



Lessons for policy-makers: SACMEQ's International Research Conference

FOR OVER A DECADE, the IIEP has been working with 15 ministries of education in Southern and Eastern African countries on integrated research and training activities designed to provide educational planners with the technical skills required to monitor and evaluate the quality of basic education. These activities have been conducted under the auspices of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ).

The SACMEQ Consortium held its biennial International Invitational Educational Policy Research Conference at the IIEP Headquarters in Paris, 28-30 September 2005 (see lead article of *IIEP Newsletter*, Vol XXIV, N° 1, January-March 2006). The Conference attracted contributions from senior professors and researchers located not only in the

SACMEQ countries but also in Australia, China, Japan, United Kingdom, United States, Uruguay and Viet Nam.

The papers presented at the Conference were required to focus on educational policy issues and to draw upon the information resources available in the SACMEQ Data Archives. This issue of the *IIEP Newsletter* presents summaries of three Conference papers that were concerned with the following research questions: Which teachers make a difference? What is the coverage and growth of extra tuition (outside school hours) in developing countries? and How can research be used to develop educational policy reforms related to streaming? Full copies of all papers presented at the Conference are available on the SACMEQ web site: www.sacmeq.org.



Which teachers make a difference?

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THERE has been increasing international recognition that meeting the key Education for All goal of having all children attending and completing a high quality primary education by 2015 may be at risk because of a shortage of qualified teachers. This problem has been compounded by the fact that, in some countries, many of the existing teachers lack the skills and training required to improve the quality of education delivered by schools. In this context, the need for information to guide the development of teacher education policies is essential.

While results from previous research have confirmed that high quality teachers do make a difference to pupil achievement, it has been more difficult to identify the particular characteristics of teachers and teaching that contribute towards this difference. Much of the debate in this area has centred on the relative contributions of pedagogical training, subject matter competency,

and classroom practices to teachers' effectiveness.

These issues were examined in a Conference paper focussed on Namibia by taking advantage of the rich data set collected in 2000 during SACMEQ's second major educational policy research project. The paper investigated the relative impact of teacher factors on the mathematics achievement of Grade 6 pupils after adjusting for the home backgrounds of pupils and school resources. In order to take into account of the hierarchical nature of the SACMEQ data, a multi-level model was employed to guide the data analyses.

The research results confirmed that, in Namibia, *teachers do matter*. In fact, it was possible to isolate the effects of specific teacher characteristics on pupil mathematics achievement, over and above the effects of the home backgrounds of pupils and school resources. An extremely interesting feature of these analyses was

the appearance of a significant interaction between teachers' pedagogical training and their knowledge of subject matter. This finding supported the notion that teachers needed to be competent in *both* areas. In short, all other things being equal, pupil achievement levels in mathematics were much improved in schools where teachers had received more years of pedagogical training *and also* had a better knowledge of mathematics.

These research findings confirmed *the combined importance of both streams of teacher training*: subject matter knowledge and pedagogical skills. The findings also suggested that, as far as possible, only individuals with a certain minimum knowledge of relevant subject matter should be admitted to train as teachers. If this is not possible, then teacher training programmes should be designed to provide opportunities for individuals to improve their knowledge of subject matter. □



What is the coverage and growth of extra tuition in less developed countries?

Laura Paviot, International Institute for Educational Planning
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THE Jomtien World Conference on Education in 1990 and the Dakar World Education Forum in 2000 both urged all countries to work towards universal participation in primary education by the year 2015.

While many governments have been making good progress towards Education for All by expanding access to 'mainstream' schooling, a parallel, or 'shadow', form of schooling has emerged in a number of countries in order to provide extra tuition in school subjects outside school hours. Private tuition or supplementary tutoring systems are already well-established in developed countries – especially in those countries that have highly selective entrance examinations for different educational and career destinations.

One of the Conference papers showed that this extra tuition has also grown spectacularly in less developed countries. The paper examined the coverage and growth of the provision of extra lessons in school subjects outside school hours for the six African countries that participated in SACMEQ's two major cross-national

studies of the quality of education during 1995 and 2000.

The paper illustrated that the percentage of Grade 6 pupils receiving extra tuition across the six countries expanded from an initially very high figure of around 50 per cent in 1995 to nearly 70 per cent in 2000 (see Table). This substantial increase seemed to suggest that by the time of the next SACMEQ data collection, in 2007, there may well be almost universal coverage of extra tuition in some SACMEQ countries.

In Kenya, for example, the coverage of extra lessons in school subjects outside school hours has already reached over 85 per cent of Grade 6 pupils – with over half of these pupils reporting that the lessons were paid for.

The authors of the paper conceded that the existing SACMEQ data provided no clear guidance as to how this phenomenon was being organized in Africa. This leaves several questions unanswered. For example: Who is delivering this extra tuition? How much does it cost? Where

Percentage of pupils receiving and paying for extra lessons in six African countries

Country	Percentage of pupils receiving extra lessons		Percentage of pupils paying for extra lessons
	SACMEQ I %	SACMEQ II %	SACMEQ II %
Kenya	68.6	87.7	57.9
Malawi	22.1	79.7	8.9
Mauritius	77.5	86.6	90.5
Namibia	34.7	44.7	17.3
Zambia	44.8	55.1	50.9
Zanzibar	46.1	55.9	37.9
Average	49.0	68.3	43.9

Source: Sacmeq Data Archive, 2005, Paris: IIEP

is it being delivered? These important questions will be addressed by SACMEQ's 2007 data collection.

What was very clear from these research results was that, in some of the world's less developed countries, the whole notion of Education for All needs to be re-evaluated in order to address a situation whereby some children have no access to education at all while others attend **both** 'mainstream' and 'shadow' school systems. □



How can research be used to develop policy reforms related to streaming?

André Leste, Ministry of Education, Seychelles

DURING the conduct of SACMEQ's second educational policy research project in the Seychelles, every Grade 6 pupil in the country was tested in reading. A detailed analysis of these test scores that was presented in a Conference paper showed some rather surprising results.

The variance in pupil reading test scores for the Seychelles was the largest of all

SACMEQ countries, and it was more than twice as large as the SACMEQ average! A closer inspection of the results showed that this very large dispersion in pupil test scores had its origins in large differences in average pupil test scores between Grade 6 classes within schools.

These between-class differences within Seychelles' schools had emerged because of

the application of 'streaming' (sometimes referred to as 'tracking') – whereby pupils are allocated to different classes based on an assessment of their abilities. That is, the 'brightest' pupils were allocated to Class 6A, the 'second brightest' were allocated to Class 6B, and so on down to the bottom stream. In some of the Seychelles primary schools the differences between average

pupil test scores for the highest and lowest streams were the equivalent of around two or three years of learning.

Although the practice of streaming had been officially discouraged in the Seychelles, the SACMEQ researchers discovered that *a*) in many schools the practice commenced at the Grade 1 level and was applied throughout the whole of primary schooling, and *b*) the teachers and school heads often believed that it was easier to organize classroom instruction based on homogenous ability groups.

The Ministry of Education examined the SACMEQ research results related to the impact of streaming and expressed concern that many low achievers were being left far behind as they proceeded

through the primary school system.

Further analyses of the SACMEQ research results also illustrated an unacceptable impact on gender equity. For Seychelles overall, the highest streams contained a majority of girls, while three quarters of the pupils in the lowest streams were boys.

The Minister for Education took immediate action, using the SACMEQ research results as an integral part of a national policy dialogue on the reform of streaming practices in the Seychelles. This included the requirement that SACMEQ researchers make presentations on the need for reform to school system officials, school heads, teachers, parent organizations, and participants at

important national conferences on education.

A *De-Streaming Committee* was subsequently established to work with schools on the formulation of policy reforms and an associated national action plan that would bring an end to streaming. The action plan commenced with a requirement that all pupils in the Seychelles should be allocated at random to classes. It also recommended changes in the curriculum and teacher education in order to provide *a*) training and classroom materials to support the teaching of mixed-ability classes, and *b*) a five-year monitoring plan to assess the long-term implementation and impact of the new 'non-streaming' policy. □

OPERATIONAL ACTIVITIES

Guidebook for planning education in emergencies and reconstruction

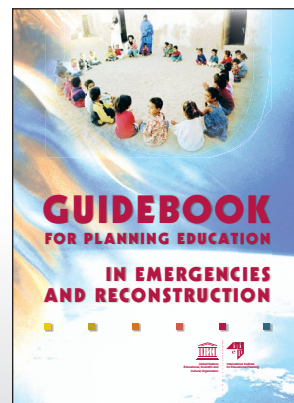
IIEP-UNESCO, 2006. 640 p.

ISBN: 92-803-1288-X

(Series: Education in emergencies and reconstruction)

WHEN serious crisis or conflict hits a country, schools are often abandoned or reduced to rubble. On a larger scale, the whole education system is shaken up if not destroyed. Urgent measures must be taken to ensure that teaching and learning continue to take place, whatever the circumstances. Access to education is essential to provide protection for children and to allow them to return to normalcy as soon as that becomes possible.

The *Guidebook for planning education in emergencies and reconstruction* developed by the International Institute for Educational Planning aims to help countries take quick and appropriate action in emergency situations. Intended mainly for education ministry staff, the guide will also serve the needs of educational planners and managers at all levels, as well as UN staff, donor agencies and NGOs. It comes in a user-friendly folder, with 38 chapters that can be read together or unclipped and consulted as self-contained topics. Each chapter offers a checklist of points to cover as well as strategies or policy options that have already proven successful in such situations.



Due to the very nature of education reconstruction work, which has to move fast in a rapidly changing environment, experience is often not documented, and valuable lessons are lost. The *Guidebook* is part of IIEP's pioneering research programme in this field, and draws on case studies from situations as diverse as Kosovo, Southern Sudan, Timor-Leste and Rwanda. The 38 topics cover issues ranging from ethnicity, child soldiers and refugees to teacher training, donor relations and budget management.

The *Guidebook* benefited from the collaboration of a team of recognized specialists brought together by IIEP, representing experienced researchers and practitioners from institutions, agencies and ministries across the world. Copies will be available from *IIEP Publications and Dissemination* as from mid-May 2006.

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