## **Policy Brief**

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# Southern and Eastern Africa Consortium for Monitoring Educational Quality

# Progress in Gender Equality in Education: South Africa

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## Introduction

This policy brief covers key gender-related issues in education in South Africa with a view to showing whether there have been any significant changes in 'gender equality' between 2000 and 2007, both at the provincial and national levels. The following questions formed the basis of the investigation:

- What were the changes, if any, in the **proportion of girls' enrolment** at the Grade 6 level for the nine provinces in South Africa between 2000 and 2007?
- What were the changes, if any, in the size and direction of the gender differences in reading and mathematics scores for the nine provinces in South Africa between 2000 and 2007?
- What were the changes, if any, in **selected gender-related school environment factors** between 2000 and 2007 that could be further investigated in order to improve gender equality in education for South Africa?

Answers to the above questions are expected to guide appropriate policy decisions regarding gender-related interventions in education.

# South Africa's Participation in SACMEQ

The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) is a

network of 15 ministries of education (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania (Mainland), Tanzania (Zanzibar), Uganda, Zambia, and Zimbabwe).

SACMEQ's mission is twofold: (a) To expand opportunities for educational planners to gain the technical skills required to monitor and evaluate the quality of their education systems. (b) In the process of pursuing its mission, SACMEQ generates important information that can be used as evidence by decision-makers to plan and improve the quality of education.

SACMEQ undertook three large-scale, cross-national studies of the quality of education: SACMEQ I (1995-1999, reading) with seven ministries; SACMEQ II (2000-2004, reading and mathematics) with 14 ministries; and SACMEQ III (2006-2010, HIV mathematics, and and reading, **AIDS** knowledge) with 15 ministries. South Africa participated in SACMEQ II in 2000 (3,163 Grade 6 learners from 169 primary schools); and SACMEQ III in 2007 (9,071 Grade 6 learners from 392 primary schools).

## The Importance of Gender Equality in Education

The importance of gender equality in education within the process of international goal-setting has

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been emphasized in the Education for All (EFA) Goals (UNESCO, 2000) and in the Millennium Development Goals (MDG) (United Nations, 2006).

The gender equality issue in education has been a major concern in many countries, including South Africa, because of its link with health and nutrition, economic development, and civic responsibilities. For the purposes of this policy brief, the concept of 'gender equality in education' follows the UNESCO (2003) interpretation, which refers to the notion of boys and girls experiencing the same advantages or disadvantages in attending school, receiving teaching methods, curricula, and academic orientation, and producing learning achievements equal and subsequent life opportunities.

## Gender-Related Policy in South Africa

One of the greatest achievements since democracy in South Africa has been the massive expansion of access to basic education, especially in the enrolment of girls. The achievement was made possible mainly by a progressive constitution that guarantees the right to education for both females and males. The South African Government has committed itself to transforming gender relations, achieving gender parity between males and females, and promoting women's empowerment.

The 2001 National Census revealed that for the population twenty years and older, there were twice as many women as men in the social sciences, while there were ten times as many men as women in the engineering and the natural sciences (DoE, 2008). The 2010 Education for All (EFA) Country Report indicated that in 2008 South Africa ranked 22 out of 138 countries that were assessed for gender parity (DoE, 2010). It also indicated that, according to the 2009 Global Gender Gap Report, South Africa had made great strides in closing gender gaps in various spheres of life, thereby entering the top 10 countries at sixth position.

The prioritization of the status of women in all aspects of life beyond primary education has been given particular expression through the establishment of the Department of Women, Children and Persons with Disability, whose main responsibility is to formulate relevant policies and monitor progress in their implementation. In addition, the government has introduced a number of innovative programmes that seek to enhance women's vocational choices, with special attention given to accelerating their participation in science and technology.

Within the Department of Basic Education (DBE), there is a Gender Equity Unit whose main function is to monitor gender equality, with particular focus on: (a) ensuring equal opportunities for both boys and girls to access basic education, (b) enhancing girls' retention in school, (c) promoting girls' participation and performance in science and mathematics, (d) protection of girls against violence, (e) prevention of all kinds of gender biases in the curriculum, and (f) promoting equitable gender advancement in all potential career fields.

The DBE, in close collaboration with Provincial Education Departments (PED), has taken a number of initiatives to give effect to the national priorities of promoting gender parity in vocations and societal responsibilities. The Girls Education Movement (GEM) was initiated specifically to encourage girls to study science and technology (DoE, 2008). The 'Techno-Girl Programme' was introduced to provide career guidance and life-skills support to girls, particularly in careers that involve mathematics and technology.

In general, the DBE and PEDs have made concerted efforts to entrench programmes that must serve as vehicles to empower both girls and boys, by providing career guidance and the teaching of socially related life skills.

# Gender Balance in Grade 6 Participation

Figure 1 shows the proportion of girls enrolled at Grade 6 level for each province and South Africa as a whole in both 2000 and 2007. Throughout all the SACMEQ studies, the use of a 'scientific' sampling method with an internationally-required level of sampling accuracy ensured that the proportion of girls at the Grade 6 level in the sample reflected the entire Grade 6 target population.

It can be seen in Figure 1 that the proportion of girls enrolled at the Grade 6 level in South Africa in 2000 was 52 percent of the total enrolment. There was not much change in the proportions of boys and girls by 2007, which left girls at 51 percent of the total enrolment, virtually leaving the gender balance in South African schools unchanged, but still slightly tilted in favour of girls.

In all the provinces, except Limpopo, the gender balance remained reasonably unchanged with less than a five percentage point movement either way between 2000 and 2007. In Limpopo, the proportion of girls decreased by six percentage points from 56 percent in 2000 to 50 percent in 2007. There were only two provinces, Mpumalanga and Northern Cape, where the proportion of girls was below 50 percent of the Grade 6 learners, but even there gender balance was not threatened in any significant way.

A curious phenomenon in South Africa was that there were more male than female learners at primary school level, but the order got reversed at secondary and tertiary institutions, where there were more female than male learners (DBE, 2010). Possible explanations for this phenomenon could include, among others, higher grade repetitions and early dropout rates among boys, but a further systematic investigation is required in this regard.

# Gender Differences in Learning Achievements

While the gender balance remained reasonably maintained in South African school enrolments between 2000 and 2007, the concern of policymakers was whether there was comparable gender equality in terms of learning achievements.

Figures 2 and 3 illustrate the gender and time differences in the learning achievements in reading and mathematics by province. The standardized scores with a pupil mean of 500 and a standard deviation of 100 were established during SACMEQ II, based on the calibration of test items from the SACMEQ I and SACMEQ II studies. During SACMEQ III, use of the sub-sets of these test items along with the Rasch-measurement approach permitted valid comparison of scores over time.

#### Reading

In South Africa as a whole, reading performances for both boys and girls did not change in any meaningful measure between 2000 and 2007, with girls performing reasonably and consistently better than boys.

At the provincial level, North West, Northern Cape, Mpumalanga and Free State provinces saw notable improvements (positive change with both boys and girls) between 2000 and 2007, again with girls tending to perform observably better than boys. It was interesting to note that while the scores of boys in Gauteng dropped, the scores of girls actually improved between 2000 and 2007, resulting in a large gender difference. In the rest of the provinces, learner scores remained either unchanged or dropped in this period. This included Western Cape which, although registering the highest overall scores for both boys and girls, experienced significant drops in the performance of both genders in this period. In KwaZulu-Natal and Western Cape, a very big drop by girls led to a marginal gender difference.

#### **Mathematics**

At the national level, the overall learner performance in mathematics increased in 2007, especially for girls.

At the provincial level in 2007, the performances had either remained unchanged or improved in all the provinces, except in the Eastern Cape, Limpopo, KwaZulu-Natal, and the Western Cape where there were definite declines in performance, although the latter province still remained the highest performer. Like for reading, those provinces that realised appreciable improvements in mathematics performances in this period were the Free State, Northern Cape, North West, and Gauteng girls, with girls in all four instances either reaching or exceeding the SACMEQ II mean score of 500, while boys still remained below this critical benchmark. There was some improvement in performance in Mpumalanga, although for both boys and girls it was still below the SACMEQ benchmark.

The Eastern Cape, KwaZulu-Natal, and Limpopo saw worrying declines in the performance of both boys and girls in this period. Overall, it would appear that these three provinces, which are largely rural but also among them host the majority of learner populations in South Africa, need more focused interventions to improve the educational outcomes of both genders.

## Other Information through the 'Gender Lens'

The above sets of results illustrated that, whilst South Africa was doing reasonably well in terms of gender balance in learner enrolments, learner achievements tended to be low, more so for boys than for girls. This general trend in 2000 was repeated in 2007. It appeared that the learning dimension of gender equality had not yet been addressed satisfactorily in South Africa (Saito, 2010).

To understand the context of these results, a set of selected gender-related indicators has been provided

in Table 1. All the indicators shown in Table 1 should be interpreted in relation to the Grade 6 learners.

#### **Female Staff**

In South Africa, female teachers are in the majority at primary school level. Invariably, teachers of Grade 6 classes would normally teach both reading and mathematics, although the tendency to have subject specialists seems to be on the increase. As shown in Table 1, the majority of Grade 6 learners were taught by female teachers for both reading and mathematics, and the percentage even increased to 68 percent in 2007 for reading. Despite the fact that female teachers were in the majority in primary schools, relatively few of them were school heads or principals. In 2000, only 21 percent of Grade 6 learners were in schools where the principal was a female. This percentage increased to 35 percent by 2007, but was still relatively low.

With relatively fewer female principals as role models, fewer girls are likely to aspire to lead roles, again widening gender inequality in the process.

#### **School Safety**

School safety is critical for all learners and teachers, but particularly so for female learners and staff. Some of the critical resources that provide safety and feelings of safety in schools include the safe fencing off of school premises. Table 1, shows that in 2000 only 82 percent of South Africa's Grade 6 boys and girls were in schools that were fenced off and that this percentage had increased to 87 percent by 2007. Because fencing is such a basic safety requirement, it remains unacceptable that 13 percent of learners were in schools that were not fenced off.

#### **Sanitation**

The provision of adequate, separate sanitation facilities, such as separate toilets for boys and girls, is another basic requirement. In the absence of these facilities, female learners may feel unsafe and

consequently, be forced not to stay long in school. In Table 1, the average numbers of learners per toilet in 2000 and 2007 are shown separately, namely, boys per boys' toilet and girls per girls' toilet. For boys and girls, it is worrisome that the ratio of learners to toilets increased between 2000 and 2007.

Although no norms for the numbers of learners per toilet were available for South Africa, the recommendation of the World Health Organisation is a ratio of 1:30 (i.e., only 30 learners should be sharing one toilet. Using this norm (in the absence of a national norm) it is evident that Grade 6 learners in South Africa were in schools where toilets were overcrowded, as was seen in the relatively high learner-toilet ratios, and the fact that these ratios increased considerably during the period in question.

## **Summary of Results**

This policy brief focused on gender equality issues regarding the participation and learning achievements (reading and mathematics) for Grade 6 learners in South Africa. Additional information concerning female staff, security, and sanitary issues was also presented to understand the context.

The results indicated that:

- For South Africa overall, there is a reasonable gender balance in schools as measured through the proportion of boys and girls in school enrolments.
- Achievement levels were generally low, particularly for boys. Learners' scores in both reading and mathematics remained virtually unchanged between 2000 and 2007. The provinces of Eastern Cape, KwaZulu-Natal and Limpopo particularly, saw worrying declines in the performance of their learners in this period.
- In terms of staffing in the teaching profession, there were unacceptably large gender inequalities in terms of leadership of schools. This could

- serve as negative role models for learners, especially girls.
- Provision of safety and sanitation in schools was inadequate. Unacceptably large numbers of learners were in schools where there was no fencing, and the ratios of learners to toilets were too high. This could have a 'push-out' effect on female learners in particular.

## **Policy Suggestions**

To address and rectify each of the key challenges identified in this policy brief, it is suggested that:

- The Teacher Development Unit of the Basic Education Department of should intensively monitor the provision of continuing professional development of teachers of literacy and mathematics, to increase their efficiency in teaching literacy and mathematics to all learners, but with a special focus on improving the performance of boys. Priority should be given to the provinces of Eastern Cape, KwaZulu-Natal and Limpopo.
- District Managers, in collaboration with School Management Teams (SMT), should agree on promotion strategies that seek to redress the current gender inequalities, and deliberately work to increase the number of female principals in the primary schools.
- The Physical Planning Unit of the Department of Basic Education should immediately seek to: (a) establish and publish norms and standards for the provision of separate toilets for boys and girls; and (b) ensure that all schools adhere to these norms and standards.

#### Conclusion

In terms of the participation of both boys and girls in education, South Africa has maintained a reasonably equitable gender balance. However, there are worryingly low levels and wide gender inequalities in the area of learner achievements; female participation in school leadership positions is low; and there is insufficient provision of adequate safety and sanitation facilities, which are particularly crucial for retaining girls in schools.

If properly implemented, the suggestions made in this policy brief could move South Africa forwards in improving gender equality in education.

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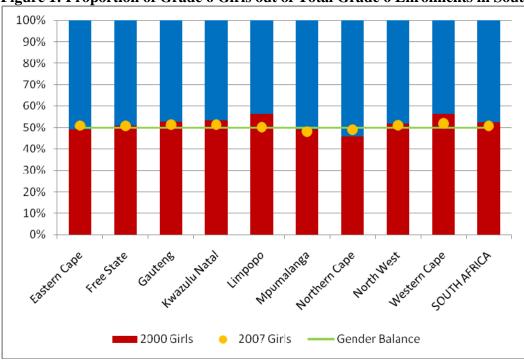


Figure 1: Proportion of Grade 6 Girls out of Total Grade 6 Enrolments in South Africa (2000 and 2007)

Source: SACMEQ Data Archive.

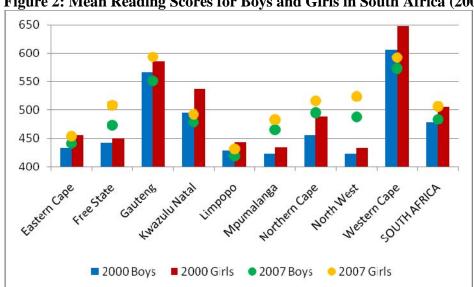
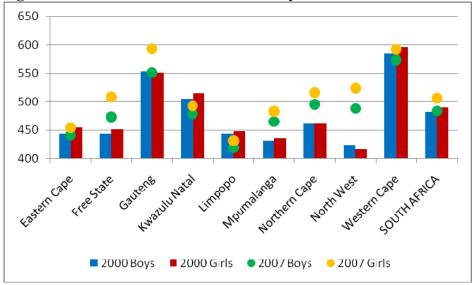


Figure 2: Mean Reading Scores for Boys and Girls in South Africa (2000 and 2007)

Source: SACMEQ Data Archive.

Figure 3: Mean Mathematics Scores for Boys and Girls in South Africa (2000 and 2007)



Source: SACMEQ Data Archive.

Table 1: Selected Information through 'Gender Lens' in South Africa (2000 and 2007)

<b>Selected Indicators</b>	2000	2007
Female Reading Teacher	58%	68%
Female Mathematics Teacher	53%	58%
Female School Head	21%	35%
Have School Fence	82%	87%
# Boys per Boys' Toilet	54	58
# Girls per Girls' Toilet	30	51

Source: SACMEQ Data Archive.