and 'sounding words'. Somewhat surprisingly 'reading for comprehension' fell between 1995 and 2000. This is a cause for concern because reading for understanding is the most important activity in reading.

Table 4.9(a). Percentages and sampling errors for the learner activities of teaching reading (SACMEQ I and SACMEQ II)

Activity	Activity rated as 'most important'			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
Listening to reading	4.8	2.05	4.8	1.42
Silent reading	2.3	1.21	3.9	1.13
Learning new vocabulary	29.5	4.02	21.9	2.60
Sounding words	13.4	2.94	19.8	2.47
Reading for comprehension	35.1	4.09	25.7	2.79
Taking books home to read	6.5	2.15	6.3	1.50
Reading materials in home	8.5	2.22	11.5	2.16
Reading aloud in class *			6.0	1.52

For mathematics, the percentage of learners with teachers who rated different learner activities as most important have been presented in Table 4.9(b). The activity with the highest rating was 'working in pairs or groups'. This was followed by 'using practical equipment', homework assignments', and 'quizzes, tests, examinations'. The other activities received very few endorsements. The high rating for 'working in pairs or groups' is mainly due to the conception that many teachers in Namibia have, that "learner centred education" is synonymous with group work.

Table 4.9(b) Percentages and sampling errors for the activities of teaching mathematics (SACMEQ II)

Activity	Activity rated as ‘most important’	
	%	SE
Working in pairs or groups	41.1	3.03
Working alone	3.3	1.03
Preparing projects to be shown to the class	4.7	1.22
Using practical equipment	16.6	2.32
Homework assignments	12.9	2.13
Studying and interpreting graphs	1.8	0.76
Reciting tables, formulae, etc.	2.1	0.75
Quizzes, tests, examinations, etc..	17.5	2.49

What did teachers consider to be the most important goals in reading and mathematics?

The percentages of learners with teachers who rated each goal as the most important for reading have been presented in Table 4.10(a) and for Mathematics in Table 4.10 (b).

Table 4.10(a). Percentages and sampling errors for the goals of teaching reading (SACMEQ I and SACMEQ II)

Goal	Goal rated as ‘most important’			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
Making reading enjoyable	13.9	3.10	13.5	2.11
Extending vocabulary	20.0	3.49	24.6	2.77
Improving word attack skills	6.2	2.25	5.1	1.58
Improving reading comprehension	26.4	3.87	17.9	2.37
Developing a lasting interest	33.6	3.95	20.6	2.53
Opening up career opportunities *			9.2	2.00
Developing of life skills *			9.1	1.73

Two further goals were added for the 2000 data collection. This makes it difficult to compare between 1995 and 2000. The percentages of learners with teachers who rated ‘improving reading comprehension’ decreased, ‘extending vocabulary’ and ‘making reading enjoyable’ remained about the same.

In mathematics, the two goals seen as most important were ‘Problem solving’ meaning ‘transfer of skills to everyday life and applying knowledge’, and ‘different ways of thinking’ meaning ‘Thinking skills including different ways of thinking in solving mathematical problems.’

Table 4.10(b). Percentages and sampling errors for the goals of teaching mathematics (SACMEQ II)

Goal	Goal rated as ‘most important’	
	%	SE
Basic numeracy skills	8.8	1.91
Problem solving	38.0	3.01
Different ways of thinking	17.6	2.27
Confidence in solving problems	11.7	2.08
Satisfaction from doing Mathematics	6.1	1.36
Opening up career opportunities	12.7	2.28
Developing of life skills	5.2	1.30

What teaching approaches/strategies were used most frequently by reading and mathematics teachers?

The results of the analyses have been presented in Tables 4.11(a) and 4.11(b). Most teachers seemed to use all of the approaches/strategies most of the time. The exception was ‘using materials made by teacher’ for reading.

Table 4.11(a) Percentages and sampling errors for the approaches/strategies of teaching reading (SACMEQ I and SACMEQ II)

Approach/Strategy	Percentage indicating ‘often used’			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
Introducing passage before reading	66.1	4.01	55.3	3.15
Asking questions to test comprehension	73.8	3.75	76.1	2.84
Asking questions to deepen understanding	76.7	3.69	69.4	2.96
Using materials made by teacher	27.9	3.77	31.8	2.90
Reading aloud to the class	74.2	3.88	57.7	3.20
Giving positive feedback*			71.5	2.93

For mathematics, again most learners had teachers who used all approaches. However, fewer learners had teachers who used individual teaching and small group teaching as part of their approaches. All of the other approaches sounded plausible. The emphasis on ‘explaining mathematical processes’ should mean that the learners had high scores on the ‘understanding of principles’ items in the test, but the generally low learner scores reported in chapter 7 indicates that this was not so.

Table 4.11(b) Percentages and sampling errors for the approaches/strategies of teaching mathematics (SACMEQ II)

Approach/Strategy	Percentage indicating ‘often used’	
	%	SE
Using everyday problems	57.6	3.12
Teaching the whole class as a group	53.3	3.14
Teaching in a small group	31.1	2.80
Teaching individually	13.5	2.12
Teaching through question and answer technique	65.0	2.96
Giving positive feedback	74.9	2.76
Relating to everyday life situations	56.6	3.16
Basic skills training	56.7	3.16
Explaining mathematical processes	78.7	2.44
Using available local materials	58.6	3.07

How often did teachers give written tests in reading and mathematics?

Teachers were asked to state how often they gave tests in the two subject-areas. Their responses were classified into ‘once or more per week’, ‘two or three times per month’ or ‘less frequently’. The results have been presented in Tables 4.12(a) and (b).

Table 4.12(a) Percentages and sampling errors for the frequency of reading tests (SACMEQ I and SACMEQ II)

Region	Frequency of reading tests											
	SACMEQ I						SACMEQ II					
	Less Often		2/3 per month		1 + per week		Less often		2/3 per month		1 + per week	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	17.6	9.58	23.5	10.65	58.8	12.36	12.1	8.41	9.9	7.01	78.0	10.56
Erongo	35.0	15.41	10.0	10.27	55.0	16.15	38.2	12.23	18.7	12.45	43.1	12.41
Hardap	66.7	17.23	22.2	15.20	11.1	11.49	26.8	12.11	29.8	13.38	43.5	13.53
Karas	40.0	16.78	30.0	15.69	30.0	15.69	13.6	9.31	17.1	9.98	69.4	12.37
Kavango	35.0	11.61	25.0	10.30	40.0	13.11	20.6	8.73	34.1	9.95	45.3	10.71
Khomas	34.6	12.09	23.1	12.40	42.3	12.71	44.5	10.09	26.6	8.52	28.9	9.21
Kunene	33.3	17.23	22.2	15.20	44.4	18.16	23.4	11.02	45.0	13.98	31.6	12.66
Ohangwena	47.1	12.60	23.5	10.71	29.4	11.50	38.9	8.58	23.4	6.75	37.7	8.58
Omaheke	0.0	0.00	0.0	0.00	100.0	0.00	26.7	14.29	16.6	11.47	56.7	16.02
Omusati	25.0	10.02	25.0	10.02	50.0	11.57	41.3	8.59	39.7	8.22	19.0	6.70
Oshikoto	42.9	21.38	14.3	15.12	42.9	21.38	34.4	9.27	31.5	9.00	34.1	9.35
Otjozondjupa	21.2	15.67	42.9	21.38	35.9	19.05	29.5	10.66	27.4	11.58	43.1	12.46
Oshana	35.7	19.09	50.0	20.07	14.3	15.17	49.9	9.69	40.5	10.43	9.6	5.12
Namibia	33.9	4.04	25.3	3.87	40.8	4.28	35.6	3.11	30.6	2.96	33.8	2.92

It can be seen that for reading the percentages of learners having teachers in the least often category were about the same on both occasions. About one third of learners had teachers in each category in 2000. Nothing very much can be said about the various regions differences on the two occasions because of the high standard errors.

It should be noted that in Namibia, the post independence educational reforms of the Ministry of Education emphasised the use of "continuous assessment" instead of "tests" per se. There are different ways in which continuous assessment is carried out and testing is just one of them. However, "tests" may have a negative connotation in some circles in the Namibian context, in the sense that tests were, in the pre-independence era, mainly used to determine *pass* and *failure* for the promotion of learners from one grade level to the next.

The data for mathematics teachers were only for the year 2000. Nearly 50 percent of learners had teachers who said that they gave mathematics tests less frequently than two

or three times a month. Nearly 40 percent said that they gave tests two or three times a month and only 13 percent said once or more per week.

Table 4.12(b) Percentages and sampling errors for frequency of mathematics tests (SACMEQ II)

Region	Frequency of mathematics tests					
	Less often		2/3 per month		1 + per week	
	%	SE	%	SE	%	SE
Caprivi	26.6	12.14	35.6	14.69	37.8	13.02
Erongo	46.9	12.92	30.9	11.84	22.2	12.24
Hardap	47.8	13.52	49.8	13.31	2.4	2.40
Karas	35.5	12.89	32.2	12.96	32.2	13.11
Kavango	19.1	8.15	49.5	10.44	31.4	9.14
Khomas	53.1	9.89	39.1	9.51	7.8	4.15
Kunene	33.8	13.06	49.9	13.38	16.3	9.16
Ohangwena	49.6	8.86	42.8	8.71	7.5	3.86
Omaheke	41.0	15.78	50.9	15.57	8.1	8.13
Omusati	58.1	8.52	31.0	7.72	10.9	4.69
Oshikoto	53.7	10.09	37.7	9.19	8.6	5.29
Otjozondjupa	61.6	12.97	26.9	12.00	11.5	8.57
Oshana	50.4	9.98	42.0	9.69	7.7	4.64
Namibia	47.7	3.20	39.2	3.13	13.0	1.90

Policy suggestion 23. The regions of Otjozondjupa, Omusati, Oshikoto and Oshana would seem to be in need of encouragement to give more tests in addition to other measures of continuous assessment if they are to have systematic feedback from the learners as to where each learner is in terms of the objectives/competencies mastered and not mastered

Was there a specific section in learner school reports for reading and mathematics?

Specific questions were asked of both reading and mathematics teachers about whether the school report for each learner included a specific section for comments on their specific subject-matter area. The results have been presented in Table 4.13.

Table 4.13. Percentages and sampling errors for the frequency of a specific section in learner school report for reading and mathematics (SACMEQ I and SACMEQ II)

Region	SACMEQ I		SACMEQ II			
	Reading section		English section		Mathematics section	
	%	SE	%	SE	%	SE
Caprivi	35.3	12.00	37.1	14.08	44.6	13.86
Erongo	30.0	15.69	68.7	11.07	41.7	14.50
Hardap	33.3	17.23	34.2	13.49	53.3	13.78
Karas	40.0	16.78	34.6	13.55	26.4	12.61
Kavango	42.7	12.04	42.1	10.38	66.4	9.65
Khomas	22.7	10.91	39.3	10.11	39.8	8.90
Kunene	44.4	18.16	76.9	12.79	53.5	14.00
Ohangwena	58.8	12.43	68.6	8.47	46.9	8.59
Omahake	33.3	40.00	69.2	14.62	53.2	15.59
Omusati	52.3	11.27	51.7	8.66	50.7	8.20
Oshikoto	57.1	21.38	71.4	8.75	50.4	10.35
Otjozondjupa	7.3	7.75	42.6	12.79	44.8	12.33
Oshana	42.7	18.04	53.8	9.48	57.5	9.70
Namibia	42.4	4.14	54.7	3.18	50.2	3.18

In Table 4.13 the standard errors for the regional estimates as well as for the national estimates are high and hence it is not possible to say that there was a difference between what the situation was in 1995 and 2000. In general however about 50 percent of learners were in schools where there was a specific section in the school reports for comments on reading and mathematics separately. This does mean, however, that there were about 50 percent of learners that were in schools that did not have this policy. Given that specific information is always of more use than general information, it would appear that the Ministry might make a general statement about this.

How often did teachers meet with parents each year?

In some systems of education teachers must meet with parents at the end of each term, in other systems it is once a year, and in many systems it is once a year and as often as is required. In Namibia, there is no prescribed number of times that teachers have to meet with parents. The type of meetings and the frequency of such meetings differ from one school to another.

The question in the teacher questionnaire was ‘How often do you usually meet with the parents or guardians of the learners in your class to discuss learner performance or related matters?’ The possible responses were ‘never’, ‘once a year’, ‘once a term’, and ‘once a month or more’. Those answering ‘once a term’ or ‘once a month or more’ were put into one category and it is these results that have been presented in Table 4.14.

Table 4.14 Percentages and sampling errors for the frequency of teacher meetings with parents frequently (SACMEQ I and SACMEQ II)

Region	Percentages of teacher meetings with parents frequently					
	SACMEQ I			SACMEQ II		
	Reading teacher		Reading teacher		Mathematics teacher	
	%	SE	%	SE	%	SE
Caprivi	64.7	12.00	82.4	9.93	75.7	12.99
Erongo	85.0	10.96	81.9	9.13	85.1	8.59
Hardap	55.6	18.16	47.4	13.96	79.6	9.66
Karas	70.0	15.69	76.3	12.71	83.9	9.08
Kavango	55.0	12.47	85.4	6.19	87.1	5.74
Khomas	73.3	12.37	86.4	7.49	84.2	6.88
Kunene	77.8	15.20	58.9	13.83	61.5	13.96
Ohangwena	50.5	12.26	63.2	8.23	61.4	8.40
Omaheke	33.3	40.00	30.9	14.61	49.0	15.59
Omusati	67.3	10.55	68.6	8.39	60.7	8.37
Oshikoto	42.9	21.38	65.0	9.07	74.0	8.30
Otjozondjupa	35.9	19.05	68.3	12.49	81.2	9.09
Oshana	42.7	18.04	59.0	9.28	45.1	9.93
Namibia	59.2	4.21	68.5	2.94	68.6	2.92

In 1995 the figure was about 60 percent and in 2000 it was 68 percent for both subjects. Because of the large standard errors nothing much can be said about the differences among regions. The low figure for Omaheke and Hardap for reading may be a cause for concern.

Policy suggestion 24. The Directorate of Educational Programmes Implementation (EPI) in collaboration with regional education forums and school boards, should come up with policy guidelines that will compel all teachers to meet the parents of the learners whom they teach at least once per year and as often as required in conformity with the national educational goal of democratic participation.

What percentage of parents met with teachers each year?

Most schools have a policy of teachers meeting with parents on a special day each term or even only once a year to discuss the learner's cognitive and social development with parents. It is often the parents of children who have some problems at school who do not attend such meetings. What is important is that a teacher meets with all of the parents of the learners in the class. A question was therefore asked about this. The results have been presented in Table 4.15.

Table 4.15 Percentages and sampling errors of parents meeting teachers each year (SACMEQ II)

Region	Parents meet reading teacher		Parents meet mathematics teacher	
	%	SE	%	SE
Caprivi	41.1	6.10	29.5	7.35
Erongo	93.4	40.97	48.4	5.39
Hardap	23.9	6.67	44.2	6.39
Karas	29.2	4.40	32.8	5.40
Kavango	37.6	6.49	60.0	13.12
Khomas	39.7	5.04	45.2	5.47
Kunene	22.8	5.93	25.0	5.82
Ohangwena	26.8	4.56	27.2	5.18
Omahake	29.7	9.86	25.9	6.96
Omusati	41.4	11.81	33.2	5.28
Oshikoto	27.1	5.34	25.2	5.13
Otjozondjupa	33.6	5.50	38.6	5.29
Oshana	21.9	4.68	29.1	5.11
Namibia	41.1	6.10	35.4	2.20

The results were not very encouraging. Indeed, they were somewhat shocking. From Table 4.15 it can be seen that on average only about 40 percent of parents in Grade 6 were met by the teachers of the learners. Again, this means that 60 percent of parents were not met. It was in Hardap (for English), Karas, Kunene, and Oshana that the percentages of parents met were particularly low.

Did teachers ask parents to sign homework assignments?

Homework is important. It is in the poorer homes that parents often do not help with or even check on homework. Thus, schools often have a policy of requiring parents to sign the homework assignments to ensure that they have been done. In Namibia there is no central policy on signing homework, but some individual schools require this of the parents, while other do not. The results of the percentages of teachers who ask parents to sign homework have been presented in Table 4.16.

Table 4.16. Percentages and sampling errors of teachers asking parents to sign homework (SACMEQ I and SACMEQ II)

Region	SACMEQ I		SACMEQ II			
	Sign reading Homework		Sign reading Homework		Sign mathematics homework	
	%	SE	%	SE	%	SE
Caprivi	23.5	10.65	44.9	14.06	44.3	13.80
Erongo	45.0	16.15	66.9	11.17	77.1	10.23
Hardap	22.2	15.20	25.8	13.38	67.1	12.24
Karas	20.0	13.70	52.3	13.89	38.9	13.58
Kavango	32.3	12.00	36.7	10.42	46.3	10.33
Khomas	50.2	12.91	56.2	9.97	67.4	8.86
Kunene	33.3	17.23	52.5	13.90	23.5	11.11
Ohangwena	41.2	12.43	32.4	8.54	32.0	8.40
Omahake	33.3	40.00	27.5	15.46	13.0	9.92
Omusati	62.3	10.92	22.9	7.40	25.3	6.73
Oshikoto	57.1	21.38	32.6	9.02	33.1	9.28
Otjozondjupa	35.9	19.05	25.1	11.48	48.4	13.07
Oshana	35.5	19.06	46.8	10.59	37.4	9.59
Namibia	42.8	4.25	36.5	3.12	39.6	2.99

Only about 40 percent of learners were in schools where teachers asked parents to sign the homework. Although the standard errors are high for the regions it can be said that there may well be special problems in Omahake, Omusati, and Oshikoto. However, in some rural schools learners from nearby villages who have problems in doing homework at home, are allowed to return to school in the afternoon to do their homework under the supervision of a teacher. Besides, some parents may not know how to read and write and may not be able to sign. In such instances the homework might not be signed by a parent.

Teacher lesson preparation, marking learners' work, teaching strategies, goals and other classroom practices have an important role to play in the teaching/learning process.

Policy suggestion 25. Regional education authorities may wish to monitor these aspects on a regular basis in order to take timely corrective measures. NIED should continue assisting teachers with the practical implementation strategies for continuous assessment which should include regular tests as long as such tests are used to monitor learner acquisition of basic competencies for diagnostic purposes and not for promotion purposes.

Apart from parent-teacher annual general meetings that deal with general welfare of the school, one way in which democratic participation of parents in the education of their children may be enhanced is through regular meetings between teachers and the parents of the learners whom they teach. Such meetings will help improve learning and learning outcomes by focussing learner classroom behaviour and performance.

General Policy Concern 10:

What was the availability of classroom furniture (for example, sitting/writing places, teacher table, teacher chair, and bookshelves) and classroom equipment (for example, chalkboard, dictionary, maps, book corner, and teacher guides) in Grade 6 classrooms?

It is clear that there must be adequate classroom conditions for learners to learn. There must be sitting and writing places. There must be adequate furniture and equipment. There must be a reading corner of different books and there must be adequate teaching aids. What then was the situation in Namibia?

What percentages of learners were in classrooms with adequate sitting and writing places?

Teachers were asked to state the number of sitting and writing places in their classrooms and these were matched against the number of learners in the class. The results have been presented in Table 4.17.

Table 4.17 Percentages and sampling errors for learners having sitting and writing places (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	% having sitting place		% having writing place		% having sitting place		% having writing place	
	%	SE	%	SE	%	SE	%	SE
Caprivi	100.0	0.00	79.2	8.05	96.7	1.97	95.0	2.29
Erongo	100.0	0.00	95.5	4.65	96.8	1.85	93.2	3.26
Hardap	100.0	0.00	100.0	0.00	99.6	0.38	98.1	0.67
Karas	100.0	0.00	100.0	0.00	99.3	0.47	98.8	0.65
Kavango	100.0	0.00	85.3	6.41	98.7	0.58	97.0	0.78
Khomas	100.0	0.00	100.0	0.00	98.9	0.44	95.2	1.51
Kunene	100.0	0.00	100.0	0.00	97.9	1.13	97.3	1.36
Ohangwena	96.0	2.52	88.9	5.52	89.5	4.93	87.1	5.68
Omaheke	100.0	0.00	100.0	0.00	95.2	2.55	89.5	2.36
Omusati	100.0	0.00	100.0	0.00	96.5	0.97	95.8	1.11
Oshikoto	100.0	0.00	85.7	15.12	91.5	4.08	87.0	4.36
Otjozondjupa	100.0	0.00	100.0	0.00	92.8	2.67	89.3	2.68
Oshana	100.0	0.00	100.0	0.00	95.7	1.40	94.2	1.55
Namibia	99.4	0.39	94.5	1.42	95.1	1.04	92.8	1.19

Even from a cursory glance at the table it can be seen that the picture has deteriorated slightly since 1995. There was a shortfall of sitting and writing places in each region. This state of affairs may be caused by the increase in learner numbers coupled with the rate at which broken furniture has been either repaired or replaced over the years.

Policy suggestion 26. Regional education authorities and school board members sitting with the problem of broken desks and chairs may wish to mobilise parents and their local communities to repair them from their own resources without waiting for the central office of the Ministry of education to do so.

What percentages of learners were in classrooms with adequate classroom furniture and equipment (for example, a teacher table, teacher chair, bookshelves and chalkboard?)

The percentages of learners in classrooms with each of eight items have been presented in Table 4.18.

Table 4.18 Percentages and sampling errors for availability of classroom resources for the teachers (SACMEQ I and SACMEQ II)

Resource	Availability of classroom resources					
	SACMEQ I		SACMEQ II			
	Reading Teacher		Reading teacher		Mathematics teacher	
	%	SE	%	SE	%	SE
A usable writing board	96.5	1.52	97.0	1.11	94.6	1.64
Chalk	97.9	1.27	96.0	1.26	94.1	1.44
A wall chart of any kind	51.0	3.84	56.6	3.03	63.2	2.99
A cupboard	74.6	3.74	59.7	3.08	62.8	2.98
One or more bookshelves	36.2	3.95	29.9	2.81	26.4	2.74
A classroom library or book corner	34.5	4.15	45.7	3.11	40.9	3.03
A teacher table	79.0	3.48	69.6	2.89	69.3	2.78
A teacher chair	78.7	3.50	68.1	2.84	67.0	2.82

Even in 2000 there were still three to five percent of learners in classrooms without a chalkboard or chalk. About forty percent of learners were in classrooms without a wall chart or cupboard of any kind. Seventy percent of learners were in classrooms without a bookshelf and thirty percent were in classrooms without a teacher table or chair. These conditions certainly purvey the impression of inadequate classroom resources and everything should be done to remedy the situation. Presumably those responsible for checking the availability of these items in each region are well aware of the inadequacies. What is it that they are doing to rectify these inadequate conditions?

These items were summed and the average for each region calculated. The averages have been presented in Table 4.19. The average number of items was just over five for the country as a whole. In 2000, Hardap was the best off region for these items. The regions of Ohangwena, Oshikoto, and Oshana were particularly badly off and all efforts should be devoted to encourage these regional authorities to improve the adequacy of their classroom conditions.

Table 4.19 Means and sampling errors for the classroom resources index (SACMEQ I and SACMEQ II)

Region	Classroom resources index					
	SACMEQ I		SACMEQ II			
	Reading teacher		Reading teacher		Mathematics teacher	
	Mean	SE	Mean	SE	Mean	SE
Caprivi	4.8	0.52	4.6	0.58	4.8	0.57
Erongo	7.1	0.20	6.8	0.43	6.6	0.27
Hardap	6.3	0.57	7.4	0.14	7.1	0.24
Karas	6.9	0.28	6.8	0.56	6.7	0.22
Kavango	5.1	0.39	5.5	0.30	5.4	0.38
Khomas	7.3	0.23	6.8	0.22	6.4	0.14
Kunene	5.8	0.48	6.3	0.45	5.7	0.59
Ohangwena	4.6	0.25	4.2	0.35	4.2	0.40
Omaheke	6.0	0.00	6.3	0.61	6.4	0.29
Omusati	4.8	0.36	4.9	0.28	5.0	0.29
Oshikoto	5.9	0.63	4.3	0.43	4.3	0.42
Otjozondjupa	5.3	0.97	6.8	0.26	6.6	0.25
Oshana	5.1	0.29	4.3	0.40	4.4	0.35
Namibia	5.5	0.13	5.2	0.12	5.2	0.12

How many books did teachers have in their classroom library or book corner?

Elley¹ (1992) showed that it was extremely advantageous if learners had a book corner in their classrooms in primary school on condition that it was stocked with books appropriate to the learners' standards and that they could take the books home to read. This was better than having a school library. How many books were in these book corners in Namibia? The results have been presented in Table 4.20.

The average number of classroom library books per learner rose from 1.6 books to 2.1 books from 1995 to 2000. This is to be welcomed. But, two books per learner for a whole year is not many and the number of books in classroom libraries should be increased and this should have high priority. The regions of Omahake and Karas should receive priority.

¹ Elley, Warwick B., (1992) *How in the World do Students Read?* Hamburg: IEA

Table 4.20. Means and sampling errors of class library books per learner (SACMEQ I and SACMEQ II)

Region	Class library books per learner			
	SACMEQ I		SACMEQ II	
	Mean	SE	Mean	SE
Caprivi	1.8	0.69	6.8	4.02
Erongo	0.4	0.21	1.5	0.51
Hardap	0.3	0.16	1.2	0.43
Karas	1.8	0.92	1.0	0.49
Kavango	1.2	0.79	2.5	0.50
Khomas	3.0	1.17	1.4	0.47
Kunene	0.9	0.79	1.7	0.73
Ohangwena	2.0	0.88	1.2	0.80
Omahake	0.1	0.16	0.9	0.47
Omusati	1.2	0.50	2.1	0.62
Oshikoto	4.3	1.85	3.6	1.32
Otjozondjupa	0.0	0.00	3.4	1.26
Oshana	1.0	1.04	2.0	0.78
Namibia	1.6	0.27	2.1	0.29

Did teachers have teaching aids (for example, a map, dictionary, geometrical instruments, and teacher guides)?

Some classrooms are better equipped than others. Questions were asked of teachers about their having access to a map, an English dictionary and a Teacher's guide for English. Mathematics teachers were asked about having access to some geometrical instruments for drawing on the board and about a Teacher's guide for mathematics. The results have been represented in Table 4.21.

Table 4.21. Percentages and sampling errors of reading teachers with teaching aids in the school (SACMEQ II)

Region	Teaching aids									
	For teaching reading					For teaching mathematics				
	Map		English dictionary		Teacher's guide		Geometrical instruments		Teacher's guide	
	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	64.7	12.98	90.9	7.66	92.4	7.65	58.5	14.04	95.9	4.12
Erongo	92.3	7.71	100.0	0.00	100.0	0.00	79.6	11.52	88.0	8.42
Hardap	85.4	9.90	100.0	0.00	92.2	7.79	81.7	10.22	69.9	11.96
Karas	90.3	6.85	95.4	4.58	95.4	4.58	74.4	10.87	89.4	7.39
Kavango	35.8	10.25	71.5	8.95	88.9	6.50	79.2	7.72	61.9	9.67
Khomas	68.8	9.30	88.1	6.01	62.6	9.90	60.9	9.39	79.3	8.07
Kunene	45.9	13.79	86.9	9.08	92.7	7.27	63.7	12.97	75.3	11.58
Ohangwena	82.3	6.65	91.6	4.90	93.1	4.93	61.6	8.77	59.8	8.81
Omahake	76.9	15.36	86.1	13.89	91.8	8.31	51.3	15.63	100.0	0.00
Omusati	56.1	8.63	85.2	6.29	66.7	8.05	66.5	7.88	61.3	8.44
Oshikoto	59.2	9.69	74.4	8.75	93.8	4.85	64.3	9.76	64.2	9.92
Otjozondjupa	53.7	12.74	70.9	11.67	79.4	10.61	58.0	12.46	93.2	6.84
Oshana	52.6	10.56	87.1	6.25	79.3	8.18	66.0	9.01	51.5	9.71
Namibia	63.5	3.04	85.2	2.27	83.2	2.39	66.3	3.04	67.9	3.04

In the country as a whole, 64 percent of learners were in schools with Grade 6 teachers who had access to a map, 85 percent with teachers having access to an English dictionary, and 83 percent having access to a teacher guide for English.

Sixty-six percent of learners had teachers who had access to geometrical instruments and 68 percent to a teacher guide for mathematics. There were some educational regions that were low on one or other of these items. It would seem to be wise for regional education authorities to add these kinds of items to their annual audit of schools and then calculate what is needed and ensure that it is supplied.

Policy suggestion 27. The Directorate of Educational Programmes Implementation (EPI), regional education authorities and school inspectors may wish to consider conducting regular audits to monitor the provision of basic classroom teaching materials and ensure that each school or teacher is supplied with the basic requirements.

General Policy Concern 11:

What professional support (in terms of education resource centres, inspections, advisory visits, and school head inputs) was given to Grade 6 teachers?

Most educational systems devote a good deal of energy to the supply of support mechanisms for teachers. These may be in the form of all sorts of extra curriculum materials or resource centres nearby to their schools that teachers can use, or have regular inspection and advisory service visits. Some systems have the school head's reviewing lessons and helping teachers. Some have the excellent teacher system but this did not appear to be in evidence in the SACMEQ countries. But for those support systems that did exist questions were asked and the data summated.

Did teachers use the education resource centres?

Prior to 1990 and the creation of one Ministry, large parts of the country did not have teacher resource centres. The policy of the Ministry after 1990 was to provide a resource centre at least for each of the original 7 educational region. The resource centres were to be used for in-service training workshops and to provide reference materials which teachers could use for their lesson preparations and for making their own teaching materials. Teachers could also borrow books and other materials from the resource centre. Given the vastness of the country, a single resource centre for each of the 7 educational regions, meant that many schools/teachers were situated very far away from these centres.

Teachers were asked about whether there was a resource centre nearby the school, and whether they had visited it or not. The results have been presented in Table 4.22

Table 4.22 Percentages and sampling errors for the availability of education resource centres for teachers (SACMEQ II)

Region	Reading teacher						Mathematics teacher					
	None available		Have not visited		Have used		None available		Have not visited		Have used	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	0.0	0.00	4.1	4.12	95.9	4.12	0.0	0.00	16.2	9.22	83.8	9.22
Erongo	9.8	6.98	53.9	12.67	36.3	12.45	5.0	5.00	54.1	14.74	40.9	14.38
Hardap	0.0	0.00	41.1	13.59	58.9	13.59	7.0	7.03	22.3	10.83	70.7	12.03
Karas	0.0	0.00	11.9	8.29	88.1	8.29	0.0	0.00	17.3	9.63	82.7	9.63
Kavango	2.7	2.71	22.5	8.64	74.8	8.90	4.4	4.40	38.6	9.74	57.1	9.99
Khomas	0.0	0.00	21.9	7.78	78.1	7.78	4.2	4.19	20.0	7.90	75.8	8.54
Kunene	5.5	5.53	25.6	13.25	68.9	13.54	12.8	8.91	30.2	12.25	57.0	13.21
Ohangwena	9.3	4.97	10.1	5.17	80.6	6.80	11.1	5.25	32.8	8.58	56.1	8.95
Omaheke	7.0	7.09	33.3	16.44	59.7	16.47	0.0	0.00	35.5	14.50	64.5	14.50
Omusati	5.5	3.84	25.0	7.49	69.6	7.94	7.7	4.61	36.7	7.77	55.6	8.15
Oshikoto	8.7	5.16	21.9	8.22	69.3	9.38	12.1	6.78	29.6	9.08	58.3	9.90
Otjozondjupa	31.8	12.53	16.1	9.98	52.1	13.13	33.7	12.89	22.6	10.78	43.7	13.01
Oshana	5.0	4.96	18.7	7.48	76.3	8.45	7.7	5.39	39.1	9.09	53.2	9.21
Namibia	6.8	1.59	21.3	2.57	71.9	2.85	8.9	1.86	32.5	3.01	58.6	3.16

It can be seen from Table 4.22 that about 12 percent more reading than mathematics teachers had used the resource centres. Generally, there were fewer teachers using the resources centres. Seventy-two percent of learners had English teachers who had not used a resource centre and 59 percent of learners had mathematics teachers who had not used them. However, six to eight percent denied their existence or lived very far away from the nearest educational resource centre. The high percentages for not having used the resource centres are mainly due to the long distances between these centres and teachers in the peripheries of the regions some of which had radii of more than 200 kilometres.

When asked about the reasons why they went to such centres, the answers (and the percentages of teachers giving a particular answer) were as follows:

- Borrow materials 41 percent
- Make materials 31 "

- Training course 57 "
- Exchange ideas 47 "
- Seek advice 42 "

School heads were asked whether the school had been visited and the number of times the school had been visited by members of the teachers' resource centres. For the computation only if a school had been visited it was counted as having been visited. The results have been presented in Table 4.23.

Table 4.23. Percentages and sampling errors for schools being visited by staff of the education resource centre (SACMEQ II).

Region	Have visited	
	%	SE
Caprivi	27.9	13.30
Erongo	54.9	15.42
Hardap	79.4	11.17
Karas	41.3	13.92
Kavango	39.9	10.67
Khomas	25.1	9.17
Kunene	50.7	14.44
Ohangwena	78.2	7.47
Omahake	21.5	12.50
Omusati	54.5	8.90
Oshikoto	73.4	9.05
Otjozondjupa	33.8	14.97
Oshana	74.9	9.31
National	56.8	3.17

Fifty-seven percent of learners were in schools where teachers said that they had been visited at least once by members of the teachers' resource centre. The most frequent visits had been made in Hardap, Ohangwena, and Oshikoto. The least frequent were in Khomas, Caprivi, Omahake, and Otjozondjupa

The school heads were further asked about the number of schools that were served by their own teachers' resource centre. The highest option was "16 or more". The results have been presented in Table 4.24.

Table 4.24. Means and sampling errors of number of schools served by the education resource centre (SACMEQ II).

Region	Number of schools served by centre	
	Mean	SE
Caprivi	20.0	0.00
Erongo	18.6	1.08
Hardap	20.0	0.00
Karas	20.0	0.00
Kavango	20.0	0.00
Khomas	20.0	0.00
Kunene	18.6	1.14
Ohangwena	18.7	0.93
Omaheke	20.0	0.00
Omusati	19.5	0.48
Oshikoto	19.2	0.78
Otjozondjupa	14.5	2.46
Oshana	20.0	0.00
Namibia	19.2	0.25

It can be seen from Table 4.24 that the average number of schools that were served by one centre was twenty. In reality however, the teacher resource centres served more than 20 schools because they were meant to serve all schools in each educational region. The region with the smallest number of schools was Omaheke, with 42 schools, and the largest number of schools was in the Kavango region which had 313 schools.

What support did Advisory teachers or Inspectors give to the teachers in terms of administrative, professional and pedagogical matters?

The role of the inspectorate has changed over time. At one time it was for appraising or certifying teachers as able to continue teaching. Over time the role has become one of helping the teachers in many different ways. Inspectors are expected to provide professional advice and guidance to school heads on school management and leadership. Advisory teachers are expected to provide pedagogical support and guidance to teachers on subject related matters, teaching strategies and the implementation of the curriculum. The percentages of learners with teachers who agreed with certain statements about inspectors and advisory teachers have been presented in Table 4.25.

Table 4.25 Teachers' descriptions of the actions of the inspector and advisory teacher (SACMEQ II)

Description of the actions	Percentage of teachers agreeing							
	Reading teacher				Mathematics teacher			
	Inspector		Advisor		Inspector		Advisor	
	%	SE	%	SE	%	SE	%	SE
Pedagogical role								
Bring new ideas	89.8	3.10	90.0	2.80	86.1	3.20	91.4	2.61
Clarify educational objectives	80.8	3.99	83.9	3.80	78.2	3.74	77.3	3.92
Recommend new teaching materials	68.0	4.58	81.2	3.94	65.2	4.51	81.4	3.54
Contribution to my classroom teaching	26.4	4.19	35.0	4.97	31.2	4.59	38.7	4.73
Explain curriculum content	57.2	4.92	82.2	3.91	61.2	4.70	78.9	3.90
Suggest improving teaching methods	84.6	3.75	93.6	2.62	78.0	3.76	86.5	3.04
Critical versus advisory role								
Comes to advise	84.7	3.38	96.4	2.11	81.2	3.48	94.5	2.21
Comes to criticise	9.1	2.62	18.0	4.19	18.1	4.17	13.1	3.15
Finds faults and report them to the employer	26.4	4.24	26.2	4.41	30.1	4.63	30.1	4.54
Professional development role								
Provides information for teacher self-development	64.9	4.55	68.9	4.76	59.5	4.61	63.9	4.40
Encourage professional contacts with other teachers	75.8	4.20	79.9	3.85	72.4	4.19	78.7	3.74
Provides in-service training to teachers	43.7	4.78	60.9	4.98	47.5	4.95	56.7	4.60

It can be seen from Table 4.25 that there was no difference between the reading and mathematics teachers about the role of the inspectors except for the statement 'come to criticise'. The mathematics teacher seemed to perceive the inspectors coming more to criticise. There were very few differences in the two sets of teachers' views about advisory teachers. Not many seemed to view inspectors or advisory teachers as contributing anything to their classroom teaching. Inspectors were viewed as explaining curriculum content less than advisors. Advisory teachers were also seen more as providing in-service training more than inspectors. This is so because in the Namibian context it is Advisory teachers who are responsible for the implementation of the curriculum and other pedagogical matters, while inspectors are mainly responsible for matters pertaining to school management. Some 25 to 30 percent of learners had teachers who thought that the inspectors and advisors came to find faults with them and report

them to their employers. This means that some teachers still do not feel that the role of inspectors and advisory teachers has changed. This implies that some inspectors may still operate in the old way or it is some teachers themselves who have not changed their perception of inspectors.

Policy suggestion 28. Regional Directors of Education should see to it that inspectors and advisory teachers continue to render professional guidance and support to schools and teachers to help improve the quality of education. Inspectors and advisory teachers should be encouraged to have a positive attitude towards teachers in order to win their confidence.

Did school heads advise teachers on their teaching?

In Namibia it is expected that school heads will help all teachers to improve their teaching. The percentages of learners with teachers who said that they received advice from their school heads have been presented in Table 4.26. On average, there were 86 to 89 percent saying that they had received advice from the head in 2000. Although a direct comparison was not possible with the figures for 1995 because of the way in which the questions was asked, it never the less seems as though there had been an improvement. In 2000, the situation in Khomas seemed to be undesirable for both reading and mathematics teachers, even if the majority of the teachers in this region are well qualified and may need less advice from their school principals. For mathematics teachers in Otjozondjupa there seemed to be a problem that should be tackled by the office of the regional director of education.

It should be noted in the northern regions of Namibia have larger percentages of teachers who have low academic and professional training. These teachers teach large classes with few teaching and learning materials. Some of these teachers may not only feel insecure in their jobs, but they expect support from their school principals, inspectors and advisory teachers.

Table 4.26 Percentages and sampling errors for the frequency of advice to teacher from school head (SACMEQ I and SACMEQ II)

Region	Percentage of teachers receiving advice 'sometimes' or 'often'					
	SACMEQ I *		SACMEQ II *			
	Reading teacher *		Reading teacher *		Mathematics teacher *	
	%	SE	%	SE	%	SE
Caprivi	82.4	9.58	90.1	7.08	88.1	8.63
Erongo	65.0	15.41	100.0	0.00	78.5	11.21
Hardap	88.9	11.49	93.8	6.28	89.6	8.21
Karas	60.0	16.78	89.7	7.28	83.5	11.51
Kavango	80.0	9.43	87.0	6.28	91.0	6.35
Khomas	81.0	9.14	79.0	8.15	71.0	8.25
Kunene	77.8	15.20	81.9	12.27	92.5	7.47
Ohangwena	74.0	10.65	89.7	5.06	87.1	5.81
Omaheke	49.5	34.65	90.8	9.29	86.1	13.89
Omusati	80.0	9.26	90.3	5.07	83.6	6.39
Oshikoto	71.4	19.52	84.1	7.31	85.7	6.86
Otjozondjupa	42.9	21.38	91.0	9.02	77.9	12.22
Oshana	92.9	7.59	89.5	6.23	95.2	4.78
Namibia	75.7	3.61	88.5	2.04	85.5	2.27

Policy suggestion 29. As instructional leaders at the school level, school principals should be encouraged to continue with periodic monitoring of what goes on in the classroom and advise teachers accordingly.

General Policy Concern 12:

What were the factors that had most impact upon teacher job satisfaction?

It is important that teachers are happy in their jobs if they are to devote full effort to teaching. It was therefore deemed to be appropriate to ask teachers about this. The results of the analyses have been reported in Table 4.27.

Table 4.27 Percentages and sampling errors for sources of teacher job satisfaction (SACMEQ I and SACMEQ II)

Source of satisfaction	Percentages of learners with teachers indicating reason as 'very important'					
	SACMEQ I		SACMEQ II			
	Reading teacher		Reading teacher		Mathematics teacher	
	%	SE	%	SE	%	SE
Living conditions						
Travel distance to school	55.7	4.24	70.5	2.91	65.9	2.91
Availability of teacher Housing	77.6	3.74	77.9	2.65	77.6	2.51
Quality of teacher housing	66.7	4.06	61.2	3.16	65.9	2.97
School facilities/equipment						
Quality of school buildings	79.8	3.52	79.2	2.58	75.5	2.82
Quality of classroom furniture	74.1	3.87	66.2	3.10	70.3	2.85
Relationships with others						
Quality of school management and administration	90.1	2.70	93.7	1.51	92.6	1.65
Amicable relations with staff	79.1	3.47	84.9	2.27	90.0	1.89
Good relation with community	84.3	3.14	87.6	1.99	90.9	1.81
Career advancement						
Expanded opportunities for promotion	76.5	3.65	64.1	3.11	70.0	2.89
Opportunities for professional development	91.9	2.22	95.0	1.36	94.8	1.32
Level of teacher salary	79.6	3.51	73.6	2.88	77.8	2.70
Educational outcomes of learners						
Seeing learners learn	87.8	2.93	92.7	1.68	93.6	1.50

In the table it can be seen that the percentage of learners with teachers who reported that a particular reason was very important. The highest percentage indicating a reason as very important for job satisfaction was 95 percent for 'Opportunities for professional development'. Tied for second place were the 'Quality of school management and administration' and 'Seeing my learners learn'. The least important (that is the factors with the least percentages of teachers endorsing them) were 'Quality of Teacher Housing', 'Quality of Classroom furniture' and 'Travel Distance to school'. The high percentage for professional development as opposed to seeing learners learn, seems to give credence to the common assertion by critics that some Namibian teachers are eager

to improve their qualifications in order to get higher salaries without any changes in their competence and teaching practices.

Policy suggestion 30. The directorates of Planning and Development, EPI and NIED, in collaboration with regional education authorities and teacher trade unions should continue dialogue on the relationship between teacher qualifications, the quality of teaching and remuneration. At the same time incentives should be given to teachers who consistently demonstrate good teaching.

What did teachers rate as the most important factor?

Teachers were asked to state which of the 12 reasons given in Table 4.27 was the ‘most important’ to them. The answers have been summarised in Table 4.28.

Table 4.28. Percentages and sampling errors for teacher ratings of reasons for job satisfaction being the ‘most important’. (SACMEQ I and SACMEQ II)

Reason given	SACMEQ I		SACMEQ II			
			Reading teacher		Mathematics teacher	
	%	SE	%	SE	%	SE
Travel distance to school	0.0	0.00	8.7	1.88	7.4	1.64
Location of school **			0.7	0.37	1.8	0.93
Quality of the school buildings	3.6	1.84	3.8	1.08	3.9	1.26
Availability of teacher housing	3.1	1.65	5.5	1.36	5.9	1.58
Quality of teacher housing	1.3	0.98	1.0	0.46	3.8	1.48
Availability of classroom furniture **			5.6	1.53	4.2	1.21
Quality of classroom furniture	1.4	1.06	1.5	0.83	0.2	0.18
Level of teacher salary	8.9	2.46	7.7	1.65	4.2	1.21
Timely payment of salaries **			1.0	0.59	0.6	0.37
Seeing learners learn	19.7	3.21	15.8	2.19	15.9	2.08
Availability of classroom supplies **			17.3	2.49	16.5	2.33
Quality of classroom supplies *	8.8	2.70				
Quality of school management and administration	11.6	2.57	16.3	2.48	18.1	2.36
Amicable working relationships	2.7	1.24	2.2	0.98	2.8	1.09
Good relationships with the community	2.7	1.43	1.7	0.69	2.6	1.10
Expanded opportunities for promotion	0.5	0.47	0.4	0.43	1.2	0.65
Opportunities for professional development	35.7	4.09	10.6	1.99	10.8	1.96

* only in SACMEQ I

** only in SACMEQ II

The two sets of figures are not directly comparable because of the addition in SACMEQ II of some further reasons and the fact that SACMEQ I had ‘quality of classroom

supplies' that was not in SACMEQ II. Nevertheless, the table is of interest. In SACMEQ I it was 'seeing learners learn' that was rated as most important. This was no longer the case in SACMEQ II 'Availability of classroom supplies' and 'Quality of school management and administration' had overtaken 'seeing learners learn'. At a glance this appears to be a relegation of 'seeing learners learn,' however caution ought to be exercised because good school management and administration coupled with adequate classroom supplies are essential for effective learning to take place. May be the message that the teachers are conveying is that problems of school management and lack of classroom supplies are having a negative impact on teaching and learning.

Conclusion

In this chapter it has been shown that the average learner had Grade 6 teachers of English and Mathematics who were in their mid 30s even if maths teachers tended to be a bit older and the teaching force in Kavango region tended to be a bit younger. There were slightly more learners having female English teachers than male teachers and slightly more male maths teachers than females. However, learners who were taught by female maths teachers achieved higher scores than those taught by male teachers. There were 13 percent of learners with Reading teachers and almost 18 percent of learners with Maths teachers whose highest level of academic qualifications was primary education. Most of these teachers tended to be old and were concentrated in the previously disadvantaged regions. Are these teachers well grounded in the subject matter of the two subjects? The Reading and Mathematics achievement levels of teachers that have been presented in Chapter 7 indicate that there is a relationship between the achievement levels of teachers and their learners.

Regional education authorities, especially in the northern region should see to it that teachers with low academic/teacher training qualifications are mixed with other teachers who have higher qualifications and competencies, who can help the under qualified teachers, while replacing them after retirement. Regional Education authorities should be encouraged to closely monitor the selection of applicants for teaching posts at the school level, to ensure that under qualified and unqualified people are not appointed at the expense of trained teachers.

Large variations within and between regions have been noted in the conditions of teacher housing. The Ministry does not provide teacher housing. Most of the teachers provide their own accommodation depending on the area where they are, and so the variations are understandable. However, the Ministry should continue to provide teacher housing in rural areas in order to deploy qualified teachers there.

Teachers appear to have a good understanding of the important learner activities as well as the important goals for reading and for mathematics, but the decline in the rating by reading teachers, of 'reading for comprehension' is cause for concern and should be taken up in in-service courses. Of equal concern is the low rating for frequency of testing learners (for monitoring acquisition of basic skills and competencies), and of teachers meeting with parents in some regions. These are crucial issues which need to be addressed by regional authorities in co-operation with NIED and other development partners.

Much has been accomplished over the years in providing resources to schools but there were still a few schools which did not have basic resources such as chalkboard, textbooks and other classroom resources. These factors coupled with inadequate professional and advisory support can have an influence on teacher motivation and job satisfaction. It could be for this reason that teachers rated 'opportunities for professional development' above 'seeing learners learn'. It is also true that in Namibia, many teachers are eager to get higher qualifications in order to get a higher salary without any corresponding

improvement in teaching. Equally high in the teachers' ratings was the 'quality of school management.' The Ministry may wish to address these problems by implementing some of the policy suggestions made in this chapter.

Chapter 5

School Principals' Characteristics and their Views about Educational Infrastructure, the Organisation and Operation of Schools, and Problems with Learners and Staff

In SACMEQ I it was seen that there were many differences among schools. Some schools were well equipped and others had hardly anything. Some had well qualified staff and others had not so well qualified staff. Indeed the differences among schools on many variables were highly correlated with differences in achievement among schools. In this sense it made a lot of difference in learner achievement as to which school they attended. The school a learner attended tended to be the local school. Thus, there was little equality of education for the learners in Namibia. It was all a matter of where the learner lived.

The School principal is often said to be the driving force of a school. It has been said that if a good head took over then he or she attracted good staff and within four years the school was a good school. Conversely, if a poor head was appointed then within four years it was possible to detect deterioration in the academic and social life of the school.

In this chapter the main characteristics of school principals have been summarised as well as their views about the school infrastructure, various school policies, inspections, and behavioural problems in the school.

General Policy Concern 13:

What were the personal characteristics of school principals
(for example, age, and gender)?

In any system of education it is important to have a reasonable distribution of school principals across the various regions in the country in terms of age and gender. These are the first two characteristics to be examined.

What was the age distribution of school principals?

The data have been presented in Table 5.1. It can be seen that there was no difference in the average age of school principals for Namibia for 1995 and 2000. In 2000 there was not very much variation in the average ages of school principals in the different regions. The range was from 41.8 years in Kavango to 53.4 years in Omaheke. The range of ages of all teachers was from 25 to 62. The median age was 47 but the mode was 36. This indicates a slightly old teaching force. There was not much difference between male and female teachers.

Table 5.1. Means, percentages, and sampling errors for school principal age and gender (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	Age		Gender		Age		Gender	
	(years)		(female)		(years)		(female)	
	Mean	SE	%	SE	Mean	SE	%	SE
Caprivi	45.6	2.04	20.0	9.18	49.4	1.71	0.0	0.00
Erongo	42.1	2.31	18.2	12.47	46.5	1.91	39.1	15.31
Hardap	48.9	2.28	11.1	11.49	47.5	2.03	15.3	10.35
Karas	40.5	2.37	9.1	9.29	44.0	1.84	0.0	0.00
Kavango	42.9	1.73	10.5	7.33	41.8	1.50	22.5	9.57
Khomas	49.7	1.37	35.7	13.51	51.7	1.17	20.4	8.39
Kunene	47.8	2.66	11.1	11.49	44.6	2.41	15.4	10.39
Ohangwena	51.8	1.58	25.0	11.31	45.0	1.57	27.8	7.72
Omaheke	49.0	2.26	0.0	0.00	53.4	1.17	11.1	11.19
Omusati	45.7	1.68	27.3	9.78	46.1	1.51	42.8	8.75
Oshikoto	47.1	2.33	71.4	19.52	48.3	1.59	51.1	10.34
Otjozondjupa	47.1	3.07	14.3	15.12	47.5	2.13	12.1	8.43
Oshana	49.1	2.96	12.5	13.14	47.6	1.84	30.7	9.61
Namibia	47.1	0.61	23.9	3.78	46.7	0.55	29.0	3.05

What was the gender distribution of school principals?

In Table 5.1, it is the percentages of learners with female school principals that have been shown. Given the standard errors it cannot be said that there was a difference between the percentages of female school principals in 1995 and 2000. However, in 2000 there were some remarkable differences among regions. The range was from no female heads in Caprivi and Karas to 51 percent female heads in Oshikoto.

The Ministry does not have a policy on the gender of school principals. The position of school principal is a promotion post. Whenever a vacancy for the position occurs, qualifying male and female teachers may apply. More than 60 percent of the qualified teachers in Namibia were female but there were very few of them in management positions such as head of department or principal.

The average age of school principals was high. In 2000, there were somewhat more learners with female school principals than in 1995. But it was still only 29 percent. This is rather low given that there were more female teachers than males. In Caprivi and Karas there were no female school principals.

Policy suggestion 31. The EMT may wish to encourage regional education authorities and school boards to encourage qualified, experienced and deserving female teachers to apply for school management positions in line with the national policy of affirmative action.

General Policy Concern 14

What were the professional characteristics of school principals (in terms of academic and professional training, experience, and specialised training)?

Apart from attempting to have equity among school principals for gender, the Ministry also attempts to allocate heads to schools according to their qualifications. To what extent this has been achieved has been examined below.

How many years of academic education had school principals completed?

Before independence, teachers who were employed by the different education authorities had different levels of academic and teacher training qualifications. Most of the people who became teachers in the ethnic education authority schools during the 1960s and 70s had only primary education, while others had junior secondary and later senior secondary education. Some of the teachers with low academic qualifications are still in the system. It goes without saying that teachers who were promoted to positions of school principals had different academic qualifications. In the former "white" schools most of the teachers had higher academic qualifications compared to the former "black" schools. School principals were asked to indicate the number of years of academic qualifications that they had completed. The data on school principal's academic education for SACMEQ I and II have been presented in Tables 5.2(a) and (b) respectively.

Table 5.2(a). Years of academic education of school principals (SACMEQ I)

Region	School principal academic education	
	Mean	SE
Caprivi	12.3	0.62
Erongo	14.1	0.45
Hardap	13.6	0.88
Karas	13.6	0.89
Kavango	12.5	0.63
Khomas	15.0	0.70
Kunene	11.9	0.70
Ohangwena	10.2	0.43
Omahake	8.5	0.98
Omusati	11.2	0.34
Oshikoto	12.3	0.94
Otjozondjupa	13.9	1.12
Oshana	11.2	0.65
Namibia	12.1	0.20

Unfortunately the two sets of figures are not directly comparable. In SACMEQ I the results have been presented in terms of years of school education and in SACMEQ II in terms of the percentages of school principals having completed the various levels of schooling. In SACMEQ I the average number of years of education of the average principal that a learner had was 12.1 years but with Khomas having principals with 15 years of education and Omahake having principals with only 8.5 years of academic education.

In 2000, 14 percent of the principals had only completed primary education, 17 percent junior secondary school, 38 percent senior secondary, 11 percent an equivalent of 'A' level, and 20 percent tertiary education.

Table 5.2(b). Level of academic education of school principals (SACMEQ II)

Region	Level of academic education									
	Primary		Junior Secondary		Senior secondary		A-level		Tertiary	
	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	5.4	5.41	22.4	12.77	26.0	11.94	39.1	13.87	7.2	7.26
Erongo	11.3	8.02	5.6	5.67	40.8	15.36	19.0	10.81	23.3	12.52
Hardap	7.6	7.57	0.0	0.00	16.4	11.76	18.5	10.19	57.6	13.88
Karas	0.0	0.00	0.0	0.00	25.7	11.98	27.3	12.74	47.0	13.97
Kavango	2.9	2.86	31.6	9.90	33.8	10.39	16.8	8.00	15.0	7.27
Khomas	0.0	0.00	8.2	5.70	13.4	7.41	18.1	8.40	60.2	10.41
Kunene	21.5	12.20	19.5	10.90	44.6	13.68	14.3	9.76	0.0	0.00
Ohangwena	17.7	6.46	18.0	6.87	54.0	8.94	0.0	0.00	10.2	5.02
Omaheke	17.5	11.93	18.7	11.71	25.0	16.05	14.4	10.05	24.4	13.63
Omusati	20.6	7.13	16.1	6.35	54.3	8.75	4.3	4.26	4.8	3.38
Oshikoto	20.0	8.33	21.2	8.67	31.2	9.49	16.0	7.59	11.7	6.52
Otjozondjupa	15.6	10.56	5.6	5.57	20.2	10.84	11.8	8.17	46.9	13.52
Oshana	17.6	7.45	21.9	8.96	31.8	9.76	10.2	7.49	18.5	7.82
Namibia	14.0	2.31	16.9	2.53	37.6	3.22	11.3	1.97	20.1	2.25

The percentage of school principals who have only primary education is rather high in Kunene, Ohangwena, Omaheke, Omusati, Oshikoto and Oshana. Some of the principals with primary education only have had difficulties adjusting to the new demands of the post independence education reforms such as the use of English language, Learner Centred Education, and Continuous Assessment. This has led to problems in providing instructional leadership to teachers who are more qualified than they are.

Policy suggestion 32. The EMT may wish to consider setting the minimum academic and professional qualifications as well as years of experience for new appointments to the position of school principal

How many years of teacher training had school principals completed?

In Namibia the form and length of teacher training has varied over time as was seen in Chapter 4 where the professional training of teachers was discussed. What can be said about the teacher training that those who are now school principals had received?

The information on the professional teacher training that principals had received has been presented in the second and fourth columns of Table 5.3. The number of years of teacher training of heads had risen from 2.3 years in 1995 to 2.9 years in 2000.

This follows the Ministry's directive to all unqualified and under qualified teachers to upgrade their qualifications. It is gratifying to note it is not only teachers who have complied with the Ministry's policy, but school principals as well.

Table 5.3. Means and sampling errors for the teaching experience and training of the school principals (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II					
	Experience (years)		Teacher training (years)		Experience (years)		Teacher training (years)		Specialised Training (weeks)	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	20.5	1.51	2.3	0.17	25.9	1.80	2.2	0.13	26.7	13.34
Erongo	20.5	2.59	2.4	0.28	22.5	1.87	3.7	0.16	15.4	6.17
Hardap	26.9	3.26	3.2	0.29	24.8	1.76	3.7	0.14	28.3	9.24
Karas	19.0	2.07	2.9	0.26	21.4	1.70	3.6	0.15	3.6	1.32
Kavango	18.3	1.36	2.2	0.24	18.0	1.47	2.8	0.18	4.7	1.04
Khomas	27.4	2.34	3.0	0.28	27.4	1.33	3.6	0.13	24.7	8.05
Kunene	23.8	2.65	1.8	0.24	20.1	2.35	2.8	0.19	11.4	3.76
Ohangwena	27.2	1.83	1.9	0.19	20.1	1.58	2.8	0.17	6.4	2.36
Omaheke	26.0	0.80	0.6	0.54	28.7	1.63	2.8	0.27	35.6	14.77
Omusati	21.5	1.37	2.2	0.20	21.4	1.40	2.6	0.16	14.8	4.08
Oshikoto	19.3	2.21	2.3	0.20	24.0	1.65	2.6	0.17	18.4	7.44
Otjozondjupa	25.1	3.00	2.7	0.38	25.0	1.85	3.4	0.25	32.4	9.20
Oshana	17.7	3.94	2.4	0.28	22.7	1.63	2.3	0.16	5.4	2.13
Namibia	22.7	0.65	2.3	0.08	22.4	0.53	2.9	0.06	14.8	1.66

Table 5.3 also indicates that in 2000, the range in the number of years of school principals' training among regions was from 2.2 years in Caprivi to 3.7 years in Erongo and Hardap. This range seems to be very high. Perhaps the data base for these kinds of data when appointing persons to be school principals is not available and should be created so that regional directors of education can use them apart from the other criteria for promotion of teachers to the position of principal.

How many years of teaching experience had school principals completed?

It can also be seen from Table 5.3 that there was no difference in the average number of years of teaching experience of school principals in 1995 and 2000. It was between 22 and 23 years. In 2000 there was some variation around the mean of 22.4 years. The lowest region was Kavango where the heads had an average of 18 years and the highest was Omaheke where the average was 28.7 years. Generally, the Kavango

region has younger school principals than other regions. It is desirable to have school principals with long experience to provide the necessary management and leadership in schools. However, it is less beneficial to the Ministry to have old principals who have primary education only and low professional training, as some of them may not cope with the new dynamics and demands of the education system. Such personnel should be gradually phased out.

Policy suggestion 33. The Ministry should, after consultations with teacher unions, identify and offer incentives for retirement to school principals who have primary education only and have been in the teaching service for more than 25 years.

How many years of experience did school principals have either as a school principal or as an acting head – in the current school altogether?

The results presented in Table 5.4 show that there has been no significant change in the mean number of school principals' years of experience as principals between 1995 and 2000.

Table 5.4. Means and sampling errors of school principals' years of experience as a school principal (SACMEQ I and SACMEQ II)

Region	SACMEQ II							
	SACMEQ I							
	This school		Altogether		This school		Altogether	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Caprivi	8.2	1.70	13.1	2.07	7.3	2.15	13.4	2.37
Erongo	4.9	1.96	6.4	2.15	7.4	1.78	10.0	2.19
Hardap	9.0	2.51	11.2	3.20	9.2	2.17	10.7	2.16
Karas	4.9	1.88	7.5	1.68	6.1	1.39	9.7	1.29
Kavango	9.4	1.88	11.2	1.69	7.6	1.31	9.8	1.36
Khomas	6.5	1.45	8.4	1.43	6.6	1.34	10.6	1.73
Kunene	11.7	1.92	15.2	1.84	10.4	1.34	12.0	1.54
Ohangwena	14.2	1.87	16.9	1.69	11.5	1.66	12.8	1.71
Omahake	12.3	3.21	14.0	2.40	11.2	2.92	15.3	2.92
Omusati	14.1	1.97	16.5	1.75	13.4	1.55	14.7	1.58
Oshikoto	6.0	2.65	6.7	2.54	11.9	1.65	13.5	1.66
Otjozondjupa	9.7	3.98	14.6	3.29	9.0	2.02	13.1	2.23
Oshana	9.6	3.39	17.1	2.59	15.0	1.83	16.8	2.03
Namibia	10.3	0.70	13.3	0.65	10.8	0.55	13.0	0.58

Have school principals received specialised training in school management?

The average number of weeks of school management training that school principals had received was reported in Table 5.3. For the country as a whole it was 14.8 weeks. In Namibia the training of principals in school management tends to focus more on principals from the previously disadvantaged regions. Principals with lower academic and/or professional training are often targeted for training. So the number of training and duration is bound to vary from one school principal to another.

This may help explain the variations among regions. The variation among regions was very large ranging from 3.6 weeks in Karas to 35.6 weeks in Omaheke. However, it would seem that the differences are too large and it might be wise to consider undertaking a review of the type of training provided while harmonising the basic requirements for the promotion of teachers to principals, in order to have uniform management training for all school principals.

What percentage of the school teaching staff had post-secondary academic education?

It is often argued that it is the staff as a whole in a school that creates the atmosphere for the whole school rather than the individual teacher that a learner happens to have in a given year. To this end, it was decided that questions should be asked about the staff as a whole. The first set of data is about the percentages of all school teaching staff having post-secondary academic education. The results have been presented in Table 5.5.

Table 5.5. Percentages, means and sampling errors for the qualifications of the school teaching staff (SACMEQ II)

Region	Post-secondary Academic education		Teacher training (years)	
	%	SE	Mean	SE
Caprivi	35.8	9.87	2.4	0.10
Erongo	11.7	8.29	2.7	0.17
Hardap	38.7	10.80	2.8	0.15
Karas	38.8	10.33	2.5	0.16
Kavango	19.7	7.01	1.7	0.09
Khomas	48.7	9.28	3.2	0.09
Kunene	24.4	9.57	2.2	0.17
Ohangwena	18.5	5.21	2.2	0.07
Omahake	45.4	14.07	2.2	0.20
Omusati	18.7	6.31	2.3	0.07
Oshikoto	29.1	7.39	2.3	0.13
Otjozondjupa	39.5	10.90	2.5	0.19
Oshana	25.0	7.81	2.4	0.08
Namibia	26.4	2.37	2.4	0.03

For the country as a whole 26 percent of learners were in schools with school staffs that had post-secondary education. The standard errors are large for the regions but it would appear that in Erongo an effort should be made to increase the staff members with post-secondary education.

What average years of teacher training were received by the school staff?

The data in answer to this question have been given in Table 5.5. The average number of years of teacher training of the whole staffs was 2.4 years and for Kavango it was only 1.7. In 1995 there were more than 60 percent of teachers in the Kavango region who did not have professional teacher training qualifications. These teachers have been improving their qualifications through different distant education programmes, while newly qualified ones may have joined the Ministry. However, the region still has a large number of teachers at the primary school phase, who do not have the desired professional teaching qualification - BETD. It is hoped that some of these teachers are still in the process of upgrading their qualifications.

In this section the academic qualifications and training of school principals and whole school teaching staffs were reviewed. In some regions the percentage of school principals with only primary school education was high. In general, the school heads had had three years of teacher training, 22 years of teaching experience, 13 years as

school heads, and 15 weeks of specialised training to be school principals. However, the number of years of specialised training was low in Karas, Kavango, Ohangwena, and Oshana. Questions were asked about the staff as a whole. There it could be seen that 26 percent of teachers had post-secondary education and 2.4 years of teacher training.

Policy suggestion 34. The phasing out of unqualified teachers who have not responded to the Ministry's, instructions for them improve, should go hand in hand with recruitment of new graduate teachers. Regional education authorities should see to it that the new graduate teachers are allocated to schools where their services are needed most and that such schools should be given priority in the construction of teacher houses.

General Policy Concern 15:

What were the school principals' views about general school infrastructure (for example, electrical and other equipment, water, and basic sanitation) and the condition of school buildings?

In SACMEQ I it was found that the amount of resources in a school was highly related to the achievement of learners. What then was the situation about school resources in Namibia in 2000?

What items of equipment (telephone, fax, photo-copier) and general facilities (library, staff room, store room) did schools have?

The results have been presented in Table 5.6.

Table 5.6. Percentages and sampling errors for schools with general facilities (SACMEQ I and SACMEQ II)

Facility	Percentage with facility			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
School buildings				
School library	84.3	2.95	66.1	3.07
School hall	12.1	2.23	15.5	1.82
Staff room	52.8	3.64	57.4	3.04
School principal's office	50.5	3.27	53.8	2.88
Store room	57.7	3.79	79.6	2.67
Cafeteria	16.3	2.52	14.4	1.75
School grounds				
Sports area/ playground	86.0	2.99	76.2	2.87
School garden	45.4	4.34	58.3	3.24
General services				
Piped water/ well or bore-hole	71.8	3.72	88.0	2.16
Electricity	43.3	2.74	57.0	2.65
Telephone	42.7	2.53	44.0	2.36
Equipment				
First-aid kit	20.8	2.87	25.6	2.16
Fax machine	13.3	2.26	24.1	1.59
Typewriter	62.0	3.62	70.5	3.04
Duplicator	51.5	3.61	50.0	2.99
Radio	25.5	3.88	33.6	2.99
Tape recorder	43.0	4.20	48.5	3.21
Overhead projector	32.9	2.79	36.0	2.29
Television set	16.4	2.57	18.7	1.94
Video-cassette recorder	15.5	2.75	17.7	2.03
Photocopier	23.3	2.64	33.0	2.17
Computer	16.1	2.46	23.5	1.77

It can be seen from Table 5.6 that there was a tendency for an increase in all items of equipment. Not all differences were significant. But at least there was no deterioration in the amount of equipment, general services and school buildings. Given the problems associated with keeping the school equipped and equipping new schools across large distances and within the Ministry's budget, then this is no mean achievement.

There was however a drop in the percentage of learners in schools with a school library or a playground. This might be partly due to the different conceptions of what constitutes a school library. Some teachers referred to a conventional school library, where learner can either borrow books from, and can sit down to read during school or

after school. Some teachers may have referred to a set of books kept in a store-room, or on the principal's office, which learners are allowed to borrow.

What kind of water supply did schools have?

It was reassuring to see that there had been an increase of learners in Grade 6 in schools that had either piped water, or well or bore-hole water. In 2000 some 12 percent of learners were in schools without water of any kind. The percentages of learners in schools with water in different regions have been shown in Figure 5.1.

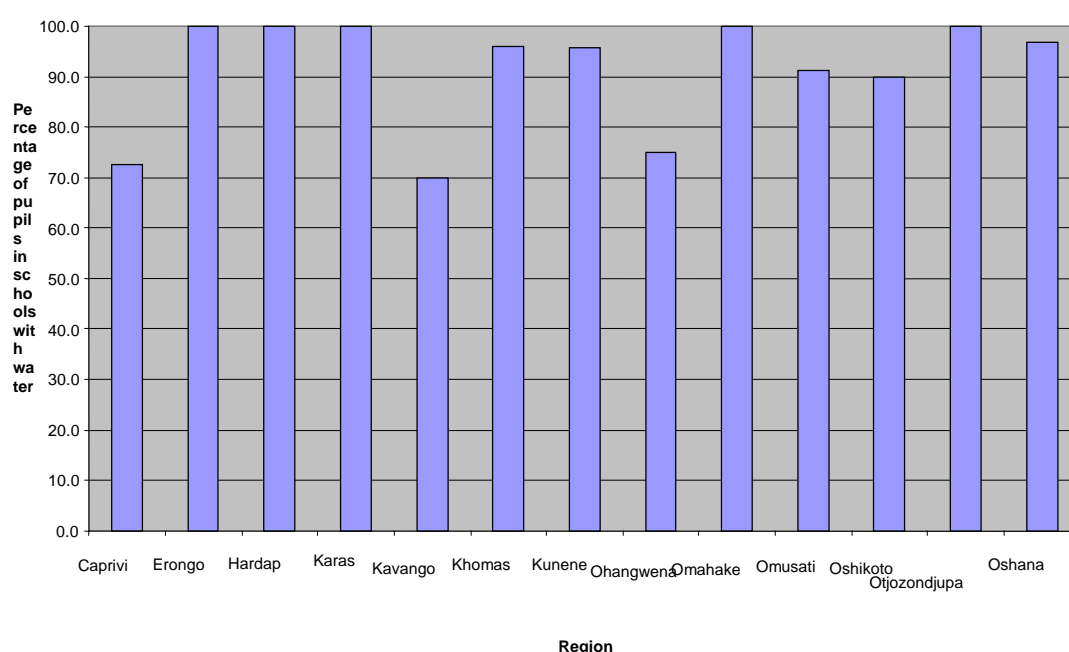


Figure 5.1: Percentage of learners in schools with water

It should be noted that Namibia is the driest African country south of the equator. The only rivers that have water throughout the year are the Kunene and Kavango along the border with Angola in the north, the Zambezi and Chobe Rivers in the northeast Caprivi region and the Orange River along the southern border with South Africa. In many of the regions water is either obtained from dams that fill up during the rainy seasons or from bore-holes. It is therefore gratifying that in ten of the thirteen regions, between 90 to 100 percent of the schools had water. However, there were still 30 percent of learners in schools without water in Caprivi and Kavango.

What was the nature and provision of toilet facilities in schools?

Toilets, as part of the school buildings, are often a problem in many countries. There are insufficient toilets or they are hardly usable and stink. 'Toilet Provision' is the number of learners in the school divided by the number of toilets yielding a 'learners per toilet ratio'. The numbers of learners per toilet have been presented in Table 5.7.

Table 5.7 General condition of buildings and toilet facilities (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	Need repair		Toilet provision		Need repair		Toilet provision	
	%	SE	Mean	SE	%	SE	Mean	SE
Caprivi	70.0	10.51	172.7	38.78	57.6	14.20	54.2	10.74
Erongo	9.1	9.29	33.2	15.93	22.0	10.75	19.3	2.37
Hardap	11.1	11.49	35.9	13.54	11.8	8.20	44.2	14.12
Karas	9.1	9.29	30.5	11.30	10.6	7.49	27.6	4.25
Kavango	60.0	12.61	131.8	32.11	61.6	10.38	81.6	12.09
Khomas	28.6	12.74	56.8	27.64	20.2	8.28	28.7	3.17
Kunene	55.6	18.16	92.5	41.53	40.7	13.78	36.2	11.67
Ohangwena	66.7	11.53	313.4	63.86	44.4	8.88	117.9	15.95
Omaheke	0.0	0.00	36.8	18.22	28.6	13.79	46.1	14.60
Omusati	72.7	9.78	392.7	49.16	54.6	8.78	90.9	10.05
Oshikoto	57.1	21.38	253.1	84.73	64.1	9.92	132.3	23.75
Otjozondjupa	42.9	21.38	52.4	30.96	49.6	13.55	29.6	5.50
Oshana	87.5	13.14	308.9	61.94	72.4	9.32	98.1	10.39
Namibia	54.0	3.85	211.9	16.56	48.4	3.22	81.3	4.60

The number of learners per toilet had improved a great deal between 1995 and 2000 (from 212 learners per toilet to 81 learners per toilet). The regions with high numbers of learners per toilet were Ohangwena and Oshikoto. The situation had improved for both girls and boys. In all, only seven percent of learners were in schools without any toilets but in Kunene the figure was 23 percent and in Kavango it was 15 percent. In these two regions some effort could be made to improve the toilet situation.

What was the general condition of school buildings?

The school principal was asked to state the condition of the school on a five-point scale with the following values: 5 = in good condition; 4 = some classrooms need minor repairs; 3 = most or all classrooms need minor repair; 2 = some classrooms need major repairs; and, 1 = the school needs a complete rebuilding. This variable was then re-coded in order to calculate the percentage of Grade 6 learners who were in

schools where the school principal perceived the need for either ‘major repairs’ or ‘complete re-building’. These percentages have been listed in Table 5.7 above.

There was no significant difference between the percentage of learners in 1995 and 2000 in schools badly in need of repair or even rebuilding. The high percentages (more than 50 %) of learners in some regions with poor buildings should be noted. The regions were Caprivi, Kavango, Omusati, Oshikoto, and Oshana. The Ministry has done a commendable job in providing modern classrooms where none existed in these regions and to replace prefabricated classrooms, traditional structures, and classrooms made from corrugated iron sheets. However, more still needs to be done.

Policy suggestion 35. However, regional education authorities and school boards need to pay special attention to the repair and maintenance of the buildings so that they can be used for a long time.

What was the classroom space available for learners?

It is clear that crowded classrooms are not conducive to teaching. In most countries the norm is 1.5 square metres per learner. The norm for the new classrooms being built in Namibia is 52 square metres for 35 learners at the primary phase, which works out to be almost 1.5 square metres per learner. In Table 5.8 the square metres per learner has been presented first in terms of permanent and temporary structures. Then, in parentheses, the numbers of square metres per learner have been presented if only permanent structures are taken.

Table 5.8. Means and sampling errors of the classroom space available for learners (SACMEQ II) –permanent and temporary structures

Classroom space		
Region	Mean	SE for first mean
Caprivi	2.1 (1.6)	0.38
Erongo	9.4 (9.4)	6.43
Hardap	3.5 (3.2)	1.18
Karas	9.1 (8.9)	7.11
Kavango	6.9 (6.7)	4.57
Khomas	1.8 (1.8)	0.19
Kunene	2.7 (2.7)	0.94
Ohangwena	4.5 (2.8)	1.85
Omaheke	12.1 (11.7)	10.68
Omusati	1.7 (1.4)	0.63
Oshikoto	7.3 (2.8)	4.29
Otjozondjupa	1.9 (1.7)	0.30
Oshana	2.2 (1.6)	1.06
Namibia	4.2 (3.3)	0.85

It can be seen that classroom space is not a problem in Namibia. However, the high values for Erongo, Karas, Kavango and Omaheke are not realistic. For example, given the class size of 52 square metres, the mean value of 11.7 square metres per learner in Omaheke implies that on average there are about five learners in Grade 6 classes in the region, even if the high standard error indicates that there were wide variations.

Policy suggestion 36. The physical facilities division in the Directorate of Planning and Development together with the regional education planners in Erongo, Karas, Kavango and Omaheke should investigate the classroom space per learner in these regions because it has implications for the implementation of staffing norms in these regions.

In general, there was an improvement between 1995 and 2000 for the resources to schools and the condition of the buildings. However, it should be noted that for one resources (school libraries) there were 18 percent fewer learners in schools with libraries than earlier. There were certain regions where there were still some problems. There was a problem of water supply in Caprivi and Kavango, a problem of sufficient toilet provision in Kunene and Kavango, poor school buildings in Caprivi, Kavango, Omusati, Oshikoto, and Oshana. There were, however, enough square metres per pupil everywhere. It was interesting to note that, generally, the principals' views about

the general school infrastructure and the conditions of school buildings were favourable.

General Policy Concern 16:

What were the school principals' views about (a) daily activities (for example, teaching, school community relations, and monitoring learner progress), (b) organisational policies (for example, school magazine, open days, and formal debates), (c) inspections, (d) community input, and (e) problems with learners and staff (for example, learner lateness, teacher absenteeism, and lost days of school)?

What amount of teaching did school principals undertake?

It can be argued that school principals with more experience as school principals and also as teachers will be more versed in the ways of schools and therefore will be able to run their schools in a better way than the less experienced heads. It can further be argued that school principals who actually teach in their schools as part of their duties will know more about what is going on in the schools than principals who do not teach as part of their regular duties.

In Namibia, primary school principals are expected to have a teaching load of “25% of school hours” per week, which works out to be 10 hours or 600 minutes per week. Each period is usually 40 minutes long. This means that principals are expected to teach 15 periods per week. The other time is supposed to be spent on administrative activities, as well as class visits and support to teachers. However, the number of periods taught by the principal differs from one school to another and from one region to another depending on the number of learners, number of classes and the subjects taught. In Table 5.9, the numbers of minutes that school principals said that they taught per week have been presented.

Table 5.9 Means and sampling errors for amount of school principal teaching per week (SACMEQ I and SACMEQ II)

Region	School principal teaching minutes per week			
	SACMEQ I		SACMEQ II	
	Mean	SE	Mean	SE
Caprivi	539.5	90.49	598.0	84.59
Erongo	489.1	98.70	865.1	131.16
Hardap	250.0	66.20	734.1	119.95
Karas	806.4	178.16	888.7	106.68
Kavango	624.2	92.50	726.1	85.24
Khomas	244.3	59.12	286.2	44.30
Kunene	657.8	211.94	876.4	92.29
Ohangwena	829.4	96.90	1061.6	62.73
Omaheke	260.0	42.08	831.2	124.96
Omusati	827.5	91.71	903.8	73.46
Oshikoto	681.4	166.96	1043.1	80.69
Otjozondjupa	285.7	102.39	405.9	108.16
Oshana	521.2	168.54	798.5	83.29
Namibia	611.1	34.34	818.9	25.67

It can be seen that nationally, the amount of time school principals taught had increased from about 10 hours per week in 1995 to 13.65 hours per week in 2000. There was some notable variation among regions in 2000 ranging from 4.8 hours in Khomas and 6.8 in Otjozondjupa to 17.4 hours in Ohangwena and Oshikoto.

There can be several possible reasons for the large variation in the principals' number of teaching hours. Firstly, where there are more class groups and a shortage of teachers in a particular school, the school principal may be compelled to teach more periods per week. Secondly, promotion subjects usually have more periods per week than some non-promotional subjects. So where a principal is teaching one of the promotion subjects he/she will have more teaching periods than another principal who may be teaching a non promotional subject. Also, schools with low enrolments may not qualify for additional teachers. In such cases, the principal may have more teaching periods to compensate for a low administrative workload.

Policy suggestion 37. Whatever the circumstances may be, the regional education authorities in Ohangwena and Oshikoto may wish to investigate the reasons why school principals in the two regions have so many teaching hours per week. The education authorities in Khomas may also wish investigate why principals in the region have very few teaching hours.

What level of importance did school principals attach to activities such as community contacts, monitoring learner progress, administrative tasks, etc?

In SACMEQ 1 a number of questions were asked about the school principals' activities. In 2000 one of these activities was dropped and two were added. It is clear that where there were no common items a comparison could not be made. The data have been presented in Table 5.10.

Table 5.10 The importance of various school principal tasks
(SACMEQ I and SACMEQ II)

Task	Percentage rating as 'very important'			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
Contact with community	87.4	2.76	88.9	2.13
Using progress Records *	75.7	3.72		
Monitoring learners progress **			93.9	1.62
Administrative tasks	94.2	2.04	94.8	1.38
Discuss educational objectives with the teaching staff	97.7	1.17	83.5	2.56
Professional development (Teachers)	85.4	2.98	86.1	2.43
Professional development (School principals)**			98.0	0.87

*SACMEQ I only

** SACMEQ II only

For 'contact with the community' and for 'administrative tasks' the percentages of learners in schools where school principals rated these tasks as 'very important' were about the same. However, there was a significant decrease in school heads 'discussing educational objectives with the teaching staff.' It is not clear why there was this decrease but it might be that some of the older and less qualified principals feel less inclined to discuss educational objectives with younger teachers who are more qualified than themselves. This should be a serious concern given that the instructional leadership and pedagogical support of the school principal is crucial for teacher motivation and effective teaching/learning. Over 90 percent of learners were in schools where school principals rated 'monitoring learners progress' and the 'professional development of school principals' as very important.

What was the incidence of school activities such as school magazine, public speaking day, ‘open days’, etc.?

In each school there were activities over and above teaching that were meant to be conducive to learners’ learning. In the field of reading, for example, there were selected activities that from other research were known to help the children to read more. In a study by Elley (1992) already cited, it was found that in schools where the learners produced a school magazine or journal or had a debating society that, other things being equal, learners in such schools had a higher reading performance than in schools without such activities. Equally, it was felt that where there were frequent meetings between parents and teachers in whatever form, then the learner performance would be enhanced. The SACMEQ NRCs decided on a list of such activities that were of importance in reading. The percentages of learners in schools where these various activities occurred have been given in Table 5.11.

Table 5.11. Percentages and sampling errors for the school activities
(SACMEQ I and SACMEQ II)

Activity	Percentage of school activities			
	SACMEQ I		SACMEQ II	
	%	SE	%	SE
School Magazine	36.1	4.16	34.1	3.09
Public Speaking Day	23.9	3.71	27.7	3.00
Open-Door Policy	90.9	2.39	88.8	2.20
Formal Debates or Debating Contests	42.7	4.28	36.8	3.23

There were no differences in the percentages of learners in schools where the heads said that these activities were held. Where the activities were supposed to be related to learning and improving reading it was only about 30 percent of heads who said that the activity happened in their schools. It would appear that these ideas of school activities are not included in teacher training activities or have not yet permeated from teacher training courses to all of the school principals. It is suggested that this kind of information be included in the school principal management courses without delay.

How many school days were lost in the last school year due to non-school events?

The mean number of official school days that were lost in 1995 and in 2000 have been presented in Table 5.12.

Table 5.12 Means and sampling errors for number of official school days lost (SACMEQ I and SACMEQ II)

Region	Average of official school days lost			
	SACMEQ I		SACMEQ II	
	Mean	SE	Mean	SE
Caprivi	0.7	0.33	2.2	0.97
Erongo	1.0	0.44	1.1	0.63
Hardap	3.1	1.86	3.2	1.16
Karas	0.2	0.19	1.3	0.56
Kavango	2.4	0.90	1.9	0.59
Khomas	3.7	2.20	1.1	0.34
Kunene	5.2	3.87	6.3	1.77
Ohangwena	1.7	0.61	1.5	0.57
Omaheke	3.0	0.00	1.4	0.68
Omusati	0.7	0.31	2.2	1.09
Oshikoto	0.4	0.31	2.9	1.47
Otjozondjupa	1.0	0.57	1.1	0.48
Oshana	1.0	1.05	3.1	1.11
Namibia	1.6	0.32	2.1	0.32

There was no difference between 1995 and 2000 for the number of school days lost in a year. However, in 2000 it would seem that the Kunene region lost more school days than other regions. This region needs to be examined by school inspectors in more detail.

What were the purposes and frequency of school inspections?

The policy of the Ministry of education in Namibia is that every school should be visited regularly by their respective circuit school inspectors. In practice this means at least twice a year or as often as need may be. In other countries national inspectors also visit schools, but Namibia does not have national inspectors. (However plans for the establishment of a national inspectorate have reached an advanced stage). A question was asked in the questionnaire given to the school principals about if there had been a visit by an inspector in the last three years and for what purpose. These data have been presented in Table 5.13.

Table 5.13 Percentages and sampling errors for school inspections (SACMEQ II)

Purpose of inspection	Inspection took place in past 3 years	
	%	SE
Full inspection	45.8	3.23
Routine inspection	51.0	3.29
Inspect teachers – <u>not</u> for promotion	26.0	2.92
Inspect teachers – <u>for</u> promotion	20.8	2.54
Assist teachers	39.4	3.27
Advise the school principal	56.8	3.26
Address crisis/problem	44.6	3.32
Courtesy call	72.5	2.92

It can be seen that 72.5 percent of school principals reported that the main reason the inspectors' visit was 'courtesy call'.

In Table 5.14, the numbers of inspections over the last three years have been presented. The average number of inspections for the whole country was six, implying an average of two inspection visits per year.

Table 5.14. Means and sampling errors of the frequency of school inspection over 3 years (SACMEQ II)

Region	Numbers of inspections over 3 years	
	Mean	SE
Caprivi	5.4	1.44
Erongo	6.8	1.31
Hardap	8.1	1.51
Karas	9.7	1.84
Kavango	9.7	1.33
Khomas	4.5	0.73
Kunene	8.4	1.61
Ohangwena	4.9	0.82
Omahake	2.8	0.34
Omusati	4.3	0.53
Oshikoto	4.8	0.97
Otjozondjupa	6.7	1.41
Oshana	7.5	1.21
Namibia	6.0	0.32

Omahake had fewer visits than other regions. The regional education authorities in Omaheke may wish to make a follow up on the work of inspectors in the region to ensure that the schools in the region receive the same attention as schools in other regions.

What was the contribution of the school community (in terms of time and resources for maintaining the school and for providing supplementary funding?)

From other research (cf. Postlethwaite and Ross, 1992) it is clear that the community's co-operation with the school is very important not only in the life of the community in general but also for the learners' learning in the school. Coleman, in his work on 'social capital' has indicated that where there are strong links between the church or mosque or temple, the school, and the parents, then the learners learn more and there is less crime in the community. The school principals were asked to indicate the extent to which lack of co-operation from the community was a problem. The results have been given in Figure 5.2.

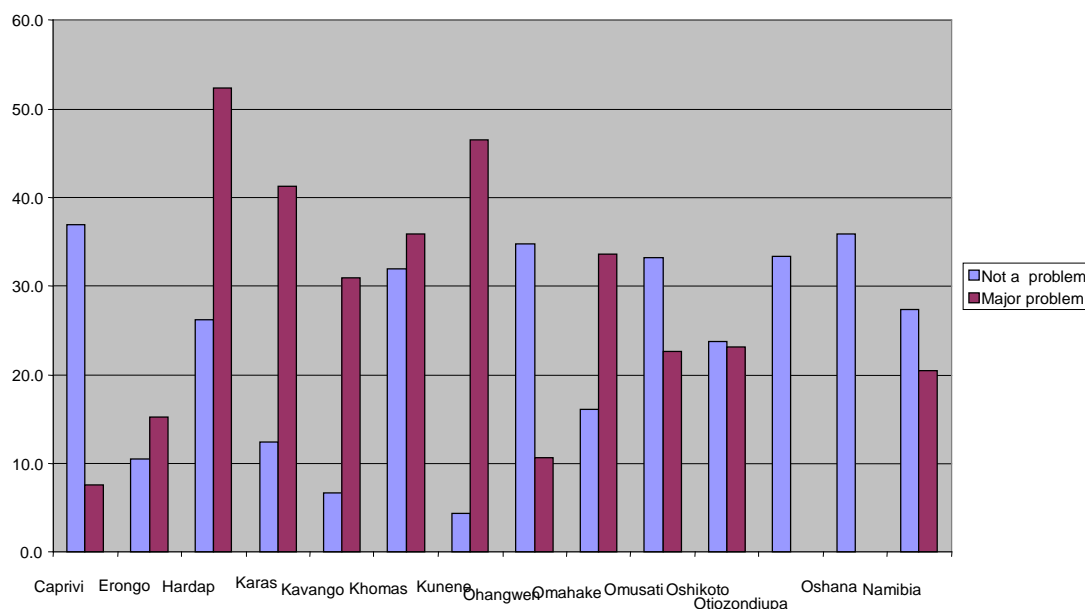


Figure 5.2: Percentages of learners in schools where heads perceived community cooperation as either not a problem or as a major problem

More than 50 percent of the school principals in Hardap and more than 40 percent in Karas and Kunene reported that community cooperation was a major problem, while more than 30 percent of the principals in Caprivi, Khomas, Ohangwena, Omusati, Otjozondjupa and Oshana reported that it was not a problem. For the country as a whole 20 percent of the principals reported that community cooperation was a major problem.

At the same time questions were asked about the kinds of cooperation that were common. The percentages of learners in schools where the heads said that contributions were given for different purposes have been presented in Table 5.15.

Table 5.15 Parent/community contributions to the school (SACMEQ II)

Type of contribution	Learners in school with community contributing to	
	%	SE
Building of school facilities	55.9	2.79
Maintenance of school facilities	40.7	3.21
Construction/maintenance and repair of furniture/equipment	27.5	2.91
The purchase of textbooks	21.7	2.55
The purchase of stationery	31.7	2.67
The purchase of other school supplies	46.7	3.17
Payment of examination fees	42.7	3.08
Payment of the salaries of additional teachers	19.9	2.71
Payment of an additional amount of the salary of teachers	1.6	0.90
Payment of the salaries of non-teaching staff	13.8	2.30
Payment of an additional amount of the salary of non-teaching staff	4.3	1.44
Extra-curricular activities	59.7	3.24
Assisting teachers in teaching without pay	24.6	2.88
Provision of school meals	12.7	2.16

It can be seen that it was for 'extra-curricular activities' and the 'building of school facilities' that most parents contributed to the schools. The next group of activities were 'the purchase of other school supplies', the 'payment of examination fees, the 'maintenance of school facilities', and the 'purchase of stationery'. It was very rarely that money was directed towards the payment of salaries of either teachers or non-teaching staff. The relatively high percentage (42.7 percent) for 'payment of examination fees' is rather surprising. At the primary education phase, the dominant form of assessment was continuous assessment, and the Ministry does not charge examination fees for the national examinations conducted at the end of Grade 7. However, it is known that some schools ask parents to make financial contributions for the purchase of paper that is used for photocopying or duplication of end of term/year examinations.

The promulgation of the Education Act (2001) gives school boards a legal basis for the mobilisation of parents and communities to be more involved in different affairs of schools and the education of their children.

What were the main behavioural problems of learners?

Schools are responsible not only for ensuring that learners learn but also that they are socialised. There are few schools that do not have some problem or other with their learners and/or teachers. In previous studies (see SACMEQ 1 publications) some schools had problems with learner absenteeism and a few schools had problems with sexual harassment. Learner absenteeism was strongly related to poor reading performance. The NRCs identified 18 possible problems with learner behaviour and ten with teachers. The data for learner problems have been presented in Tables 5.16 (a) and (b). It is to be noted that the data have been presented in terms of the percentage of learners who were in schools where the heads said that the problem was NOT a problem and NEVER occurred.

Table 5.16(a) Learner behavioural problems (SACMEQ I and SACMEQ II)

Frequency of learner behavioural problem*	Indicating * 'not a problem'/'never' occurs			
	SACMEQ I*		SACMEQ II*	
	%	SE	%	SE
Absenteeism	6.6	2.00	5.2	1.41

Only 5 percent of learners were in schools where the heads said that learner absenteeism was not a problem. This also meant that 95 percent of learners were in schools where absenteeism was a problem. This is not an acceptable form of behaviour. In chapter 3, the main reason that learners gave for absenteeism was illness. However, it is also believed that in the rural areas, some learners stay away from school because of hunger and long walking distances. Learners who are frequently absent or who are absent from school for prolonged periods of time, miss out on schoolwork.

Policy suggestion 38. Regional education authorities may wish to investigate the reasons associated with learner and teacher absenteeism and establish the type of illnesses associated with absenteeism.

Table 5.16(b) Learner behavioural problems (SACMEQ II)

Frequency of learner behavioural problem	Indicating 'never' occurs	
	%	SE
Arriving late at school	2.4	1.11
Skipping classes	27.4	2.98
Dropping out of school	7.9	1.59
Classroom disturbance	28.1	2.94
Cheating	30.7	3.14
Use of abusive language	18.4	2.55
Vandalism	32.0	3.06
Theft	33.8	3.09
Intimidation of learners	26.7	2.99
Intimidation of teachers/staff	61.2	3.26
Physical injury to staff	93.2	1.64
Sexual harassment of learners	64.0	3.13
Sexual harassment of teachers	94.7	1.38
Drug abuse	83.7	2.44
Alcohol abuse	63.5	3.24
Fights	8.1	1.93
Health problems	6.9	1.75

It can be seen that 'arriving late at school', 'dropping out of school', 'fights', and 'health problems' occurred in many schools. 'Classroom disturbances', 'cheating', 'use of abusive language', 'vandalism', 'theft', and the 'intimidation of learners' was also occurring in 70 percent of the schools. Even the 'sexual harassment of learners' was prevalent in schools where 30 percent of learners were. There is clearly a major problem in many Namibian schools and the Ministry should launch a special task force to recommend what should be done.

Policy suggestion 39. The directorate of EPI, in conjunction with PAD should set up a task force that should work closely with regional education authorities to identify schools that have discipline problems, identify reasons for the problems and recommend measures to overcome them. Regional education authorities and school boards should investigate the reasons for absenteeism, late coming to school and other vices that have a negative influence on teaching/learning and ensure that suggested solutions involve parents and local communities.

What were the main behavioural problems of teachers?

Some of the typical problems experienced with teachers have also been given below, in Tables 5.17(a) for SACMEQ I and in Table 5.17(b) for SACMEQ II. Again it is the percentages of learners in schools where the problem did not exist or never occurred that have been given.

Table 5.17(a) Teacher behavioural problems (SACMEQ I)

Frequency of teacher behavioural problem	Indicating 'not a problem'	
	%	SE
Absenteeism	30.4	3.97
Sexual harassment of teachers by other teachers	58.0	4.09
Laziness	39.1	4.17

Table 5.17(a), indicates that in SACMEQ I, 70 percent of learners had principals who reported that teacher absenteeism was a problem and 60 percent had principals who reported that teacher laziness was a problem.

Table 5.17(b) Teacher behavioural problems (SACMEQ II)

Frequency of teacher behavioural problem	Indicating 'never' occurs	
	%	SE
Arriving late at school	21.5	2.78
Absenteeism	41.0	3.21
Skipping classes	54.4	3.33
Intimidation or bullying of learners	73.9	2.84
Sexual harassment of teachers	97.8	0.91
Sexual harassment of learners	93.3	1.82
Use of abusive language	56.8	3.32
Drug abuse	94.1	1.51
Alcohol abuse	72.0	2.88
Health problems	23.2	2.88

In both SACMEQ I and II, 'Teacher absenteeism', 'teacher laziness', 'teachers arriving late at school', 'teacher absenteeism', and 'health problems' occurred in schools where more than 60 percent of all Grade 6 learners were in schools. The fact that 28 percent of learners were in schools where teachers were perceived to be guilty of alcohol abuse is startling.

The whole problem of learner and teacher behaviour seems to be widespread enough to suggest that it needs to be tackled in a wide scale. If teachers are guilty of some of these simple forms of behaviour, then learners might follow suit. Correlations have been presented in Table 5.18.

Table 5.18. Correlations between learner and teacher behavioural problems

	Teacher									
	Arrive late	absent	skip class	bully learners	Harass teacher	harass learner	abusive lang.	drug abuse	alcohol	health
arrive late	.35	.28	.17	.22	.11	.06	.16	.16	.22	.18
Absent	.36	.23	.21	.25	.07	.06	.13	.26	.25	.22
skip class	.33	.39	.30	.23	.03	.08	.16	.18	.18	.21
bully learner	.31	.36	.38	.37	.07	.14	.44	.17	.19	.24
l harass l	.22	.29	.25	.09	.15	.30	.27	.24	.24	.09
l harass t	.02	.09	.12	.08	.26	.21	.02	.24	.10	.05
drug abuse	.21	.22	.29	.29	.19	.26	.21	.35	.22	.25
alcohol	.24	.27	.29	.35	.14	.25	.40	.26	.35	.27
Health probs	.13	.11	.18	.14	-.03	.04	.18	.08	.09	.36

It can be seen that where the teachers are late or absent or skip classes or themselves bully learners, then the learners bully learners. The highest correlation is between the teacher using abusive language and learners bullying learners. There is a high correlation between teachers using drugs and learners using drugs, between alcohol abuse by teachers and by learners and the teachers having health problems and the learners having health problems.

In this section a series of problems concerned with the running of schools was reviewed. In general, school principals taught more than the specified amount. The exceptions were Khomas and Otjozondjupa where it was unclear why the principals did not teach the required amount.

The principals undertook a lot of work with their staff but, again for unknown reasons, ‘discussed educational objectives with their staff’ less than before. The average number of days that learners were absent from school was reasonable (less than two days per month) except in Kunene where it was over six days.

The educational inspectors/advisors visited the schools according to the guidelines laid down, except in Omaheke. Over 20 percent of learners were in schools where community cooperation was perceived by the principal to be a problem. The figure was higher for the regions of Hardap, Caprivi, Khomas, Ohangwena, Omusati, Otjozondjupa, and Oshana.

Most of the community help was given for extra-curricular activities, the building and maintenance of the school buildings, the purchase of some school supplies and the payment of examination fees for the pupils.

Finally, school principals were asked about learner and teacher behavioural problems in their schools. The major problems concerning learners were 'arriving late', 'absenteeism', 'drop-out', and 'health'. For teachers the problems were 'arriving late', 'absenteeism', and 'health'.

However, in general it was good to see that there had been either no change or an improvement in most things. Where there were problems, these were highlighted and suggestions made as to actions that might be taken in order to improve matters.

Conclusion

The personal characteristics of school principals, their professional characteristics and their views about general school infrastructure have been discussed in this chapter. Also discussed were the principals' views about school-community relations, school learning related activities as well as some of the problems associated with learners and with teachers.

It is clear that there is a lot that needs to be done in order to improve parental/community involvement in school. However, of great importance is the discipline of both teachers and learners.

In order for effective teaching and learning to take place three things should take place. Firstly, school principals should be well equipped to provide proper management and monitor the learning process in the school. Secondly, teachers should be role models for the learners whom they teach and as such they should exhibit high levels of discipline at all times. Thirdly, school regional educational authorities and school boards should sensitise communities, parents, teacher unions and learners as to transform their schools into centres of teaching/learning and centres of excellence.

Policy suggestion 40. PAD, EPI and the envisaged National Inspectorate should combine forces, involving local knowledge in conducting more focussed research into the problems hampering effective teaching and learning, while at the same time publicising good school functioning practices.

Chapter 6

Have Educational Inputs to Primary Schools in Namibia been Allocated in an Equitable Fashion?

Introduction

At independence, Namibia inherited an educational system that had been deliberately designed to maintain inequities among schools and among racial and ethnic groups, in the allocation of nearly all types of school resources. Therefore, the task of the new democratic and multi-racial, multi-ethnic government of the independent republic of Namibia was to redress the inequities of the past. One of the goals of education in Namibia is to give all pupils an equal opportunity to learn. This cannot be achieved unless there is an equitable distribution of educational resources among all schools. The equitable distribution of financial resources within the Ministry is the responsibility of the education budget committee based at head office. The Ministry of Finance determines the budget of the Ministry of education, and so the amount and the type of resources that can be distributed among schools is centrally determined by the available financial resources.

In all school systems where the government wishes to take action to address the issue of equity, it is important to know the 'location' of differences or variations in resource inputs to schools. For example, it is important to know whether variations in resource inputs are more pronounced among regions, or whether they are larger among schools within regions. An answer to this type of question provides guidance concerning which resources are distributed evenly or unevenly, and at the same time suggests the level at which decisions must be taken (national or regional) in order to address any major inequities that are observed.

In exploring questions of equity, it must be recognised that there is need to examine allocation patterns in association with the actual levels of provision. Such information is vital because it enables policy makers to identify which resources require attention,

and also to have some feeling for the amounts of supplementary resources that may be needed in order to achieve a more equitable distribution.

This chapter concentrates mainly on an examination of inequities in the distribution of educational resources and upon absolute resource levels. Hence the results presented in this chapter should be examined in conjunction with results presented from the two previous chapters, which examined baseline and benchmark resource allocations.

Two approaches to the measurement of equity

A statistic called the coefficient of intra-class correlation (ρ) may be used to divide the variation in resource inputs into two components: (a) among educational regions, and (b) among schools within educational regions. ρ can range from nearly 0.00 to 1.00. When used in this way, ρ is a ratio that measures the percentage of total variation among schools that can be attributed to variation among regions. The residual figure measures the average variation among schools within regions.

To appreciate the meaning of ρ , it is useful to consider two hypothetical school systems: system A and system B.

Variations among schools within regions and variations among regions

In school system A, resources are allocated equally, or nearly equally, to all schools and therefore, when calculations are made on average resource levels for the educational regions in the system one finds that these are more or less the same – except perhaps for some minor chance deviations. For such a school system, the value of ρ would be close to zero because of the small variation among regions. In this situation most of the variation would be among schools within regions. On the other hand, consider school system B where, because of administrative decisions, historical factors, or geographical differentiation of social-class groups, etc., there are large variations among the educational regions. In this case, the value of ρ would be close to unity. Most of the variation among schools in this case would be due to variations among regions, and there would be little variation among schools within regions.

The above examples are two extremes that serve to illustrate the interpretation of rho. In practical terms, if the intention is to judge whether the variation is more among educational regions or more among schools within regions, a rho of, say, 0.20 means that 80 percent of the differences are among schools within regions and 20 percent among regions. In contrast a rho of 0.80 would indicate that 80 percent of the differences was among regions and 20 percent among schools within regions.

It is also possible to quantify the differences among schools within a particular region by making a comparison with the variation among schools at the national level. This can be achieved by using the formula below:

$$\frac{\text{Standard deviation for schools in a region}}{\text{Standard deviation for schools in the nation}} \times 100$$

The standard deviation of an indicator for a particular region measures the amount of variation among schools within that region, whereas the standard deviation for the whole country measures the amount of variation among schools for the nation. The ratio of the standard deviation for a division to the standard deviation for the nation, expressed as a percentage, provides a measure of the degree of equity within a region compared with the national picture.

To illustrate the interpretation of these ratio values, it is helpful to consider two hypothetical regions: region A1 and Region B1. Assume that the levels of a resource are measured by an indicator that has a ratio value of 50 percent in Region A1 and 150 percent in Region B1. This figure would mean that the variation in resource levels among schools in Region A1 is 50 percent *less* than the variation in resource levels among the schools for the whole nation; and the variation in Region B1 is 50 percent *higher* than for the nation. From these ratio values it can be said that, compared with the national picture, there has been an equitable allocation among schools within Region A1. In contrast, the Ministry should be concerned about Region B1 because there is clear evidence that inequalities among schools in Region B1 are larger than the whole nation

General Policy Concern 17

Have human resources (for example, qualified and experienced teachers and school heads) been allocated in an equitable fashion among regions and among schools within regions?

Were qualified and experienced Grade 6 teachers and school heads distributed equitably among regions and among schools in regions?

The variables selected for inspection were professional qualification of the reading teacher (for SACMEQ I) and the professional qualifications for reading and mathematics for SACMEQ II. In the same way, teacher experience, school principals' professional qualifications and experience as a principal, inspectors' visits for reading and mathematics teachers and finally the teacher/learner ratio have been reviewed. The results have been presented in Table 6.1(a) for SACMEQ I and Table 6.1(b) for SACMEQ II.

The variation among regions was in general lower in 2000 than in 1995. In 2000, however, the variation among regions was still very high for learner/teacher ratio and to some extent for school principal's professional qualifications.

Comparing the variation among schools within regions with the country variation the variables where there was too much variation in some regions were:

- Reading teacher professional qualification in Karas
- Reading teacher experience in Otjozondjupa
- School head experience in Oshana
- Inspectors' visits in Ohangwena, Otjozondjupa, and Oshana

There was only too much variation among schools within regions for:

- Inspectors' visits for reading teachers in Kavango and Kunene
- Inspectors' visits for mathematics teachers in Kavango and Oshana

It is the Regional Education Directors who will need to remedy the inequity in inspectors' visits in Kavango, Kunene, and Oshana. It is the national Ministry that needs to examine the problem of inequity among regions for learner/teacher ratio.

The Ministry is well aware of the inequity among regions for learner teacher ratio. The regions with the highest learner/teacher ratio are mainly the northern regions which have larger learner populations. The Caprivi and Karas regions have the lowest learner/teacher ratio because of low learner numbers. One of the solutions to this problem is to transfer teacher from the regions that have low learner/teacher ratio to the regions that have larger learner /teacher ratio. However, this has not been possible due to lack of teacher accommodation in the regions that have high learner teacher ratios such as the Ohangwena and Kavango regions.

Policy suggestion 41. The Ministry should continue to provide new classrooms and to build new schools in the northern regions that have high population density and large learner numbers. The construction of new classrooms should go hand in hand with the building of teacher houses in these regions to accommodate teachers who will be appointed from other regions in Namibia.

Table 6.1(a). Equity of human resource allocation as assessed by (a) variation among schools within regions, and (b) variation among regions (SACMEQ I)

Human resources	Variation among schools within regions													Variation among regions (rho x 100)
	Caprivi	Erongo	Hard	Karas	Kava	Khom	Kune	Ohan	Omah	Omus	Oshik	Otjoz	Oshan	
Reading teacher prof. qualif.	68.6	94.4	62.2	140.9	72.6	67.0	91.4	94.9	77.7	93.7	104.3	96.3	58.5	23.7
Reading teacher experience	89.9	104.0	83.7	125.2	80.4	107.0	88.0	60.6	130.2	59.8	51.1	159.8	29.4	21.5
School head prof. qualif.	79.3	98.4	88.7	88.5	80.7	110.4	75.2	85.4	100.7	100.4	51.9	101.2	79.2	21.2
School head experience	86.4	107.5	121.3	85.9	52.7	110.4	98.6	98.8	18.1	81.6	70.8	96.0	135.7	14.4
Inspectors/advisors visits	50.2	105.3	50.4	62.1	81.2	51.0	72.8	144.9	49.7	105.9	74.1	175.7	154.3	3.5
Learner/teacher ratio	30.3	26.3	22.2	16.4	46.6	38.8	41.0	112.1	7.7	68.7	68.0	30.7	92.3	67.4

Table 6.1 (b). Equity of human resource allocation as assessed by (a) variation among schools within regions, and (b) variation among regions (SACMEQ II)

Human resources	Variation among schools within regions													Variation among regions (rho x 100)
	Caprivi	Erongo	Hardap	Karas	Kavang	Khomas	Kunene	Ohanwe	Omaha	Omusat	Oshiko	Otuzo	Oshana	
Reading teacher prof. qualif.	84.4	116.3	122.8	102.3	128.5	83.6	96.7	75.5	68.7	78.3	127.3	88.9	77.7	6.2
Reading teacher experience	90.9	98.5	146.1	119.3	59.4	96.7	91.4	80.7	126.2	88.6	78.6	88.0	97.7	10.9
Math. Teacher prof. qualif.	113.0	94.9	75.0	118.7	85.7	103.4	93.3	89.3	113.0	79.2	112.8	97.3	94.1	7.5
Math. Teacher experience	102.6	80.3	102.2	100.8	71.4	74.7	75.0	90.2	100.3	117.0	109.2	101.4	73.3	12.9
School head prof. qualif.	65.1	70.8	67.7	70.1	93.2	71.7	84.9	98.7	115.7	93.4	89.5	107.0	86.8	23.8
School head experience	99.3	79.6	86.8	79.0	86.0	81.5	112.5	102.7	91.9	95.9	107.1	94.1	107.9	8.6
Inspectors/advisors visits for reading teachers	0.0	0.0	0.0	0.0	134.3	0.0	346.8	0.0	0.0	0.0	134.3	0.0	0.0	0.4
Inspectors/advisors visits for mathematics teachers	0.0	0.0	0.0	0.0	206.2	0.0	0.0	67.3	0.0	0.0	0.0	0.0	238.8	1.2
Pupil/teacher ratio	61.9	55.9	22.2	33.0	73.3	82.5	88.2	80.5	35.1	71.4	113.1	51.2	95.5	44.3

General Policy Concern 18:

Have material resources (for example, classroom teaching materials and school facilities) been allocated in an equitable fashion among regions and schools within regions?

It is unfair if some pupils are in schools with many resources and others in schools with very few resources. Classroom resources, school resources, classroom space, teacher housing and the like are all elements of schooling that can make a difference about how equally learners are being treated. These kinds of resources have been examined in this section.

Were (a) general school infrastructure, (b) classroom equipment, and (c) classroom teaching materials distributed equitable among regions and among schools within regions?

The data for the equitable distribution of these resources have been presented for SACMEQ I in Table 6.2 (a) and for SACMEQ II in Table 6.2 (b). More variables have been examined in the second table because reading and mathematics teachers statements have been examined separately.

In SACMEQ I it can be seen that there were large variations among regions for toilets per pupil, classroom space per pupil, and school resources. There was only high variation among schools (higher than for the nation as a whole) for classroom furniture in Caprivi and Otjozondjupa.

In SACMEQ II, there was large variation among regions for classroom furniture (as reported by both reading and mathematics teachers) and school resources. The problem of the inequitable distribution of school resources was pointed out in the report for Namibia for SACMEQ I. This inequity is still high. However, in 2000 the classroom furniture resources were also inequitable distributed.

Among schools within regions there was some inequity among schools for toilets per learner in Oshikoto and for classroom space per learner in Erongo, Karas, Kavango,

and Omahake. The space per learner did not appear to be a problem when the square metres per learner were examined in Chapter 5 but it may be worthwhile that the Directors of the educational regions mentioned above re-examine the problem.

In 2000 it was the inequitable distribution of classroom furniture and school resources that were a major problem. This is a matter for both the national Ministry of Education and the regional directors of education to take up and remedy.

Table 6.2 (a). Equity of material resource distribution to schools as assessed by (a) variation among schools within regions, and (b) variation among regions (SACMEQ I)

Material resources	Variation among schools within regions													Variation among regions (rho x 100)
	Caprivi	Erongo	Hardap	Karas	Kavang	Khomas	Kunene	Ohangw	Omaha	Omusat	Oshiko	Otjozo	Oshana	
Classroom furniture index	140.9	36.7	98.2	54.1	97.5	32.5	90.3	82.1	0.0	91.6	82.7	137.2	41.6	18.7
Toilets per pupil	84.9	24.0	19.2	18.0	68.0	49.8	59.0	123.6	9.1	112.2	103.7	37.9	81.6	37.2
Classroom library	105.2	100.7	106.8	110.3	81.9	82.4	94.2	100.3	123.3	100.4	114.2	0.0	80.7	8.3
Classroom space per pupil	76.0	129.9	75.2	100.1	44.9	57.6	182.1	30.3	34.4	68.5	52.3	65.5	55.6	35.1
Teacher housing quality	95.1	97.8	67.5	104.5	68.3	0.0	101.2	94.8	116.9	101.1	98.8	76.5	79.6	24.9
School resources index	43.5	67.7	54.3	76.8	55.1	76.0	61.5	43.1	48.7	38.3	93.7	63.6	65.1	66.9

Table 6.2 (b). Equity of material resource allocation as assessed by (a) variation among schools within regions, and (b) variation among regions (SACMEQ II)

Material resources	Variation among schools within regions													Variation among regions (rho x 100)
	Caprivi	Erongo	Hardap	Karas	Kavango	Kho mas	Kun ene	Ohangwen a	Omah eke	Omu sati	Oshi koto	Otjozo ndjupa	Osha na	
Classroom furniture index by reading teacher	109.9	45.7	35.0	92.8	76.9	45.1	78.2	108.7	46.1	83.3	97.4	33.8	105.8	32.1
Classroom furniture index by mathematics teacher	114.6	45.8	34.4	36.6	93.9	38.2	100.2	105.5	36.5	91.9	104.2	34.6	92.3	31.8
Toilets per pupil	61.9	13.7	67.8	28.0	77.9	24.7	43.2	122.1	83.5	80.8	154.6	30.6	85.7	29.1
Classroom library by reading teacher	102.6	93.4	83.8	98.7	99.1	97.5	104.5	89.7	99.6	97.2	100.9	100.9	97.6	6.2
Classroom library by mathematics teacher	108.5	101.4	100.7	95.5	99.1	80.6	106.5	96.3	108.2	100.5	103.2	90.9	85.9	5.1
Classroom space per pupil	6.0	185.5	31.0	177.8	163.0	4.8	27.6	48.9	223.1	23.6	120.5	6.3	36.2	0.0
Reading teacher housing quality	106.2	96.4	94.1	53.1	102.5	72.0	104.3	91.4	105.9	99.9	94.0	95.2	93.9	12.8
Mathematics teacher housing quality	74.6	55.1	72.5	85.4	93.3	44.7	100.6	88.3	102.1	91.6	01.7	97.5	84.8	27.2
School resources index	29.0	91.3	54.4	69.0	58.7	56.5	95.0	62.3	86.7	40.8	94.4	63.2	53.6	5 8.3

Chapter 7

The Reading and Mathematics Achievement Levels of Learners and Their Teachers

Introduction

In Chapters 3, 4, and 5 an examination was made of the home backgrounds of learners, the classrooms in which they were, the teachers they had, and finally of the conditions of the schools in which they were. But, in the end, the important thing is how well did the learners learn. In this chapter, learners' achievement, measured towards the end of the learners' time in Grade 6, has been presented. It is, in a way, the culmination of learning that has taken place up to the end of Grade 6.

The learners were administered tests in reading and mathematics. The details of the construction of the tests and the qualities of the tests have been reported in Chapter 2. It will be recalled that not only was it possible to have a total Rasch score but also the test data were analysed in such a way that different levels of competency or skills in achievement could be identified and in turn the percentages of learners reaching these levels could be calculated. These achievement levels can also be regarded as instructional levels. Those learners, for example, who have mastered the skills in, say, Level 3 but not at Level 4, are in a position to begin to learn the knowledge and skills embodied in Level 4. At the national level, this is important feedback to the curriculum planners/developers, teachers, and in-service training providers. Furthermore it was possible to have minimum and desirable levels of mastery of those items that were considered to be critical to master if the learners were to (a) *barely survive* during the next year of schooling (the "minimum" level), and (b) *be guaranteed to succeed* during the next year of schooling (the "desirable" level).

At the same time it was possible to measure the achievement of the Grade 6 teachers in reading and mathematics. It was possible to place the teachers' and learners' achievement on the same scale and compare the results. The major reason for measuring the achievement of teachers was that it was believed that the teachers' mastery of the subject matters was crucial if the learners were to learn. The results of

the teacher tests in reading and mathematics have been presented following the learner results.

General policy concern 19:

What were the levels (according to Rasch scores and descriptive levels of competence) and variations (among school and regions) in the achievement levels of Grade 6 learners and their teachers in reading and mathematics- for Namibia and for other SACMEQ countries?

What were the overall mean Rasch scores of learners and their teachers in reading and mathematics across the SACMEQ countries?

The average score of all *learners* in all fourteen countries participating in SACMEQ II was 500 and the standard deviation was 100. Teachers from the same countries (except for Mauritius and South Africa that did not test teachers) were placed on the same scale. The results have been presented in graphical form in Figures 7.1 to 7.4 and in tabular form in Appendix 7.1. It will be seen that for reading the average of all SACMEQ teachers was 733 and for mathematics it was about 791. Thus, on average the teachers' scores were a good two standard deviations above the learner mean.

How did Namibia compare with other SACMEQ countries?

The results for learner reading scores have been presented in Figure 7.1 and results for teacher reading scores have been presented in Figure 7.2. The results for learner mathematics scores and teacher mathematics scores have been presented in Figure 7.3 and 7.4 respectively.

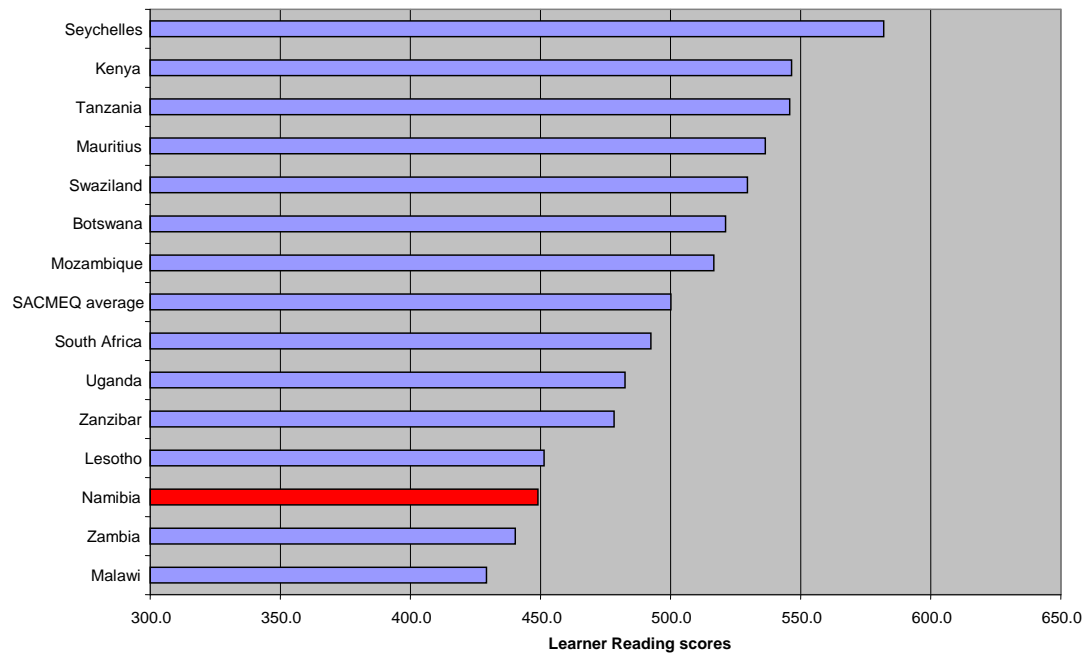


Figure 7.1: Learner reading scores by country

It can be seen from Figure 7.1 that in reading, Namibian learners scored relatively poorly and half a standard deviation below the SACMEQ average. They had about the same level of achievement as the Lesotho learners and were slightly better than the learners from Zambia and Malawi.

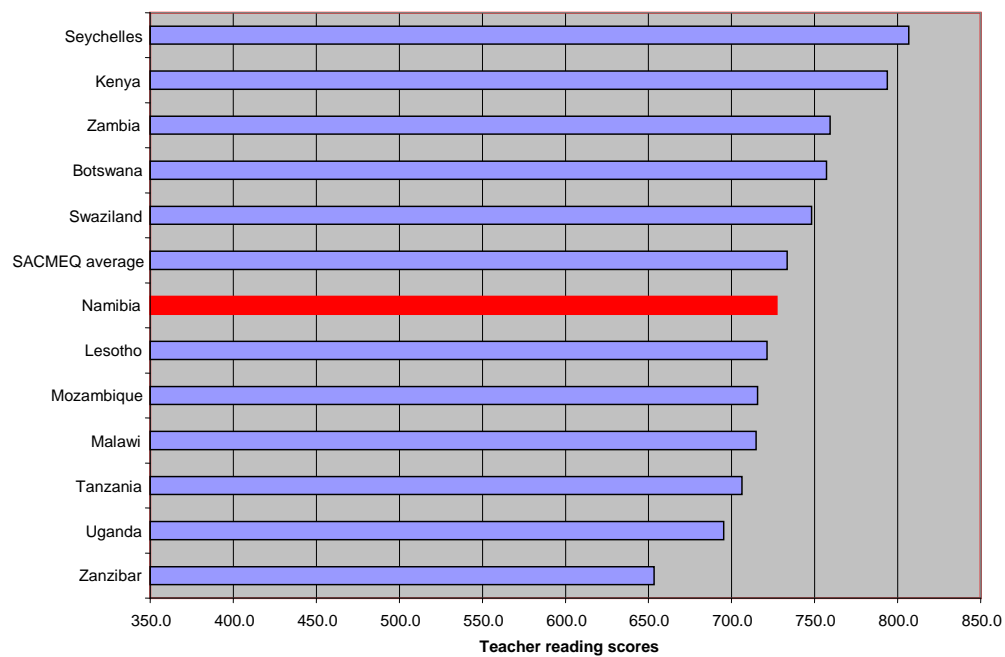


Figure 7.2. Teacher reading scores by country

However, the Namibian reading teachers scored just below the SACMEQ average for reading teachers. On the other hand it can be seen that the Zanzibar teachers scored relatively poorly compared with other SACMEQ country teachers but the Zanzibar learners achieved relatively very well.

In mathematics, Namibian learners were bottom. The Namibian teachers were second from bottom beating only the Zanzibar teachers. This is not a healthy situation given that the Namibian government attaches great importance to the teaching of mathematics and science. The overall, low average scores for Namibian Grade 6 mathematics teachers and their learners indicates that there could be a problem with either the mathematics curriculum or the training of mathematics teachers and the way they teach the subject.

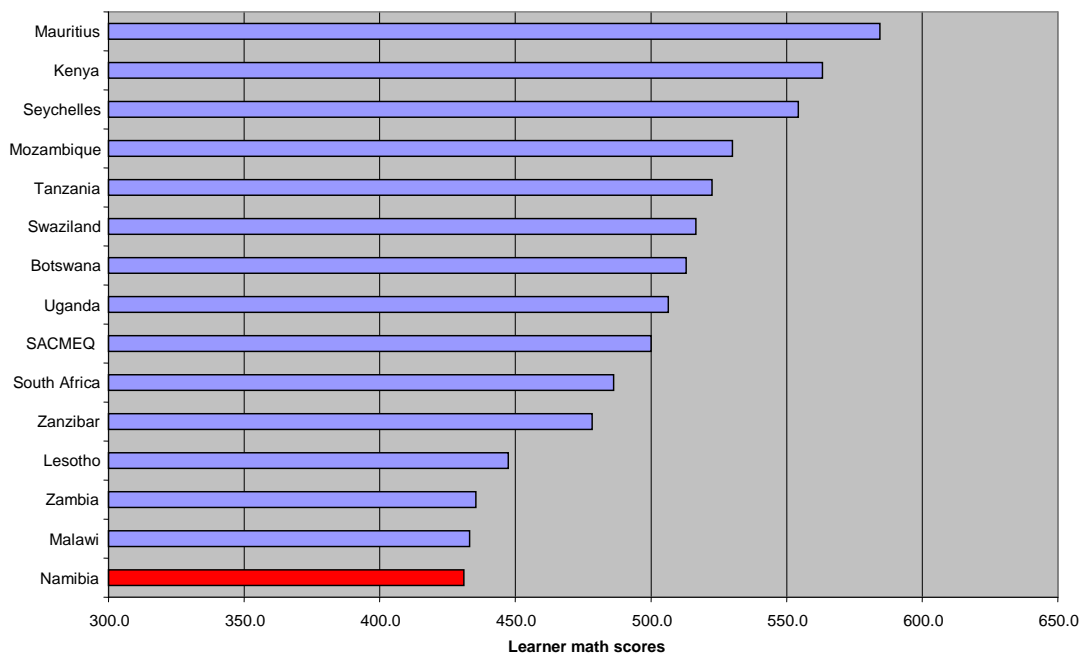


Figure 7.3. Learner mathematics scores by country

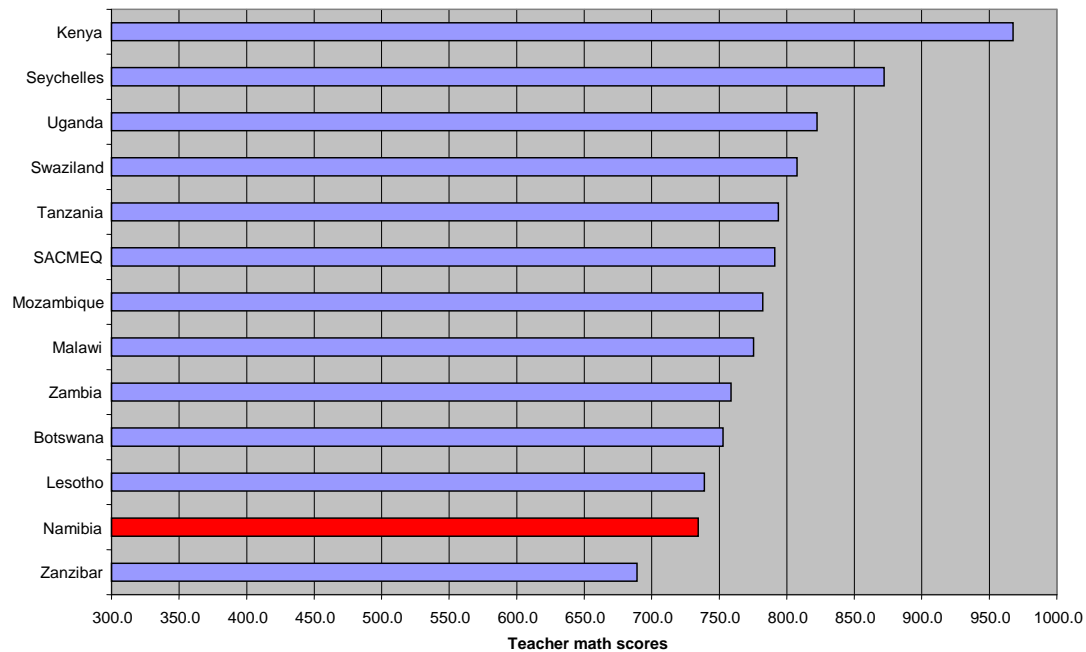


Figure 7.4: Teacher mathematics scores by country

Policy suggestion 42. There is a need for NIED to make further investigations to identify the competencies that might be lacking in the school reading and mathematics curriculum, in teacher training curriculum and/or in the teachers' teaching practices.

What were the differences in reading and mathematics achievement among regions within Namibia?

The differences in learner Rasch scores among regions reading (SACMEQ I & II) and for mathematics (SACMEQ II only), have been presented in Table 7.1.

Table 7.1. Means and sampling errors for the reading and mathematics test scores of learners with all items (SACMEQ I and SACMEQ II)

Region	Learner performance on all items					
	SACMEQ I		SACMEQ II			
	Reading		Reading		Mathematics	
	Mean	SE	Mean	SE	Mean	SE
Caprivi	430.9	2.76	417.3	4.71	405.2	4.03
Erongo	545.7	28.69	527.5	24.22	494.4	21.23
Hardap	512.3	21.79	518.7	20.27	499.0	17.89
Karas	519.8	21.86	510.4	19.49	482.7	18.33
Kavango	448.3	5.13	431.5	4.99	419.0	4.95
Khomas	585.5	22.14	567.0	18.77	530.5	19.06
Kunene	455.6	6.04	448.2	13.29	445.4	14.17
Ohangwena	444.2	3.65	416.9	3.69	398.8	2.65
Omahake	450.3	19.04	434.4	8.23	426.4	5.16
Omusati	440.1	3.10	424.0	3.91	410.0	3.82
Oshikoto	460.3	43.51	428.3	13.38	420.0	13.51
Otjozondjupa	509.9	34.97	468.9	21.39	458.8	17.04
Oshana	451.2	8.10	429.9	7.68	402.4	6.79
Namibia	472.9	4.65	449.0	3.12	431.1	2.93

There was a definite decline (23 points, making two tenths of a standard deviation) in reading scores between 1995 and 2000. There was considerable variation among regions in 1995 ranging from 431 in Caprivi to 586 in Khomas. This is one and a half standard deviations and this amount is sometimes said to be the equivalent of three years of schooling. In 2000, the variation was still large ranging from 417 in Caprivi and Ohangwena to 567 in Khomas. The difference was still one and a half standard deviations but at a lower level. In mathematics, the range was from 402 in Oshana and 405 in Caprivi to 531 in Khomas. This is one and a third standard deviations.

The actual range of learner scores was from 157 to 946 in reading and from 190 to 934 in mathematics. It was interesting to note that the top five percent of learners in reading and mathematics scored higher than the bottom 12 percent of teachers in reading and the bottom 10 percent of teachers in mathematics! How different were the teachers in their achievement among regions. These results have been presented in Table 7.2.

Table 7.2. Means and sampling errors for the reading and mathematics test scores of teachers (SACMEQ II)

Region	Teacher performance on all items			
	Reading		Mathematics	
	Mean	SE	Mean	SE
Caprivi	699.9	20.11	680.5	23.36
Erongo	770.2	23.98	776.6	37.27
Hardap	810.7	28.89	819.1	30.41
Karas	777.5	23.09	853.0	40.85
Kavango	697.4	11.97	684.2	14.41
Khomas	796.2	16.99	830.7	26.23
Kunene	702.0	21.85	808.5	36.22
Ohangwena	725.6	11.29	717.8	21.80
Omahake	656.2	56.17	811.3	48.01
Omusati	705.0	10.36	702.7	11.10
Oshikoto	727.8	12.91	703.1	20.27
Otjozondjupa	741.7	24.20	789.2	31.20
Oshana	714.5	11.27	703.9	16.14
Namibia	727.4	4.69	734.5	6.65

In 2000, the range of teacher scores among regions was from 656 in Omahake to 811 in Hardap for reading and from 681 in Caprivi to 853 in Karas for mathematics. The regions of Caprivi, Kavango, Ohangwena, Omusati, Oshikoto, and Oshana were very poorly served with mathematics teachers.

It would seem that a major campaign should be undertaken to improve the reading and mathematics standards of Grade 6 teachers accompanied by a redistribution of teachers to regions according to their subject matter knowledge.

What percentages of learners and teachers reached the minimum and desirable levels of mastery?

In Chapter 2 the definitions of minimum and desirable levels of achievement were given. The percentages of learners reaching the minimum and desirable levels in reading have been presented in Table 7.3.

Table 7.3 Percentages and sampling errors of learners reaching minimum and desirable reading levels of mastery (SACMEQ I and SACMEQ II)

Region	SACMEQ I				SACMEQ II			
	Learners reaching minimum level of mastery		Learners reaching Desirable level of mastery		Learners reaching minimum level of mastery		Learners reaching desirable level of mastery	
	%	SE	%	SE	%	SE	%	SE
Caprivi	3.2	0.85	0.0	0.00	4.2	1.67	1.1	0.70
Erongo	59.9	10.54	23.4	10.20	52.3	9.15	25.1	7.47
Hardap	45.5	11.38	15.8	5.54	49.4	8.26	23.4	5.94
Karas	51.8	10.18	15.8	5.82	45.4	8.11	16.2	6.06
Kavango	11.1	3.02	0.1	0.14	7.5	1.76	0.5	0.34
Khomas	73.8	6.09	38.5	8.88	63.7	6.48	35.3	6.79
Kunene	15.2	3.55	1.0	0.79	16.2	5.25	3.5	2.52
Ohangwena	9.9	1.65	0.0	0.00	3.4	1.20	0.2	0.17
Omaheke	20.2	14.81	0.0	0.00	11.6	3.97	1.1	0.93
Omusati	4.6	1.21	0.0	0.00	4.4	1.15	0.2	0.15
Oshikoto	15.4	14.96	12.1	12.85	10.0	5.45	5.6	3.87
Otjozondjupa	37.9	12.51	14.7	12.86	26.7	7.91	12.1	5.97
Oshana	11.8	3.08	0.0	0.00	11.0	3.25	1.2	0.49
Namibia	22.7	1.76	7.8	1.51	16.9	1.17	6.7	0.88

In 1995, 23 percent of learners reached the minimum level and 8 percent the desirable level of reading mastery. In 2000, these figures had declined and 17 percent reached the minimum level and only 7 percent the desirable level. Less than 5 percent of the learners in Caprivi, Ohangwena and Omusati regions managed to reach the minimum level. In Caprivi, Kavango, Ohangwena, Omaheke, Omusati and Oshana, less than 1.2 percent of the learners reached the desirable level of mastery, compared to 25 and 35 percent for Erongo and Khomas, respectively. The differences between the regions are just too big.

The percentages of teachers reaching the learners' minimum and desirable levels have been presented in Table 7.4

Table 7.4 Percentages and sampling errors of teachers reaching minimum and desirable reading levels of mastery (SACMEQ II)

Region	Teachers reaching minimum level of mastery		Teachers reaching desirable level of mastery	
	%	SE	%	SE
Caprivi	100.0	0.00	76.5	12.58
Erongo	100.0	0.00	100.0	0.00
Hardap	100.0	0.00	100.0	0.00
Karas	100.0	0.00	100.0	0.00
Kavango	100.0	0.00	90.4	5.50
Khomas	100.0	0.00	97.5	2.50
Kunene	100.0	0.00	88.2	8.40
Ohangwena	100.0	0.00	94.7	3.71
Omaheke	77.9	15.04	77.9	15.04
Omusati	100.0	0.00	92.8	4.12
Oshikoto	100.0	0.00	96.8	3.24
Otjozondjupa	100.0	0.00	100.0	0.00
OShana	100.0	0.00	95.6	3.19
Namibia	99.4	0.42	94.1	1.42

It was expected that all teachers would reach the learner levels of mastery. It was somewhat of a surprise, therefore, to discover that in reading only 78 percent of teachers reached the minimum level in Omaha and that in several regions not all teachers reached the desirable level. Indeed, in two regions (Caprivi and Omaha) less than 80 percent of teachers reached the desirable level.

No minimum and desirable levels had been defined for mathematics since mathematics was not tested in SACMEQ I.

The percentages of learners reaching the minimum and desirable reading levels of mastery by sub-groups based on gender, socio-economic status and school location for both SACMEQ I and II, have been presented in Table 7.5.

Table 7.5 Percentages and sampling errors of learners reaching minimum and desirable reading levels of mastery by sub-groups (SACMEQ I and SACMEQ II)

Sub-groups	SACMEQ I				SACMEQ II			
	Learners reaching minimum level of mastery		Learners reaching desirable level of mastery		Learners reaching Minimum level of mastery		Learners reaching desirable level of mastery	
	%	SE	%	SE	%	SE	%	SE
<i>Gender</i>								
Boys	24.2	1.92	8.1	1.59	16.2	1.35	6.6	0.99
Girls	21.4	1.83	7.5	1.54	17.5	1.24	6.9	0.90
<i>Socio-economic level</i>								
Low SES	11.1	1.09	1.2	0.31	5.9	0.56	0.8	0.17
High SES	34.1	2.95	14.2	2.78	31.9	2.26	14.9	1.92
<i>School location</i>								
Isolated/Rural	9.9	1.17	0.8	0.29	4.5	0.65	0.2	0.08
Small town	26.8	7.49	10.5	6.39	25.5	4.08	10.0	2.79
Large city	62.2	5.80	29.0	5.80	53.1	4.57	27.1	4.05
Namibia	22.7	1.76	7.8	1.51	16.9	1.17	6.7	0.88

It can be seen from Table 7.5 that in 1995, 24.2 percent of the boys and 21.4 percent of the girls reached the minimum level of mastery and slightly more boys than girls reached the desirable level of mastery. In 2000 there were slightly more girls who reached the minimum and desirable levels than boys. However, there was a general decline in the percentages of both boys and girls reaching the minimum and desirable levels of mastery. The percentage of all learners reaching the minimum level dropped from about 23 percent in 1995 to 17 percent in 2000. There was also a decline in the percentages of learners who attained the minimum and the desirable levels in each of the three subgroups: gender, SES and school location. Nevertheless a clear pattern can be seen between 1995 and 2000, in that there were more learners from high SES who reached the desirable level compared to learners from the low SES. There were also more learners from urban areas who reached the minimum and desirable levels of mastery compared to learners from isolated rural areas.

What percentages of learners reached different competency levels in reading and mathematics?

Having seen that achievement declined both from the point of view of the overall achievement (Rasch scores) and in terms of the mastery levels, there is little point in providing a breakdown of SACMEQ I data by competency level. Rather emphasis will be laid on the SACMEQ II results.

The SACMEQ II learner reading results have been presented in Table 7.6 for reading and Table 7.7 for mathematics.

Table 7.6. Percentages and sampling errors for literacy levels of learners (SACMEQ II)

Region	Percentage of learners reaching the reading competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	16.2	2.82	43.1	3.82	27.3	3.53	10.2	2.53	1.6	0.93	0.6	0.58	1.1	0.70	0.0	0.00
Erongo	8.7	3.67	13.9	3.97	13.7	3.17	11.6	3.50	13.9	2.18	16.1	3.21	13.8	3.73	8.2	3.39
Hardap	6.7	2.98	18.6	4.85	12.6	2.71	14.0	2.63	16.4	2.80	10.6	2.10	15.2	3.20	5.8	2.66
Karas	6.2	1.80	14.8	3.96	16.7	3.55	18.8	2.84	14.1	3.79	13.5	3.00	11.9	4.00	4.0	2.42
Kavango	12.4	1.57	29.5	3.53	36.2	2.32	15.5	2.93	4.5	1.10	1.5	0.60	0.5	0.34	0.0	0.00
Khomas	2.1	0.72	7.1	2.06	12.5	2.41	17.5	2.57	14.4	2.17	14.3	1.75	16.6	2.98	15.5	4.05
Kunene	7.3	2.19	34.0	3.65	26.5	3.73	18.8	3.35	7.5	2.54	2.7	1.06	0.6	0.61	2.5	1.86
Ohangwena	16.6	1.99	39.6	2.10	27.9	1.84	13.1	1.76	2.5	1.08	0.2	0.17	0.2	0.17	0.0	0.00
Omahake	12.5	2.85	33.8	5.09	28.7	3.40	15.2	2.72	6.6	2.46	2.1	0.84	1.1	0.93	0.0	0.00
Omusati	14.0	2.05	32.1	2.54	33.4	2.23	16.8	2.12	3.0	0.99	0.7	0.40	0.0	0.00	0.0	0.00
Oshikoto	17.8	2.53	40.3	3.22	25.0	2.98	7.8	1.57	2.9	1.37	0.9	0.68	4.4	3.07	0.9	0.66
Otjozondjupa	9.8	3.64	29.2	5.01	21.9	3.37	14.3	3.27	7.8	1.99	6.1	1.76	8.3	4.15	2.7	1.93
Oshana	15.5	3.39	32.2	4.34	28.3	2.51	14.9	3.05	6.5	2.10	1.5	0.55	0.8	0.42	0.2	0.21
Namibia	12.8	0.77	30.6	1.03	26.6	0.82	14.3	0.78	6.0	0.48	3.6	0.29	3.9	0.51	2.2	0.41

Table 7.7. Percentages and sampling errors for numeracy levels of learners (SACMEQ II)

Region	Percentage of learners reaching the mathematics competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	25.5	2.99	64.1	3.08	8.8	2.41	1.6	1.18	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Erongo	9.7	3.24	35.7	6.35	26.1	4.29	11.5	2.81	7.3	3.14	6.6	3.10	2.4	1.67	0.7	0.47
Hardap	6.2	2.30	39.2	5.54	25.5	3.97	10.1	2.28	10.1	3.52	7.3	3.05	1.2	0.98	0.3	0.35
Karas	6.7	1.75	46.1	7.19	21.8	3.46	13.4	4.55	4.8	1.76	5.8	2.99	1.5	1.45	0.0	0.00
Kavango	19.9	2.55	60.1	2.87	17.8	2.87	1.8	0.63	0.4	0.27	0.0	0.00	0.0	0.00	0.0	0.00
Khomas	3.8	1.32	29.3	4.87	27.0	3.16	14.3	2.56	8.4	2.09	11.0	3.41	5.5	2.29	0.7	0.53
Kunene	9.2	1.85	62.9	5.32	20.2	3.17	4.1	1.95	1.2	1.24	0.6	0.62	1.2	1.24	0.6	0.62
Ohangwena	28.5	2.22	63.1	2.14	8.4	1.28	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Omahake	11.2	3.05	70.0	3.30	17.0	2.74	1.5	0.72	0.3	0.31	0.0	0.00	0.0	0.00	0.0	0.00
Omusati	21.3	1.96	65.2	1.94	11.8	2.00	1.4	0.57	0.3	0.28	0.0	0.00	0.0	0.00	0.0	0.00
Oshikoto	24.5	2.56	60.0	4.24	8.3	1.46	1.4	1.11	2.4	1.65	3.0	2.44	0.2	0.22	0.2	0.22
Otjozondjupa	10.4	3.16	54.1	6.41	22.1	3.52	5.4	1.77	3.4	2.26	3.5	2.56	1.0	1.04	0.0	0.00
Oshana	27.6	3.64	58.5	3.81	12.2	2.95	1.5	0.76	0.2	0.22	0.0	0.00	0.0	0.00	0.0	0.00
Namibia	19.6	0.83	57.0	1.10	14.9	0.77	3.5	0.36	2.0	0.33	2.1	0.44	0.7	0.22	0.1	0.06

It will be recalled that for reading, the first two competency levels represent a kind of pre-reading level. It cannot be said that the learners could read well. This comprised 43 percent of Namibian learners nationally. Nearly 27 percent managed to reach Level 3 but very few were in the levels above that nationally. However, there were huge regional disparities. While only 10 percent of learners in Khomas were not able to read for comprehension, in Caprivi, Ohangwena, and Oshikoto, more than 55 percent of the Grade 6 learners were in this category. If more than half of the Grade 6 learners in the three regions cannot read for comprehension, then there could be a serious problem with either their regional or home circumstances, or the way in which they are taught.

Policy suggestion 43. NIED and Regional education authorities in Caprivi, Ohangwena and Oshikoto should further investigate the reasons for the low reading comprehension among learners and help both teachers and their learners to overcome this deficiency and bring these learners to at least level 3.

In mathematics, learners at Levels 1 and 2 could not be said to be numerate. Nearly 77 percent of learners nationally, were in these two categories. In Caprivi, Kavango, Ohangwena, Omaheke, Omusati, Oshikoto and Oshana, the number of learners who could not be said to be numerate ranged from 80 to 90 percent. This is a very serious problem.

Policy suggestion 44. The problem of low competence among teachers and learners in Caprivi, Kavango, Ohangwena, Omaheke, Omusati, Oshikoto and Oshana regions needs to be addressed as a matter of urgency starting with the following measures:

- The education authorities in these regions should carry out an audit of the number of qualified and experienced mathematics teachers in the regions.
- The EMIS division should conduct a verification exercise of data on teachers qualified to teach mathematics at upper primary level in these regions.
- Subject specialist from NIED and advisory teachers should arrange training workshops for mathematics teachers in these regions to address the problem.
- Mathematics teacher trainers in Teacher Training Colleges and teacher In-service course providers should emphasise the teaching of higher competencies.

What percentages of *teachers* reached the various *learner* competency levels in reading and mathematics?

The data for teachers reaching the learner competency levels have been presented in Tables 7.8 and 7.9. In reading it was alarming to find that there were some teachers in Omahake who were at Levels 1 and 3. There were also teachers in Kavango,

Khomas, Kunene and Omusati at competency levels below what they might be expected to achieve.

In mathematics the problems were in Caprivi, Kavango, Ohangwena, Oshikoto and Oshana. Only 20 percent of teachers reached Level 8, the highest level for learners.

The level of subject matter knowledge among Namibian Grade 6 teachers leaves much to be desired.

Policy suggestion 45. A number of remedial measures for teachers in the northern regions may be necessary:

- One mode of remedial is through in-service training courses that are tailor-made for what the teachers need. The competence levels mentioned in this chapter will be of use to the Namibian authorities when deciding on the content of such courses.
- A second avenue of remedial is in increasing the standard in pre-service teacher training colleges for qualification to become a teacher.
- Finally, a special campaign might be launched that targets certain schools in the identified regions for specific remedial work.

Table 7.8. Percentages and sampling errors for literacy levels of teachers (SACMEQ II)

Region	Percentage of teachers reaching the reading competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	23.5	12.58	25.8	12.85	50.7	13.88
Erongo	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	5.6	5.67	22.4	11.15	71.9	11.64
Hardap	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	12.9	8.99	87.1	8.99
Karas	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	22.2	11.81	77.8	11.81
Kavango	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	3.6	3.59	6.0	4.27	53.5	10.15	36.9	9.76
Khomas	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	2.5	2.50	0.0	0.00	13.3	6.58	84.2	6.90
Kunene	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	7.3	7.27	12.5	8.96	34.2	12.54	46.0	13.99
Ohangwena	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	5.3	3.71	36.3	8.40	58.4	8.69
Omahake	13.9	13.89	0.0	0.00	8.2	8.31	0.0	0.00	0.0	0.00	0.0	0.00	34.2	15.41	43.7	15.87
Omusati	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	4.4	3.08	2.9	2.86	41.5	8.49	51.3	8.50
Oshikoto	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	6.6	4.60	30.2	8.64	63.2	9.07
Otjozondjupa	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	3.7	3.72	27.5	12.41	68.8	12.29
Oshana	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	1.5	1.54	5.6	3.97	38.0	9.92	54.8	10.32
Namibia	0.4	0.38	0.0	0.00	0.2	0.22	0.0	0.00	1.7	0.76	4.8	1.28	34.1	3.08	58.8	3.14

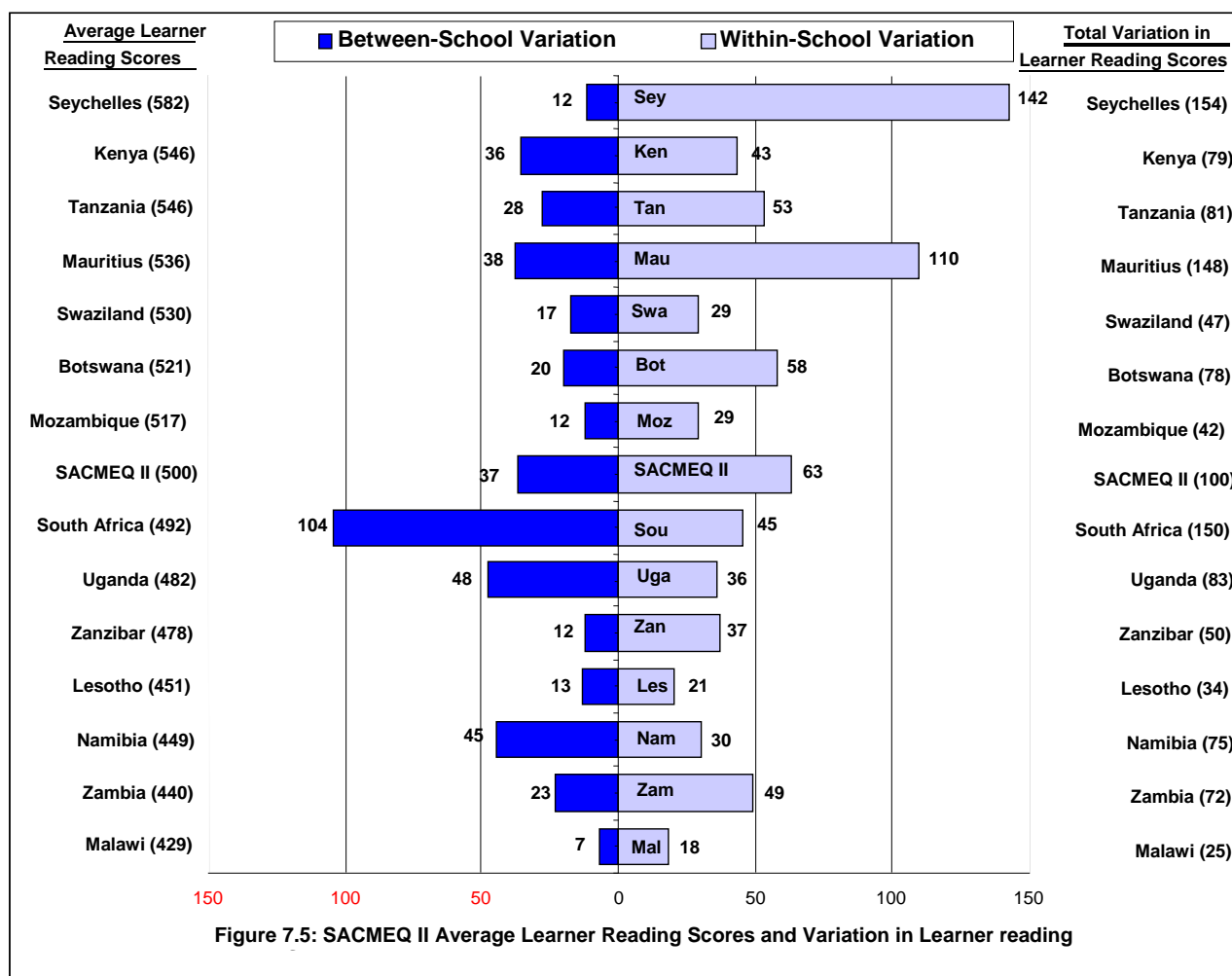
Table 7.9. Percentages and sampling errors for numeracy levels of teachers (SACMEQ II)

Region	Percentage of teachers reaching the mathematics competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Caprivi	0.0	0.00	0.0	0.00	3.0	2.98	17.7	9.85	13.4	9.33	36.0	12.30	22.6	10.06	7.2	7.26
Erongo	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	10.1	7.17	35.4	12.69	25.9	11.27	28.6	12.26
Hardap	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	8.7	6.94	9.8	7.75	39.1	13.37	42.4	12.51
Karas	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	22.2	10.81	12.9	8.97	64.9	12.69
Kavango	0.0	0.00	0.0	0.00	0.0	0.00	11.0	6.50	26.9	8.79	26.1	9.20	34.7	10.50	1.3	1.27
Khomas	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	1.2	1.24	10.1	4.89	44.7	9.43	43.9	10.00
Kunene	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	4.2	4.25	15.2	10.31	47.0	13.89	33.5	12.97
Ohangwena	0.0	0.00	0.0	0.00	8.0	6.22	5.5	4.06	6.6	3.79	24.5	7.11	35.2	7.88	20.2	7.18
Omahake	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	27.2	12.43	31.0	14.04	41.8	16.54
Omusati	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	22.8	6.94	42.8	8.06	26.1	6.95	8.4	4.70
Oshikoto	0.0	0.00	0.0	0.00	4.0	3.97	7.8	5.44	25.1	9.08	23.0	9.19	20.9	7.84	19.2	7.52
Otjozondjupa	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	10.0	7.42	22.4	10.54	28.1	10.48	39.5	12.07
Oshana	0.0	0.00	0.0	0.00	0.0	0.00	3.2	3.25	14.0	5.83	46.6	9.56	32.2	8.46	4.0	4.02
Namibia	0.0	0.00	0.0	0.00	1.9	1.21	3.8	1.22	14.2	2.16	29.1	2.84	31.1	2.85	19.9	2.30

In this chapter, learner achievement levels have been presented in terms of rasch scores, minimum and desirable levels of mastery and by competence levels. The rasch scores indicate low learner achievement in both reading and mathematics. Even if the rasch scores do not indicate big differences between educational regions in Namibia, the learner and teacher mathematics scores in Namibia, are particularly very low in comparison to other SACMEQ countries. In reading there has been a decline in the percentages of learners reaching both the minimum and the desirable levels of achievement from 1995 to 2000. This is an indication that the commendable expansion in the provision of access to primary education that Namibia has achieved since independence has not been accompanied by a corresponding improvement in the quality of learning outcomes.

What were the percentages of between and within school variance associated with learner Rasch scores in reading and mathematics across the SACMEQ countries?

The average learners' scores in reading and mathematics, total percentages in variation in the scores, as well as the variation *between schools* and *within schools* in each of the 14 SACMEQ countries have been presented in Figure 7.5 and Figure 7.6.



It can be seen from Figure 7.5 that for reading, learners in Seychelles achieved the highest rasch scores. The Seychelles had a total variation of 154 percent in learner reading scores. However, 142 percent of the variation in learner reading scores in the Seychelles was due to factors within the school or *within school variation* and only 12 percent could be attributed to between school variations.

While the Seychelles, followed by Mauritius had the highest within school variation, South Africa had the highest percentage (104) of between school variations among all the 14 SACMEQ countries, followed by Uganda (48) and Namibia (45). Big variation between

schools in an indication of equity problems within the education system. In Namibia there was higher variation between schools than within schools. This implies that in Namibia, the variation in learner scores was to a large extent influenced by differences or inequities between schools than by differences in abilities among learners within each school. In other words, the type of school that a learner attends in Namibia has a greater influence on achievement.

It can be seen from Figure 7.6 that in mathematics, South Africa and Uganda had the highest percentages of variations between schools, but overall Mauritius had the highest total variation (196) as well as the highest variations within schools (148). The between school variation in mathematics achievement in Namibia was slightly higher than the SACMEQ average, while the variation within school was lower than the SACMEQ average. This is not a good situation given that the mean score for Namibia was low compared to the other countries.

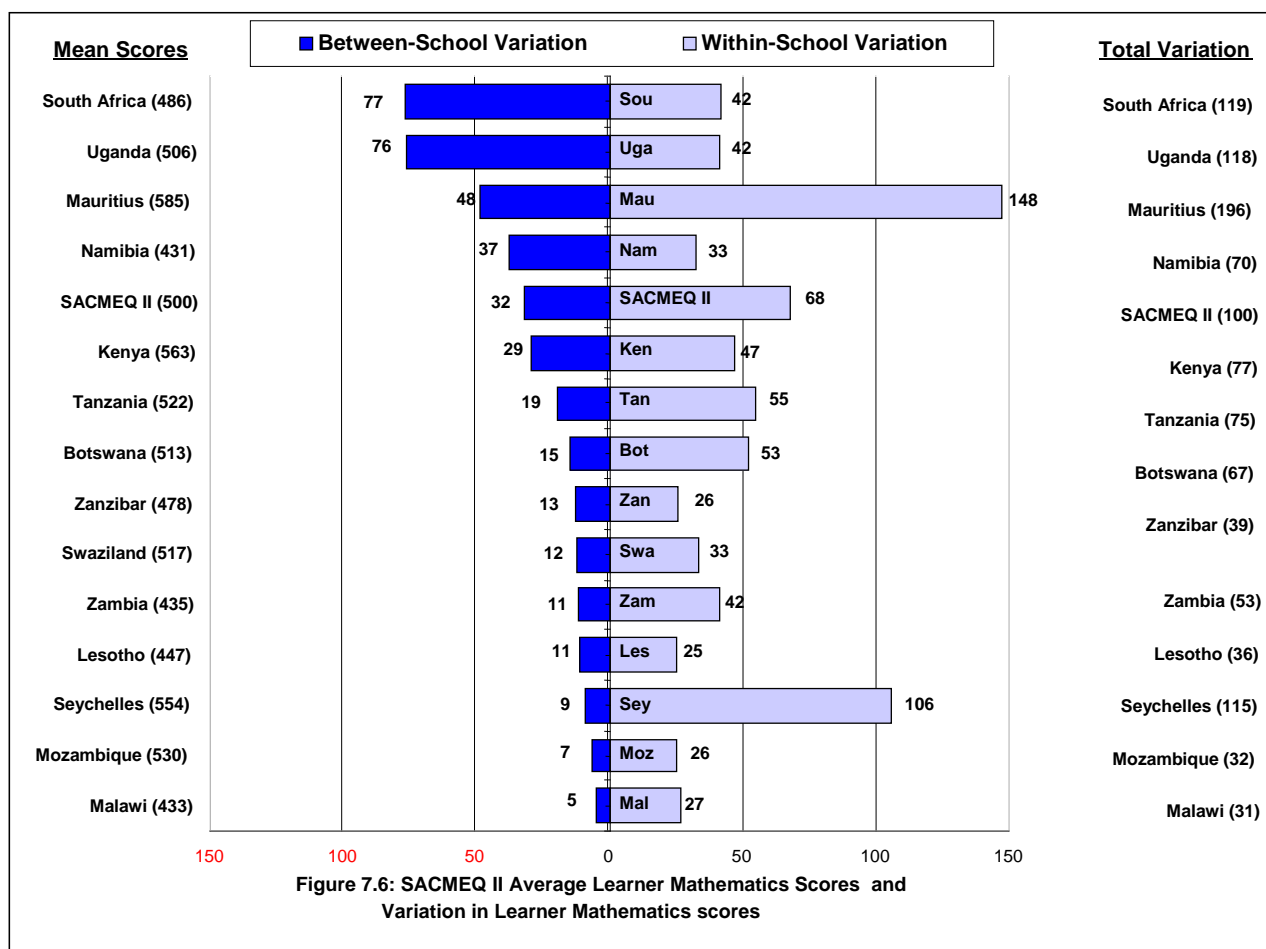


Table 7.10. Learners and teachers scores in reading and mathematics assessed by (a) variation among schools within regions, and (b) variation among regions (SACMEQ I and SACMEQ II)

Sub-groups	Variation among schools within regions _____													Variation among regions (rho x 100)
	Cap	Ero	Har	Kar	Kav	Kho	Kun	Oha	Oma	Omu	Oshk	Otj	Oshn	
<i>Reading test</i>														
SACMEQ I learners	17.6	132.4	90.0	100.9	25.1	115.9	25.0	21.8	47.9	20.6	154.8	124.4	31.0	46.3
SACMEQ II learners	27.1	131.3	111.9	88.6	36.5	126.1	82.9	27.3	50.5	31.4	87.9	111.6	48.0	42.9
SACMEQ II teachers	86.9	108.0	117.5	96.3	78.4	99.7	98.6	76.2	171.5	73.5	74.1	104.8	70.4	15.4
<i>Mathematics test</i>														
SACMEQ II learners	24.5	128.4	107.3	85.4	42.4	140.5	97.4	24.2	31.4	34.3	99.7	96.4	46.4	39.3
SACMEQ II teachers	81.1	119.8	111.4	100.3	59.8	96.4	109.7	83.1	142.9	55.3	88.7	98.3	69.5	20.9

Note: Cap=Caprivi; Ero=Erongo; Har=Hardap; Kar=Karas; Kav=Kavango; Kho=Khomas; Kun=Kunene; Oha=Ohangwena; Oma=Omaheke; Omu=Omusati; Oshk=Oshikoto; Otj= Otjozondjupa; Oshn=Oshana..

It can be seen from Table 7.10 that for both reading and mathematics, there was higher variation between schools within the same regions compared to variations among regions. There is no information on mathematics for SACMEQ I because learners were tested only in reading. For reading, Oshikoto, Erongo and Otjozondjupa regions had the highest variation among schools within their respective regions in 1995, and in 2000 it was Erongo, Khomas, Hardap and Otjozondjupa that had higher variations. For teachers, the highest variation among schools within one region was in Omaheke (171.5).

The highest variation in learner mathematics scores among schools within the same region for SACMEQ II was in Khomas (140) and in Erongo (128). For teacher mathematics scores, the highest variation was (143) in Omaheke region. The variation in scores among learners can be understandable, given the differences in SES and other factors, but the relatively big variation in scores among teachers is cause for concern because generally, all teachers are expected to be competent in the subjects they teach in order to ensure the same standards across the country. However the results indicate that there are different standards of teacher competence, which implies that while some learners may have the opportunity get the best out of their teachers, others are let down by their teachers.

General Policy Concern 20:

What were the reading and mathematics achievement levels of important sub-groups of Grade 6 learners and their teachers (for example, learners and teachers of different genders, socio-economic levels, and locations)?

What were the gender differences in reading and mathematics achievement for learners?

The results for gender differences have been presented in Tables 7.11(a) to 7.12(c). When examining differences it is important to take account of the sampling errors. For example, in Table 7.11(a) it can be seen that in SACMEQ I reading, boys scored 474.6 and girls 471.4. This was a differences of 3.2 score points. However, the sampling error for the boys' score was 4.85. This sampling error should be doubled if we are to be certain 95 percent of the time or 19 times out of 20 where the true score lies. In this case we can only be sure that the boys score lies between $474.6 \pm 2(9.7)$. That is, we can only be sure that the boys score lies between 464.9 and 484.3. The girls' score of 471.4 lies well within this range and hence it can be seen that there were no gender differences in Rasch score between boys and girls for reading in SACMEQ I. There were also no differences between boys and girls for both reading and mathematics in SACMEQ II.

Similarly for learners reaching the minimum and desirable levels in reading in both SACMEQ I and SACMEQ II there were no differences. There were also no differences between boys and girls in the competency levels reached.

What were the school location differences in reading and mathematics achievement for learners and teachers?

The results of the analyses by location have been presented in Tables 7.11(a) to 7.12(c). School location was described as being isolated/rural, or in a small town or large city. In terms of the Rasch scores there were significant differences among learners in the different locations in reading in SACMEQ I and in both reading and mathematics in SACMEQ II.

The same was true for the percentage of learners reaching the minimum and desirable levels except for the difference between isolated/rural and small town in learners reaching the *desirable* level of mastery in SACMEQ I reading.

Table 7.11(a). Means and sampling errors for the reading and mathematics test scores of learners by sub-groups for learners (SACMEQ I and SACMEQ II)

Sub-groups	Learner performance on all items					
	SACMEQ I		SACMEQ II			
	Reading		Reading		Mathematics	
	Mean	SE	Mean	SE	Mean	SE
<i>Gender</i>						
Boys	474.6	4.85	446.2	3.50	433.5	3.45
Girls	471.4	4.79	451.6	3.22	428.8	2.93
<i>Socio-economic level</i>						
Low SES	445.6	2.14	421.8	1.72	408.9	1.62
High SES	499.6	8.03	486.2	5.96	461.4	5.93
<i>School location</i>						
Isolated/Rural	444.3	2.40	417.9	1.91	404.9	1.75
Small town	486.5	20.12	470.5	9.49	448.9	9.12
Large city	557.7	15.54	539.7	11.87	507.7	11.87
Namibia	472.9	4.65	449.0	3.12	431.1	2.93

Table 7.11(b). Percentages and sampling errors of learners reaching minimum and desirable reading levels of mastery by sub-groups (SACMEQ I and SACMEQ II)

Sub-groups	SACMEQ I				SACMEQ II			
	Learners reaching minimum level of mastery		Learners reaching desirable level of mastery		Learners reaching Minimum level of mastery		Learners reaching desirable level of mastery	
	%	SE	%	SE	%	SE	%	SE
Gender								
Boys	24.2	1.92	8.1	1.59	16.2	1.35	6.6	0.99
Girls	21.4	1.83	7.5	1.54	17.5	1.24	6.9	0.90
<i>Socio-economic level</i>								
Low SES	11.1	1.09	1.2	0.31	5.9	0.56	0.8	0.17
High SES	34.1	2.95	14.2	2.78	31.9	2.26	14.9	1.92
<i>School location</i>								
Isolated/Rural	9.9	1.17	0.8	0.29	4.5	0.65	0.2	0.08
Small town	26.8	7.49	10.5	6.39	25.5	4.08	10.0	2.79
Large city	62.2	5.80	29.0	5.80	53.1	4.57	27.1	4.05
Namibia	22.7	1.76	7.8	1.51	16.9	1.17	6.7	0.88

In Table 7.11(c), it is interesting to note that female teachers performed slightly better than their male counterparts in both reading and mathematics. However the rural – urban divide in performance follows the same pattern as the one for learners, with teachers in larger cities performing better than those in small towns and rural areas.

Table 7.11(c). Means and sampling errors for the reading and mathematics test scores of teachers by sub-groups (SACMEQ II)

Sub-groups	Teacher performance on all items			
	Reading		Mathematics	
	Mean	SE	Mean	SE
<i>Gender</i>				
Male	726.4	6.17	733.6	10.61
Female	729.3	7.30	736.1	8.80
<i>School location</i>				
Isolated/Rural	708.8	5.88	708.4	8.31
Small town	743.0	11.61	749.1	15.36
Large city	782.0	11.35	816.5	17.14
Namibia	727.9	4.70	734.8	6.67

Policy Suggestion 46. There were large differences in achievement between learners in isolated/rural areas and those in more urban areas. Coupled with the differences seen earlier in teacher subject matter knowledge among the regions, it would seem that efforts will be needed to improve the teacher subject matter knowledge as well as the classroom furniture and school resources in the isolated and rural areas

What were the socio-economic differences in reading and mathematics achievement for learners and teachers?

The results for achievement by socio-economic status have been presented in Tables 7.11(a) to 7.12(c). The possessions in the home (see Chapter 3) were taken as a proxy measure for socio-economic status. They were summed to make a total possessions index. All learners from homes that had summed scores up to and including the mean of total possessions for Namibia were placed in the low SES group. Those above the mean were placed in the High SES group.

For Rasch scores, there were significant differences for reading at SACMEQ I and for reading and mathematics in SACMEQ II. In all cases the High SES group learners scored higher than the low SES group learners.

The high SES group of learners scored significantly higher than the low SES group of learners for all calculations for learners reaching the minimum and desirable levels of mastery.

In terms of the percentages of learners reaching different competency levels, it can be seen from Table 7.12(a) that for SACMEQ I there were higher percentages of learners from the low SES at Levels 1, 2, and 3 in reading. At Level 4 the percentages from the low and the high SES were the same, and at higher levels the higher SES group had higher percentages of learners. This was also true for reading in SACMEQ II (*Table 7.12(b)*) where large percentages of learner from the low SES group were at Levels 1-3. However, from Level 4 onwards there were higher percentages of learners from the high SES group compared to learners from the low SES group.

In mathematics, it can be seen from Table 7.12(c) that in SACMEQ II there was a bigger percentage of learners from the high SES group at Level 3 and above compared to the low SES group.

Table 7.12(a). Percentages and sampling errors for literacy levels of learners by sub-groups (SACMEQ I)

Sub-groups	Percentage of learners reaching the reading competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<i>Gender</i>																
Boys	3.8	0.54	12.5	0.96	33.5	1.39	28.2	1.45	10.2	0.88	4.2	0.59	4.5	0.84	3.0	0.90
Girls	3.7	0.55	12.6	0.92	36.1	1.54	28.6	1.66	8.4	0.75	3.5	0.53	3.7	0.68	3.3	0.90
<i>Socio-economic level</i>																
Low SES	5.3	0.68	15.5	1.03	42.4	1.34	28.1	1.54	6.4	0.73	1.2	0.23	0.8	0.21	0.3	0.20
High SES	2.2	0.40	9.7	1.03	27.4	1.64	28.8	1.89	12.1	1.03	6.5	0.78	7.4	1.31	5.9	1.61
<i>School location</i>																
Isolated/Rural	4.9	0.57	16.0	1.09	42.4	1.31	29.2	1.70	6.0	0.72	0.8	0.22	0.5	0.18	0.2	0.15
Small town	3.0	1.09	10.5	1.88	31.9	4.45	29.4	3.40	11.1	2.62	4.2	1.50	4.8	3.12	5.1	3.43
Large city	0.6	0.31	2.9	0.91	11.8	2.35	25.4	3.10	18.8	2.23	13.6	1.67	15.5	2.58	11.5	3.49
Namibia	3.7	0.41	12.6	0.79	34.8	1.17	28.4	1.36	9.3	0.68	3.9	0.46	4.1	0.71	3.2	0.86

Table 7.12(b). Percentages and sampling errors for literacy levels of learners by sub-groups (SACMEQ II)

Sub-groups	Percentage of learners reaching the reading competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<i>Gender</i>																
Boys	13.3	0.94	31.8	1.21	26.7	1.13	13.3	0.92	5.5	0.54	3.4	0.37	3.9	0.59	2.0	0.45
Girls	12.4	0.94	29.4	1.27	26.4	1.06	15.3	0.93	6.4	0.65	3.7	0.39	3.9	0.53	2.4	0.49
<i>Socio-economic level</i>																
Low SES	15.4	0.95	36.9	1.22	30.3	1.05	12.4	0.90	3.4	0.44	1.0	0.19	0.4	0.12	0.1	0.07
High SES	9.4	0.93	21.9	1.36	21.5	1.16	16.9	1.12	9.5	0.81	7.0	0.59	8.6	1.12	5.1	0.94
<i>School location</i>																
Isolated/Rural	16.9	1.07	37.6	1.29	29.7	1.07	12.4	0.98	2.7	0.49	0.6	0.16	0.1	0.06	0.0	0.01
Small town	8.8	1.18	24.2	2.31	25.5	1.92	17.3	1.60	9.5	1.38	5.2	0.94	7.1	2.02	2.4	0.81
Large city	2.4	0.51	12.0	1.94	16.3	2.14	18.3	1.88	13.9	1.47	12.5	1.34	14.2	1.89	10.3	2.24
Namibia	12.8	0.77	30.6	1.03	26.6	0.82	14.3	0.78	6.0	0.48	3.6	0.29	3.9	0.51	2.2	0.41

Table 7.12 (c). Percentages and sampling errors for numeracy levels of learners by sub-groups (SACMEQ II)

Sub-groups	Percentage of learners reaching the mathematics competence level															
	1		2		3		4		5		6		7		8	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<i>Gender</i>																
Boys	19.5	1.05	55.8	1.36	15.3	0.98	3.6	0.42	2.4	0.44	2.5	0.56	0.8	0.28	0.1	0.06
Girls	19.8	1.07	58.0	1.31	14.4	0.87	3.5	0.46	1.7	0.32	1.7	0.39	0.7	0.23	0.2	0.09
<i>Socio-economic level</i>																
Low SES	23.5	1.04	63.0	1.07	11.9	0.81	1.1	0.22	0.3	0.11	0.1	0.06	0.0	0.00	0.0	0.00
High SES	14.4	1.16	48.7	1.87	18.9	1.21	6.9	0.73	4.4	0.73	4.7	1.01	1.7	0.51	0.3	0.13
<i>School location</i>																
Isolated/rural	24.6	1.14	64.3	1.10	10.2	0.82	0.7	0.19	0.1	0.09	0.0	0.00	0.0	0.00	0.0	0.00
Small town	15.5	1.88	51.6	3.04	19.9	1.88	5.1	0.96	3.7	1.24	3.4	1.48	0.6	0.35	0.2	0.14
Large city	5.9	1.17	35.9	3.47	26.4	2.35	12.2	1.63	7.2	1.32	8.3	1.95	3.6	1.22	0.6	0.29
Namibia	19.6	0.83	57.0	1.10	14.9	0.77	3.5	0.36	2.0	0.33	2.1	0.44	0.7	0.22	0.1	0.06

Conclusion

In this chapter, the reading and mathematics achievement or competence levels of learners and their teachers have been discussed. The results indicate that generally the competence levels of both learners and teachers, especially in the northern regions of Namibia are low. Countrywide, the achievement levels are not only associated with the SES of learners, but they also follow the rural-urban continuum. However the variation among schools within regions was high for Namibia. This poses a major challenge for the equitable provision of the necessary resources to all schools in order to help narrow the variation in outcomes.

In mathematics, teachers in Caprivi, Kavango, Ohangwena Oshana and Oshana and Omusati demonstrated very low competencies. This raises a serious concern for two reasons: Firstly, about two thirds of all primary schools are found in these 6 northern regions, which also have the largest teacher: learner ratios. This means that teachers who only had low competencies in the mathematics taught more than 65 percent of all Grade 6 learners in Namibia. Secondly, these teachers cannot be expected to teach learners to acquire higher competencies, which they (the teachers) themselves did not have. Further, most of the schools in the 6 regions cater for rural communities who have very low SES. Therefore most of the learners who attend schools in the northern regions come from low SES background.

The results show that learners from rural communities that have low SES obtained the lowest scores in both literacy and in numeracy. This implies that these learners could be said to be caught up in a vicious cycle of disadvantages in terms of their *school* background, *home* background as well as *community* background factors. Therefore, it would be advisable for the Ministry to develop new strategies and a multi-pronged approach aimed at improving the quality of education in these regions in order to help break the vicious cycle.

Chapter 8

Conclusion and Agenda for Action

This is the second national report on the conditions of schooling and the quality of primary education in Namibia. Data for the first report which was published in 1998, was collected in 1995, while the data for the analysis made in this report was collected towards the end of 2000. The report does not only present the conditions of primary schooling in 2000, but also provides an indication of the changes that had occurred between 1995 and 2000. As could have been expected progress was made in some aspects of the conditions of schooling such as school resources. However, in some instances there was no change at all, the situation remained very much the same. Perhaps five years is still a shorter period to expect bigger changes but in some aspects such as learner achievement or learner acquisition of basic literacy skills, there was a decline.

The analysis made in this report and the policy suggestions provided have taken into account the findings and recommendations of the SACMEQ I report as well as other developments taking place within and outside the Ministry. Of particular mention are the Ministry efficiency programme report (1996), the Presidential Commission Report on Education and Training (1999), the MBESC Strategic Plan 2001-6, the Second National Development Plan (2001/2 - 5/6), EFA National Plan of Action (2001-15), Vision 2030, the promulgation of the Education Act (Act # 16 of 2001), and the decentralisation of the Ministry from the previous 7 educational regions to 13.

Not all the recommendations of the first SACMEQ project, the Efficiency Report and the Presidential Commission Report have been implemented by the Ministry. Some of the recommendations required structural changes, more financial and human resources, while others did not. This has led to justifiable criticisms in some quarters, that the Ministry has not been able to implement some sound and practicable recommendations. Some of the policy suggestions that have been made in different sections of this report, and those that have been summarised in this chapter include some suggestions that were made in

the SACMEQ I report and other documents. This is not just a mere repetition. It is because these suggestions are pertinent to the well being of the educational system. The Ministry can only continue to ignore these suggestions at its own peril. These suggestions should be debated and discussed within the Ministry and with stakeholders so that collective solutions can be found to some of the educational problems and so that appropriate actions can be taken.

There are a total of 46 policy suggestions that have been made in this report. In order to facilitate debate and follow up on implementation by senior managers the responsible or lead units have been identified, a time frame has been indicated as well the degree of the cost implications, i.e. low, medium or high.

Summary of policy Suggestions

Policy suggestion	Lead unit	Time frame	Estimated cost
Policy suggestion 1. Further effort may be required by the regional education authorities in Kavango and Ohangwena to have learners enter school at the right age and that they repeat less frequently.	Kavango and Ohangwena regions	Medium to long term	No additional costs
Policy suggestion 2. The Regional Director of education in Ohangwena may wish to consider conducting a special study in the region in order to find out why insufficient boys were attending Grade 6.	Ohangwena region	Medium term	Low cost
Policy suggestion 3. The educational authorities in Kavango may well wish to consider extending the “school feeding programme” or any other supplementary food programme to more schools for the children from very poor families.	Kavango region	Medium to long term	Additional costs

<p>Policy suggestion 4. The Hostels Division at head office as well as the education authorities in Kunene and Omaheke should investigate the operations of hostels in the two regions to determine the number, and investigate the conditions of all informal or community hostels to ensure that their operations are in conformity with the requirements of the Ministry.</p>	Kunene & Omaheke regions; Hostel division of EPI	Medium to long term	Low cost
<p>Policy suggestion 5. If there are few books in learner's homes, then the Ministry may wish to overcome this deficit by ensuring that there are <i>enough</i> books in the classroom and that it is possible for learners to <i>take books home</i> from school to read. Regional Directors in conjunction with the Directorate of National Libraries and Information Services can also extend the operations of community libraries to include mobile libraries that visit villages at least once every two weeks.</p>	Directorate of National Libraries; Regional Education Directors	Medium to long term	Requires additional costs
<p>Policy suggestion 6. Noting that it will take a while for the government to help improve the general socio-economic conditions in the Caprivi, Kavango, Ohangwena, Omusati, Oshikoto and Oshana regions, the Ministry and the Regional Education authorities should make concerted efforts to supply schools in these regions with enough qualified/experienced teachers, textbooks and other reading/learning materials to compensate for the inadequacies in the home background characteristics of learners.</p>	EMT, General Services & EPI	Medium to long term	Requires additional costs
<p>Policy suggestion 7. The education authorities in Oshikoto region should further investigate the reasons for high learner absenteeism to determine the type/s of illnesses, the type of family reasons and the type of work associated with learner absenteeism.</p>	Oshikoto region	Medium term	No additional costs

<p>Policy suggestion 8. Education authorities in Ohangwena, Omaheke, Omusati, Oshikoto, Otjozondjupa and Oshana should investigate the reasons for the high repetition rates in their regions.</p>	<p>Regional Education Directors in the 6 regions</p>	<p>Medium to long term</p>	<p>No additional costs</p>
<p>Policy Suggestion 9. Regional Education authorities, advisory teachers and school principals should encourage mathematics teachers to give more homework and to correct it more often.</p>	<p>Regional Directors, Advisory teachers & principals</p>	<p>Medium to long term</p>	<p>No additional costs</p>
<p>Policy suggestion 10. Given the importance of homework in improving learning outcomes, school boards, school inspectors, school principals as well as teachers should ensure that learners are regularly given homework, that the homework is corrected, and take every opportunity of encouraging the parents of their learners to ensure that homework has been done, and show an interest in the homework by helping if they can and certainly looking at the schoolwork of their children.</p>	<p>Regional Directors, Inspectors, Advisory teachers, & school board members</p>	<p>Medium to long term</p>	<p>No additional costs</p>
<p>Policy suggestion 11. It is suggested that the Ministry should initiate some in-depth study into the different kinds of parental involvement programmes that have proven successful in other parts of the country and that some pilot studies be begun in Caprivi and Kunene.</p>	<p>Kunene and Caprivi regions, EPI and PAD.</p>	<p>Medium to long term</p>	<p>Low cost</p>

<p>Policy suggestion 12. It is suggested that education authorities in Caprivi, Kavango, Ohangwena, Omusati, Oshikoto and Oshana as well as the regional education forums in these regions should ensure that the disadvantaged schools in these regions get the support they need from inspectors and advisory teachers. School principals should see to it that learners are given enough homework regularly, and monitor that, teachers actually mark the homework. School boards should mobilise parents to be more involved in the education of their children, by seeing to it that their children get food before going to school, and that they attend school regularly without recourse to repetition.</p>	<p>Regional directors of Education in the 6 regions, Inspectors, Advisory teachers and school principals</p>	<p>Long term</p>	<p>No additional costs</p>
<p>Policy suggestion 13. The financial services division of the directorate of General Services and EPI may wish to consider conducting an audit of the budgetary allocations for textbooks for each educational region and determine how this money was actually distributed among schools in the regions. Regional education authorities may wish to request school principals and their teachers to conduct annual audits on the situation of textbooks in schools. School inspectors should verify the information during their school visits so that corrective measures can be taken in time.</p>	<p>General Services/ financial division, procurement, school inspectors & principals</p>	<p>Medium to long term</p>	<p>Requires additional costs but Low cost</p>
<p>Policy suggestion 14. Regional education offices and School Inspectors should constantly monitor the budgetary allocation for textbooks and classroom materials. School boards should also mobilise parents to contribute to the education of their children by buying less expensive materials such as pencils, erasers and rulers.</p>	<p>Regional Directors, Inspectors, principals & school board members</p>	<p>Medium to long term</p>	<p>No additional costs</p>

Policy suggestion 15. The Directorate of National Libraries and Information Services, and the EMIS division should collect data on classroom libraries for all schools and then after that, steps should be taken to ensure that all schools have either a school or classroom library. At the same time school principals should be instructed to provide a borrowing system that will enable all learners to borrow books to take home and read.	Directorate of National Libraries & EMIS division	Medium to long term	Low cost
Policy suggestion 16. Given the magnitude of the occurrence of extra tuition, EPI and PAD should conduct in-depth studies, starting with a pilot study in Omaheke, Oshikoto and Otjozondjupa regions to determine the reasons for the extra tuition, who provides it and how it is organised.	EPI, PAD, School Inspectors & Principals	Medium term	Requires additional costs
Policy suggestion 17. The EMT through the Directorate of Planning and Development should maximise its efforts in soliciting for resources to continue to provide teacher housing, in the rural areas, in order to equitably reallocate qualified and experienced teachers between the rural and urban areas.	EMT & PAD	Long term	Requires additional costs
Policy suggestion 18. Regional Education Directors and their respective advisory teachers should in consultation with NIED investigate the subject competencies of teachers in Maths and English, and design courses to upgrade the subject knowledge of these teachers.	Regional Directors, Advisory teachers & NIED	Long term	Requires additional costs, but low cost
Policy suggestion 19. Regional education authorities in Omaheke, Otjozondjupa, Oshikoto, Erongo, Omusati and Oshana should see to it that teachers who have primary education only should firstly upgrade their academic qualifications and enrol only for the distance teacher training courses which have the same minimum entry requirement as the BETD.	Regional Directors, School Principals, Inspectors & School board members	Long term	Requires additional costs

Policy suggestion 20. Regional education officials should strive to allocate teachers to schools in their regions in a way that promotes a balance between experienced qualified teachers and new graduate teachers in all schools.	Regional Directors & school board members	Medium to long term	Requires additional costs but low costs
Policy suggestion 21. The National Institute for Educational Development (NIED) may wish to consider providing policy guidelines on the type and frequency of in-service courses for all teachers.	NIED	Medium term	Requires additional costs
Policy suggestion 22. The education authorities in Oshana may wish to investigate the possible reasons why Mathematics teachers in the region taught fewer hours.	Regional Director, Inspectors & Advisory teachers	Medium term	Low cost
Policy suggestion 23. The regions of Otjozondjupa, Omusati, Oshikoto and Oshana would seem to be in need of encouragement to give more tests in addition to other measures of continuous assessment if they are to have systematic feedback from the learners as to where each learner is in terms of the objectives/competencies mastered and not mastered.	Regional Directors, Advisory Teachers & School Principals	Medium term	No additional costs
Policy suggestion 24. The Directorate of EPI in collaboration with regional education forums and school boards, should come up with policy guidelines that will compel all teachers to meet the parents of the learners whom they teach at least once per year and as often as required in conformity with the national educational goal of democratic participation.	EPI, Regional Directors & School board members	Medium to long term	No additional costs

<p>Policy suggestion 25. Regional education authorities may wish to monitor teachers' teaching strategies/practices on a regular basis in order to take timely corrective measures where necessary. NIED should continue assisting teachers with the practical implementation strategies for continuous assessment which should include regular tests as long as such tests are used to monitor learner acquisition of basic competencies for diagnostic purposes and not for promotion purposes.</p>	<p>Regional Directors, Inspectors, Advisory teachers & NIED</p>	<p>Medium to long term</p>	<p>Requires additional costs but low cost</p>
<p>Policy suggestion 26. Regional education authorities and school board members faced with the problem of broken desks and chairs may wish to mobilise parents and their local communities to repair them from their own resources without waiting for the central office of the Ministry of education to do so.</p>	<p>Regional Directors, Inspectors & School board members</p>	<p>Long term</p>	<p>Requires additional costs but low cost</p>
<p>Policy suggestion 26. The Directorate of Educational Programmes Implementation (EPI), regional education authorities and school inspectors may wish to consider conducting regular audits to monitor the provision of basic classroom teaching materials and ensure that each school or teacher is supplied with the basic requirements.</p>	<p>EPI, Inspectors & advisory teachers</p>	<p>Medium to long term</p>	<p>Requires additional costs</p>
<p>Policy suggestion 28. Regional Directors of Education should see to it that inspectors and advisory teachers continue to render professional guidance and support to schools and teachers to help improve the quality of education. Inspectors and advisory teachers should be encouraged to have a positive attitude towards teachers in order to win their confidence.</p>	<p>Regional Directors, EPI, Inspectors & Advisory teachers</p>	<p>Medium to long term</p>	<p>No additional costs</p>

Policy suggestion 29. As instructional leaders at the school level, principals should be encouraged to continue to periodically monitor what goes on in classrooms and advise teachers accordingly, instead of leaving the responsibility to Heads of Department only.	Inspectors & School principals	Medium term	No additional costs
Policy suggestion 30. The directorates of Planning and Development, EPI and NIED, in collaboration with regional education authorities and teacher trade unions should continue dialogue on the relationship between teacher qualifications, the quality of teaching and remuneration. At the same time incentives should be given to teachers who consistently demonstrate good teaching.	EPI, NIED, PAD, Advisory teachers, principals & School board members	Medium to long term	Requires additional costs but low costs
Policy suggestion 31. The EMT may wish to encourage Regional Education authorities and school board members to encourage qualified, experienced and deserving female teachers to apply for school management positions in line with the national policy of affirmative action.	EMT, Regional Education directors 7 school board members	Medium to long term	No additional costs
Policy suggestion 32. The EMT in consultation with NIED and EPI may wish to consider setting minimum academic and professional qualifications as well as years of experience for new appointments to the position of school principal.	EMT, EPI & NIED	Medium to long term	No additional costs
Policy suggestion 33. The Ministry may wish to make consultations with teachers unions to identify and offer incentives for early retirement for school principals who have primary education only, and who have been in teaching service for more than 25 years.	EMT, Personnel division & EPI	Medium to long term	Requires additional costs but low

Policy suggestion 34. The phasing out of unqualified teachers who have not responded to the Ministry's directive to upgrade themselves should go hand in hand with the recruitment and appointment of new graduate teachers. Regional Education authorities should see to it that new graduate teachers are allocated to schools where their services are needed most, and that such schools should be given priority in the construction of teacher houses.	EMT, EPI, NIED, Regional Directors & Inspectors	Long term	Requires additional costs for teacher houses
Policy suggestion 35. Regional Education authorities and School board members need to pay special attention to the repair and maintenance of school buildings so that they can be used for longer periods.	Regional Directors, Inspectors & school board members	Medium to long term	Requires additional costs but low
Policy suggestion 36. The physical facilities division in the Directorate of Planning and Development together with regional education planners in Erongo, Karas, Kavango and Omaheke should investigate the classroom space per learner in these regions because it has implications for the implementation of the Ministry's staffing norms.	PAD, Regional planners in the relevant regions	Medium term	Low cost
Policy suggestion 37. The Regional Education authorities in Ohangwena and Oshikoto may wish to investigate the reasons why school principals in the two regions have so many teaching hours per week, while the authorities in Khomas region may wish to investigate why school principals in the region have very few teaching hours per week.	Regional Directors, Inspectors & EPI	Medium term	Low cost
Policy suggestion 38. Regional Education authorities may wish to further investigate the reasons associated with learner and teacher absenteeism and establish the type/s of illnesses associated with regular absenteeism.	Regional Directors & Inspectors	Medium to long term	Low cost

<p>Policy suggestion 39. The Directorate of EPI in collaboration with Regional Education authorities should consider setting up a task force to identify schools that have serious discipline problems, identify reasons for the problems and suggest measures to overcome the problems. Regional Education authorities and school board members may wish to investigate the reasons for regular absenteeism, late coming to school and other vices that have a negative influence on teaching/learning, and ensure that suggested solutions involve parents and local communities.</p>	<p>EPI, Regional Directors, Inspectors School principals & school board members</p>	<p>Medium to long term</p>	<p>Low cost</p>
<p>Policy suggestion 40. The Directorates of EPI, NIED, PAD and Regional Education authorities may wish to combine forces in conducting more focussed research into possible reasons hampering effective teaching and learning in Namibia, and at the same time publicise good, functioning practices.</p>	<p>EPI, Inspectors, NIED, PAD & Educational Region authorities</p>	<p>Long term</p>	<p>Requires additional costs</p>
<p>Policy suggestion 41. The Ministry should continue to provide new classrooms and build new schools in the northern regions that have large learner numbers. The construction of new schools should go hand in hand with the construction of teacher houses.</p>	<p>PAD, Regional Education Offices</p>	<p>Medium to long term</p>	<p>Requires additional costs</p>
<p>Policy suggestion 42. There is a need for NIED to make further investigations to identify the competencies that might be lacking in the reading and mathematics school curricula, in teacher training curriculum and/or in the teaching practices of teachers and take corrective measures.</p>	<p>NIED, Advisory teachers</p>	<p>Medium to long term</p>	<p>Requires additional costs but low</p>

<p>Policy suggestion 43. NIED and the Regional Education authorities in Caprivi, Ohangwena and Oshikoto may wish to make further investigations into the reasons for the low reading comprehension among learners and help the teachers and their learners to overcome this deficiency in order to acquire competence levels 3 and 4.</p>	<p>NIED, EPI, Advisory teachers & Regional Education authorities</p>	<p>Medium to long term</p>	<p>Requires additional costs</p>
<p>Policy suggestion 44. The problem of low competence in mathematics needs to be addressed as a matter of urgency starting with the following measures:</p> <ul style="list-style-type: none"> • Education authorities in the 7 northern regions may wish to carry out an audit of the number of qualified and experienced maths teachers that are available in the regions. • The EMIS may conduct a verification of data on qualified upper primary mathematics teachers in the regions. • Subject specialists from NIED and advisory teachers may arrange special training workshops at the inspection circuit level, for mathematics teaches in these regions. • Trainers of mathematics teachers in teacher colleges, should emphasise to trainee teachers, the teaching of higher competencies in mathematics 	<p>NIED, EPI, Advisory teachers, Inspectors & Teacher trainers</p>	<p>Medium to long term</p>	<p>Requires additional costs but low.</p>
<p>Policy suggestion 45. A number of remedial measures for teachers who have low competencies in mathematics may be necessary:</p> <ul style="list-style-type: none"> • Tailor-made in-service courses taking into account the current competencies that the teachers have and those that they lack • Increase the standards required for pre-service teachers specialising in mathematics. <p>Need to target specific remedial work for schools that are known to be struggling.</p>	<p>NIED, Advisory teachers, Regional Education authorities, School principals</p>	<p>Medium to long term</p>	<p>Requires additional costs</p>

Policy suggestion 46. There were large differences in achievement levels between learners in isolated/rural areas and those in urban areas. Coupled with the differences in teacher subject matter knowledge discussed in chapter 7, it would seem that efforts will have to be made to improve not only the subject competence of the teachers but classroom furniture and other classroom resources as well, especially in rural schools.	EPI, NIED Regional Education authorities & PAD	Long term	Requires additional costs
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The way forward

This report has highlighted some achievements, major shortcomings and challenges that have to be tackled to provide “equitable access” to “quality primary education” for all in conformity with the Ministry’s own Strategic Plan and in conformity with the goals of the Dakar declaration on education for all. While efficiency is still a major challenge there is a great need for equitable access to quality teaching and learning for all learners. This report has shown that much needs to be done in this regard.

On average, the government of the Republic of Namibia spends about 20 percent of recurrent budget on basic education. The Ministry of Basic Education Sport and Culture in turn spends 90 percent of this amount on remuneration for teachers and other Ministry staff. These figures are quite high compared to other SACMEQ countries. The nation ought to have quality education in terms of the competencies that teachers and their learners have to demonstrate. It is therefore worrisome to note that there has not only been a decline in the competence of learners, but also that the competence of teachers, especially in mathematics, is very low compared to other SACMEQ countries.

Further more, there are already indications that the gains made after independence in terms of providing access to education and improving the quality of teaching and learning will be eroded by the impact of the HIV and AIDS pandemic, due to increased teacher attrition rates, prolonged periods of absence from school due to illness and an increase in the number of school going age orphans and other vulnerable children. It is therefore

imperative for the Ministry to redouble its efforts to overcome some of the shortcomings highlighted in this report in order to make improvements in education that will enable Namibia to become more competitive in the global economy. This is one of the prerequisites to the achievement of a "knowledge based economy" in Namibia as envisaged in the national vision – "Vision 2030."

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