



Republic of
Mauritius



Association for the
Development of
Education in
Africa



Working Group on Education Sector Analysis

Peer Review in Education in Africa

Mauritius

2000-2005
Educational Reform



Edited by
Ibrahima Bah-Lalya and Kaviraj Sukon

Republic of Mauritius
2000-2005 Educational Reform

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Conducting Peer Reviews
in Education in Africa

Republic of Mauritius

2000-2005 Educational Reform

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Ibrahima Bah-Lalya and Kaviraj Sukon

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Foreword

Quality education is a fundamental right for all children irrespective of their socio-economic status. Consequently, the present Government of Mauritius has decided to take up, with relentless determination and renewed energy, the mission of providing quality education tall, especially in a situation where the competitiveness of our economy is being increasingly challenged by the erosion of trade preferences. In fact today, there is a national consensus for fundamental reforms in our education sector, with an overall emphasis on quality education for all.

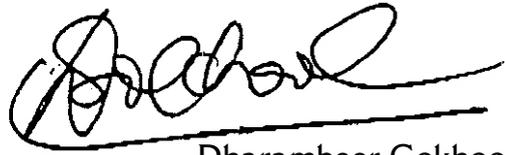
There have been several attempts to reform our education system in the past. However, we have to concede that most of them aimed at increasing the number of seats in our schools. It is obviously an important priority to give all children the opportunity to attend school, However, this is but the first step towards the goal of the World Class Quality Education for All. Once our children have secured a seat, they must be offered quality education; otherwise there will be little motivation to remain at school.

Several projects have been launched recently including the curriculum reform at both primary and secondary levels in order to address the following questions:

- » How much are our children learning?
- » Is the learning effective?
- » Are there major gaps in their learning process that need to be urgently addressed?

As it is rightly said, “what gets measured, gets done”. In this light, we should also continuously measure the quality of education. Our participation in this ADEA Peer Review exercise has been an opportunity to measure student achievement and to evaluate how well our school systems have been carrying out their own responsibilities. This report presents the strengths and weaknesses of the system. The results of this exercise will be translated by both local and international experts into new governing policies that will enhance the quality of teaching and learning in our schools.

Provided we spare no effort in transforming every pair of hands into a pair of thinking hands by promoting the right human resource development strategy, we can face the future, confident that the next stage of excellence is not beyond us.

A handwritten signature in black ink, appearing to read 'Dharambeer Gokhool', with a long horizontal line extending from the end of the signature.

Dharambeer Gokhool
Minister of Education and Human Resources

Acknowledgements

This study, which was commissioned by the Government of Mauritius, was made possible thanks to the leadership and support of the entire Ministry of Education and Human Resources and its partners from the private sector and civil society. On behalf of WGESA, I wish to express our deep appreciation to the former Minister, Honorable Dr. Steven Obeegadoo, whose guidance helped launch the process and to the current Minister, Honorable Dharambeer Gokhool, who supported the review every step of the way.

On behalf of the Working Group, I also wish to extend our gratitude to the Mauritius higher education sector and particularly to the Tertiary Education Commission for its eagerness to participate in this review and allow the expert team to conduct an inquiry in complete independence. The Commission should also be commended for providing timely and relevant information while ensuring that appropriate support was provided for the work.

Special thanks are extended to the ADEA Steering Committee, Executive Secretariat and Caucus of Ministers for their support of this initiative, their effective supervision and assistance in fund-raising, without which nothing would have been possible. WGESA is particularly appreciative of the kind of leadership they exercised on this Peer Review – the first of its kind in Africa. Due recognition goes in particular to Mr. Ahlin Byll-Cataria, Mr. Mamadou Ndoye and Mr. Hamidou Boukary for their discreet but very effective guidance and support and their deep commitment to the project.

Words alone cannot express the thanks WGESA owes to partner agencies for their invaluable and generous support, in particular SIDA, NORAD, the World Bank, USAID, DANIDA and the OECD. In these institutions, certain individuals deserve special mention for their favorable disposition, enthusiasm and understanding where the Peer Review is concerned: Ms. Berit Rylander and Dr. Ulla Kann, a former consultant of SIDA and the senior member of the WGESA Steering Committee, Ms. Ellen-Marie Skaflestad from NORAD, Ms. Catherine Miles from USAID and Mr. Bernard Hugonnier and Dr. Ian Whitman from the OECD. This work would not have been possible without their understanding, friendly professional support and insight.

WGESA wishes to address a special word of thanks to the international Peer Review experts, who agreed to work under challenging conditions, but who fully dedicated themselves to successfully carrying out the review, from:

Benin	Prof. Paulin Hountondji, former Minister of Education of Benin;
Guinea	Prof. Ibrahima Bah-Lalya, Peer Review Coordinator;
Kenya	Prof. Kabiru Kinyanjui, Chairman of the Public Universities Inspection Board;
Madagascar	Ms. Josiane Rabetokotany, former permanent Secretary, MOE;
Nigeria	Prof. Pai Obanya, former BREDA Director , Expert Team Leader ; Ambassador Dr. Olusegun Akinluyi;
OECD	Ms. Miho Taguma and Dr. Ian Whitman;
South Africa	Ms. Angela Arnott.

Their dedication and hard work demonstrate that concern for educational policies and engagement in field activities will always transcend the most daunting challenges when minds and cultures converge in a collaborative manner.

Finally, WGESA expresses its deep gratitude to the host and lead agency, the IIEP, in particular to Ms. Françoise Caillods for her support and guidance despite her other obligations.

May the Peer Review exercise in Mauritius stand as testament to the Mauritius child, adolescent and adult learner. May this Review contribute to improving quality education in Africa and pave the way for other African ministries of education that would look to reviews that are useful and accessible to those who need them most, the educationalists who to often work under challenging conditions in remote field locations throughout the continent.



Ibrahima Bah-Lalya, Ph.D.
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ADEA Working Group Co-ordinator
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List of abbreviations and acronyms

ADEA	Association for the Development of Education in Africa
BCR	Quantified Results of the Education Reform (<i>Bilan chiffré de la réforme de l'éducation</i>)
CDC	Curriculum Development Centre
CERI	Centre for Educational Research and Innovation
CPE	Certificate of Primary Education
CPP	Computer Proficiency Programme
CRP	Curriculum Renewal in the Primary Sector
ECD	Early Childhood Development
EFA	Education for All
ERR	Ending the Rat Race in Primary Education
FDI	Foreign Direct Investments
GDP	Gross Domestic Product
HSC	Cambridge Higher School Certificate
ICT	Information and Communication Technology
IVTB	Industrial and Vocational Training Board
MCA	Mauritius College of the Air
MES	Mauritius Examinations Syndicate
MGI	Mahatma Gandhi Institute
MIE	Mauritius Institute of Education
MLA	Monitoring Learning Achievement
MML	Minimum Mastery Level
MQA	Mauritius Qualifications Authority
NCCRD	National Centre for Curriculum Research and Development
NTC	National Trade Certificate
OECD	Organisation for Economic and Cultural Development
PASEC	Programme for the Analysis of Comparative Education Systems
PFI	Publicly Funded Institute
PSSA	Private Secondary School Authority
PSTF	Pre-school Trust Fund

PVE	Pre-vocational Education
QEA	Quality Education for All
RCEA	Roman Catholic Education Authority
RTI	Rodrigues Technological Institute
SACMEQ	Southern African Consortium Measuring Educational Quality
SC	Cambridge School Certificate
SEN	Special Education Needs
SITP	School Information Technology Project
SSS	State Secondary School
TEC	Tertiary Education Commission
UNDP	United Nations Development Programme
UOM	University of Mauritius
UTM	University of Technology of Mauritius
WGESA	Working Group on Education Sector Analysis
ZEP	Priority Education Zone (<i>Zone d'éducation prioritaire</i>)

Executive summary

Background and Methodology

The Peer Review exercise in Mauritius was initiated by the ADEA, in collaboration with African country governments and implemented by WGESA to, among others, provide support for the ADEA Policy Dialogue endeavor which is based on country ownership, country leadership, development of local capacities, support of national dialogue among all education stakeholders, networking and developing international partnership. It is grounded in a few lessons drawn from common sense and research findings.

First, it is acknowledged that individual countries know best what challenges and opportunities make up the foundation of their educational policies and determine the way in which reforms should be designed and implemented in their specific context. It therefore follows that national decision-makers are more inclined to take action and implement solutions that they themselves have first identified.

Second, there is a large set of challenges, responsibilities and values shared by countries throughout sub-Saharan Africa. Therefore, it can be assumed that professional dialogue among peers from different African countries would lead to a useful and productive breakthrough in policy formulation and implementation.

Another guiding principle, deriving from ADEA's mission and practices, is that African countries can learn a great deal from experiences outside Africa. In this light, the OECD peer review exercises were a source of inspiration for the African peer review. In the same spirit, experts from outside Africa were invited to add to and complement African peer expert teams as they provide increased visibility, international legitimacy and synergy.

Furthermore, a major conviction of the review can best be expressed as “implementation matters”. Therefore, a major objective of the Peer Review is to identify workable and practical solutions for overcoming the challenges met in the field.

The concept underlying this Peer Review exercise is based on the lessons above. The exercise intends to use international, mostly African experts to review a country's own performance, the overall purpose being to develop workable proposals for improving the formulation of education policies and their implementation.

The methodological choices made for the review were also determined, to a large extent, by these lessons. They were guided by the following:

- » Using a participatory process with an African-led international expert team comprised of members who have demonstrated sound professional and leadership experience in diverse African settings. In the case of Mauritius, these experts came from countries such as Benin, Guinea, Kenya, Madagascar, Nigeria, South Africa and from the OECD (Japan);
- » Fully including the reviewed country's own experts in the entire process on the basis of collegiality and national participation at all stages of the undertaking. The report drafted by the national team is part of the overall report;
- » Making use of desk reviews, interviews with local stakeholders, preferably done by peers and professionals in similar fields, as well as an analysis of data and peer discussions on specific issues;
- » Going beyond the policy-makers for interviews, to include, at the other end, the "policy consumers" such as students, teachers, parents, and association leaders.;
- » Taking gradual steps including the following: (I) a preparation phase launched by the country; (II) a national self-evaluation leading to a report that is an integral part of the overall report; (III) an international review to complete step II; (IV) validation and in-depth dissemination of the recommendations; and (V) an impact review to be conducted about 18 months after the release of the report.

In the specific case of Mauritius, Phase I to IV have been completed with the validation of the present report which is structured around two parts: Part I, entitled *Mauritius Country Report*, was drafted by the national counterparts; Part II, entitled *Review by the International Peers*, was prepared by international peers from seven African countries and Japan (OECD).

The Country Report

The country *Self-Evaluation Report* first presents a brief history and geography of the Republic of Mauritius. Next, it describes the development and structure of the Mauritian education system. Then it provides extensive extracts of key national policy documents to present the 2001-2005 educational reform. The report then critically evaluates the reform's achievements.

From this analysis it appears, in particular, that Mauritius has achieved commendable success in providing universal access to basic education, even if the country has yet to meet *et al.* the targets set by the 1990 Jomtien World Conference on Education and the 2000 Dakar Conference on EFA. On the downside, it appeared that the rate of failure on the Certificate of Primary Education is still the most serious problem, as up to 40% of all children do not obtain it. It is also observed that there are still considerable differences

in achievement scores between Mauritian children. Its “U” curve stratification is characteristic of systems having unequal distribution of educational opportunities.

The *Self-evaluation Report* points out that many sources of educational inequalities exist and should be addressed to meet basic learning needs and assure a minimum level of competence for all. While some privileged groups receive high quality education from pre-primary to tertiary, others have less resources and opportunities for learning and progressing across the different levels of education.

The report states that the lack of appropriate planning and implementation strategies explains part of the poor achievement, especially as it concerns the ICT initiative.

The International Peer Report

Part II of the document presents the peer team’s report.

The section entitled *Pre-primary and Primary Education: Rethinking the Foundation for a Knowledge Society*, provides an extensive description and analysis of pre-primary and primary education. For each of the two sub-sectors, the report examines the appropriateness of both policies and their implementation in the areas of access, relevance and achievement.

The section on *Secondary and Non-formal Education: A Shared Responsibility*, presents the institutional framework of secondary and non-formal education and its performance from the viewpoints of access, relevance and achievement. The section deals with issues and barriers before formulating recommendations to address the issues raised.

The section on *Anchoring Tertiary Education in the Mauritian Educational Reform for a Knowledge Society* discusses the place of tertiary education in the reform and analyzes the continuing challenges concerning access, relevance and achievement in tertiary education. It ends with suggesting policy options that respond to the identified challenges.

Summary of the review findings and Follow-up

The section entitled *Moving the Vision Forward* summarizes the report and offers three meaningful directions in which the process of educational reforms can be developed in Mauritius, namely:

- » Addressing the policy environment;
- » Tackling fundamental policy issues;
- » Fine-tuning ongoing initiatives.

The report proposes several recommendations that can be summarized as follows:

Pre-primary education:

1. Researching the profile of young children who are currently not enrolled in pre-schools to address their specific needs;
2. Examining the provision of facilities and teachers for pre-schools to address the variations between institutions, regions and zones;
3. Considering targeting the pre-school subsidy rate according to district socio-economic levels.

Primary education:

1. Reexamining the automatic promotion policy; the role of private tutoring and the medium of teaching to better reflect a sense of national identity;
2. Reforming the curriculum in such a way as to provide equal opportunities for quality education for all Mauritian children regardless of their socio-economic backgrounds and location; such a curriculum could emphasize a skills-based approach (as in South Africa, Botswana and Namibia);
3. Modernizing the curriculum to better reflect twentieth-century global issues, including those pertaining to human rights, poverty reduction and environmental protection;
4. Developing programs for students with special needs (physical, social, etc.).

Secondary education:

1. Developing a master plan derived from the reform for secondary education; such a master plan should be accompanied by better implementation instruments, for example, detailed action plans and timelines that are flexible but precise;
2. Strategically aligning priorities and timelines in secondary education with other education levels and with other sectors such as the Ministry of Industry, the Ministry of Child Development and Family Welfare, etc.;
3. Promoting shared responsibility between private and public providers of education and training; and
4. Ultimately, using the lifelong learning approach as the way to a knowledge society.

Tertiary education:

1. Developing an observatory unit in the university system for monitoring the reform's progress, benchmarking and paving the way forward; in the same spirit, advocating informed research as the main support for the reform;
2. Promoting the sustainable financial development of the sector through more expertise and professionalism in analyzing and forecasting financial needs as a prelude to applying for public and private funds;

3. Revisiting the status of some tertiary education institutions such as the MIE to strengthen their institutional autonomy, make them more tuned into their mandate and facilitate their inclusion in the educational reform process;
4. Better articulating the implementation of the ICT initiative throughout the system with tertiary education playing a key role.

Introduction

Mauritius is certainly one of Africa's forward-moving nations, in terms of the great strides it has made in various areas of human development – achievements that have consistently placed the country in the upper ranks in the annual human development reports of the United Nations Development Programme (UNDP).

The country has been able to transform its economic base from a monoculture to a diversified economy. Life expectancy is relatively high (78 years for men, 82 for women). Its national currency (the rupee) has been quite stable. It enjoys a per capita income that places it in the rank of middle-income countries. It has also achieved a relatively equitable distribution of income, even if disparities of all forms still exist among socio-economic groups and geographical regions.

Above all, Mauritius has remained a stable democracy with entrenched institutions and a civil rights culture. Political stability and regular, free, multi-party elections are the major characteristics of the country and this feature has helped the nation's development in various sectors.

In the field of education, as this report shows, Mauritius has made significant strides, which include:

- » The attainment of universal primary education;
- » Compulsory education up to the age of 16;
- » Complete gender equity in education, at all levels;
- » A significant private sector involvement;
- » A culture of reforms.

Mauritius has also had its fair share of education sector challenges. External factors, such as unfair terms of trade, pose a threat to the sustainable funding of education. Expansion of opportunities at the post-basic level has been slow, leading to huge unmet demands. At the secondary and tertiary levels, equity is still an issue, as is the pervasive influence of selection examinations.

The progress that the country has recorded on various indicators of human development has in itself posed real challenges for education. Population growth has been contained. This means that fewer children may be in primary school in the coming decades, although secondary education will grow. This also means greater emphasis on 'beyond-

access' issues. Rising living standards would mean rising expectations from the education sector. A relatively sophisticated and vibrant population would demand a greater say in matters concerning education development. A diversified economy creates a demand for a wide variety of skills that the education system is expected to provide. Changing times and changing life-styles will call for new survival skills – a challenge for both the schools and the non-formal system, in the context of a learning society.

An important factor at work is the reality of globalization in the current century. Knowledge is a major condition for full membership in this 'world without barriers'. The current development programme of Mauritius foresees a turn-around in society for entry into this new world through the creation of a knowledge society in a 'cyber island' that would be the hub of development in the Indian Ocean sub-region.

It is for this reason that Mauritius has started working towards 'world-class quality education'. The series of education reforms undertaken in the past two decades (and especially the reforms of the year 2000) are to be seen in this context.

This report is the fruit of an effort to examine the latest reforms using the Peer Review methodology currently being piloted in Africa by the ADEA Working Group on Education Sector Analysis. In its 'pure' form, the Peer Review is to be undertaken in the following phases:

- (i) Agreement with the host country, leading to the signing of a memorandum of understanding;
- (ii) An internal evaluation by the host country, resulting in a report to be published as part of the overall report;
- (iii) Field visits and discussions with national authorities and stakeholders by a team of external assessors;
- (iv) More intensive interactive work (national seminars, etc.), reflecting on the results of the Peer Review, with a view to channelling these into the national policy development process.

This report represents Phase III of the process. It presents both the national self-evaluation and the preliminary observations from internal evaluation and the international Peer Review mission that visited Mauritius in October-November 2005. The main body of the report is in four sections – the first presents the Mauritius education system and the findings of the national team; the three subsequent sections treat the three levels of education: primary, secondary and tertiary from the perspective of the international team. For the review team, however, education is a unity. This also holds true for the government of Mauritius, and the presentation in three parts is simply for analytical convenience.

Each section of the preliminary report tries to situate the particular sub-sector into the overall sector reforms. It then attempts an analysis of policy provisions, implementation processes, major achievements and challenges, before highlighting areas and issues that might require closer examination. Every care has been taken to avoid prescribing panacea-type solutions and prophetic recommendations.

One major feature of the findings of the review team is the existence of a good number of generic challenges. This reinforces the point that education problems always call for strategic and not sector-wide solutions.

The report certainly has its imperfections, and these have very little to do with the style and form of presentation. They are due mainly to time constraints, namely the timing of the Peer Review mission, which coincided with a change of political baton in the host Ministry and government. The situation also partly explains notable lacunae in the report, such as the relatively little attention accorded to technical and special education.

In spite of these imperfections, it is expected that the report can still serve as a useful tool for the next phase of the Peer Review process. It is also expected that the lessons of the Mauritius Peer Review pilot case would inform future efforts by ADEA/WGESA in other African countries.

Scope of Work for the Peer Review Exercise in Mauritius

Background

On 27 May 2005, the Association for the Development of Education in Africa (ADEA) and the Ministry of Education and Scientific Research of the Republic of Mauritius signed a Framework for Cooperation (FFC) for a Peer Review exercise in Mauritius based on a concept paper developed by the ADEA Working Group on Education Sector Analysis.

According to the recommended approach, such a Peer Review would be structured around five major phases:

1. Phase I: A preparatory stage ending with the WGESA preliminary mission and the signing of the Framework;
2. Phase II: Self evaluation by Mauritius, with the assistance of WGESA;
3. Phase III: A review undertaken by an international peer team;
4. Phase IV: A national consultation to validate the products and share the results with broader education stakeholders; and
5. Phase V: An eventual impact study to be conducted approximately 18 months after the release of the review report.

Phase I has been completed in Mauritius with the signing of the FFC by the duly authorized representatives of Mauritius and ADEA. Phase II is almost completed, and soon, Mauritius will issue its self evaluation report to WGESA, which is the implementing body. Presently, the launching of the third phase, the international Peer Review, is in preparation.

Regarding this latter phase, it is critical to identify an international team of peers and nominate its team leader. The present terms of reference provide the criteria and conditions for such a process.

Objectives

The Mauritian Peer Review Exercise purports to use African international experts to assist the country reviewing recent achievements made in the education sector following the 2000 reforms and to develop recommendations aiming at improving education provision in terms of both Mauritian national goals and international milestones set by the Dakar Education for All framework and the Millennium Development Goals.

The situational analysis undertaken by the national team and the international Peer Review team will facilitate effective partnerships, contribute to resource mobilization, provide direction for resource utilization, contribute to strengthening the coordination of the sector and, overall, ease the implementation processes of the educational reform initiated by the country. In this context:

- » The team of consultants is expected to conduct a Peer Review exercise based on the findings of the preliminary mission and the self evaluation undertaken by the Mauritian national authorities;
- » The team leader, in particular, is expected to direct the international team work, under the supervision of the WGESA Coordinator who will be supported by the WGESA focal points and by the technical assistance of the OECD.

Expected Output

At the end of this Peer Review exercise, the following products will be delivered:

- » A first draft report presented to MOEHR/Mauritius and to WGESA/ADEA;
- » A final draft which will take into account recommendations made during the validation process;
- » Participation in the dissemination of the findings, if requested by Mauritius.

References

The Peer Review will be conducted within the framework set forth by the WGESA Concept Paper, which was discussed and approved by ADEA's 21st Steering Committee Meeting held in Chavannes Des Bogis, Switzerland, and by the Framework for Cooperation signed between MOERS/Mauritius and ADEA during the 23rd Session of its Steering Committee Meeting held in Enghien Les Bains, France, in May 2005.

The following is a list of suggested reference documents to consult for a thorough understanding of the scope of the work and the expectations set:

- » Djibril Debourou. Les revues par les pairs. ADEA Working Group on Sector Analysis. PortNovo, October 2003

- » Ibrahim BahLalya. Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa. Proceedings of the 21st Session of the ADEA Steering Committee Meeting. Geneva, April 2004 ;
- » MOESR Mauritius and ADEA/IIEP. Initiating and Conducting an Experimental Peer Review Exercise in Education in Mauritius; A Framework for Cooperation. Paris, February 2005;
- » Richard Sack. *Developing a Shared and Broader Vision for Education in Africa through Peer Review*. ADEA Working Group on Sector Analysis. Paris 2003.

Scope of the Work

The core of the Peer Review exercise will be drawn from the findings of the report of a preliminary mission organized in early 2005. This mission's aim was to shape and adjust the approach used in the specific context of Mauritius, identify the key challenges at stake in the country's educational system and propose strategies to remedy potential problems.

Another major source of reference will be the report and those documents assembled after the self evaluation process.

As indicated in the above mentioned documents, there are three interrelated themes that structured the core of the reforms implemented in Mauritius between 2000 and 2005: (i) access, (ii) relevance and (iii) achievement. For each of these themes, the preliminary mission, as well as the self evaluation undertaking, identified the key challenges and assessed to what extent solutions proposed by the Mauritian education system, were effective. It focused both on policies and their implementation as well as the overall goal of the exercise, which was to raise questions for the subsequent phases of the Peer Review.

- (a) Regarding *access and equity*, the preliminary activities attempted to assess to what extent:
 - ♦ The system has been inclusive in permitting broad access to quality education for all children, adolescents and adults regardless of their socioeconomic backgrounds;
 - ♦ The system provides equal opportunity to pupils during key transition points;
 - ♦ Adequate legal and political frameworks exist to initiate, support, review and amend policies during their implementation
 - ♦ The tools used for policy formulation and implementation are appropriate and effective.
- (b) Regarding *relevance*, the preliminary activities focused on the system's capacity to effectively achieve the vision it set for itself, which was to "*provide educational*

opportunities, including free and compulsory education for all up to age 16, which will enable the citizens of the Republic to benefit from and contribute to the social and economic development of the self and the Nation”;

- (c) Regarding *achievement*, the preliminary activities focused on the system’s capacity to effectively address the social and economic needs of all the various components of Mauritian society, while simultaneously providing students with skills their international counterparts acquire so that they may successfully compete in the global market;
- ♦ For each of the above points, the preliminary assessment proposed areas of further investigation and methodologies to be used in order to facilitate the implementation of the next steps. The overall intention of the Peer Review is to produce concrete and feasible proposals, drawn from reviewers who have valid field experience;
 - ♦ The Review Exercise will examine the Mauritian educational reform and develop a 60 page document mainly covering the following: A review of the education sector achievements on its national and international policy priorities across the different education levels and in terms of the interrelated themes; access, relevance and achievement;
 - ♦ Identification of some of the lessons and experiences that will guide the scaling up of the sector’s response to its policy goals. Interventions, promising approaches and best practices relating to improved education delivery within the sector will be documented.
 - ♦ Recommendations as to the possible direction and strategic interventions based on the information gathered. Considering the overall mission and direction, team members should be selected according to the following criteria:

Considering the overall mission and direction, team members should be selected according to the following criteria:

Qualifications and Experiences of the Peer Reviewers

- » a. International Peer Team Member;
- » b. International Peer Team Leader.

Support for the Team and the Team Leader

Methodology and Timeframe

The study will be drawn from a desk review, interviews with key stakeholders, an analysis of the data gathered and exchanges on preliminary findings.

Country report

Commissioned and endorsed by
The Mauritian Peer Review
National High Level Team

Principal Consultant

Dr. Kaviraj S. Sukon

HRDC Research Manager Chairman,
Mauritius College of the Air

Section I

PEER REVIEW OF THE POLICY REFORMS IN EDUCATION IN MAURITIUS

“Whether or not expanded opportunities will translate into meaningful development – for an individual or for society – depends ultimately on whether people learn as a result of those opportunities, i.e. whether they incorporate useful knowledge, reasoning ability, skills and values.” The focus of basic education must, therefore, be on actual learning acquisition and outcome, rather than exclusively upon enrolment, continued participation in organized programmes and completion of certification requirements. Active and participatory approaches are particularly valuable in assuring learning acquisition and allowing learners to reach their fullest potential. It is, therefore, necessary to define acceptable levels of learning acquisition for educational programmes and to improve and apply systems of assessing learning achievement..”

World Conference on Education for All, Jomtien, Thailand, March 1990

Brief History of the Republic of Mauritius

The Republic of Mauritius lies in the south-west of the Indian Ocean. It comprises the main island of Mauritius and its dependencies are Rodrigues, Agalega and St. Brandon as well as a number of outlying smaller islands. Mauritius, belonging to a group of islands called the Mascarenes, is of volcanic origin and has a surface area of 1865 km². Surrounded mostly by coral reefs and lagoons, the silver-beached island lies within the edge of the southern tropical belt between latitudes 19°58' and 20°31' south and longitude 57°46' east. Its exclusive economic zone is 1.7 million km² extending almost to a distance of 200 nautical miles from its baseline.

Mauritius was an uninhabited island and never had an indigenous population. It was first discovered by the Portuguese in 1513. Then came the Dutch, who rediscovered the island in the late seventeenth century and abandoned it around 1710. They were followed by the French, who decided to stay. It was during the period of French colonization that the island acquired the characteristics of a society, and the economic, educational and

cultural structures they established formed the basis for development. In 1810, the island was taken over by the British who introduced changes in the island in many fields and mainly in the education sector. Mauritius became an independent sovereign state on 12 March 1968 and a republic in 1992.

Mauritius is a pluralistic society. As a result of historical factors, its population is made up of emigrants and descendants of emigrants from three continents – Europe, Africa and Asia. The censuses provide information on the population classified in three main groups, namely the Indo-Mauritians, the “General Population” (a heterogeneous category regrouping mainly Mauritians of African and French descendants) and the Sino-Mauritians. Table 1.1 gives the data from the last two censuses carried out in 1990 and 2000. The variety of ethnic origins coupled with the Franco-British historical background gives rise to a complex language situation. French Creole is spoken by nearly the whole population. English is the official language and medium of instruction and French is the main cultural vehicle. Apart from these, a variety of Oriental (Indian and Chinese)/Arabic languages and dialects are spoken by different groups – Hindi, Urdu, Tamil, Telugu, Marathi, Gujrati, Bhojpuri, Hakka, Cantonese and Mandarin. The network of mass media is quite efficient. Several daily and weekly papers are printed, mainly in French but also in other languages; radio and Television broadcasts are in English, French, Creole and Oriental languages.

Table 1.1. Resident Population by Geographical Location and Group

Year of Census	1990	%	2000	%
Indo-Mauritians	707,075	66.92	781,450	66.29
General Population	342,548	32.42	380,142	32.25
Sino-Mauritians	3,613	0.34	8,151	0.69
Others	3,424	0.32	9,105	0.77
Island of Mauritius	1,022,456		1,143,069	
Island of Rodrigues	34,204		35,779	
Republic of Mauritius	1,056,660		1,178,848	

Source : Central Statistics Office, *Annual Digest of Statistics 2001*

On 1 July 2005, the population of the Republic of Mauritius was estimated at 1,243,588 (of whom 614,999 were males and 628,589 females) by the Central Statistical Office¹.

1. CSO (2005), *Economic and Social Indicators*, No. 525.

Development of Education: Some Highlights

Formal education at all levels is governed by the Education Regulations of 1957 and the Education Act of 1982 and their various amendments.

The Mauritian education system has been to a large extent shaped by the type of schooling developed during the French and British colonial periods. It has evolved from a completely private enterprise to a national education system. The growth of education came about with an increase in annual income coupled with a high social demand for education. The government's impetus for free primary education for all, which started in the 1940s, resulted in near universal enrolment at primary level, long before primary education was made compulsory in 1982. In 1976, the decision to provide free secondary education caused enrolment at the secondary level to rise considerably. In 1978, the Private Secondary Schools Authority (PSSA) was established to look after the running of private secondary schools and to maintain standards. The education wave was thus an inexorable one in the developing Mauritian society. While the eighties and nineties saw the construction of several state secondary schools, these were insufficient to improve access to quality education for all.

In 1975, the Mauritius Institute of Education (MIE) was established to provide training (preservice and inservice) to teachers at both the primary and secondary levels. This institution was also responsible for curriculum development activities, which were taken over by the Curriculum Development Centre (CDC) under the aegis of the Ministry of Education in 1985. The CDC became the National Centre for Curriculum Research and Development (NCCRD) in 1993. The MIE was also looking into some aspects of assessment and examinations, but these activities were taken over by the Mauritius Examinations Syndicate (MES), which was created in 1984.

The MES has the overall responsibility for conducting all national examinations – the Certificate of Primary Education (CPE), the Cambridge School Certificate (SC) and the Cambridge Higher School Certificate (HSC); technical and vocational examinations; professional examinations for foreign examination organizations; and other local examinations. It also carries out examination based research aimed at improving the assessment system and informing policy decisions.

Various commissions were appointed to look into the education system and make recommendations for its improvement. Most of the reports highlighted the extremely high rate of failures at the end of primary education and the competitive nature of our examination system. The absence of a proper structure for preprimary education and provision for remedial education were also stressed. Some of the recommendations made in this regard concerned:

- » The identification of children with learning difficulties at Standard III and the provision of remediation (Glover *et al.*, 1978; Richard *et al.*, 1979);
- » The introduction of a record card for each child (Glover *et al.*, 1978);
- » “To follow him/her in his/her school career to diagnose difficulties or handicaps so that remedial action may be taken” (Richard *et al.*, 1979);
- » As a “passport ... with a record of his/her attainments, potential and aptitudes” (Glover *et al.*, 1983);
- » The dropping of formal examinations everywhere except in Standard VI (Richard *et al.*, 1979);
- » The administration of a simple test in literacy, numeracy and self-expression for all children leaving primary school (Ministry of Education, White Paper, 1984);
- » The introduction of vocationally oriented subjects at the secondary level (Ministry of Education, White Paper, 1984).

In the 1990s, Mauritius made two major attempts at reforms: the Master Plan of Education (Ministry of Education and Scientific Research, 1991) and the Action Plan of Mauritius (Ministry of Education and Scientific Research, 1998). Several projects were implemented by the Mauritius Examinations Syndicate – the main one being the publication of the Learning Competency for All document in 1992 and the redesigning of the CPE examination in 1994 in terms of essential and desirable learning competencies. This led to the revision of all the textbooks for the primary level produced by the NCCRD. In the early eighties and in 1996, attempts to develop a continuous assessment scheme were made. Unfortunately, these were not successful because of resistance from teachers due to lack of support and the additional amount of time this scheme required.

Unemployment in Mauritius

Logically, there exists a negative correlation between the growth rate and the rate of unemployment. When there is a rise in the growth rate, this means that the overall demand in the economy is increasing and that employers will be employing more people and this will lead to a lower rate of unemployment. However, Table 1.2a shows that despite the fact that the growth rate has been rising over the years, the rate of unemployment has also been increasing in parallel. According to the Phillips Curve, there is an inverse relationship between inflation and the unemployment rate. However the Mauritian experience shows that in some years even if inflation has been rising, the unemployment level has continued increasing.

Table 1.2a. Unemployment, Growth Rate and Inflation (1994-2005)

Year	Growth Rate (%) [*]	Unemployment Rate (%) ^{**}	Inflation (%) ^{***}
1994	+4.8	4.5	9.4
1995	+5.5	5.1	6.1
1996	+6.2	5.8	5.8
1997	+5.6	6.6	7.9
1998	+5.7	6.9	5.4
1999	+2.3	7.7	7.9
2000	+9.3	8.8	5.3
2001	+5.6	9.1	4.4
2002	+1.9	9.7	6.3
2003	+4.6	10.2	5.1
2004	+4.2(1)	-	6.7
2005	+5.1(2)	-	-

Table 1.2b shows that the trends in the Mauritian labour market clearly show that the total labour force, employment and unemployment figures have been soaring over the years. In fact as compared to year 1993, in 2003 total labour force has increased by 18.5%, total employment has grown by 11% while the number of unemployed has risen significantly by 202.2% and the rate of unemployment has increased by 6.3%. The results also show that total labour force for both men and women has continuously increased over the years with the number of male workers exceeding that of female. However it should be noted that despite the fact that the rate of unemployment has continuously been rising, the number of foreign workers has also been rising (for instance in 2003 there were 18,200 foreign workers in Mauritius and 54,400 unemployed). According to statistics from the Employment Division of the Ministry of Labour, Industrial Relations, it is noted that the overwhelming majority of work permits are issued in the occupational category of “skilledworkers” (93% on average). Is this due to the fact that our education and training system is not able to generate the skilled workers required by the labour market? Besides, it is also seen that employment in large establishments (employing more than 10 employees) outweighs the number of workers outside large establishments for both male and female workers. The overall rate of unemployment has been rising and in fact it has more than doubled from 1994 to 2003. It is seen that in absolute figures the number of persons unemployed is higher for male workers but the rate of unemployment is higher for female workers. As for foreign workers, the 1997 figures show that the number of female expatriates exceeds that of male expatriates.

Table 1.2b. Labour Force, Employment and Unemployment, 1988-2003, Mauritius (Midyear estimates)

Year	Both sexes (thousands)							
	Labour force ^a			Employment ^b			Unemployment	
	Mauritian	Foreign Workers	Total	In large Establishments ^c	Outside large Establishments	Total	Number	Rate ^d (%)
1988	-	-	411,5	272,4	123,1	395,5	16,0	3.9
1989	-	-	421,4	275,4	130,6	406,0	15,4	3.6
1990	432,0	1,0	433,0	284,5	136,3	420,8	12,2	2.8
1991	439,2	2,2	441,4	289,0	140,4	429,4	12,0	2.7
1992	448,8	4,1	452,9	291,0	146,9	437,9	15,0	3.3
1993	457,0	6,9	463,9	290,5	155,4	445,9	18,0	3.9
1996	482,3	8,2	490,5	286,8	175,8	462,6	27,9	5.8
1997	490,8	8,6	499,4	287,8	179,4	467,2	32,2	6.6
1996	482,3	8,2	490,5	286,8	175,8	462,6	27,9	5.8
1997	490,8	8,6	499,4	287,8	179,4	467,2	32,2	6.6
1998	499,4	10,0	509,4	294,7	180,3	475,0	34,4	6.9
1999	506,6	12,9	519,5	297,4	183,1	480,5	39,0	7.7
2000	514,0	14,6	528,6	297,7	185,9	483,6	45,0	8.8
2001	522,0	16,5	538,5	301,0	189,8	490,8	47,7	9.1
2002	523,9	17,0	540,9	296,2	193,9	490,1	50,8	9.7
2003	531,3	18,2	549,5	295,9	199,2	495,1	54,4	10.2

Source: Digest of Labour Statistics (1983-2003)

a. Labour force comprises population 12 years and above; b. Includes foreign workers; c. Average of March and September figures; d. Unemployment total as a percentage of Mauritian labour force.

The Mauritian Education System

Mauritius has a 6+5+2 education structure, i.e. six years of compulsory primary schooling from Standard I to Standard VI leading to the Certificate of Primary Education (CPE). This is followed by five years of compulsory secondary education from Form I to Form V leading to the Cambridge School Certificate (SC) and two years more of secondary ending with the Cambridge Higher School Certificate (HSC). Education is now compulsory up to the age of 16, with the introduction of 11 year schooling in January 2005. This measure has involved relevant changes in legislation. Education is free at the primary and secondary levels. At the tertiary level, all fulltime undergraduate programmes are free at the University of Mauritius.

Before the year 2002, the CPE examination was used for certification purposes and for ranking pupils for admission to the highly rated secondary schools (commonly called the



➔ A typical Mauritian student at the CPE level. © Photo Collection: I. B-L

'star' schools). Many pupils preferred to re-sit this examination to secure a better rank and thus gain access to better secondary schools. However, in the year 2002, ranking was abolished; a grading system has been used since. The distribution of schools, enrolment and personnel in March 2005 is given in Table 1.3.

Pre-vocational education is offered to those who have failed the CPE examination. In March 2005, 147 schools were offering pre-vocational education: 142 on the island of Mauritius and five on Rodrigues. Sixty-two of these schools were state secondary schools and state pre-vocational schools while the remaining 85 were confessional, private-aided and private-unaided schools. Enrolment in the schools offering pre-vocational education was 9,845 comprising 6,121 boys and 3,724 girls. The pre-vocational education teaching staff numbered 648 (239 men and 409 women).

Educational Reforms 2001-2005

The educational reforms of 2001-2005 were presented in the documents:

- » *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level – The Way Forward (2001);*
- » *Curriculum Renewal in the Primary Sector (2001);*
- » *Further reform proposals were made in the document entitled Quality Education for All (2003).*

In June 2005, the Ministry of Education presented the document *Bilan chiffré de la réforme de l'éducation* (Quantified Results of the Educational Reform), which contains the measures undertaken during the period May 2001 - May 2005.

Table 1.3. Distribution of Schools, Enrolment and Personnel in March² 2005

School		Island of Mauritius			Island of Rodrigues		
		Pre-primary	Primary	Secondary	Pre-primary	Primary	Secondary
No. of Schools ^a		1.039	278	182	33	13	6
Enrolment	Boys	18.228	60.335	51.363	706	2.394	1.625
	Girls	17.736	58.402	55.442	686	2.431	1.857
	Total	35.964	118.737	106.805 ^b	1.392	4.825	3.482 ^c
Teaching Staff		2.426	6.425	6.608	75	251	177
Non-Teaching Staff		856	1.424	-	5	153	-
Teacher:Pupil		1:15	1:29 ^d	1:16	1:19	1:235	1:20

a. Includes government/state, private-aided and private-unaided schools. b. Excludes pre-vocational stream. c. Excludes pre-vocational stream. d. General purpose teacher.

The following are extracts taken from the document *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level – The Way Forward (2001)*: (This document will be referred to as ERR.)

ERR1 The major dysfunction of the Mauritian education system is to be found in the bottleneck situation constraining access to secondary education from primary. (p. 1)

ERR2 The intense competition to secure a place in the star schools – referred to as the rat race -begins right from lower primary years, thus exerting immense psychological pressure on both students and their parents and perverting the very function of the school within the society. The whole education process is thereby vitiated. (p. 1)

ERR3 Due to ranking, admission to star schools is determined by so narrow a margin as one decimal place, which is pedagogically unsound, totally arbitrary and unfair. This 'lopsided' education leaves by the wayside such important aspects of education as physical development, aesthetic appreciation and creativity,

2. CSO (2005) *Economic and Social Indicators*, No. 523

and the importance of learning to live together in a multi-cultural society as responsible citizens. (p. 5)

ERR4 With the abolition of ranking, schooling reclaims its primary function, which is the holistic development of the child. (p. 5)

Through 2005, all children obtaining the present minimum passing grades (grade E in English, French and an overall 35%) will join the secondary mainstream. All those who do not achieve passing grades on the CPE after two attempts will join the secondary pre-vocational stream. By 2006, the grade system will have evolved into a record of achievement rather than an instrument of selection so that no child is classified as a 'failure'. With standard setting throughout the years of primary education and the timely introduction of remedial measures, all children would, by then, without having to repeat Standard VI, be entitled to enter Form I either in the mainstream or in the pre-vocational stream. (p. 7).

ERR5 The new alphabetical grade system:

Range of Marks	Alphabetical Grading
75 to 100	A
60 to 74	B
50 to 59	C
40 to 49	D
30 to 39	E
< 30	U (unclassified)

ERR6 A Gifted and Talented Programme will eventually be introduced to make the curriculum more challenging for the brightest and allow more time for what they do best. (p. 8)

ERR7 Students will be assessed at all levels of their schooling to allow for the timely adoption of remedial measures. However, there will be no examination for promotion from one key stage to the next, except that through 2005 the Standard VI examinations will be maintained in their present form to determine promotion to Form I in either the pre-vocational stream or the academic stream. (p. 9)

ERR8 The structural reforms presented in this document will be followed by a drive for quality assurance in schools through the definition and introduction of a literacy and numeracy strategy, the rethinking of school pedagogy, standard setting at all levels, close monitoring of school performance, the strengthening

- of school management and the upgrading of teachers' skills. Within such a perspective, appropriate pedagogical measures will be introduced to encourage all children to strive for excellence and the performance of each school will be monitored. (p. 10)
- ERR9** With the construction of a large number of state secondary schools in the years to come and the extensions in existing state secondary schools together with conversions of SSS vocational, the bottleneck situation will no longer exist so that a selection instrument as pernicious as the CPE ranking will no longer be justified. (p.11)
- ERR10** Setting up of 40 new state secondary schools entailing the construction of 33 new state secondary schools (Forms I -V) and the conversion of six SSS vocational and the former D. Ramphul SSS at Pamplémousses into new secondary schools. Upgrading three existing Form I-III SSS into full-fledged state secondary schools and the extension of four existing state secondary schools. (p.11)
- ERR11** The construction programme for new secondary schools has been worked out so that all regions of the Republic are provided with an adequate number of secondary education institutions. (p. 12)
- ERR12** The conversion programme will be carried out through the complete revamping of the buildings, the construction of additional blocks where necessary and the provision of all standard amenities (playground, laboratories, etc.) (p. 13)
- ERR13** The three Form I-III state secondary schools at Terre Rouge (boys), Pailles (girls) and Sebastopol (boys) will be upgraded into full-fledged Form I-V state secondary schools.(p. 13)
- ERR14** New blocks of classrooms will be added to four existing state secondary schools to cater to two additional streams in each. (p. 14)
- ERR15** In Rodrigues, provision for some 560 additional places will be made to accommodate all students who will have completed the primary cycle as of 2003. This will be achieved by extending existing schools and by constructing new ones. (p. 14)
- ERR16** Three new four-stream secondary schools, stream, will be constructed by 2003. (p. 15) each including one pre-vocational
- ERR17** In two existing REDCO colleges (Marechal and Le Chou), new blocks of classrooms will be constructed by 2002 to accommodate one pre-vocational stream and one additional academic stream each. (p. 15)
- ERR18** The new state secondary schools that are to be operational between 2002 and 2006 should create an additional net capacity of 5,200 places in Form I. (p. 17)

- ERR19** Such reforms should boost the number of students joining Form I approximately 4,100 once secondary schooling becomes compulsory. (p. 17) by
- ERR20** A small number of long-identified 'sub-standard' private secondary schools that do not lend themselves to upgrading are likely to close down. However, the security of employment of existing staff will be guaranteed through redeployment. This will ensure that the interests of the staff in the private secondary sector are adequately safeguarded under any circumstances. (p. 17)
- ERR21** The 'star' state schools will be converted into Form VI colleges. (p. 18)
- ERR22** For the 11-year schooling project to become a reality, secondary education will be divided in two phases:
- ERR23** Forms I – V secondary schools where schooling will be compulsory up to the age of 16.
- ERR24** Form VI colleges where schooling will be optional. (p. 18)
- ERR25** All state secondary schools not transformed into Form VI colleges will offer only Form I-V classes. (p. 18)
- ERR26** The Form VI colleges will be national colleges as opposed to state secondary schools (Forms I-V), which will be regional ones. Students will have a wider choice of schools as there will be, by 2003, 15 Form VI colleges spread across the island of Mauritius and one in Rodrigues. (p. 19)
- ERR27** Form VI colleges, by means of a certain degree of specialization, will offer a wider choice of combination of subjects. (p. 19)
- ERR28** In line with increasing demand for HSC classes and in order to offer more choice to parents, five new Form VI colleges will be operational by 2003 (including one in Rodrigues) and one more will be operational by 2004. (p. 19)
- ERR29** As of 2003, existing state secondary schools being converted into Form VI colleges will no longer have a Form I intake whereas the existing state secondary schools converted into Form I-V secondary schools will have no intake in Form VI. (p. 19)
- ERR30** To facilitate early admission of students into Form VI colleges, the Cambridge Examinations Syndicate has been requested to communicate to the MES the SC results by mid-January as of January 2003 instead of mid-February as at present. In addition, a system of computerized processing of applications for places in Form VI colleges will be established. (p. 22)
- ERR31** Rectors of Form VI colleges will benefit from specialized training and it is proposed to have two deputy rectors to support each rector. (p. 22)

- ERR32** All Form VI colleges will have comparable standard and similar facilities. The existing colleges that will be transformed into Form VI colleges will be upgraded accordingly. (p. 22)
- ERR33** Provision will be made for extra classes to be held after normal school hours as and when necessary for students in Form VI colleges. (p. 23)
- ERR34** New regulations will be introduced to prescribe the minimum days of effective attendance in schools for any student to sit for the HSC examinations. (p. 23)
- ERR35** With the conversion of 11 existing secondary institutions into Form VI colleges and the construction of five such colleges by 2003 and one more at a later date, state Form VI colleges should number 17 by 2006. Their coming into operation will in no way affect private secondary schools. (p. 23)
- ERR36** The demand for places in Lower VI, which presently stands at 7,400, is projected to rise to 10,300 in 2006 because of an increase in the number of children joining the secondary sector, improved performance at the School Certificate level and changes in eligibility conditions for the HSC. (p. 23)
- ERR37** At present, state secondary schools cater to 3,240 students in Lower VI and their intake will increase to approximately 6,220 by 2006. (p. 23)
- ERR38.** As of 2003, admission to state secondary schools (Forms I-V) will accordingly be carried out on a regional basis. However, to enhance parental choice while allowing for greater specialization, Form VI colleges will recruit on a national level. (p. 24)
- ERR39.** Each region combines rural and urban areas so as to ensure effective parental choice in that within any particular region, parents may apply freely to any state secondary school. (p. 24)
- ERR40** Where any secondary school is over-subscribed, selection of students to be admitted by the MES into the academic mainstream will be carried out on the basis of the following criteria in order of importance:
- ERR41** CPE grade aggregate;
- ERR42** Residence;
- ERR43** In the case of Asian languages/Arabic, these subjects will be conferred the same status as all other examinable subjects for the CPE examination of 2004. Pupils not having studied Asian languages/Arabic before will be offered the possibility of free coaching outside normal school hours as of 2001. (p. 25)
- ERR44** The inclusion of Asian languages/Arabic for purposes of admission to secondary schools without prejudicing the interest of any child. (p. 25)

- ERR45** The present arrangements in terms of reserved places in state secondary schools for Asian languages/Arabic will be maintained but on a regional basis. (p. 25)
- ERR46** Admission to Form VI colleges will be on the basis of the grade aggregate on the School Certificate (SC) examination and the combination of subjects offered. (p. 25)
- ERR47** The new system proposed will provide parents with a wider choice of schools in that within the next five years, 49 new secondary schools (Form I-V SSS and Form VI colleges) will be operational in the Republic of Mauritius – all provided with standard facilities and the necessary amenities. (p. 26)
- ERR48** Within each region, parents will be free to seek admission to any secondary school for their child as per grades obtained. To prevent the reappearance of a rigid hierarchy in the public perception of such schools and for the ‘parity of esteem’ of schools, measures will be taken to encourage the upgrading of existing schools through provision of appropriate infrastructure and relevant resources in all schools. (p. 26)
- ERR49** The posting of teachers in state secondary schools will be rationalized so as to strengthen the regionalization process. (p. 26)
- ERR50** As of 2001, those who have not passed the CPE after their second attempt have been given the opportunity to continue their secondary education through pre-vocational classes. As of 2003, state secondary schools will generally have a pre-vocational stream and all private secondary schools will have the opportunity to hold at least one pre-vocational class. (p. 26)
- ERR51** As is the case at present, private secondary schools, including the confessional schools, will continue to play an important role in providing an education responsive to the needs of the individual citizen as well as to those of the nation as a whole. They will be free to offer an alternative education route to that provided by the state. (p. 27)

The following are extracts taken from the document *Curriculum Renewal in the Primary Sector* (2001.)

- CRP 1** All children will benefit from a better understanding of history and geography of Mauritius and an early exposure to the world of science. (p. 3)
- CRP 2** Although the study of Asian languages/Arabic will remain optional, efforts will be geared towards motivating all pupils to study an Asian language/Arabic or, at least, to have exposure to one of them. (p. 3)
- CRP 3** Religious classes, currently offered in schools, will still be available. (p. 3)

The new curriculum will respond to basic learning needs that comprise both essential learning tools (such as literacy, oral expression, numeracy and problem-solving) and basic learning content (knowledge, skills, values, attitudes, etc.). (p.4)

Drawing activities, which must be regular, frequent, varied and intensive, will be alternately free and guided. They develop fine motor skills, writing (readiness) skills and artistic expression skills. The children may be invited to engage in such activities during language, writing, mathematics, drawing or painting, science readiness lessons, etc. (p. 4)

Logical mathematical activities such as counting and sorting will be carried out during mathematics lessons, obviously, but also during science readiness, language or literacy lessons. (p. 4)

The computer is an indispensable tool for teaching and every school should be fully networked allowing teachers and pupils to access the Internet, courses and other media resources. The ultimate objective is to provide each child, at the end of primary schooling, with a 'computer driving license' that will enable the child to be computer literate and, further, be more apt to participate in a knowledge-based society. (p. 5)

Citizenship education is very important for children to grow up learning about and understanding their social and natural environment and learning to live together harmoniously as active members in a multi-cultural society. They must be aware of their rights but also of their duties, of safe and healthy living, of democracy and nation-building, of peace, co-existence and gender equality. (p. 6)



➤ *Waving to parents before the kindergarten class starts. (©Photo Collection: A.A.)*

The arts also form part of communication like language and IT and allow children to express themselves in a more personal and creative way and find joy through that exposure. The children, while expressing their creativity, will develop other skills such as problem-solving that will help them to open up and face, in their own way, the outside world. (p.6)

Health and physical education are important to make the child educationally motivated, alert and successful in school, while ensuring his physical well-being. The health and physical education curriculum will help students develop a lifelong commitment to healthy, active living. An adequate number of health and physical education teachers will be trained to develop in children an awareness of the importance of health issues such as disease prevention and control, injury prevention, treatment and rehabilitation and the importance of being physically fit through exercise and sports. (p. 6)

The new curriculum takes into account the necessity to boost the moral, cultural and physical development of the child. The introduction of new subjects implies a broader time span. New school hours are being proposed but will not in any way increase the pressure on the child's intellect nor increase the workload of the general purpose teacher. (p. 7)

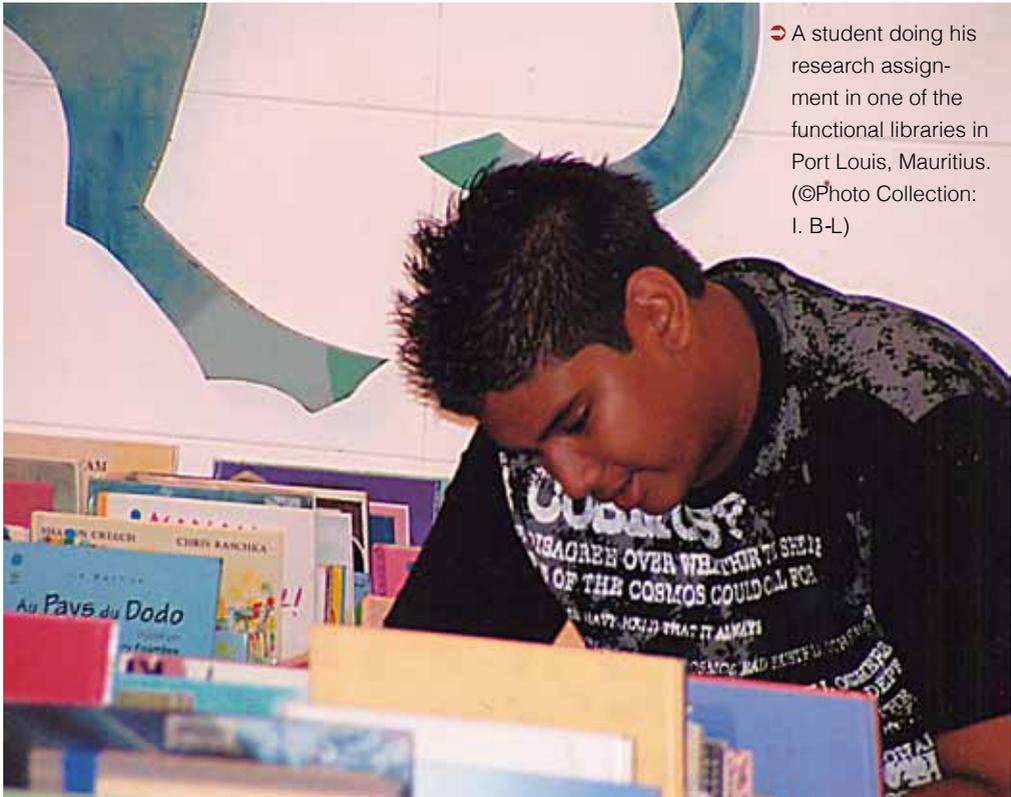
It is proposed to construct 222 computer labs and 116 reading rooms/libraries in the schools lacking such facilities. There will be a minimum of at least one computer lab in each school and all schools will be provided with a reading room/library. (p. 10)

The following are extracts taken from the document *Quality Education for All* (2003). (This document will be referred to as the QEA). As of 2003-2004, two pre-school units attached to a government primary school will be constructed annually to guarantee universal access to pre-school education.

- QEA1** Children with light disabilities will have free access to all state-owned pre-schools. Private pre-school settings will be encouraged to develop inclusive services for children with special needs.
- QEA2** By 2007, all working pre-school teachers should be holders of professional training certificates.
- QEA3** The number of new state secondary schools built increased from 34 in 2000 to 63 in 2003.

The following are extracts from the document *Bilan chiffré de la réforme de l'éducation*. (This document will be referred to as BCR).

- BCR1** The education reform project has been developed around three main objectives (p. 1):



➤ A student doing his research assignment in one of the functional libraries in Port Louis, Mauritius. (©Photo Collection: I. B-L)

- ♦ To guarantee access to education to everyone until the age of 16 and beyond;
- ♦ To ensure that the schools respond to the needs of the child and of the country by renewing the curriculum; and
- ♦ To promote the success of schools by offering quality education.

BCR2 The commitment of the government in favour of the reform has been reflected in an investment of about Rs 25 billion in the education sector from 2001 to 2005.

Access to education (1-3):

BCR3 In the pre-primary sector, six state schools have been set up since 2001. Eight additional pre-primary school units should be operational by 2006. Thus over 95% of children aged 4 to 5 are attending pre-primary schools in 2005.

BCR4 In primary, the 28 low-achieving schools of Mauritius and Rodrigues will henceforth benefit from the Priority Education Zones (ZEP) project to ensure the full participation of their 11,000 students in the basic learning stage. The project will be extended to the two schools in Agalega this year.

- BCR5** Ranking has been abolished at the CPE level.
- BCR6** From 2001 to 2005, 36 additional state secondary schools were established.
- BCR7** At the secondary level, the number of state schools in Mauritius therefore increased from 34 in 2000 to 70 in 2005. The total intake in state secondary schools rose from 3,700 in 2000 to 7,276 in 2005. In all, 20,473 students were admitted in Form I in January 2005 compared to 16,582 in the year 2000.
- BCR8** Enrolment in the 36 additional colleges increased from 100,143 in 2001 to 117,263 in 2005. Thus the percentage of children aged 12 to 15 years who are attending secondary schools increased from 80.7% in 2000 to 90% in 2005.
- BCR9** Schooling is therefore accessible to everyone and is also compulsory to all until the age of 16.
- BCR10** At the tertiary level, enrolment in public institutions increased from 9,081 in 2000-2001 to 11,715 in 2004-2005. Overall, enrolment increased from 16,759 in 2000-2001 to 26,074 in 2004-2005.
- BCR11** The Open University of Mauritius has been set up and will be operational.
- BCR12** The Tertiary Investment Support Scheme allows all students in higher education in Mauritius to obtain a loan without any guarantee required. It is only after six months following graduation that the student will begin to repay the loan.
- BCR13** The budget devoted to special education for handicapped children increased from Rs 4 million (2004-2005) to Rs 17 million (2005-2006).
- BCR14** Since October 2002, the Mass Computer Proficiency Programme has provided an introduction to computers to 37,253 people of all ages.
- On curriculum renewal:
- BCR15** The MIE has published the Standard Programme Guidelines in order to ensure uniformity in teaching at the pre-primary level.
- BCR16** In June 2005, 930 private pre-primary schools received a first payment of Rs 10.5 million that will allow them to offer a quality service in line with the required norms.
- BCR17** In the primary sector, new subjects like citizenship education, science, information technology and health and physical education have been introduced.
- BCR18** Since 2004, the result obtained in Asian languages is counted for the overall grade on the CPE.
- BCR19** Since 2001, at the secondary level, the Pre-Voc project has been designed to cater to those who failed the CPE.

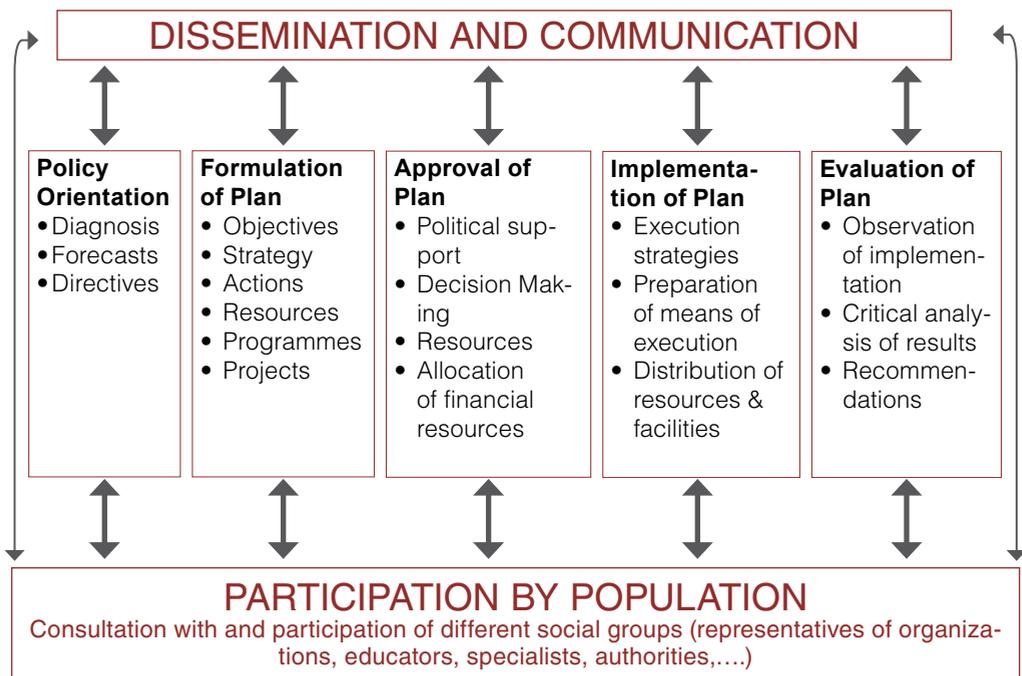
- BCR20** In June 2005, polytechnical education will be launched as an alternative to the Higher School Certificate in order to better prepare young people for the working world.
- BCR21** In September 2004, the report entitled *Grafi Larmoni* proposed a standard writing style for Mauritian Creole for the first time.
- On providing quality education:
- BCR22** The extension of the school day in the primary schools by 25 minutes in the context of the National Literacy and Numeracy Strategy has allowed all 126,000 students at primary level to increase their skills in reading, writing and arithmetic.
- BCR23** Since 2003, 237 IT teachers have been hired in Mauritius, Rodrigues and Agalega. IT labs are being established in 50 primary schools. All schools will have their own labs by 2008.
- BCR24** At the primary level, the pupil-teacher ratio improved from 26:1 to 23:1 while at secondary level the ratio changed from 19:1 to 16:1.
- BCR25** At the pre-primary level, 99% of the teachers have taken a course in education. At secondary level, 65% of the teaching staff are graduates as compared to 52% in the year 2000.
- BCR26** Since 2001, 1,242 and 1,052 teachers have been recruited in primary and secondary schools respectively.



An analysis of the contents of the four documents showed that several objectives initially set could not be met while there are outcomes that do not stem from any of the objectives.

Evaluation: A Model for the Educational Planning Process

Educational change on any scale is almost always a slow and complex process requiring continuity of policy. Action in the field is inevitably influenced by existing structures and provision, and the difficulty of bringing about major shifts, for example in public budgets even when the will is strong. However, meticulous educational planning definitely leads to effective results faster. A simple model for an educational planning process could be:



Evaluation: The Policy Reforms

Diagnosis

Educational diagnosis may be briefly defined as the study of the “relationship existing between the present educational provision and the demographic, economic and social situation, the better to discern the needs in the field of education”³. This extract from the recommendations by UNESCO and the International Bureau of Education has the merit of evidencing the interdisciplinary character of the exercise.

3. UNESCO (1984), Implementation, follow-up and evaluation of educational plans.

Both documents *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level – The Way Forward (2001)* and *Curriculum Renewal in the Primary Sector (2001)* do not contain any educational diagnosis. In fact, neither of these documents contains references to any systematic inquiry. There is no mention of the three pillars of the reforms, namely access, relevance and achievement. The underpinnings of the reforms were mentioned in the document *Quality Education for All*, which appeared in December 2003. Education is a fundamental human right. It has a powerful impact on the possibilities that children have to determine and enhance their future. However, there are certain questions that have always been deeply troubling: how much are children learning at school? Is it enough? Are there major gaps in their learning that need to be addressed? Admittedly, an educational diagnosis demands time but without careful, systematic inquiry into the effectiveness of either the current school practices or new programmes, many changes occurring in education become little more than the random adoption of faddish innovations. In a rich democratic tradition, consultations need to be carried out with all the stakeholders so as to bring innovations and changes to a successful fruition.

It is evident from the ERR document that the main objectives of the educational reforms were the abolition of ranking on the CPE and the admission of more children to state secondary schools. This required the construction of new schools. Such additions are always commendable. However, such a focus on access has overshadowed the issue of quality. *The EFA Global Monitoring Report (2005)* states that “Quality stands at the heart of Education for All. It determines how much and how well students learn, and the extent to which their education achieves a range of personal, social and development goals”. While giving all children the opportunity to attend school is obviously an important priority, it is but the first step towards EFA. Once pupils find seats in a classroom, they need quality instruction; otherwise there will be little motivation to remain in school.

Although there was understandable haste to undertake the educational reforms, thus leaving no time for diagnosis, the findings of previous evaluation studies conducted in Mauritian schools could have been used to identify the needs and hence influence policy decisions. These studies include: (i) *MES (1991): Determinants of Performance in Primary Schools with special reference to failures at CPE Level*. (ii) *MES (1996): Monitoring Education for All Goals. A Joint UNESCO/UNICEF Project: A Survey of 9-year-old children in Mauritian Schools in Literacy, Numeracy and Life Skills*. (iii) *MES (2003): Monitoring Learning Achievement. A Joint UNESCO /UNICEF Project: A Survey of 9-year-old children in Mauritian Schools in Literacy, Numeracy and Life Skills*. (The MLA surveys were conducted in 1993 and 1999).

The major findings of the study *MES (1991): Determinants of Performance in Primary Schools with special reference to failures at the CPE Level* are summarized as follows:

Determinants of Performance at the CPE Level

The most important determinant of performance at the CPE level was found to be the students' general intelligence. The other two significant factors were the extra education facilities made available to them and their socio-economic status. Pupils' involvement in their studies (that is, the pupils' attitude towards school, reading habits, perceptions of the teacher and attitude towards the curriculum), motivation of the teachers to work and their attitude towards teaching also contribute positively towards the enhancement of CPE performance. It was found that 67% of the variance in CPE performance was explained by the above-mentioned factors.

While factors such as intelligence, exposure to additional education facilities (which include private tutoring and availability of reading materials) and socio-economic status, which are essentially pupil and household characteristics, play an important part in the determination of performance at the CPE level, we note that the school also matters. School factors such as head teacher attitude, teacher attitude, motivation and classroom teaching do contribute to enhancing CPE performance. Head teacher and teacher attitudes have special significance in high-achieving schools, while teacher motivation and classroom performance seem to make a greater contribution in low-achieving schools especially, and compensate in part for an inadequate outside-of-school environment.

Characteristics of Schools/CPE Pupils in Various Geographic Regions of Mauritius

It was observed that higher rates of school amenities, parental interest, extra educational facilities, socio-economic status and the least possible teacher absenteeism have a more positive effect on the achievements of a school, whether rural or urban.

No significant differences were found in the general intelligence of CPE pupils, and in the characteristics of CPE teachers in schools located in the urban, suburban, rural, remote-rural and coastal areas.

When urban pupils were compared to those from suburban, rural, remote-rural and coastal regions, it was found that the socio-economic status level of urban pupils was significantly higher than those of suburban and coastal pupils. It was also higher than for rural and remote-rural pupils but the differences were not significant. The performance of pupils from urban, rural and remote-rural areas on the CPE examination, subject-wise, was significantly better than that of their suburban and coastal counterparts, but the difference was less pronounced for mathematics, probably because this subject requires fewer language skills. On the other hand, significantly higher pupil involvement and provision of extra education facilities were observed as concerns rural pupils compared to urban pupils.

CPE Failures

Out of the 40% children who fail the CPE examination each year, around 43% fail in all the core subjects: English; mathematics; French; environmental studies; and this represents 18% of the total number of candidates. Ninety percent of those who obtain grade F in all four subjects (4Fs) on their first attempt would fail on their second attempt. It is estimated that out of the 22% who fail with results other than 4Fs, about 3% to 5% are borderline failures.

In addition to factors associated with failure, mentioned above, two factors that further characterize this group of pupils are their past performance score and the rate of absenteeism. The past performance score for these pupils, subject-wise, was 17 marks, which is well below the passing score on the CPE examination, and is characteristic of cumulative failure throughout primary education. Failing pupils were found to be absent from school nearly twice as often as those who pass and two and a half times as often than the higher achievers. Those who failed with results of 4Fs had been absent, on average, 29 days or nearly six weeks from school, each year.

From a study of the background characteristics of those pupils who failed the CPE examination on their first attempt but had gone on to pass the examination the second time, it was found that although their socio-economic status was not significantly different from those who failed, they had higher levels of intelligence, around the overall sample mean of 18, a past performance score of nearly 30 marks, and were also more involved in their studies. These pupils must have in all likelihood suffered from inadequate attention, lack of remediation and the system of automatic promotion. It is suspected that this must have been the case for those 15 pupils (around 2% of the total sample) who were identified as being above average but had failed the CPE examination.

Private Tutoring

Although the provision for private tutoring represents an economic burden for many parents, a good number of them still go out of their way to provide private tutoring for their children. The majority of parents and children favour private tutoring, and for them to have private tutoring, is to help “to learn more” or “to be admitted to a good secondary school”. Nearly 70% of CPE children take private tutoring, ranging from two days a week to five days a week. The majority (88%) of children receive tutoring from one tutor, 9% from two tutors and 3% from three tutors.

It is to be noted that 90% of children who passed the CPE examination had private tutoring, while 50% children who failed the examination did not have private tutoring.

Nutritional Status and Performance

No significant difference was found in nutritional status, based on the body-mass index, of CPE pupils attending high, average and low-achieving schools, as well as schools

located in urban, suburban, rural, remote-rural and coastal areas. Twelve percent of CPE pupils were found to be malnourished on the basis of the measures height-for-age and weight-for-age. Thirty percent of those who were malnourished were both under-weight (low weight-for-age) and stunted (low height-for-age). Although the effects of malnutrition on CPE performance could not be established, it was found that 60% of the total number of cases who were malnourished were unsuccessful on the CPE examination, as compared to 40% who were successful.

Perceptions about Causes of Failures

From a survey on the opinion of CPE teachers, deputy head teachers, head teachers and inspectors concerning causes of failure on the CPE examination, there seems to be unanimous agreement that 'automatic promotion' is the most important cause of failure on the examination, followed by 'low socio-economic status of parents'. For the third main cause of failure, there is a difference in perception between the supervisory personnel and the CPE teachers. While the supervisory personnel, that is, the inspectors, head teachers and deputy head teachers unanimously state that 'teacher motivation and attitude' is the third important factor responsible for failure, CPE teachers feel that it is either because of the 'difficult curriculum' or 'language problems'. The other two important factors were 'no room for remedial teaching' and 'parental attitude'.

The major findings of the MLA surveys conducted by MES in 1994 and 1999 are:

- » Mauritius has not yet met its Jomtien/Dakar targets (with at least 80% of the learners attaining the defined minimum learning competencies) in any of the learning areas. However, Mauritius has made significant progress in the pursuit of EFA goals. The percentage of learners who have attained the minimum mastery level (MML) in all the learning areas has increased from 56% in 1993 to 70% in 1999;
- » Nearly one out of every four children surveyed has shown thorough mastery of higher skills in all three subjects;
- » Highest and lowest performances on the literacy test were recorded for the areas of vocabulary and writing-expression respectively. Despite the fact that students had an adequate knowledge of vocabulary, they had a great deal of difficulty communicating their thoughts by writing sentences and coherent prose;
- » On the numeracy test, the best and worst performances were recorded in the areas of numbers/geometry and measurement respectively;
- » On the life skills test, items in the areas of health and environment proved to be accessible whereas items testing knowledge of science and technology proved to be challenging;
- » Both surveys confirmed that children in urban schools performed significantly better than those in rural schools in all learning areas;

- » The 1994 and 1999 surveys indicated significant gender-related differences in mean scores on all the tests were recorded – the girls performing better than boys;
- » Mauritius has achieved commendable success in providing universal access to basic opportunities through its well-established education system. However, the differences in achievement scores for children attending the same level of education suggest that our system may not be addressing learning difficulties. Certainly, many sources of education inequalities exist. When questions about equal education inputs, processes and outcomes are raised in view of the Jomtien and Dakar objectives, we find that we are not yet meeting basic learning needs and ensuring a minimum level of competencies for all. Reforms in the primary education system must be geared towards reducing the differences in pupils' achievements as they progress in school;
- » For the great majority of the children surveyed, the language of learning and teaching was not their mother tongue;
- » All children reported that they enjoy learning at school;
- » One out of every 10 children included in the surveys said that they did not like their schools;
- » Only about 30% of the parents regularly participate in school activities;
- » The majority of the teachers reported that automatic promotion is responsible to a great degree for the low achievement of students;
- » One out of every two teachers pointed out that heavily loaded curriculum and the socio-economic status of parents are responsible for the poor performance of the pupils;
- » According to the results of the MLA surveys, the main determinant of a child's performance is the socio-economic status of the child's family;
- » The results also confirmed that parental education level and parents' opinion about education are decisive factors affecting performance of the children at school;
- » The information-rich child (who has privileged access to learning through technology and through books and other materials at home) is more likely to do better at school;
- » Pupils who have a positive attitude towards school and teachers as well as those who use English to communicate perform better on the tests;
- » Children who have more experienced teachers at school and who are more frequently assessed become better learners.

In the early eighties, the National Commission on Excellence in Education⁴ was created in the United States in order to investigate “the widespread public perception that something is seriously remiss in our education system,” and “support of all who care about our future” was solicited to aid the Commission’s work. The first essential message in the Commission’s public report, entitled *A Nation at Risk: the Imperative for Educational Reform*, is that the United States’ once unchallenged lead in commerce, industry, science and technological innovation is being overtaken by competitors throughout the world. The Commission’s panel of distinguished leaders warned that “the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people”. This report sparked a national debate on education.

Debates that involve all stakeholders not only allow the identification of the fundamental issues but also help build consensus and impetus around policy decisions.

Forecasts and Directives

Forecasts are estimates of what will probably happen in the future if the situation and recent trends continue. The documents describing educational reforms contain estimates of the intake of the state secondary schools. However, there is little about improvements in school outcomes – as represented by pupil’s achievement test scores. In fact, the findings in Section III of this report show that there is a constant pattern in the outcomes. Many developed countries like England have set targets that define the minimum percentage of pupils who must attain a certain education level by the end of a specified period. Such targets help to formulate policy guidelines or directives that are used to define objectives to be attained by chosen means.

A survey⁵ conducted by the Board of Investment (Mauritius) in February 2005, showed that “Most of the companies (included in the survey) believe that the current system of education does not provide some of the necessary skills for ITES/IT, even at the graduate/post-graduate level. Resources produced may have a strong theoretical background but often lack communication and vocation skills and the creative drive required by clients in foreign countries.”

Empirical work has shown that high-quality schooling improves national economic potential. Many traditional economic approaches have assumed there is a workable analogy between schools and industrial production, in the sense that a set of inputs in schooling is transformed by teachers and pupils into a set of products, or outputs, in a fairly uniform way.

4. Cited in Worthen, B.R. and Sanders J.R. (1987) *Educational Evaluation, Alternative Approaches and Practical Guidelines*, Longman.

5. Board of Investment (2005), *Survey on the ITES BPO Sector in Mauritius*

Appropriate forecasts could have contributed to moving towards the objectives set with strengthened resolve and renewed energy -in education too much is at stake for anything else.

Clearly the design of the policy reforms has several shortcomings. Moreover, due to the focus on ranking/access, several other needs have received very little attention. As a result, the reforms did not have the desired impact.

Evaluation: Implementation Strategies and Allocation of Resources

For the successful implementation of a plan, prior preparation for the implementation of the plan is vital. Since implementation requires more detail than the text of the plan may provide, it is important to start by translating the plan's objectives into operational terms. The plan is split up into operational programmes and projects so as to determine in detail the activities to be undertaken, the responsibilities to be designated, the resources to be mobilized, the results to be attained and the evaluation periods to be envisaged. A strategy is then devised to ensure proper implementation of the plan. Hence this requires:

- » Identifying the main proposals contained in the plan;
- » Ascertaining, for each of these, the favourable or restricting factors: political, socio-cultural, legal, administrative, financial and technical;
- » Undertaking a feasibility analysis and envisaging the changes that will result from this;
- » Choosing means that will guarantee execution of the plan from the administrative, legal, institutional, financial, human resources, etc. points of view;
- » Taking the steps indispensable for implementation of the plan; and
- » Modifying the plan in accordance with the results obtained throughout its implementation.

Next, on the basis of the plan's division into programmes and projects and of the implementation strategy, there remain three tasks to be performed. These are:

- » Determining the administrative levels (national, regional, local or institutional) responsible for implementation;
- » Organizing the work and distributing responsibilities; and
- » Allocating human, material and financial resources by means of a budget devised to ensure the availability of the resources needed for implementation.

The implementation strategies were the weakest in the most recent educational reforms. In fact, it seems that the preparation for the implementation was done in a very *ad hoc* way.

For instance, introduction of citizenship education in our schools has not been successful. A textbook, syllabus and exemplar materials for assessment were also prepared. However, this important subject has never been able to take off properly. Initially, it was proposed that students would have to take an examination in citizenship education. Fortunately, this examination was never held. There were certain elements of the syllabus that did not fit in with the socio-cultural characteristics of the population. Such an investment of both financial and human resources has not yielded the desired results.

A similar situation seems to have occurred in the case of the implementation of the School IT Project (SITP) in 2002. This project aimed at allowing children to understand the basic aspects of information and communication technology. About 325 specialist teachers were recruited to teach ICT to all children in our schools. An appropriate syllabus and several transitional syllabuses were prepared. However, none of government and government-aided primary schools had a computer laboratory. In several schools, a spare room was not available. Even when an institution had a spare room, it required a great deal of work before it could be used. Moreover, the software and the hardware have not been purchased despite the fact that international tenders were launched. As a result, teachers have been teaching ICT on a theoretical basis only. Where a computer is available, a student may get hands-on practice occasionally. In this case, under-estimation of financial resources (around Rs. 500 million) had a negative effect.

The subject EVS was split into two subjects, namely science and history and geography. The introduction of these subjects was accompanied by proper teaching and learning materials. Similarly, construction of the buildings to accommodate new state schools was done quite rapidly. However, many of these do not have special rooms such as science labs.

Government Expenditure on Education 2001-2005

One of the main ingredients in the successful implementation of educational reforms is the availability of sufficient funds. Other costs such as distribution of free textbooks to all primary school students must also be met. The total expenditure in the education sector has increased continuously over the years as shown in Tables 4-6.

Total government⁶ expenditure estimates for the financial year 2005-2006 is Rs 51,750 million, out of which Rs 7,379 million (14%) has been allocated to education. Government capital expenditure on education, estimated at Rs 1,179 million, represents 14% of the total government capital expenditure (Rs 8,600 million), and recurrent expenditure on education estimated at Rs 6,200 million, which is 14% of the government total recurrent expenditure (Rs 43,150 million). Out of the recurrent budget of the Ministry

6. CSO (2005), *Economic and Social Indicators*, No. 523

of Education for the year 2005-2006, 43% is allocated to secondary education, 30% to primary education, 13% to post-secondary education, 2% to technical and vocational education, 2% to pre-primary education and the rest to other Ministry expenses.

Are we spending more or less? According to the *EFA Global Monitoring Report (2005)*: “Common sense would suggest that the more resources spent per student, the better their performance. In eleven OECD countries, however, mathematics and science test scores generally fell over the quarter century ending in 1995, even though in many cases per pupil spending more than doubled.”

Table 1.4. Total Government Expenditure* (Capital and Recurrent), 2003-2006

	2003-2004 ^a	2004/2005	2005/2006
Total Government Expenditure	45,307.8	48,990.0	51,750.0
Capital	8,428.6	8,500.0	8,600.0
Recurrent	36,879.2	40,490.0	43,150.0

* (Rs million) a. Actual

Evaluation: Performance at the Primary Level

All the stakeholders understand that providing quality basic education for all children is essential not only for the economic growth and social stability of the country but also to the functioning of a stable and equitable community of nations. The goal of primary education is to develop the child’s potential to help young learners acquire not only knowledge but also the necessary skills, habits and values that help the smooth and effective adjustment of the child in a rapidly changing modern society. Primary schools are also intended to confer on children the necessary academic and cultural background to help them grow up into enlightened citizens of Mauritius. Furthermore, primary education should provide grounding in basic skills such as reading, writing and numeration, and help to produce the linguistic capacity needed in a multi-lingual society. They should encourage the child to observe, to think and to develop a growing sense of autonomy. In addition, the child learns to develop values and attitudes relevant to the society in which he is growing up. To obtain this broad objective, our schools need a judiciously prepared programme that seeks to recognize the talents and needs of all pupils and provides a broad gamut of opportunities and facilities within a highly enriching learning environment that keeps pace with the aspirations and developmental needs of a rapidly developing young industrialized multi-lingual society. A good primary education system is the key to maximizing the potential talents of our population and giving all the citizens the opportunity to build a better life for themselves and their children.

In March 2005, there were 291 schools providing primary education, 278 on the island of Mauritius and 13 in Rodrigues. The majority (221) of the schools were run by the government, 51 by the Roman Catholic Education Authority (RCEA), two by the Hindu

Education Authority and the other 17 were private unaided schools. The primary school population in the Republic of Mauritius decreased by about 2% from 126,226 in 2004 to 123,562 in 2005. Boys represented 51% of the 2005 primary school population and girls 49%. Around 75% of the primary school population was enrolled in government schools. Distribution by grade shows that the highest number of pupils was in Standard VI (26,766 pupils including 5,965 repeaters). The gross enrolment rate (primary enrolment as percentage of population aged 6 to 11 years) works out to 102%, the same as in 2004. In March 2005, some 8,253 people were employed in primary schools. Of this number, 5,531 were teaching staff: 4,186 general purpose teachers and 1,345 Oriental/Arabic language teachers. The remaining 2,722 comprised 286 head teachers, 859 deputy head teachers and 1,577 administrative and other employees.

Table 1.5. Total Government Expenditure* on Education (Capital & Recurrent), 2003-2006

	2003/2004	2004/2005	2005/2006 ^a
Island of Mauritius, Ministry of Education	5,857.5	6,433.0	6,941.0
Capital	697.0	821.6	991.2
Recurrent	5,160.5	5,611.4	5,949.8
Island of Rodrigues, Ministry of Shipping & Rodrigues and Outer Islands	161.7	142.1	117.1
Capital	86.1	59.5	32.6
Recurrent	75.6	82.6	84.5
Other Ministries	208.5	244.7	320.6
Capital	96.3	98.0	155.0
Recurrent	112.2	146.7	165.6
Total	6,227.7	6,819.8	7,378.7

* (Rs million) a. Provisional: budget estimated

Table 1.6. Government Recurrent Expenditure* on Education by Sector, 2003-2006

	2003/2004 ^a		2004/2005		2005/2006 ^b	
	Amount	%	Amount	%	Amount	%
Island of Mauritius, Ministry of Education	5,160.5	100.0	5,611.4	100.0	5,948.9	100.0
Pre-primary	78.4	1.6	107.0	1.9	99.0	1.7
Primary	1,514.2	29.3	1,565.0	27.9	1,771.1	29.8
Secondary	2,308.1	44.7	2,579.3	46.0	2,554.7	42.9
Technical and Vocational	94.6	1.8	113.7	2.0	123.5	2.1
Post-Secondary	622.0	12.1	796.7	14.2	747.7	12.6
Other ^c	543.2	10.5	449.7	8.0	646.9	10.9
Island Rodrigues ^d	75.6		82.6		84.5	
Primary	75.6		82.6		84.5	
Other ^e	112.2		146.7		165.6	
Total	5,348.3		5,840.7		6,199.0	

* (Rs million) a. Actual ; b. Provisional: budget estimated ; c. Includes administrative staff, MES, MRC & Conservatoire ; d. Dépenses au titre du vote du ministère de Rodrigues ; e. Inclut formation maritime, MIH, IVTB, MQA, Programme Technologique de l'information

Table 1.7. Number of Primary Schools from 1999 to 2005

	Island of Mauritius	Island of Rodrigues	Total no. of schools
Mar-99	274	13	287
Mar-00	278	13	291
Mar-01	280	13	293
Mar-02	277	13	290
Mar-03	278	13	291
Mar-04	276	13	289
Mar-05	278	13	291

Table 1.7 shows the distribution of primary schools from 1999 to 2004; this number has remained nearly the same. The number of school candidates who took the CPE examinations and the results are shown in Table 1.8. Over the years, the fluctuations in the percentage of candidates who passed the CPE have been very small. In 1995, it was still 65.3%. The outcomes of primary schools as represented by the percentage of students passing CPE have been stagnating for the past 10 years. The reforms do not seem to have helped the schools to do better. What is even more surprising is the grade distribution at the CPE level as shown in Figures 1.1-1.7. The “U-shape” shows a trend that is exactly opposite to that of the normal curve that governs the distribution of intelligence.

Table 1.8. CPE Examination Results for School Candidates (Republic of Mauritius) 2002-2004

Year	No. Examined	Percentage Passed
1999	26,388	64.3
2000	28,058	66.4
2001	29,120	65.3
2002	27,842	64.9
2003	27,510	62.6
2004	27,332	63.0

Figure 1.1. Distribution of Grades in English, Maths and French for CPE, 1999

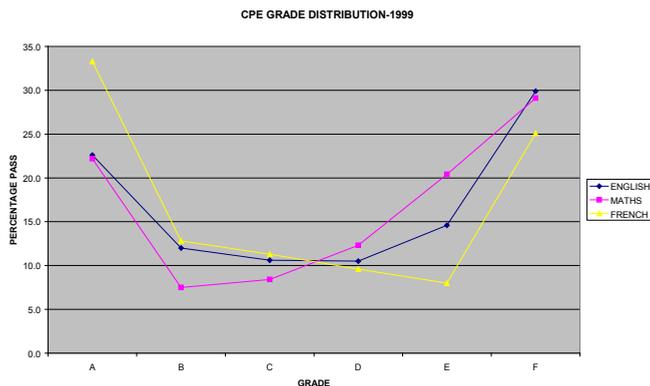


Figure 1.2. Distribution of Grades in English, Maths and French for CPE 2000

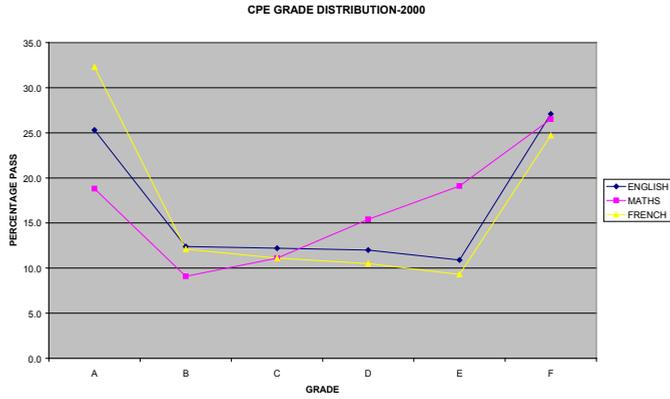


Figure 1.3. Distribution of Grades in English, Maths and French for CPE 2001

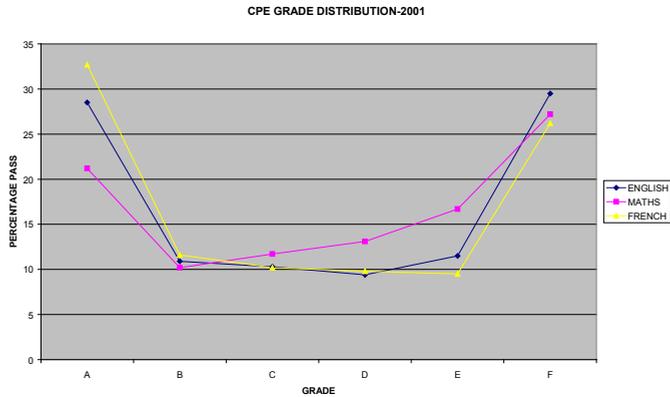


Figure 1.4. Distribution of Grades in English, Maths, French and Science for CPE 2002

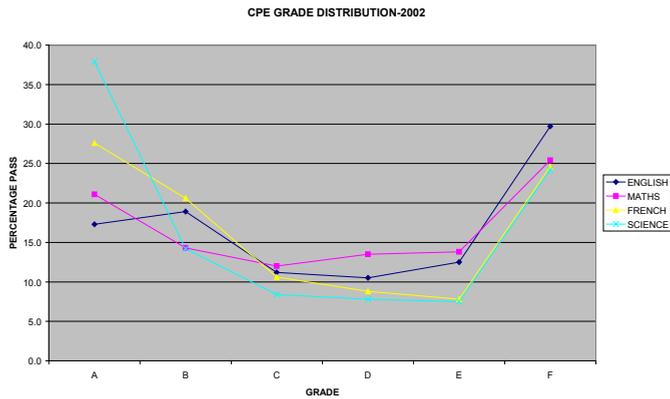
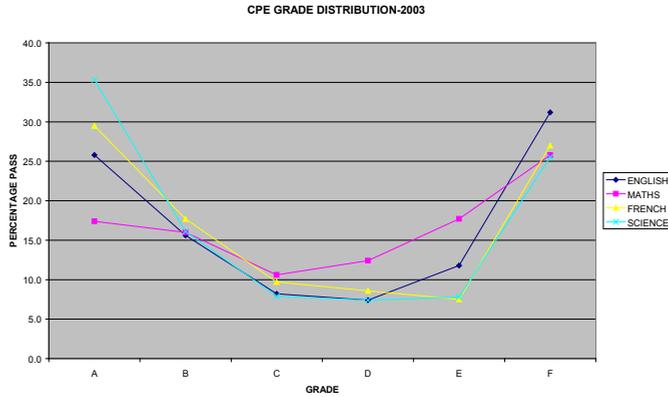
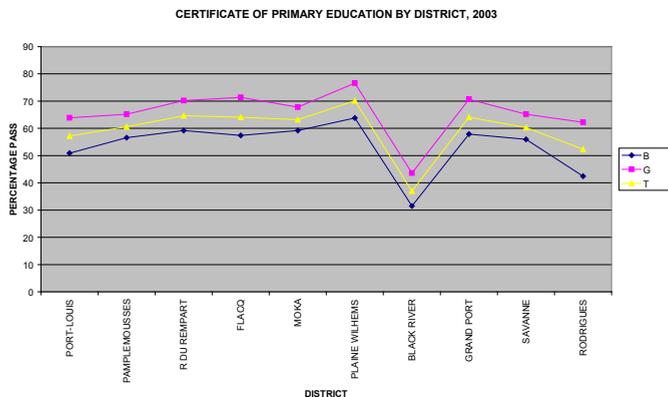


Figure 1.5. Distribution of Grades in English, Maths, French and Science for CPE 2003



Such an abnormal grade distribution can emanate from our educational curriculum, which remains too academic and class-centred and the teaching that promotes ‘rote’ learning and drills. *The EFA Global Monitoring Report (2005)* states that “across the world, commonly used styles and methods are not serving children well”. This also calls for a review of the assessment tools being used. An analysis of the grades district-wise reveal that schools in Black River require more support.

Figures 1.6 and 1.7. Performance of CPE (2002-2003) Candidates by District and Gender



Evaluation: Performance at the Secondary Level

The distribution of secondary schools is presented in Table 1.9. It clearly shows the increase in the number of schools due to the construction of new schools.

However, the performance of students has not improved in qualitative terms as shown in Figures 1.8-1.15.

Table 1.9. Distribution of secondary schools in Republic of Mauritius

DISTRIBUTION OF SECONDARY SCHOOLS 2000									
	ADMINISTRATION								
	All	STATE				PRIVATE			
		Going up to				Going up to			
		Form	Form			Form	Form		
Schools	Total	V	VI	Other	Total	V	VI	Other	
Republic of Mauritius	131	34	6	23	5	97	53	40	4
Island of Mauritius	3	-	-	-	-	3	1	2	-
Island of Rodrigues									
DISTRIBUTION OF SECONDARY SCHOOLS 2001									
	ADMINISTRATION								
	All	STATE				PRIVATE			
		Going up to				Going up to			
		Form	Form			Form	Form		
Schools	Total	V	VI	Other	Total	V	VI	Other	
Republic of Mauritius	131	34	6	23	5	97	53	40	4
Island of Mauritius	-3	-	-	-	-	3	1	2	-
Island of Rodrigues									
DISTRIBUTION OF SECONDARY SCHOOLS 2002									
	ADMINISTRATION								
	All	STATE				PRIVATE			
		Going up to				Going up to			
		Form	Form			Form	Form		
Schools	Total	V	VI	Other	Total	V	VI	Other	
Republic of Mauritius	139	40	2	28	10	99	44	49	6
Island of Mauritius	4	-	-	-	-	4	2	2	-
Island of Rodrigues									

Figure 1.8. Distribution of Grades in English at SC level

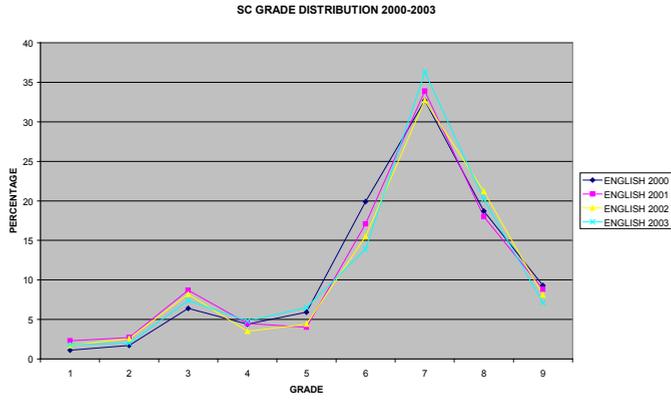


Figure 1.9. Distribution of Grades in French at SC level

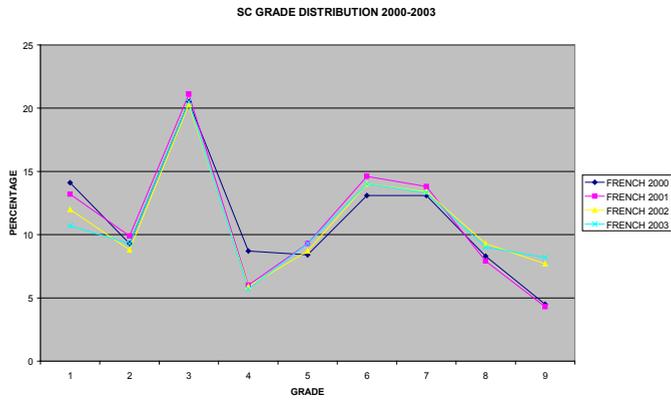


Figure 1.10. Distribution of Grades in Mathematics at SC level

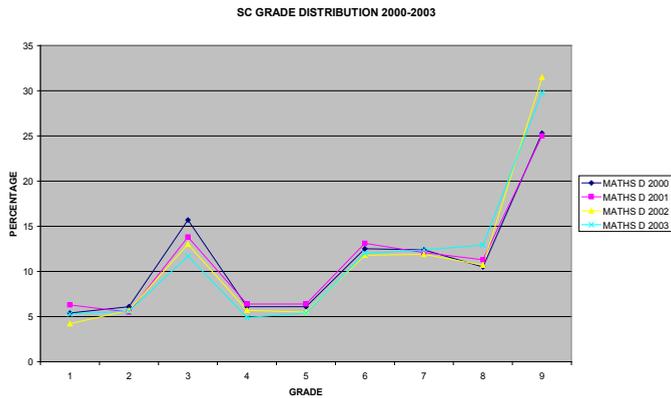


Figure 1.11. Percentage Who Pass at SC Level by Gender

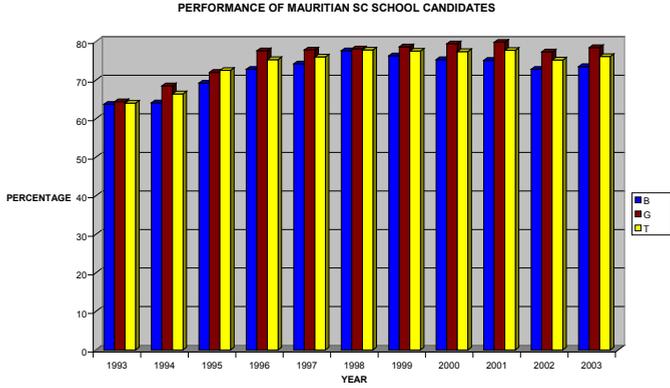


Figure 1.12. Distribution of Grades in Economics at HSC level

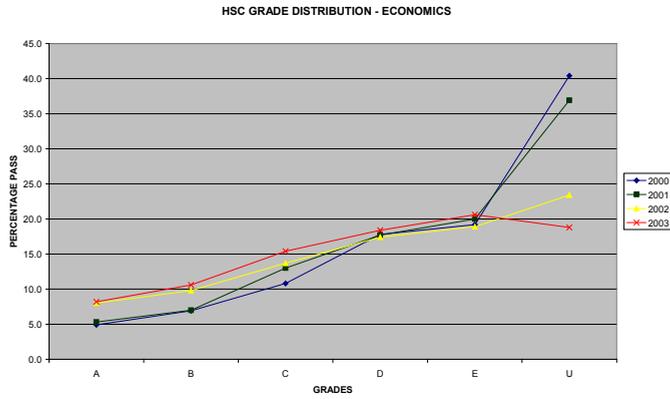


Figure 1.13. Distribution of Grades in French at HSC level

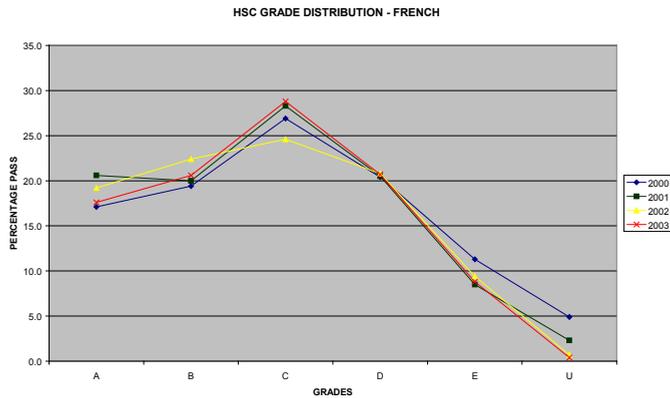


Figure 1.14. Distribution of Grades in Maths at HSC level

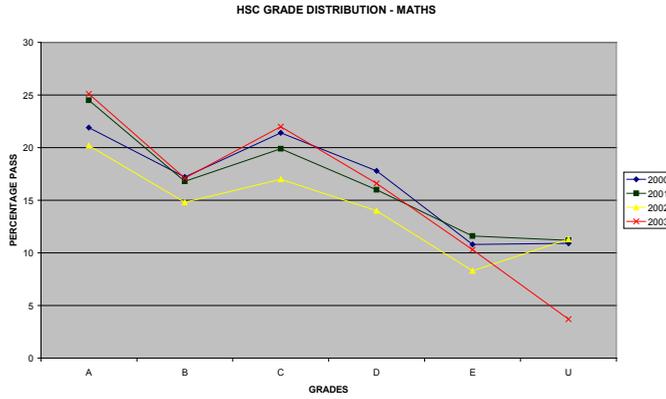


Figure 1.15. Distribution of Grades in Physics at HSC level

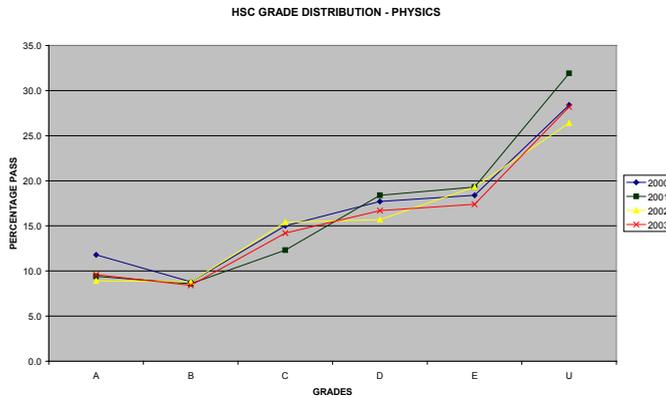
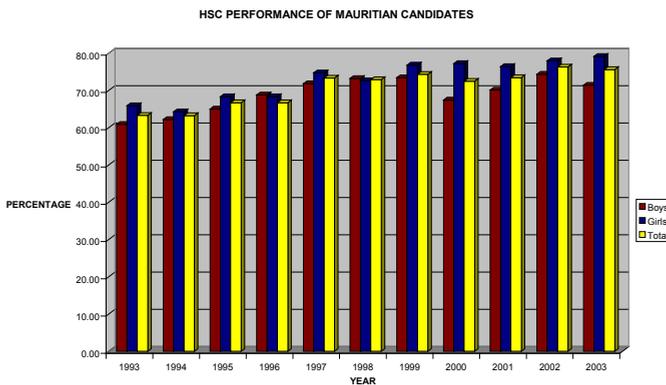


Figure 1.16. Percentage Who Pass at HSC level by Gender



International Comparison

Pre-primary Education

Pre-primary education requires the right infrastructural facilities to help pupils develop a liking for the learning institution and develop their learning instincts through intelligently prepared modules and personnel. Parents all over the world know that enrolment at the pre-primary implies that their child is in the right place for the right start in education.

In March 2005, there were 1,072 pre-primary schools providing pre-primary education: 1,039 in the Island of Mauritius and 33 in Rodrigues. Of these 824 (77%) were privately run institutions; 179 (17%), operating on primary school premises, were administered by the Pre-school Trust Fund and the remaining 69 (6%) were administered by the Roman Catholic Authorities and Municipal/Village Councils. Total enrolment in pre-primary schools numbered 37,356 of whom 18,934 were boys and 18,422 were girls. The Gross Enrolment Ratio (pre-primary enrolment as a percentage of population aged 4 and 5 years) works out to 94% in 2005 against 96% in 2004. The total employment in pre-primary schools stood at 3,362 of whom 2,501 were teachers and 861 were non-teaching staff. Most (99%) of the teachers were women. To date, 1,812 teachers have been fully trained and another group of 616 are presently following the training programme at MIE. The ratio of number of pupils to teacher was 15:1.

The Gross Enrolment Ratio in Pre-primary Education

Following the analysis made on pre-primary education around the world, we notice an increase by 4.5 % in the GER⁷ from 1998 to 2001 in Table 1.10. In addition we observe a rise in the GPI⁸ showing disparity in favour of the female population in 2001 compared to 1998. We also find out that the age groups for the GER in pre-primary schools vary from 3 to 6 years. In some countries like Senegal, South Africa, Uganda and the United Kingdom the GER in pre-primary education has improved steadily during the period 1998 to 2001. However we notice a reduction in the GER in pre-primary education in a few countries such as Mauritius, Japan, Seychelles and Thailand.

In the case of the GPI we take note that there is a disparity in favour of the female population compared to that of the male population in practically all the selected countries, with GPI greater than 1, except for the Seychelles and Thailand.

7. Gross enrolment ratio (GER) Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education. The GER can exceed 100% due to late entry or/and repetition. *EFA Global Monitoring Report* (2005).

8. Gender parity index (GPI) Ratio of female to male values of a given indicator. A GPI of 1 indicates parity between sexes; a GPI between 0 and 1 means a disparity in favour of boys/men; a GPI greater than 1 indicates a disparity in favour of girls/women. *EFA Global Monitoring Report* (2005).

Table 1.10. Early Childhood Care and Education (ECCE)⁹

Country	Age group	Gross enrolment ratio (GER) in pre-primary education (%)							
		1998				2001			
		Total	Male	Female	GPI	Total	Male	Female	GPI
Mauritius	4 – 5	98.00	97.10	99.00	1.02	87.50	86.40	88.50	1.02
Japan	3 – 5	83.10	82.20	84.00	1.02	84.20	83.20	85.30	1.03
Madagascar	3 – 5	...	...	...	...	3.40	3.30	3.40	1.02
Senegal	4 – 6	2.90	2.90	2.90	1.00	3.30	3.10	3.50	1.13
Seychelles	4 – 5	112.80	111.30	114.30	1.03	91.50	93.10	89.80	0.96
South Africa	6 – 6	24.20	24.30	24.10	0.99	35.10	35.00	35.20	1.00
Uganda	4 – 5	4.00	4.00	4.00	1.00	4.20	4.10	4.20	1.03
Zambia	3 – 6	2.30	2.10	2.50	1.19	...	...	...	...
Thailand	3 – 5	86.60	87.50	85.60	0.98	85.70	86.60	84.80	0.98
United Kingdom	3 – 4	77.50	77.10	77.90	1.01	83.20	83.20	83.20	1.00
World	...	44.10	44.30	43.80	0.99	48.60	48.10	49.10	1.02

Primary Education

Access To Primary Education: Gross and Net Intake Rates

After analyzing the data from Tables 1.11 and 1.12, we notice a slight increase by 0.2% in the total gross intake rates from 1998 to 2001 at the global level. The rates exceeding 100 per cent reflect the potential capacity to accommodate all children of the official entrance age during that period. Also a GPI greater than 1 shows a disparity in favour of the female population to access primary education around the world. Conversely the NIR¹⁰ being below than 100 % implies shortcomings in education provision worldwide.

In sub-Saharan Africa GIR and NIR in some countries like Botswana, Madagascar, Senegal and Zambia have risen by a trivial percentage. Yet Botswana, with the lowest NIR compared to the other countries, shows that many children did not enter school at the official age as compared to the different regions under investigation.

Further analyses illustrate that other countries like Seychelles, South Africa and Thailand have undergone a minor decrease in their GIR and NIR also except for South Africa and Thailand. So the comparison of the GIR and the NIR suggests that a large number of

9. Early childhood care and education (ECCE) Programmes that, in addition to providing children with care, offer a structured and purposeful set of learning activities either in a formal institution (pre-primary or ISCED) or as part of a non-formal child development programme. ECCE programmes are normally designed for children from age 3 and include organized learning activities that constitute, on average, the equivalent of at least two hours per day and 100 days per year. *EFA Global Monitoring Report* (2005).

10. Net intake rate (NIR) New entrants to the first grade of primary education who are of the official primary-school entrance age, expressed as a percentage of the population of that age. *EFA Global Monitoring Report* (2005).

entrants are actually older than the official entrance age. The analysis of the GPI greater than 1 reveals that there is a disparity in favour of the female population, for instance in the Seychelles. In the case of Thailand with a GPI less than 1, this represents a disparity in favour of the male population while a GPI of 1 in Mauritius denotes equality between the sexes.

Table 1.11. Gross Intake Rate (GIR) in Primary Education (%)

Country	Age	Free Educa-tion	1998				2001			
			Total	Male	Female	GPI	Total	Male	Female	GPI
Botswana	6-15	YES	110.30	112.60	108.00	0.96	112.30	114.90	109.60	0.95
Madagascar	6-14	YES	109.40	110.60	108.20	0.98	117.90	119.40	116.40	0.98
Mauritius	6-11	YES	104.30	104.00	104.50	1.00	91.00	89.50	92.60	1.03
Senegal	7-12	YES	71.00	72.50	69.40	0.96	86.30	86.90	85.70	0.99
Seychelles	6-15	YES	113.40	111.20	115.70	1.04	104.80	106.40	103.10	0.97
South Africa	7-15	NO	123.60	126.00	121.10	0.96	101.50	109.00	94.00	0.86
Zambia	7-13	NO	82.20	83.10	81.30	0.98	86.70	86.40	87.00	1.01
Thailand	6-14	NO	97.40	101.00	93.60	0.93	95.60	98.70	92.50	0.94
World	-	-	101.00	-	-	-	101.20	100.30	102.00	1.02

Table 1.12. Net Intake Rate (NIR) in Primary Education (%)

	1998				2001			
	Total	Male	Female	GPI	Total	Male	Female	GPI
Botswana	21.50	20.20	22.90	1.14	23.90	22.60	25.40	1.12
Madagascar	-	-	-	-	37.10	36.10	38.20	1.06
Mauritius	27.00	27.10	27.00	1.00	24.50	24.10	24.80	1.03
Senegal	39.50	40.30	38.60	0.96	-	-	-	-
Seychelles	68.20	67.60	68.70	1.02	66.80	67.20	66.40	0.99
South Africa	46.80	46.40	47.10	1.02	58.20	59.00	57.30	0.97
Uganda	-	-	-	-	-	-	-	-
Zambia	36.90	36.20	37.50	1.04	38.50	37.30	39.70	1.07
World	-	-	-	-	67.20	66.00	68.50	1.04

Trends in Participation in Primary Education: Gross and Net Enrolment Ratios

The data from the following Figures 1.23 and 1.24 highlight a high rate of participation in primary education worldwide. However after the analysis, we detect an insignificant drop of 0.1% in the GER around the world from 1998 to 2001. In addition, the GPI for the world being less than 1 denotes a disparity in favour of the male population. On the other hand, the NER for primary education at the global level has remained almost constant.

Figure 1.17 et 1.18 ?

Furthermore, in the less developed countries as a whole, the GER along with NER in the primary sector remained relatively stable during this period. In some countries such as Botswana, Madagascar, Senegal, Seychelles and Thailand, the rates of participation in primary education have increased steadily from 1998 to 2001.

On the contrary, a study of the following figures reveals that other countries such as Japan, United Kingdom, Mauritius, South Africa, Uganda and Zambia have experienced a regression in the GER in addition to the NER in that level of education. However in the case of the NER, participation is consistent for Japan and Mauritius.

In addition to these, the countries having a GER beyond 100 % throughout these years appear to be the only regions with the apparent capacity to provide education for all school-age children, otherwise the figures gathered reflect continuing difficulties in responding to the potential demand for education that is driven by rapid population growth.

With reference to the NER, Japan and United Kingdom have reached the goal of universal primary education, which implies the realization of a NER equal to 100% per cent. With regard to the GPI in the field of primary education, those regions that have a GPI greater than 1 have a gender disparity in favour of the female population whereas the opposite results if the GPI is less than 1. A GPI of 1 implies equality between the sexes. There is parity at the gender level in as much as boys and girls are highly motivated to acquire the necessary educational background at the primary level to be able to move to secondary institutions.

Figure 1.17. Net Enrolment Ratio in Primary Education by Region, 1998 and 2001

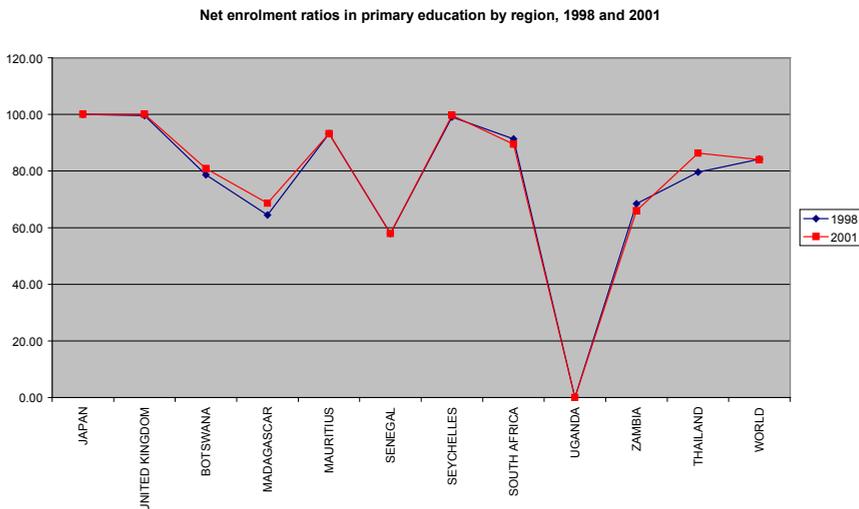
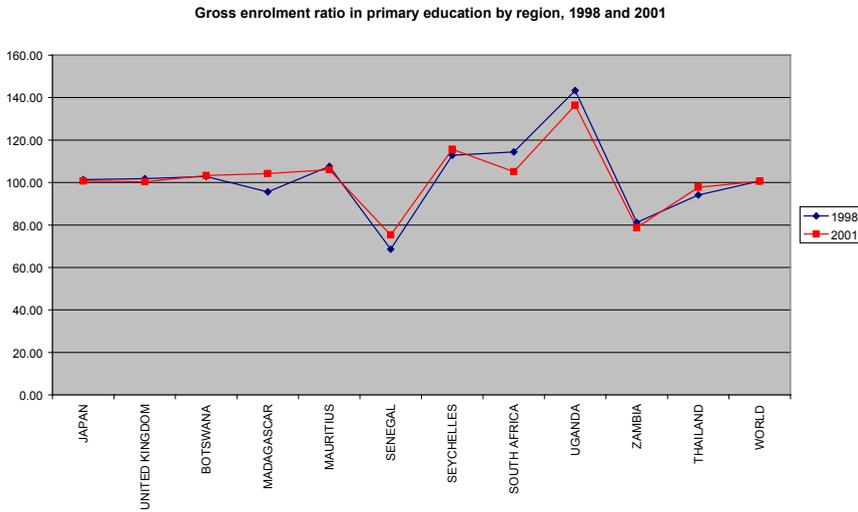


Figure 1.18. Gross Enrolment Ratios in Primary Education by Region, 1998 and 2001



Internal efficiency: Dropout and survival in primary education

Dropout in all grades in primary education, 2000

The number of out-of-school children is based on the trends in net enrolment ratios and the school-age population. After examining Table 1.13 we reached the conclusion that the number of dropouts in primary education at the global level, in all grades, has been reduced except for some countries in sub-Saharan Africa, such as Madagascar, Senegal, South Africa and Zambia. These countries have the largest proportion of out-of-school children.

Several factors account for the problem of high dropout rates. It starts from the lower and manifests itself as follows:

- » Unscrupulous students who often break the rules and regulations of schools and refuse to abide by instructions given by teachers;
- » Lack of support from parents;
- » Students not interested in academic pursuits;
- » Poor family background and absence of parental care;
- » Financial constraint;
- » High rate of children employed on account of acute poverty to support the family.

However the situation is relatively more positive for the developing regions, for instance Mauritius has a total dropout rate of 1.7%. In Mauritius, primary education, which is

compulsory, aims at successfully integrating all the young, irrespective of their age, to give them an educational background that is the necessary requisite to lifelong learning.

Table 1.13. Dropouts, All Grades In Primary Education, 2000

Country	Dropouts, all grades (%)		
	2000		
	Total	Male	Female
Botswana	15.10	18.60	11.50
Madagascar	66.40	67.20	65.60
Mauritius	1.70	2.00	1.30
Senegal	40.90	37.60	44.40
South Africa	42.60	41.50	43.70
Zambia	34.80	31.30	38.30
World	13.60	15.70	10.50

Trends in Survival Rates to All Grades in Primary Education

The survival rate to Grade 5 measures the percentage of a cohort of pupils who are enrolled in the first grade of primary education in a given school year and who eventually reach Grade 5. Its purpose is to assess the internal efficiency of an education system, i.e. the extent to which the system can retain the maximum number of pupils until Grade 5 and therefore avoid early dropouts. The achievement of five years of primary school has been defined as a minimum requirement for an individual to become literate for life.

From the data given in Table 1.14, we observe that the problem of survival until primary Grade 5 is still a pressing issue in many less developed countries like Madagascar, where only 33.6 % of the total reached that level. But the survival rate in Mauritius is quite high compared to the regions under investigation as a result of compulsory education regulations with which the population has to comply. Any dropout at any level gives rise to an in depth inquiry to highlight the exact cause of the pupils' withdrawal. However, the survival rate to Grade 5 is slightly greater than the survival rate to the last grade in almost all the countries including Mauritius, Botswana, Senegal, South Africa and Zambia.

Table 1.14. Survival Rate, All Grades, in Primary Education, 2000

Country	Survival rate to grade 5 (%)			Survival rate to last grade (%)		
	2000			2000		
	Total	Male	Female	Total	Male	Female
Botswana	89.50	86.70	92.30	84.90	81.40	88.50
Madagascar	33.60	32.80	34.40	33.60	32.80	34.40
Mauritius	99.30	99.20	99.30	98.30	98.00	98.70
Senegal	67.50	70.10	64.80	59.10	62.40	55.60
South Africa	64.80	65.20	64.20	57.40	58.50	56.30
Zambia	76.70	78.70	74.80	65.20	68.70	61.70
World	...	...	...	86.20	85.50	87.00

Trends in Transition Rates to All Grades in Primary Education

From Table 1.15 we find that there is a high rate of 90.8% in transition from primary schools to secondary education around the globe. In Botswana, Seychelles, South Africa and Thailand we also take notice of a high percentage, above 90%, in transition to secondary education. However some countries like Madagascar, Mauritius, Senegal, Uganda and Zambia have witnessed a dramatic decline in the rate of transition to secondary level compared to the percentage of enrolment in the primary sector. This is due to the fact that there have been many dropouts and repeaters.

In the case of GPI, we observe that it is greater than 1, which implies a disparity in favour of the female population in transition to secondary level compared to the male population around the world except for a few countries such as Madagascar and Senegal.

Table 1.15. Transition to Secondary Education

Country	Transition to secondary education (%)			
	Total	Male	Female	GPI
Botswana	96,10	95,10	97,00	1,02
Madagascar	55,00	55,40	54,50	0,98
Mauritius	63,20	58,80	68,00	1,15
Senegal	39,20	40,50	37,30	0,92
Seychelles	98,80	98,30	99,40	1,01
South Africa	91,90	90,70	93,00	1,03
Uganda	40,60	38,30	43,60	1,14
Zambia	49,80	49,70	49,90	1,01
Thailand	91,70	91,20	92,20	1,01
World	90,80	89,80	91,80	1,02

Repetition in Primary Education

After examining the repetition rates in Figure 1.19, we note that there exists a small percentage of repeaters in all grades at the global level. Furthermore in many countries under investigation, for instance Thailand, Botswana, Mauritius, Senegal, South Africa and Zambia, we note a relatively low rate of repeaters in all grades. However we also come across certain countries such as Japan, United Kingdom, Seychelles and Uganda where the rates of having repeaters are nil.

This may be due to the fact that Seychelles has a relatively smaller student population, hence easy access to education, which accounts for the high rate of success. Japan and

UK on the other hand dispose of a well-organized system of education with the necessary infrastructure and pedagogical facilities to help pupils get through at different levels. Also the teaching programme is implemented in such a way as to ensure overall success by different grades. As a result there is no repetition case by grade.

Moreover, we notice that there was a high rate of repeaters in Madagascar compared with the other countries. There are various issues that describe the problem of high rate of repeaters worldwide as listed below:

- » Unresponsive students;
- » Low intellectual capability and the inability to cope with the course content;
- » Health problems;
- » Bad peer group.

In Mauritius, we have an education structure of six years of compulsory primary schooling from Standard I to Standard VI leading to the Certificate of Primary Education (CPE). After the analysis of figure 1.20, we observe that there are repeaters only in Standard VI. The rate of repetition in all grades is relatively smaller compared to other sub-Saharan African countries. Hence pupils who do not pass the CPE examinations may stay on at primary for a further year to take the examination a second time. Those who fail the CPE twice or who have reached the age of 12 but failed the CPE examination, move to a prevocational stream in secondary schools for a period of three years.

Figure 1.19. Repeaters in All Grades in Primary Education, 2001

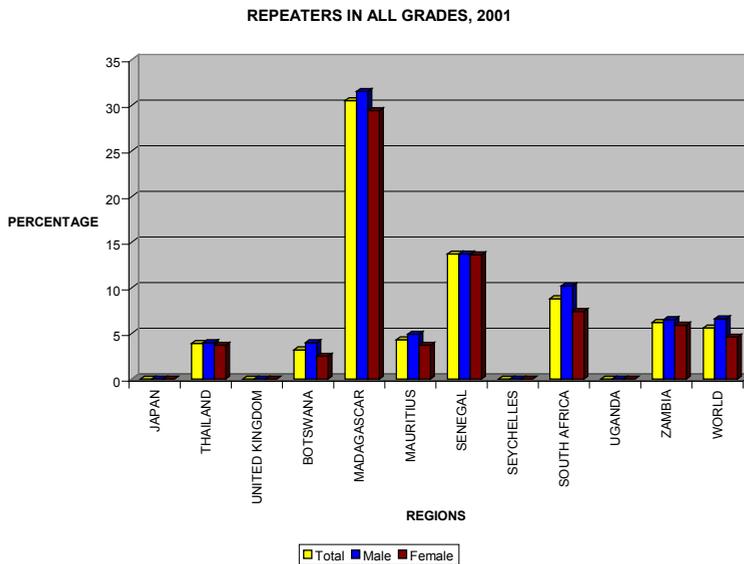
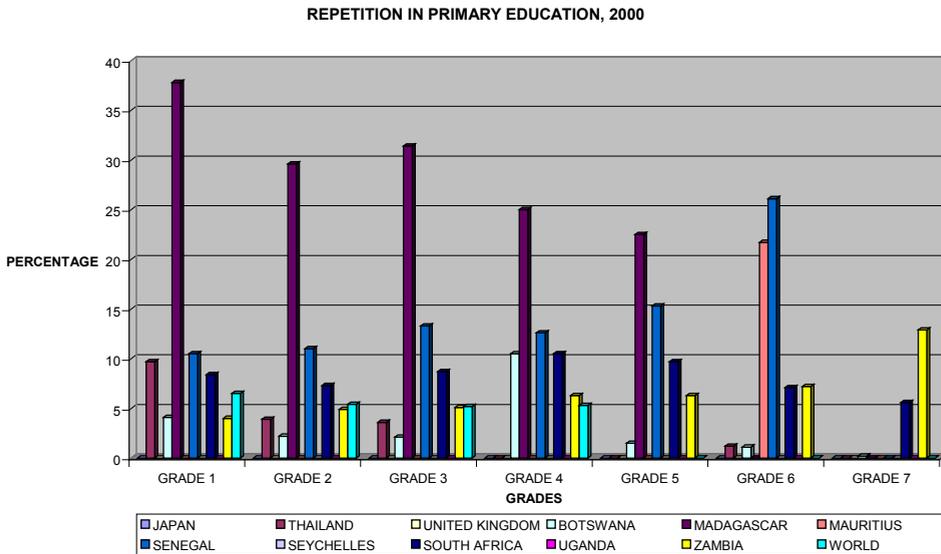


Figure 1.20. Repetition Rates by Grade in Primary Education, 2000



Secondary Education

Participation in Secondary Education

In Figures 1.21 to 1.24, we notice a gradual increase in the GER of 3.5% in secondary education around the world during the period 1998–2001, with an increase of 0.1% in the GPI, which shows a disparity in favour of the male population compared to that of the female population worldwide. Further to this, there is a rise of 3.6% in the NER in secondary education at the global level.

Yet some of the specific countries under examination such as Seychelles and South Africa experienced a steady decline in the GER from 1998 to 2001. Moreover, we notice a gradual decrease in the NER in secondary education in Botswana, Mauritius and Seychelles. On the contrary, both the NER and the GER increased in the other selected countries during the same period.

Nevertheless we also have a total of 4.4% of repeaters in general secondary education around the globe, with 12.8% of repetition in Mauritius, 12.3% in Zambia and a total of 14% in Senegal. However we do not have the required percentages for the rest of the chosen countries.

Figure 1.21. Gross Enrolment Ratio in Secondary Education, 1998

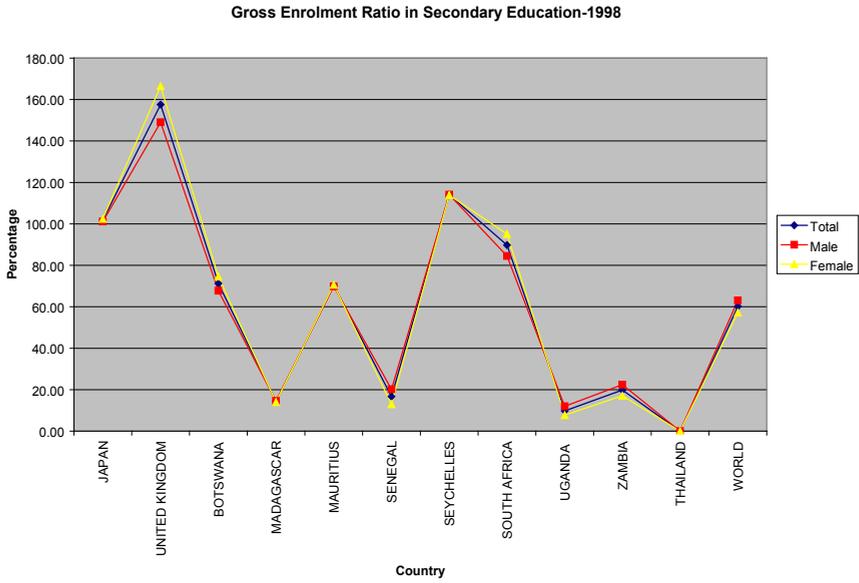


Figure 1.22. Gross Enrolment Ratio in Secondary Education, 2001

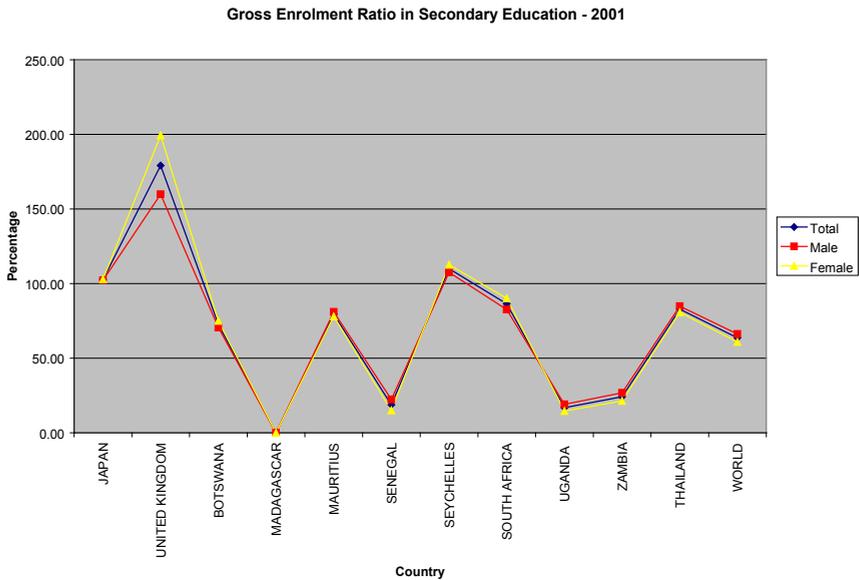


Figure 1.23. Net Enrolment Ratio in Secondary Schools, 1998

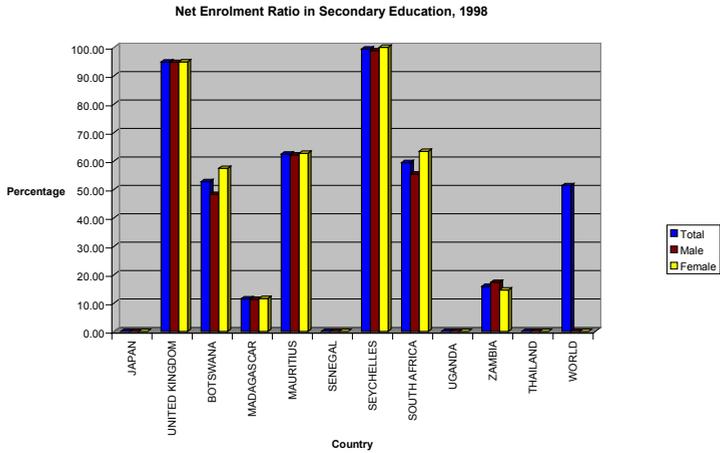
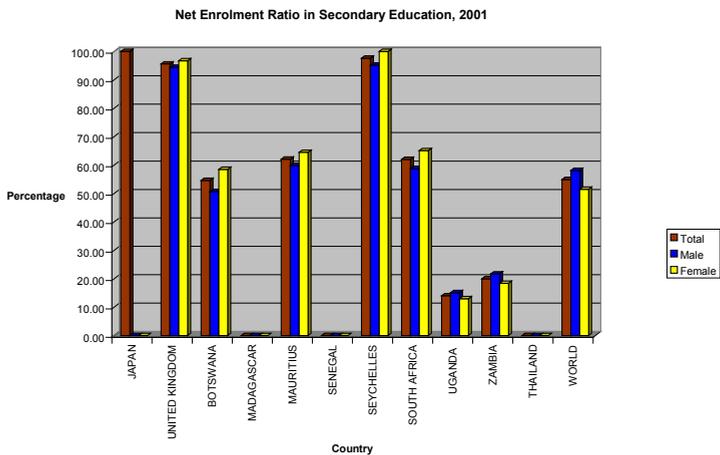


Figure 1.24. Net Enrolment Ratio in Secondary Schools, 2001



Tertiary Education

Participation in Tertiary Education

In Figures 1.25 and 1.26, we observe that there has been a slight increase of 2.5% in the GER in tertiary education during the period 1998 to 2001 at the global level. This is also reflected in almost all the selected countries under study, for instance Japan, United Kingdom, Botswana, Mauritius, Uganda, Zambia and Thailand.

However we note a negligible decline in the GER in tertiary education in Madagascar and South Africa. Concerning the GPI, we notice that there is a disparity in favour of the male population, with a GPI less than 1, in practically all the countries under investigation

except for United Kingdom, Mauritius, South Africa and Thailand, with a GPI greater than 1 showing a disparity in favour of the female population.

Figure 1.25. Gross Enrolment Ratio in Tertiary Education, 1998

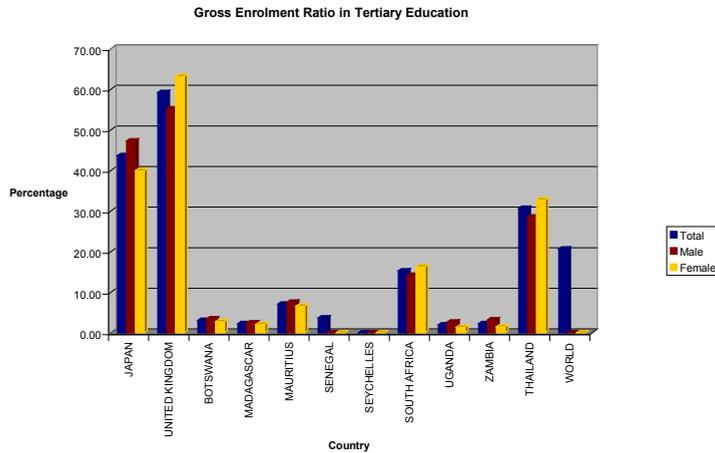
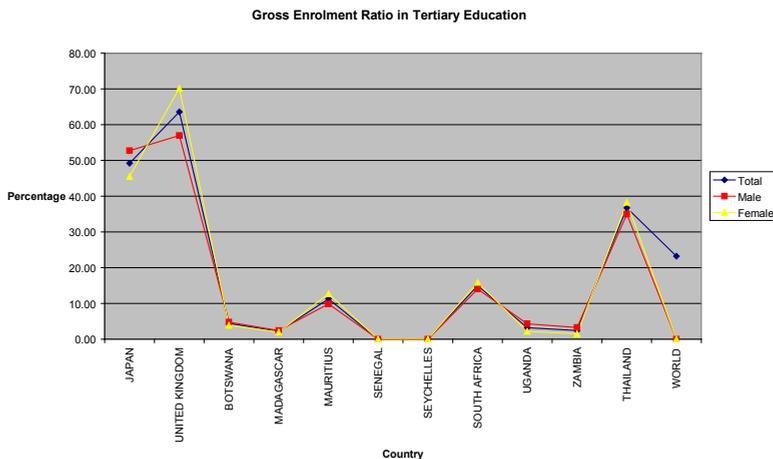


Figure 1.26. Gross Enrolment Ratio in Tertiary Education, 2001



Conclusions

What matters, ultimately, is not just the volume of participation in education but more importantly – and as stressed in the World Declaration on Education for All – what people actually learn as a result of participating in the educational process. This, in turn, depends on the quality of education.

Evidence from the performance data of our candidates in the examinations at CPE, SC and HSC levels suggests that there are many children who are facing serious difficulties at school – sometimes they don't seem to have mastered the basic skills. Such a situation has existed for several years and nothing has been done up to now to remedy this problem.

Despite significant progress, widespread inequities are still present on a very large scale. While some groups have the privilege of receiving a sound education from infancy through higher education, others are in dire poverty and distress, having little access to any education at all. The application of a blanket policy, target or priority –for example, –‘to make more extensive provision for early childhood education and care’ –can have the paradoxical effect that more education (for some) increases rather than diminishes inequality. As a corollary, more education can sometimes result in high levels of social and economic inefficiency as a result of the concentration of resources on the few to the effective exclusion of the many. This is in direct opposition to the Jomtien/Dakar Declaration. It is not enough to simply call for extra resources: they must be very carefully targeted and efficiency in their management and use must be demonstrated. Closer analysis of the data reveals continuing, sometimes increasing, inequitable provision and practice. Indeed, the problem has grown. Equity does not imply precisely equal provision nor does it entail a mathematical equality of outcomes. People, their interests, needs, and circumstances differ too much for that. Instead, equitable education for all requires:

- » That all are engaged in the process and are given equal consideration;
- » That the opportunities, facilities and programmes appropriate to the specific needs and requirements of all people are valuable and used;
- » That the learning programmes undertaken and their outcomes are of an equivalent value and use to all individuals and society.

A much better balance is needed. We must ensure a fair share of resources and opportunities for all people, not just those who are well placed to take advantage of what is offered. Respecting and providing for individual differences and circumstances do not excuse highly differentiated policies that in some cases are actually increasing inequality. The same for all can mean greater inequity; those who have least need more, and they need the kind of support and encouragement that enables them to enter the gallery of learning and proceed successfully along its passageways.

Learners have a key role in identifying the relevance and quality of their own learning. In the future, there needs to be a better connection between learner expectations and the standards being set.

Part two

Review by the international peers

Composed of experts from:

Benin: Prof. Paulin Hountondji

Guinea: Prof. Ibrahima Bah-Lalya

Kenya: Prof. Kabiru Kinyanjui

Madagascar: Ms. Josiane Rebetokotany

Nigeria: Prof. Pai Obanya (Expert Team Leader)

Ambassador Dr. Olusegun Akinluyi

OECD: Dr. Ian Whitman and Ms. Miho Taguma

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Section II

PRE-PRIMARY AND PRIMARY EDUCATION: RETHINKING THE FOUNDATION FOR A KNOWLEDGE SOCIETY

Introduction to Basic Education

Mauritius has a 6+5+2 education school structure; that is, six years of free and compulsory primary education leading to the *Certificate of Primary Education*, followed by five years of secondary education leading to the *Cambridge School Certificate* and an additional two years of higher secondary ending with the *Cambridge School Certificate*.

Examinations at the end of each level regulate the flow of pupils to the next level. At primary level, promotion from one grade to the next is automatic until Standard VI when pupils sit the *Certificate of Primary Education*. Pupils who are not successful in these exams and under 12 years may stay on at primary school for a further year in order to take the exam a second time. Those who are not successful on the second attempt are provided with an alternative type of education under the Pre-vocational Education Scheme. This consists of a three-year course.



➤ Meeting between the national self-evaluation team and the international peer examiners at the Ministry of Education in Phoenix, Mauritius. (©Photo Collection: I. B-L)

Pre-primary Education

Policy: Appropriateness and Implementation

Early childhood care and education has received greater policy attention in the last decade. The government has recognized that equitable access to quality pre-primary education can strengthen the foundations of lifelong learning and ensure the readiness of young children for primary schools. It is a critical period for the young child during which the bases of intellectual, socio-emotional and psycho-motor development are facilitated. Expanding and improving comprehensive early childhood development (ECD), is the first of the six Education for All goals adopted by the World Education Forum (UNESCO 2000).

In January 2004, the Ministry introduced a new reform for this sector, which was drafted by various stakeholders and approved by the Cabinet in the previous year¹¹. The intention of the policy¹² is primarily to formalize pre-school provision, ensure 100% access of all 4-5 year old to pre-schools and to develop a curriculum to bridge the transition to primary. In primary education, the reform aimed to fundamentally redefine the role of the trust fund, set standards, develop curriculum guidelines and other regulations procedures for quality control. Actually, the Ministry brought together all the different schools of thought to draft these regulations and to ensure quality control of both the process and the product. It is, of course, premature to review the impact this new policy has had on the sector with less than nine months of implementation.

A key challenge facing the effective management of the ECD sector in Mauritius is that it is fragmented between two ministries and between two sections within one of these ministries. The Ministry of Women's Affairs mainly manages the birth-to-3-year-old group while the Pre-school Trust Fund, a para-governmental structure connected to the Ministry of Education, manages the 3-to-5-year-old group. The Primary Education Directorate within the Ministry manages the 5-to-8-year-old group. This segmented management of preschool education is a common problem of the sector in many countries. As a result, there is no coherent policy for the whole ECD sector.

Access

Mauritius is a leading light with regard to providing universal access to pre-primary education compared to other African nations. Countries with relatively well-resourced education systems such as South Africa, Namibia, Zimbabwe and Botswana cannot compete with this level of access as their participation rates range from 17% to 36% of its pre-school-aged populations.

11. Interview with a teacher union representative, Feb 2005

12. Unfortunately, this pre-primary policy document for the current period of review was not made available to the peer review team

Considerable achievements have been made in this sector within a relatively short period of time. These achievements build on the foundations laid by previous education policy initiatives introduced over the past decade (Master Plan for the year 2000, Action Plan 1998). As a result, the gross enrolment rate in this sector has risen from 78% in 1996 to 96% in 2004, a notable achievement. Since the mid-1990s, gender parity has been maintained in this sector with slightly more boys enrolled than girls in all five zones. Nevertheless, over the past four years, as a result of the declining birth rate, the actual numbers enrolled in pre-primary schools (both private, state-aided and state) have decreased by 4.5% -some 1,749 fewer children were enrolled in 2004 than in 2000¹³. The gross enrolment rate has also declined. Additionally, despite the government's success in establishing partnerships with large private sector employers such as the sugar estates and other enterprises to establish and support pre-primary schools, there has been an overall drop in the private provision of pre-schools. It is not clear to the Peer Review team whether this decline impacts on physical access to schools for young children.

One of the factors explaining the high participation rates in pre-primary is that since 1996 the government has granted a subsidy of Rs 200 per month per child enrolled in a pre-primary school. However, many pre-schools charge substantially higher fees to parents. Fees in private state-aided pre-schools can range from Rs 200 to Rs 2,000 per month. Very few children (only 17%) are enrolled in state-funded pre-primary¹⁴ units where no fee is charged.

Aware that the children least likely to participate in pre-schools will be those with low socio-economic backgrounds, the government has taken certain measures. According to a policy dating back to 1991 and reinforced by the new policy of 2004, the government is giving priority to establishing pre-schools in disadvantaged areas. With the new policy, the Ministry proposes to establish, each year, 25 model pre-schools attached to primary schools that incorporate all the different aspects of the reform. By 2010, the aim is that all state primary schools will have a 'model' pre-school attached and 100% of pre-school-aged children will be enrolled.

Continuing Challenges

According to interviewed respondents, access to pre-primary is limited by poverty, health problems, disability and lack of parental interest. Although by international benchmarks, nearly universal access to pre-schools has been achieved, some children, particularly in rural areas and those with disabilities or suffering economic hardship, are still outside the pre-school system. The majority of pre-school children with disabilities are not mainstreamed as their physical/mental condition is not addressed by the government's policy. Some are integrated into private pre-school providers supported by external NGOs.

13. Digest of Education Statistics, 2004, p.21

14. Usually attached to a primary school

Currently, one NGO¹⁵ has developed an “early intervention” programme that is being used in 38 pre-primary schools providing teacher support and training as well as stimulus to pupils with special needs. The government may want to research the profiles of young children who are not currently enrolled in pre-schools in order to address their specific needs.

A critical concern for this sector is whether all children are receiving equal access to quality pre-school education. There is a perception that an unequal provision of facilities and teachers for pre-schools dependent on the socio-economic class that supports the school exists¹⁶. The government may wish to examine the matter in relation to the variations between institutions, regions and areas. It may want to consider targeting its pre-school subsidy rate according to the socio-economic level of the pre-school districts. In this way, children from disadvantaged groups, which tend to have higher barriers to learning than others, can be better prepared for the transition to the next phase, primary school.

Relevance

The issue of relevant quality education is being seriously addressed in this sector. A welcome innovation falling within the review period is the establishment of the Pre-school Trust Fund (PSTF), a para-governmental structure of the Ministry of Education with which all pre-schools must register. This unit mobilizes resources, monitors the minimum infrastructure of pre-schools, recruits and, together with nine regional training centres, trains pre-school teachers. This is a key factor in ensuring greater standardization across the sector. Private pre-schools can access soft loans from the PSTF to purchase appropriate learning and teaching materials. This is a one-off grant (over two years) to ensure that as many pre-schools as possible can supply themselves with quality equipment and toys. The PSTF has established itself as a resource centre for pre-schools with a play unit, safety unit, music unit and library unit.

With the advent of this pre-school strategy, PSTF is currently facilitating the development of a new curriculum based on an inclusive education approach. Curriculum guidelines focusing on bridging the gap with primary are available.

The quality of teachers in the sector has also recently been addressed. Approximately 60% of teachers in the pre-school sector were unqualified some three years ago. In preparation for the new ECD policy, it was agreed that the Pre-school Trust Fund would, in collaboration with the MIE, complete in-service training including a three-year distance learning mode for ECD teachers. Actually, it is reported that 99% of teachers were al-

15. Association de Parents d'enfants inadaptés de L'île Maurice, in particular.

16. The majority (66%) of pre-school teachers has a secondary school certificate or higher and 59% has a pre-primary education in-service certificate.

ready trained. By 2006, it is expected that all 3,000 ECD teachers will be fully trained. Additionally, there are plans afoot to develop a training programme to educate parents on their roles and responsibilities in a young child's education.

Continuing Challenges

A concern raised by respondents is the wide variation in quality provided by the pre-school sector. Some schools remain at the level of informal play groups whereas others are already addressing numeracy and literacy skills.

A primary school inspector interviewed noted that the backwash effect of the national examinations at the primary level is affecting the pre-primary curriculum in many schools. He was of the opinion that in many instances the pre-school curriculum has become overloaded. There is too much emphasis on academia rather than constructive play. It is hoped that the new curricula being supported by PSTF will address this issue.

A further consideration raised by stakeholders is how to retain human resources capacities in the sector. Salaries are low, below primary level scales even though the sector now requires the same level of qualification.

Achievement

Positive steps have been taken to ensure control and supervision of the pre-primary schools, to further develop the training programmes and to strengthen the sector through regional exchanges. This sector has been rapidly transformed into one that is formalized and accredited, supporting 98% of children in this age group. Currently, a new legal framework to establish an ECD authority to regulate this sector – in terms of training, accreditation and management of this sector – has been developed. This bill is now being prepared.

A key achievement is that this sector has shifted from being unrecognized, largely informal and externally funded to becoming more structured and substantially financed by the government. The government will subsidize all private pre-schools, the majority of schools, with equipment, materials and furniture according to mandatory requirements.

Continuing Challenges

Although Mauritius has positioned itself to deliver universal access and improved pedagogy in its pre-primary sector, it may want to continue to focus on the question of whether its policies and strategies address the school readiness of disadvantaged children entering primary. The transition to primary is noted by many to be highly problematic, particularly in the lower socio-economic groups where children have had little exposure to English or French. This is compounded in schools where primary class sizes are larger than 40:1, a characteristic of schools in socio-disadvantaged school districts. Although

pre-primary pupil/teacher ratios have improved nationally, they continued to increase in Rodrigues from 17:1 in 2001 to 19:1 in 2004. These ratios, low by international standards, are not evenly distributed among the areas and districts. If the government wants to have an impact on low achievers in primary, who are predominantly from the lower socio-economic classes, it may want to consider a head-start programme by targeting additional resources to redress the differences that characterize this ECD sector.

Other issues that the government may want to consider include ways and means of outreach for children that could not be mainstreamed due to their physical/mental condition. Numerous stakeholders desire the completion of a legislative bill for the disabled and the socially disadvantaged.

Primary Education

Primary Education Policies: Their Appropriateness and Implementation

Improving the quality of primary education and ensuring its universal access to all its children has been a key subject of educational reform in Mauritius for a number of decades. Various commissions have been appointed to look into the education system and make recommendations for its improvement. Most of these reports and action plans, according to the Ministry of Education's self-evaluation report, highlighted the "extremely high rate of failures at the end of the primary cycle and the competitive nature of our examinations system"¹⁷. Recommendations have largely focused on introducing remedial education for children with learning barriers, dispensing with national examinations except in Standard VI, tracking and monitoring pupil performance more closely, administering a numeracy and literacy test in Standard VI and introducing continuous assessment in others grades¹⁸. A number of policy analysts, researchers and educators have contributed to the policy debate on improving education delivery in Mauritius's basic school system. There are calls for introducing compensatory mechanisms to address problems of children who come from lower socio-economic backgrounds (Bhuwanee, 2002), revising the curriculum to include more thinking skills (Naeck, 2002), revisiting the curriculum in terms of a child-centred approach (Griffith, 2002), re-orientating and modernizing the content and practice of teacher education (Payneandy, 2002); and reviewing using English as the medium of instruction in primary schools (Capooran, 2002 and Busawon, 2002), to name a few.

The policy-makers in Mauritius are well aware of the problems facing the sector and to a large extent the concerns and considerations raised here are well-known and have been addressed through various structural reforms. This review highlights these issues again

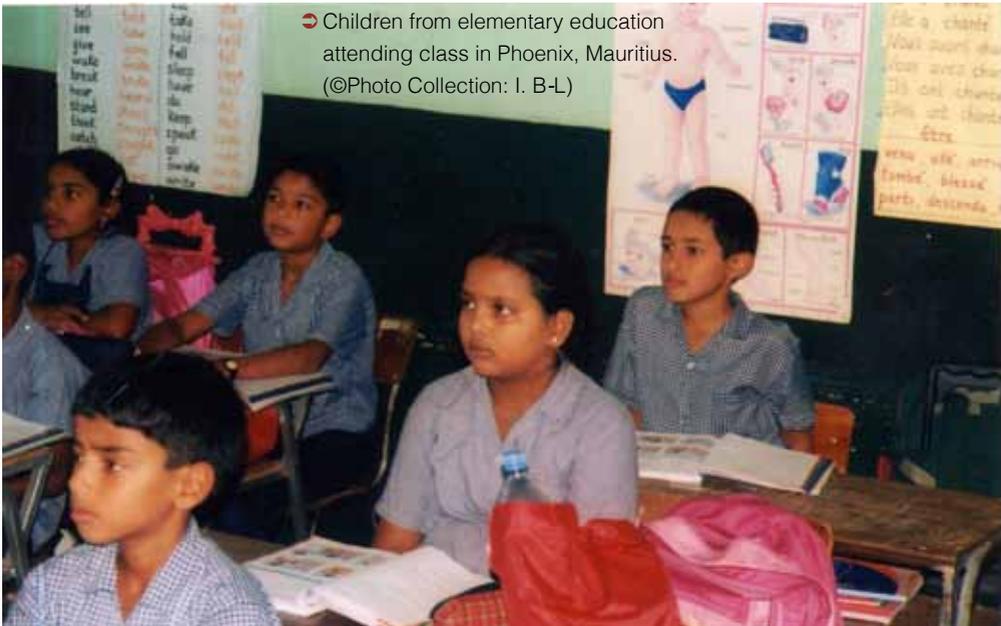
17. Interview with the former Minister of Education that launched the 2000 education reform

18. Ibid

and indicates possible strategies. The suggestions raised by a Peer Review cannot replace the national policy dialogue sector's key strategies and policies. It can, however, offer an international comparison and an outsider's view on the issue at stake.

The key policies concerned by this review are *Curriculum Renewal in the Primary Sector* (2001) and *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level* (2001). The former policy proposed a re-structuring of curriculum to address the new vision of Mauritius as a cyber island and the shift to a knowledge economy. The Rat Race Policy review proposed replacing the national ranking of pupil scores on the Certificate of Primary Education (CPE) by a new grading system and the regionalization of admission to lower secondary levels as of January 2003. The policy also extended compulsory education to the age of 16 years and offered an alternative stream of secondary education to the 'failures' of the CPE examination.

According to the respondents interviewed, both these policies addressed a heartfelt need in Mauritian society to restructure education delivery at the primary level. Although these policies include statements concerning vision, mission and objectives that fit in with the broader education goals of Mauritius, it is the opinion of the Peer Review that they, on the whole, lacked strategy statements on the management of the various aspects of the reform, in particular the pedagogical dimensions; they also did not envisage appropriate implementation mechanisms to support the activities; and there was no



➔ Children from elementary education attending class in Phoenix, Mauritius.
(©Photo Collection: I. B-L)

apparent projection of appropriate monitoring strategies for the implementation process. The annual yearbook on education statistics lacks key indicators on both the policy reforms as well as core measures of equity and poverty alleviation, such as the number of computers in classrooms, the gender profile of head teachers, the ethnic origin profile of pupils and teachers, etc.

The 2000 reform focused on three domains: human rights, the environment and culture. The Peer Review team was concerned by the lack of an articulated action plan that would precisely indicate areas of responsibility and the cost of the proposed strategies in each of these three domains. This would have had implications for the implementation of the proposed reforms. For example, the ICT strategy could not be properly implemented as there were insufficient funds to purchase computers for primary schools. The citizenship curriculum was another example as it was never completely formulated and implemented because some sections of it were dropped. Also, there were insufficient funds to construct the 116 proposed reading rooms/libraries, to mention just a few areas. A recommendation is that the Ministry of Education consider using sector analysis tools and techniques to support the formulation and costing of its next policy reform. This will improve the appropriate allocation of resources needed, the indicators to benchmark implementation progress and mechanisms for ensuring that strategies reflect the consensus of key stakeholders and role players, for example.

Although there are regular standing committee meetings with union representatives and other stakeholders, the Ministry does not organize annual sector reviews where education performance is publicly examined by all key stakeholders. This practice is a common feature in many African and developing countries. It allows the sector to reflect on its performance compared to a set of agreed indicators and offers an opportunity to modify strategies. The impression given is that policy dialogue in the sector is ad hoc and usually occurs at the start of a new cycle of a government in power. The Ministry may want to consider formalizing the involvement and collaboration with key stakeholders by monitoring the performance of policy implementation as well as its design. It was not clear to what degree parents associations or civil society organizations formally participate in regular interactions with the government over policy implementation in primary schools.

Access

Mauritius has made outstanding strides in achieving universal primary education. The primary school system is free, non-discriminatory in terms of gender, race and religion and open to all children. Funding assistance is provided to some needy families not able to afford the indirect costs of primary education (books, uniforms, etc.) by the Ministry of Social Security. There has been gender parity for some years. The gross enrolment figures have been steadily decreasing over the last decade from 108% in 1993 to 102% in

2003 as a result of a decline in the fertility rate.¹⁹ The net enrolment rate has been constant at 98% for the last several years. Although there is a higher concentration in urban areas than in rural ones, there is, on average, one primary school in every village, thus ensuring easy access for all children to a primary school. Additionally, the government now offers free transport to all children who live more than 2 km from the school and a school meal programme for low-achieving schools.²⁰

According to available documents²¹, all schools are equipped with basic facilities such as water, toilets, electricity and telephones. Faxes have been made available to all government and state-aided schools since 2002²². Although the policy of the Ministry is to provide all classrooms and pupils with adequate learning and teaching materials (blackboards, desks, chairs, textbooks, and paper), according to respondents, this is not always achieved. In 2004, the majority of all primary schools were equipped with radios, tele-

19. The rate of growth in primary enrolment is projected to decline over the next decade as a result of a projected reduction in fertility. In 2000, 5-10 year olds constituted 11% of the population. In 2010 it is expected to 9% (SACMEQ 11, p8).

20. The ZEP school initiative

21. Digest of Education Statistics, 2004 and SACMEQ II Study

22. SACMEQ II Study



➔ Lunchtime at a ZEP school
(©Photo Collection: A.A.).

visions, video players and computers. Nearly 50% of them have photocopiers. This is exceptional by African and developing world standards. Furthermore, most schools are solidly built and in reasonably good condition.

The government needs to be commended for its steps to increase community participation in schools by the payment of basic and matching grants to these schools. Consequently, all primary schools have parents associations that fall under a national umbrella structure supervised by the Ministry. The government has empowered a critical stakeholder in the sector to represent the parents' interests.

Children with disabilities have recently won a battle for government's financial recognition of their needs. Previously, these children received one third of the subsidy children in mainstream primary schools were given. The Ministry of Social Security estimates that some 3,000 children from birth to 18 years have disabilities²³. The Ministry of Education is to be highly recommended for taking on the responsibility for disabled children and introducing, at least, parity of per capita expenditure on children with disabilities this year. Furthermore, the Ministry has established a special unit to deal specifically with the needs of learners with disabilities. A draft policy has been developed that links children with disabilities to the broader group of learners with special education needs found in mainstream schools. With the advent of this policy decision, the Ministry of Education now manages all primary schools supporting these learners. This includes six on-site integrated government units in primary state schools and 36 special education needs schools and day-care centres run by NGOs. The draft policy proposes the integration of children with mild and moderate disabilities into mainstream education. These are significant achievements for the sector on many levels, and particularly in terms of providing inclusive education for all.

Continuing Challenges

Free education in Mauritius means that pupils do not pay tuition fees. However, parents' contributions to primary education are relatively substantial. Aside from the indirect costs such as additional books, school supplies, uniforms and examination fees, parents generally can expect to pay for private tutoring, a predominant feature of Mauritian primary education. This amounts on average to Rs 300 to Rs 10,000 per month. A representative interviewed from a teachers union estimated that these fees represent Rs 5 million annually, a figure estimated at over 10% of the government's recurrent budget on education²⁴. This additional burden of private tutoring on parents' income diminishes the educational opportunities of children from poor families, as many cannot afford this cost.

23. Interviewed respondents indicate that this is probably an undercount as internationally the figure is usually around 3% of this age group, which would project the figure to approximately 9,000 children

24. ADEA & CODESRIA, 2001 quoted in SACMEQ II.

The Rat Race Policy specifically addressed the public's concern that the system was failing. On average, some 30-40% of pupils failed the CPE exam and dropped out of school (after being allowed a second chance to take it). With the policy introducing compulsory education to 16 years, repeaters (or those who failed the exam a second time) are now offered a pre-vocational stream attached to 'mainstream' secondary schools. The Ministry itself observes, upon reflection, that this policy has not had the desired impact on achieving its objectives²⁵. The average failure rate on the CPE exam over the last five years was 35.6%. The rate for 2004 was 37%. There are indications that this number dropped to about 25% in 2005 (see: interview with the former MOE on 29 March 2006). Despite this progress however, access to 'mainstream' secondary education is still 'bottlenecked'. The access to the alternative 'pre-voc' stream is viewed as a 'holding ground' for under-achievers and those who fail the exam. The education results of the primary system have not substantially improved and the CPE continues to be perceived as a mechanism for social exclusion, largely affecting the socially disadvantaged. One respondent spoke of children committing suicide because they had failed their CPE examination. Another respondent spoke of adults who are still reliving the pain or coming to terms with their failure on the CPE examination at age 11. This was in conjunction with these adults seeking alternatives to obtaining a post-primary qualification outside the country.

In short, the gateway to the next level of schooling, mainstream secondary, is guarded by examinations and the rewards for success and the penalties for failure in these examinations are substantial. The differences in living standards between individuals with different levels of education seem to be significantly high, particularly in a society such as Mauritius.

Another measure of access is the provision of equitable resources necessary for quality education. Statistically, Mauritius has a very enviable pupil/teacher ratio in its schools by African and developing country standards. In 2001 the overall pupil/teacher ratio was 34:1 with class sizes ranging from 15 to about 50²⁶. In 2004, the overall pupil/teacher ratio was down to 29:1.²⁷ However, as the table below indicates, these averages mask district and regional variation. Many of the stakeholders interviewed²⁸ spoke about class sizes of 40 and above in the early grades, which militates against effective learning. This gives rise to concerns that not all schools are equally provisioned.

25. MOESR Self-evaluation Report , 2005 (p. 38).

26. SACMEQ II (pp. 4-6).

27. Digest of Education Statistics, p. 8.

28. A number of head teachers and inspectors claimed it was a major problem affecting learning and the teaching of literacy and numeracy in English in the lower grades.

Table 2.1. Enrolment by Districts

Districts	General Purpose Teachers	Enrolled Primary Pupils	Pupil/Teacher Ratio (2004)
Black River	161	4,069	25.3
Moka	328	8,039	24.5
Plaines Wilhems	1,233	36,344	29.5
Savanne	252	6,726	26.7
Grand Port	409	11,533	28.2
Flic en Flac	477	14,610	30.6
Riv. Du Rempart	384	11,254	29.3
Pamplemousses	356	10,631	29.9
Port Louis	549	18,320	33.4
Rodrigues*	191	4,700	24.6
National Total	4,340	126,226	29.1

Source: Digest of Education Statistics, 2004 *A zone not a district.

Another critical area of concern in terms of providing universal access to quality education for all, a key principle of EFA and the Millennium Development Goals, is an inclusive approach to education. Currently, children with special needs are ignored by the school system other than in ZEP schools. A child may take and fail the national examinations in Standard IV, V and VI (usually taught by the same teacher each consecutive year) and he will be automatically promoted to the next grade with no remediation to address any learning deficits. This limits a child's access to learning. The Ministry may want to recognize the need to adopt an inclusive education approach and consider introducing measures that combine strategies such as different assessment methods, remedial assistance and changes in the pedagogical approach.

Relevance

The *Curriculum Renewal in the Primary Sector* policy reform focused on overhauling the primary curriculum to give children a broader-based education. The intention was to move away from the overloaded academic orientation and incorporate the UNESCO principles of activity-focused (“learning to do, learning to be”) inclusive education. The *Curriculum Renewal* policy also added new examinable subjects. Environmental studies was split into two subject areas – science and history and geography in the upper grades. The new examinable subjects -citizenship education and information technology -were added. Currently, there is a concerted effort by the new policy to promote science at the primary level by emphasizing practical, field and experimental investigations in the curriculum. In addition, the school day has been extended by 25 minutes to accommodate a period focused on numeracy and literacy learning. This practice was introduced in 2003

and has yet to yield results. It may also consider the issue of effectively coordinating special needs education.

The reform focused on providing a number of lines of assistance to improve the lot of children in schools. A number of sub-standard schools were closed, the ZEP initiative was introduced and children now have a health card that improves the chances of early diagnosis of physical and remediation problems.

Closer community links, particularly in the low-achieving ZEP schools, are very much welcomed. The policy has targeted the issue of quality teaching by requiring that all new primary school teachers have an HSC or “A” level qualification whereas previously an SC or “O” level was accepted. Currently, more than 64% of all primary teachers have an HSC or higher education qualification²⁹ (Digest of Education Statistics, 2004). The identification of and support for children with special needs has been improved as a cadre of primary school teachers are currently (since February 2003) receiving specialized training in this regard.

Furthermore, the government has addressed Mauritius’s multi-culturalism and has supported minority languages by providing access at the primary level to over six Oriental (Asian and Arabic) language courses. Some 68% of the primary population is enrolled in Oriental language courses. One policy objective is to encourage every child to enrol in an Oriental language course. Recently, the policy has allowed children to sit the CPE exam in this subject. Some, however, view this as another form of social exclusion³⁰. It is noted that a trade-off of this policy is that it has increased inequitable provisioning by allowing some primary school Oriental language teachers to teach very small classes³¹ while their colleagues teaching general subjects are overloaded with work and large classes. Oriental language teachers are paid as full-time teachers on the same scales as general purpose teachers. The Ministry now requires that Oriental language teachers teach general subjects as well but this has not yet been fully implemented.

Continuing Challenges

There is the conviction in the current policy analysis on Mauritius and voiced by many of the respondents interviewed, both inside and outside the Ministry, that the curriculum needs radical revision. It is perceived as being very overloaded, not holistic or child-centred enough, does not take inclusion into account and is dominated by the national

29. Over 90% of all teachers in Rodriguez have SC qualifications. No information is reported on the teachers’ professional qualification profiles but the majority apparently have a three-year diploma.

30. A parent sued the state for counting Oriental languages in the ranking at the CPE examination.

31. The Peer Review team interviewed one head at a primary school that reported it had a Mandarin teacher teaching one pupil and was getting paid a full-time salary equivalent to that of a general purpose teacher.

examinations. Furthermore, and even more serious for the long-term market competitiveness of Mauritius as a global player, is the assertion that the basic school system is not ensuring a high level of numeracy and literacy for all pupils after six years of schooling (interviews, MLE). The *Curriculum Renewal* policy contributed to the overloaded nature of the curriculum by adding additional examinable subjects as well as entrenching its restrictive nature by stressing content (despite the rhetoric) over competency approaches.

A central detrimental aspect of the primary school curriculum is that it is taught in English – a foreign language for the majority of Mauritians. It is the key element in reproducing social inequality. English is the language of the privileged few. French is the language of prestige and culture. Creole is the everyday communication language of over 90% of all Mauritians. International research from the past decade has demonstrated in numerous countries that teaching numeracy and literacy in a child's mother tongue increases academic achievement substantially. It is easier for children to master secondary languages in the later grades once basic competencies have been established in their mother tongue. The Ministry may want to assess the teaching of minority languages with a view to a more equitable allocation of resources and teaching time.

There is a widespread conviction that private tutoring, a predominant feature of Mauritian primary and secondary education, significantly affects the dynamics of teaching and learning in schools.

When some pupils receiving private tutoring but others do not, mainstream teachers may face great disparities within classrooms than would otherwise be the case. While supplementary tutoring can enhance learning of regular lessons, it can detract from learning and teaching during the normal school hours. The exam-driven curriculum forces parents and children to invest in supplementary tutoring as the stakes for failure on the CPE are very high. In Mauritius, one minister of education (quoted by Foondun, 1992:26 in Bray 2003) queried the appropriateness of children spending on average a nine-hour day in private tutoring and regular schooling when adults have achieved a seven-hour standard workday. While measures were introduced in 1994 to curb private tutoring – the prohibition of tutoring in the first three grades and limiting the number of weekly hours and class size – it still remains a key problem at the primary level.

Respondents interviewed indicated that children and parents feel that the child will lose out on the curriculum if they do not participate. Apparently the more successful teachers have also marketed their knowledge and produced textbooks that pupils are encouraged to buy as part of private tutoring. It is reported that teachers can more than double their salaries with private tutoring and the royalties earned from their books. One consequence is that the Ministry and the head teachers have little or no access to teachers after school hours for in-service, parent meetings or other related activities outside

school. Teachers also strongly resist any innovations or reforms that affect their time and involvement in private tutoring. Pupils are reluctant to engage in after-school activities. In short, supplementary tutoring can fall into the trap of being parasitic and wasting financial and human resources that could be better used elsewhere.

Another concern is the costs of the national examinations in the last three grades of primary. Holding national examinations is not an inexpensive procedure in terms of human and material resources. Furthermore, automatically promoting learners after each examination combined with no systemic remedial interventions – in other words not using these results to address pedagogical issues – raises some additional concerns. If the Ministry wants to ensure the quality and coverage of the curriculum in all schools, it can use other ways to assess the system.

The backwash effect of these national examinations is distorting the education outcomes for the majority of primary pupils. The pedagogical approach that underpins the curriculum is that of rote learning and content orientation. The general perception is that too much emphasis is placed on academic intelligence to the detriment of other types of intelligence. The examination system dictates the teaching and learning interaction in the classroom to such an extent that non-examinable subjects are almost *completely* neglected. As a consequence very few children from poor backgrounds are able to combat their socio-economic status and rise above it. It is not clear what function the CPE is expected to play other than that of social exclusion. If the government wants to be able to systematically assess the performance of schools in the primary sector, it could draw findings from a sampling of schools or report on school averages.

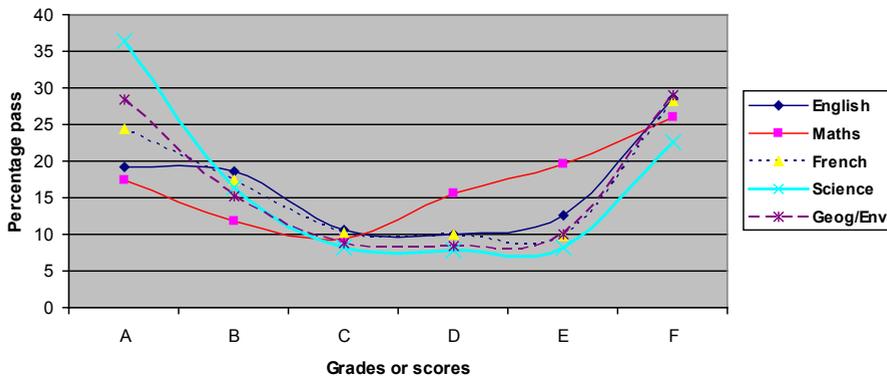
The national debate on curriculum reform proposed for the end of the year is a welcomed event. It will be a chance to review and reaffirm the vision for Mauritius as a world player and ensure that its basic school curriculum reflects the values and aspirations of society. It seems that after-school instruction has become an inescapable part of childhood in Mauritius and the high levels of stress created to pass the CPE deny children some of the joys of learning and pleasure in creating. The remedies have to be sought at the root causes, a key one of which is the curriculum.

Achievement

A key objective of the Rat Race policy was the abolition of the national ranking of the CPE examination. The new reform requested that the CPE be graded by ranges of scores (e.g. A = 75% and above, B = 65 – 74%, etc.) and selection for secondary school be based on this grading and how close the pupils live to the school. Respondents indicate that the stress associated with these high stakes examinations has still remained. The race leading up to this national examination begins in Standard IV, where, at age 9, pupils start to compete in national examinations.

A key finding of an analysis of the distribution of learner's pass rates over the past six years is that the distribution of scores is "U-shaped" instead of the expected normal bell-shaped distribution associated with the distribution of intelligence in the population. This confirms that the expected primary school outputs (i.e. the CPE exams) are biased towards a highly academic approach that does not recognize the barriers to learning faced by the majority of pupils. Mauritius produces a significant number of primary school graduates with "A" scores and a significant number with "F" scores and a low number of pupils with the intermediate scores of "B" to "E". Indeed, the MOESR's Self-evaluation Report (p. 38) notes that the distribution of pupil achievement scores is very unusual. The figure below illustrates the point for 2004 but the previous years are almost identical.

Figure 2.1 Distribution of Grades in Core Subjects for CPE in 2004



Mauritius has notably participated in a number of international exercises assessing achievement at the primary level. It has documented findings from the Monitoring Learning Achievement (MLA) project (January 2003) and the Southern African Consortium Measuring Education Quality (SACMEQ) surveys in 1995 and 2001. The Peer Review team learned that it also plans to engage PASEC (Programme for the Comparative Analysis of Education Systems), the Francophone equivalent of SACMEQ, to undertake an assessment of achievement in December 2005. In light of these surveys and other exercises, the Rat Race policy introduced a new numeracy and literacy programme to address concerns about the achievement of these basic competencies by the end of primary education.

Other studies also indicate that a significant majority of Mauritian learners are under-performing as a population group. In the 2001 SACMEQ survey, 56% of pupils sampled demonstrated a minimum level of mastery of reading and 60% in basic numeracy skills at

the Standard VI level. The MLA findings note that Mauritius has not yet met its Jomtien targets (i.e. where at least 80% of learners should attain or surpass the minimal learning competencies) in any of the learning areas. The results of this survey indicate that 35%, 26% and 32% of the sampled Standard IV children have mastered higher order skills in literacy, life skills and numeracy respectively. The poorest performances were recorded in the districts of Savanna and Black River. Seemingly, the Mauritian primary schools system is not delivering basic learning outcomes for a significant majority of pupils.

In order to address the achievement levels of low-performing schools, the Ministry has come up with several projects, the most recent of which is Priority Education Zones (ZEP). This project aims at integrating the school into its environment as the development of the school is seen to be directly linked to the overall development of the locality and community. A ZEP school is one that has an average CPE pass rate of less than 40% over the past five years. The ZEP strategy is notable for its innovative approach to increasing active participation of all the stakeholders – parents, businesses, NGOs, other ministries dealing with health and social issues – in the school. Performance-related reward schemes have been introduced. The key attribute of this project is that it allows a framework of innovation and experimentation in an education system that is otherwise very formalistic and academic (Payneandy, 2002). Although no real significant improvements in achievements have been recorded in the 25 ZEP schools, implementation has only been underway for 18 months. Expectations are that there is a reasonable chance for success. However, a key challenge is for this project to achieve credibility on a national scale. The problem of labelling schools as ZEP is that this may lead to a kind of dichotomy within the same school system.

Continuing Challenges

The paradox of Mauritius is that although all children can access education, a significant proportion of them cannot successfully remain in the system. Primary education fails 30 to 40% of all children every year. Questions are raised by the stakeholders interviewed as to whether even basic literacy and numeracy skills have been achieved by a significant number of children after five or six years of primary education. It has been noted by officials in the Ministry that while unemployment is rising, there is a frustration on the part of FDI industrial needs that specialist skills are not easily found.

In the Republic of Mauritius, the team found that Rodriguez Island and the Black River district have the lowest educational successes and are the poorest areas of the country. The highest dropout rates are found in these two areas. What is of concern is that these districts are largely populated by Mauritians of African origin. When one ethnic group is disproportionately represented within the pool of the poorest, we must ask ourselves if there is a structural problem with the education system. Education is the key means for social mobility and economic production. Mauritius, as a country that largely relies on its people as its key resource, cannot afford to lose significant proportions of its human

capital if it wants to compete in the global market, particularly in the field of information technology. A number of Mauritian policy researchers have noted this (Chinapah, 1983 and Bunwaree 1994 to name a few). There is extensive research that demonstrates a relationship between patterns of inequality in social and economic opportunities and slow economic growth. Mauritius's economy is highly vulnerable at present with the dismantling of the multi-fibre agreements and falling sugar prices.

A central consideration for the Ministry is to question the appropriateness of the use of summative assessment as the deciding criteria on which to decide children's life opportunities at a very early age. The grading system is a softening of the previous ranking system but does not go far enough as is indicated by the lack of change in the transition rate of primary graduates into mainstream secondary schools. The Ministry may want to review ways to reconfigure entry into secondary schools using a different approach. Given the policy of compulsory education to age 16, the Certificate of Primary Education has limited labour market value unless the child drops out of the system. Apparently, continuous assessment has been unsuccessfully tried in the primary sector a number of times. It is unlikely to be effective unless the incentives for examination-oriented teaching are removed. A beneficial spin-off of reducing the importance of or even abandoning the CPE would be the loosening of the stranglehold of private tutoring at the primary level. Currently, there is a perception among some people that private tuition with its burden on pupils, parents and the system is perverting the quality of teaching and learning during school hours.

Another area of concern is the phenomenon in the Mauritian system of creating a class of repeaters in the Standard VI grade – those children who have failed the CPE exam and are required by law to repeat the grade. Although the dropout rate in primary is very low because of automatic promotion, there is a very significant repetition rate estimated at about 20% in Standard VI. The Ministry may want to determine whether this extra year can be justified on educational grounds.

Summary of Recommendations Access

Access

ECD

Noting that some 4% of all children are not enrolled in pre-primary because of issues of disability, poverty, health and parental disinterest, the government may want to research the profile of young children who are currently not enrolled in pre-school in order to address their specific needs.

Given the perception that there is an unequal provision of facilities and teachers for pre-schools as some parents can better finance facilities from their own income, the gov-

ernment may wish to examine the matter in relation to variations between institutions, regions and zones. It may want to consider targeting its pre-school subsidy rate according to the socio-economic level of the pre-school district. In this way children from disadvantaged groups, which tend to have higher barriers to learning than others, can be better prepared for the transition to the next phase, primary school.

Primary

Access to primary school is not a problem for Mauritian school children. However, there is a perception that quality education is not uniformly provisioned at all schools and that schools located in upper socio-economic areas attract better-qualified teachers.

Many stakeholders recognize private or supplementary tutoring at the primary level as a challenge. Its position of power is determined on the whole by the strong gate-keeping role played by the CPE examinations. If the Ministry considers restructuring the examinations system then the role of private tutoring will not be so predominant.

Currently, children with special needs are ignored by the school system other than in ZEP schools. A child may take and fail the national examinations at Standards IV, V and VI (usually taught by the same teacher each consecutive year) and will be automatically promoted to the next grade with no remediation to address the learning deficiency. This limits a child's access to learning. The Ministry may want to recognize the need to adopt an inclusive education approach and consider introducing measures such as different assessment methods, remedial assistance and changes in the pedagogical approach.

Relevance

ECD

The consequences of the issue of unequal provision of facilities and teachers is the wide variation in quality provided by the pre-school sector. In order to ensure that basic school readiness is obtained as an outcome for children finishing pre-school, the government is in the process of revisiting a minimum standardized curriculum for all pre-schools.

Given that while the qualifying criteria for pre-primary teachers is the same as that of primary, their salary scales are not compatible, the Ministry may want to explore the possibility of addressing this issue.

Primary

The Ministry is encouraged to consider revising the pedagogical basis for its primary curriculum. The current philosophy underpinning the curriculum favours elitism and promotes the wrong education incentives. Basically, the primary curriculum does not serve a significant minority of children who fail it and are then channelled into an education

stream that contributes to limiting their access to the world of work. It proposed that Mauritius look at other international approaches to curriculum that emphasize a skills-based approach. An African Peer Review country that recently underwent a major curriculum shift in this direction is South Africa. Others include Botswana and Namibia.

Although ZEP schools offer a window of opportunity to pilot greater curriculum relevance and address the needs of learners and their communities, it remains a project outside of the mainstream system and is labelled as being for the disadvantaged. It is viewed by many as an ad hoc attempt by the system to redress its imbalance. The majority of ZEP schools have not shown a significant improvement in scores on the CPE examination over the past three years. The recommendation is to re-conceptualize ZEP schools as ‘star’ schools in which the Ministry can pilot new curriculum approaches and systems of management, teaching and learning. The Ministry will have to create some new symbolic meanings and incentives for these schools to transform them into schools desirable for parents outside disadvantaged communities.

Given Mauritius’s desire to position itself as a global player, the curriculum needs to reflect global issues – human rights, poverty reduction, and environmental impact – in its content. The vision of a cyber island needs to be rooted in a primary curriculum that addresses ICT as a tool and not purely as a subject.

There is a need to ground a strong sense of national identity in Mauritian primary education. Citizenship education has floundered. Creole is not nationally recognized. Language is being used to reinforce social exclusion and reproduce the existing status quo. “Foreign” (English and Oriental languages) is given high status. Learning needs to be mediated in the mother tongue in the first years of schooling for universal achievement of competencies in numeracy and literacy.

Achievement

ECD

Given the range of provision in the quality of pre-schools, a range that favours the economic elite and the fact that children from poor socio-economic backgrounds tend not to perform at the primary level, the Ministry may want to consider introducing an ECD head-start programme by targeting additional resources for pre-schools in poor areas to redress the differences that characterize the ECD sector. It may also want to accelerate the building of pre-school units at state primary schools in order to increase access.

Other issues the government may want to consider include ways and means of outreach for children who could not be mainstreamed due to their physical/mental condition. Numerous stakeholders desire the completion of a legislative bill for the disabled and the socially disadvantaged.

The Peer Review may recommend that the government reconsider the CPE examination as a whole. If, however, it deems it politically necessary to reform the CPE exam towards basic competencies in mathematics, language and social studies, the government may wish to only focus on Standard VI and hold an examination on mathematics, a language and one other subject. Many countries use automatic progression within sectors but preferably with a method of quality ensuring that the curriculum objectives are being met within different phases.

Primary

Issues of whether basic competencies in numeracy and literacy for a significant minority of children is achieved after 6 years of primary school was raised in some research reports and stakeholder interviews. In addition, despite the large investment by Government in teaching of languages at the primary level, foreign investors are reluctant to invest in out-sourced call centres on the island, as the language competencies are not high enough. Again the need to re-look at the outcomes of the primary curriculum is raised.

The CPE examination is limiting the integration of between 30-40% of children into economically active labour participation later in life as adults. The phenomenon of maintaining repeaters for two years in the system for this examination is pedagogically questionable, particularly as the pass rate of this group is significantly low. The Government may want to revisit this issue.

Section III

SECONDARY AND NON-FORMAL EDUCATION: A SHARED RESPONSIBILITY

The institutional framework

The Education Regulations of 1957 and the Education Act of 1982 governed the whole formal education system. The Education Regulations were established before the country became independent in 1968 while the Education Act was enacted after independence. The Mauritius Institute of Education was established in 1975 to provide training to both primary and secondary education teachers. It was also responsible for some aspects of assessments and examinations until 1984, when this responsibility was taken over by the *Mauritius Examination Syndicate* (MES). Besides, MIE was responsible for curriculum development until 1985, when a new body was created, the *Curriculum Development Center* (CDC), which became the *National Centre for Curriculum Research and Development* (NCCRD) in 1993. The MIE is the only institution responsible for teacher training as of today. The increasing number of teachers in demand can explain the progressive reduction of responsibilities. Another important date is the Year 1976, when a decision was taken to make secondary education free. This decision 'caused enrolments at secondary level to rise considerably' (Sukon, 2005, p.5). 1978 is also an important date, when the Private Secondary Schools Authority (PSSA) was set up with the specific mission to look after private secondary schools – both aided and non-aided – and maintain standards in secondary education.

As of today, the condition for enrolment in the academic stream of secondary education is the *Certificate of Primary Education* (CPE). Secondary general education leads to two sorts of certificates: the *Cambridge School Certificate* (SC) for which students sit after five years and the *Cambridge Higher School Certificate* (HSC) for which they sit after two additional years.

Children who have failed the CPE twice or are past the age limit have the opportunity to follow pre-vocational courses. These children would have otherwise been rejected from the system after primary school.

The on-going reform: 2001-2005

The on-going reform is clearly presented in the following documents as far as secondary education is concerned:

- » *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level – The Way Forward* (2001);
- » *Towards Quality Education for All* (2003);
- » *Bilan chiffré de la réforme de l'éducation* (2005).

It appears from these documents that the fundamental aim of this reform is to do away with the highly selective system and to democratize education. As stated in the 2001 document, it was acknowledged that 'the major dysfunction of the Mauritian educational system' lies in 'the bottleneck situation constraining access from primary to secondary education'. To illustrate this, the document mentions that for the 18,000 children who passed the CPE examination, there were only 1,000 places available in the small number of so-called 'star schools'. Hence, a severe competition among the children to have a chance to enrol in these schools. This competition resulted in a 'rat race' beginning right from the lower primary years. The fundamental aim of the reform was, therefore, to provide quality education for all, in the spirit of the World Conference on Education for All (EFA) held in Jomtien, Thailand, in 1990.

It also appears that the means to achieve this aim include:

- » The abolition of the ranking system in primary schools and the introduction of a grading system at CPE;
- » Construction of new state secondary schools;
- » Transformation of 'star' state secondary schools into Form VI (instead of Form V) colleges;
- » Regionalization of admission to Form I;

The 2003 document explains that the aim of the reform is to meet the three following fundamental goals: 1) promotion of equity and equality of opportunities; 2) relevance; and 3) improved efficiency and effectiveness. The document describes the on-going reform as 'a major reform programme, unprecedented in its magnitude...undertaken as from Year 2000 with a view to transforming the very landscape of the system'. It emphasizes that 'the reform programme aims at making access to quality education a fundamental right and not a privilege'. Thus, the reform rests on three pillars: Access, Relevance and Achievement. The following remarks will successively examine the implementation of the reform from these three perspectives.

Access

Promoting access has been understood in a first phase as developing infrastructure. It is now being more and more understood as widening participation. Mauritius is therefore in a transition phase. Efforts to remove stumbling blocks to access culminated in the implementation of compulsory education up to age 16. It has been a robust initiative led by the government in consultation with key stakeholders.

General secondary education

Infrastructure

The scarcity of places in secondary education and regional disparities have been identified as major causes of restricted access and its consequence, the 'rat race'. This situation is now being changed in order to ensure access for all and to come as close as possible to the ideal of 'education for all'. The private schools had 70% of all secondary education provision (as of 2003). The government could have increased the number of secondary schools by enticing investments from the private schools to co-finance secondary education. It tried to bring in the private schools. But this turned out to be difficult to implement. Therefore it resorted to developing a national strategy to increase the number of slots available by constructing new state secondary schools and converting state vocational schools into state mainstream schools so as to accommodate the increased secondary school enrolments.

While the total number of schools seem to continue to increase, the public-private participation ratio is likely to change: the public share will be on the rise although the private share will be on the rise for pre-vocational schools (Table 3.1). It would be important therefore to devise institutional and technical arrangements for sharing responsibility between public and private in order to ensure quality secondary education.

Table 3.1. Share of private in total enrolments (%)

Year	General secondary	Pre-vocational
97	78	
98	75	
99	75	
00	74	
01	73	47
02	73	57
03	70	63

The 2001 document carefully discussed the implications in the event that private secondary schools would be closed down by this initiative. The document projected the

demand and supply balance for Form I places including both public and private schools (Table 3.2). It argued that the government plan would not necessarily lead to the closure of private schools but would bring about a potentially positive effect by decreasing class size from 40 students per class on average at the secondary level as was reported at this time. The closure of schools, however, could happen. Some private schools that have been “long identified as sub-standard” could cease to exist in order to maintain the quality of secondary education. In fact, some schools have stopped receiving grants from the government (details in Section III).

Table 3.2. Form I Places for State and Private Schools

	2001	2006
Demand	19,100	23,200
Supply	19,500	24,700

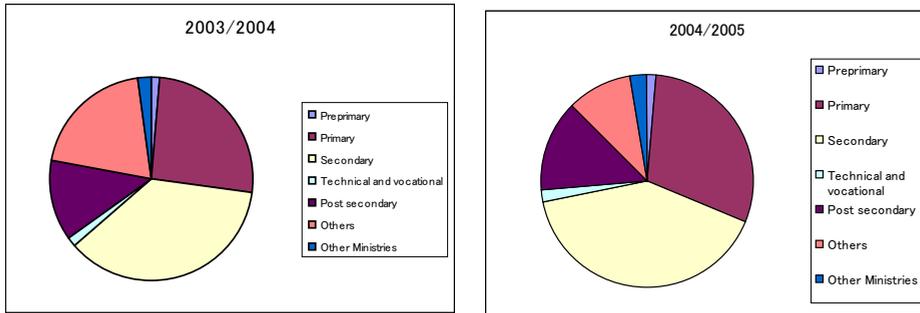
Source: Ministry of Education and Scientific Research (2001), *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level*.

Has the government invested enough in secondary education to secure an acceptable number of places? It seems so. The government allocated adequate expenditure on secondary education. This expenditure increased from 36.3% of the total expenditure on education in 2003-2004 to 40.2% in 2004-2005 (Figure 3.1). The expenditure therefore increased by 3.9% while total government expenditure on education as a whole increased by only 0.5% from 15.3% to 15.8%. As a result, the number of schools increased from 135 in 2000 to 136 in 2001, 143 in 2002, 175 in 2003, 176 in 2004 and 188 in 2005. In secondary education these numbers increased from 35 at the beginning of the reform to 70 in 2005.

Policy-making needs a forward-looking approach. Only such an approach can allow a strategic plan for an efficient use of resources in order to get maximum returns on investment in the long term. From this point of view, it is necessary to take into account the demographic change in the country and assess its potential impact on the ongoing reform. Mauritius seems to be gradually moving towards an ageing society, which places the country in a different context from African Peer countries³². The projection of the general secondary school population between 2005 and 2015 increases until the peak in 2009 and 2010 (Table 3.3) and then, by definition, starts to decrease.

32. Ministry of Women's Rights, Child Development and Family Welfare (2003) *Statistics in Mauritius: a gender perspective*, p.4.

Figure 3.1. Recurrent Government Expenditure by Level



Demographic Evolution and Its Implications for Infrastructure

Table 3.3. 2005-2015 Projection of Secondary School Population

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	53,790	55,860	57,470	58,410	58,870	58,870	58,640	58,520	58,460	58,430	58,460

Therefore, with the demographic change, supply is projected to outnumber demand in the near future. What action can be taken now? One way to maximize the use of the facilities is to open them up for lifelong learning opportunities, especially for those who have not benefited from educational opportunities before the compulsory education policy was framed. One of the goals of the mass computer proficiency programme was to contribute in addressing this. Other programmes and structures have similar purposes, in particular, the Productivity and Competitiveness Council, the public-private partnership programme, and others.

Equity

Beyond infrastructure development, it is essential to ensure access and equity. The enrolment rates have been constantly increasing. The gross enrolment rate (secondary education enrolment as a percentage of the population aged 12 to 19 years) for the academic stream grew from 50% in 1993 to 51% in 1995, 54% in 1997, 58% in 1999, 63% in 2001, 64% in 2002 and 66% in 2003.

Gender is not an issue vis-à-vis access at the secondary education level in Mauritius. In fact, a document published by the Ministry of Women's Rights, Child Development and Family Welfare, *Statistics in Mauritius: A Gender Perspective (2003)*, reports that at the secondary and tertiary levels, "girls have a slight advantage over boys ... enrolment rates are higher for girls than for boys (67% for girls against 61% for boys) at the secondary level."

Other questions can be asked on the issue of equity: what is the correlation between enrolment rates on one hand and socio-economic backgrounds, ethnicity, age (over 20) and extent of disabilities on the other? We are unfortunately not able to answer these questions due to the lack of adequate statistics. However, the field visits showed some examples of policy implementation using an inclusive approach. For instance, the specialized schools for students with disabilities are integrated into mainstream schools, or at least, located on the same school ground. It appears, however, that the investment is not sufficient to support such inclusive policy. The field visit revealed that government funding per student for special schools was only one third of that for mainstream schools until this year, whereas this category of students would in fact need more funding than other students to compensate for smaller classes, special equipment, etc.

Outcomes

Given these reservations, it appears that on the specific issue of access, the Mauritian government has been doing fairly well. Contrary to most countries in the region, the enrolment rate of girls has increased to such an extent that it has surpassed that of boys. However, how far has the education policy of the last five years really succeeded in ending the 'rat race', as was initially expected? It should be mentioned that the regionalization policy only works for state schools but not for private schools. There are therefore still schools regarded as 'star schools' and children from rich families still have more opportunities to access these schools than the others, whatever their region of origin.

Pre-vocational schools

As a consequence of the decision to provide all children up to the age of 16 with education facilities, the Republic of Mauritius has developed a pre-vocational education (PVE) system, aiming at hosting double CPE failures and those children who are over the age limit for primary schooling. The 2001 PVE scheme mentioned earlier focuses on the social importance of these schools. They are meant to provide these children with the proper environment for their growth and development and to prevent them from being exposed to social ills.

As mentioned in the 2003 document, this initiative is expected to "serve as a linkage to the technical and vocational education today dispensed by the Industrial and Vocational Training Board (IVTB) so as to enable greater access of young persons to skills required on the labour market" (p. 9). After three years of PVE, graduates are expected to take a bridging module that will allow them to enrol in vocational courses at the National Trade Certificate (NTC) third level. It is reported that in 2003 the pre-vocational sector catered to approximately 1,500 students who would have otherwise been rejected by the system. Only 1,390 of these students enrolled for the NTC Foundation course. Although 837 of them were successful, only 155 joined the NTC 3 programme.

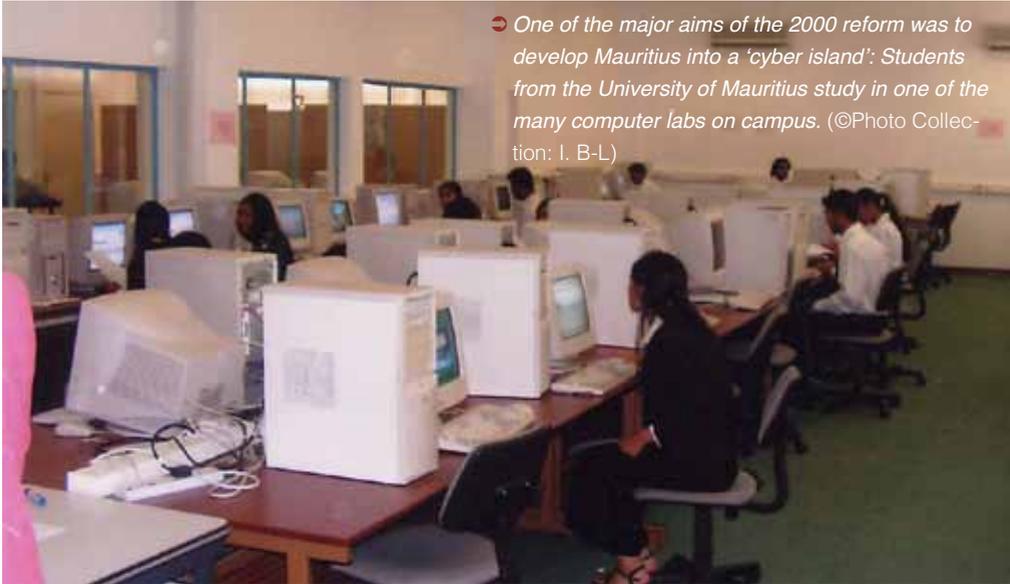
Non-formal Education

One of the objectives clearly set out by the reform is to make Mauritian society a knowledge hub. In view of this, the government has been pro-active in redefining the appropriate framework for lifelong learning. The 2003 document mentions a special institution set up in 2001, the Mauritius Qualifications Authority (MQA), which is responsible for developing and maintaining the National Qualifications Framework and providing the pathways and bridging mechanisms between the various levels of education and training. The MCA, it is said, “has been involved in the educational process ‘from cradle to grave’. It has produced a very large number of educational materials for the formal and non-formal sector on a project basis using media and distance education” (see *Towards Quality Education for All*, p. 26).

The Mauritius Institute of Education (MIE) should also be mentioned here as an institution offering lifelong learning insofar as it caters to in-service teacher training. In addition, the University of Mauritius (UOM), in its Strategic Plan 1999-2004, mentioned continuing education as one of its “future areas of development”. In view of “continuous changes in technology and economic conditions”, it was acknowledged that significant provision should be made “for regular professional updating, for upgrading of qualifications and, generally, for lifelong learning opportunities” (University of Mauritius, Strategic Plan 1999-2004, p. 27).

An important part of non-formal education is adult literacy and, more generally, adult education. Different NGOs and civil society organizations play a key role in this domain. The 2000 Population Census points to the need for creating conditions for lifelong learning by making literacy programmes for adults operational with special attention to regional cohesion. An important role is played by the Ministry of Women’s Rights, Family Welfare and Child Development. Women are given the opportunity to meet in women’s centres. Homemakers are taught how to improve literacy, culinary, nutrition and house-keeping skills and to develop various activities that enable them to earn money such as professionally preparing food or floral arrangements. Women in textile factories are also helped to better understand pro-women laws.

To achieve the often proclaimed goal of transforming Mauritius into a cyber island, a framework has been developed for lifelong learning in information and communication technology (ICT) with the joint participation of the public and private sectors. Under the chairmanship of the Minister of Education and Scientific Research, now renamed Minister of Education and Human Resources, a task-force in e-education and e-training has identified seven levels of IT skills that would address the needs of the whole Mauritian population.



Priority was given to training teachers to at least level 3, known as the computer proficiency level. A vast training programme was launched in this regard in October 2002. It is reported that the existing facilities and infrastructure of 30 state secondary schools are being used after normal school hours for this purpose. This Computer Proficiency Programme (CPP) is placed under the supervision of a steering committee with members from both the public and private sectors. The steering committee reports to this task-force. It is also reported that in view of the nation-wide nature of the training, it turned out that the CPP does not only address the needs of teachers, but also those of other categories including the working population, the unemployed and homemakers. The 2003 document noted that the government was seriously considering the creation of an open university, the University of the Air.

Some foreign institutions such as the British Council and the *Alliance Française* deliver non-formal education. These institutions offer language programmes and administer examinations to assess language proficiency. They are fee-paying and this, of course, represents a potential barrier.

An exhaustive survey of non-formal education and training would also require information about family education, institutions in charge of religious education and even sports activities. However, the team did not have the opportunity to investigate these areas.

Relevance

Relevance can be examined at several levels. It means how responsive the system is to the individual's needs, or the needs of the communities, sub-regions and regions. Finally, it is concerned with how responsive the system is to the demands of the global context today. Understood in that way, relevance can only result from quality teaching and quality curriculum that prepares learners to be autonomous citizens on one hand and, on the other, to efficiently meet the challenges of the twenty-first-century global world and those of the Mauritius context.

Quality Teaching Teaching Force

The number of teachers has been increasing. From 2001 to 2004, the number in the academic stream rose from 5,302 to 6,396. What can be said about the qualification level? Today, the mean level of the teachers is the first university degree in the academic stream and the Higher School Certificate (or equivalent) in the pre-vocational stream (Table 3.4). However, in the 2003 document, the government notes that having such academic qualifications is not enough for quality teaching and, therefore, mentions the issue of inadequate teacher training as one of the major concerns to be addressed through the reform.

Table 3.4. Teaching Staff in Secondary Schools in 2004

	School Certificate or equivalent	Higher School Certificate or equivalent	Certificate or Diploma	First Degree	Post-Graduate	Not Stated	Total
Academic	261	829	1,167	3,589	545	5	6,396
Pre-vocational	50	346	75	99	6	2	578

Quality is often referred to as class size: the smaller the class is, the easier teachers can tailor their teaching to meet the individual student's needs, level and learning style. In Mauritius, the pupil/teacher ratio is gradually declining (Table 3.5), which shows once again that the number of teachers is constantly increasing. However, as discussed before, the actual ratio seems to be higher than the estimated ratio.

Quality should not only be interpreted, however, as just the teacher qualification or the pupil/teacher ratio. Actual quality of teaching should be assessed in terms of the proficiency that students acquire out of this teaching. The Peer Review team was often presented with anecdotal evidence that teachers are puzzled by students with mixed abilities, and that some of the successful students from primary school are still unable to read or write proper English, which is the language of classroom instruction but not their mother tongue. A quality teaching force should be able to teach mixed classes, deal

with complex language issues, be sensitive to social cohesion, adapt to different learning styles, cultivate a formative assessment culture, etc.

Table 3.5. Pupil/Teacher Ratio at Secondary schools

	Academic stream	Pre-vocational stream
2000	19	NA
2001	18	16
2002	18	16
2003	18	17
2004	17	15

Source: Digest of Education Statistics, 2004, pp. 93 and 143

Quality assurance

Another aspect to quality may be illustrated by addressing the issue of governing and sharing responsibility in quality assurance.³³ The Private Secondary Schools Authority is responsible for ensuring quality infrastructure education facilities and the effective allocation of grants. It used to also be responsible for pedagogical control, which has now been shifted to the National Inspectorate under the Ministry of Education. The Inspectorate was to take responsibility for ensuring the quality of teaching/learning processes in both public and private schools. This was not as effective as anticipated because of the resistance from some secondary schools. Since 1982, 18 schools have ceased to receive grants as they were unable to meet the quality criteria. It is expected, however, that in the future, there will be added value if more sectors of the communities participate in the quality assurance process (e.g. parents, industry, the tertiary sector, learners themselves, etc.). If this can be done in a systematic way, the relevance of the pedagogies can be pertinent for several levels, that is, learners, parents, communities and society at large. This approach may also contribute to participation in an open, accountable, democratic society.

Testing

Mauritius students sit the *Cambridge School Certificate* at the end of Form V and the *Cambridge Higher School Certificate* at the end of Form VII in the academic stream. To what degree can such examinations, which are prepared by a foreign institution, be relevant tools for assessing learning achievements? In response to this question, the Peer Review team was told that the *Cambridge Certificate* examinations can be to some extent tailored to meet local contexts. However, it appears that the adoption of such ex-

33. Based on the interview with Mr Bhugun, Acting Principal Inspector; Mr Mhangoo, Senior Inspector; and Mr Luchoomun, Director on 27 October, 2005.

aminations reflects the colonial historical heritage, which lags behind the current assessment culture of the former colonial power. As these are high-stakes exams, there is a backwash effect in that teaching becomes test preparation and, if the examination is a traditional summative examination, teaching promotes rote memorization. What kind of assessment, then, will enhance teaching and learning instead of encouraging rote memorization? The use of formative assessment is highly recommended.

It is reported that “in the early eighties and in 1996, attempts to develop a continuous assessment scheme were made. Unfortunately, these were not successful because of resistance from teachers due to lack of support and the additional amount of time it required” (Sukon, 2005, p. 7).

It is appropriate here to refer to a recent study published by the OECD/CERI under the title *Formative assessment: improving learning in secondary classrooms*³⁴. The study was launched to examine the effect of formative assessment on educational improvement at the secondary education level with case studies from Australia, Canada, Denmark, England, Finland, Italy, New Zealand, and Scotland (OECD, 2005). The direct benefits of formative assessment, (as opposed to traditional summative assessments that focus on positive/negative rewards) are reported to be:

- » Improvement in the quality of teaching;
- » A stronger relationship with students and increased contact with parents;
- » Different and better work products from students; and
- » Greater student involvement.

Language of Classroom Instruction

The language of classroom instruction remains a key issue at the secondary education level just as it is at the primary education level (see section on primary education). English used as a medium of classroom instruction presents a barrier to vulnerable groups. The interviews reveal that the actual language used is Creole for special education needs (SEN) schools and pre-vocational schools. The country now has to decide whether to continue with English as an exclusive language of instruction, with the poor results now observed, or, as an alternative, to develop Creole, which is the mother tongue, first; and French, which is the European language closest to Creole, second and English only third. This could, in fact, increase the level of understanding and mastery of English for the largest possible number.

34. OECD/CERI. (2005) *Formative assessment: improving learning in secondary classrooms*, Paris. This book is also available in French under the title *L'évaluation formative: pour un meilleur apprentissage dans les classes secondaires*.

Relevant Curriculum

Overloaded Curriculum

Many teachers acknowledged, among other things, that “We are teaching too many things too early”; “The curriculum is over-loaded”; “There is over-emphasis on academic knowledge and not enough emphasis on practical know-how”; “We are promoting rote memorization instead of learning-to-learn skills”, etc. The Peer Review team was highly impressed by the lucidity of and capacity for self-criticism shown by all the stakeholders of the system, including the teachers.

As far as pre-vocational education is concerned, the 2003 document explains that the curriculum and pedagogical approach are oriented towards: 1) a holistic approach; 2) learning by doing; 3) activity-based teaching; 4) group work; 5) project work; and 6) peer learning. It is still questionable, however, to what extent these declared goals are achieved in reality.

Selection and/or Education

It is often reported that the system is far too selective. For instance, there are only about 20 scholarships at the end of secondary education for those who wish to study abroad. Compared to the total number of students that are enrolled in Upper Form VI – 8,041 students in 2004, for example, the number is miniscule. This creates unnecessary competition or selection, which emphasizes ‘the end’ rather than ‘the process’ of learning. Improving access to higher education in Mauritius on one hand and, on the other, strengthening the link between the secondary school curriculum and the needs of the labour market will play a key role in reshaping the mission of secondary education.

Relevance to the Global Context

Mauritius needs to integrate into its own education policy the goals and objectives recognized by the global community such as Education for All (EFA) as stated by the World Conference on Education for All held in Jomtien, Thailand, in 1990, and restated by the Dakar Conference in 2000, as well as the strategic objectives defined by the United Nations Millennium Development Goals. In this respect, efficient pedagogies should be devised to minimize in fact, and not only in words, the rates of dropouts and repeaters. In addition, better attention should be paid in the education system to the issue of AIDS/HIV prevention.

The curriculum should be made more responsive to the changing economy of the country. Initially based on the sugar industry, the economy of Mauritius is now based more on the textile industry and tourism. The current economic situation is vulnerable because the emergence of China as a global textile export country increasingly affects the textile

industry. The tourism industry is also becoming more challenged by other countries with similar conditions that wish to develop their own tourism. Moreover, Mauritius is often challenged by natural disasters such as hurricanes. Under such circumstances, its resources being primarily human, Mauritius is attempting to become a 'cyber island' by developing a 'knowledge hub' conveniently located between India and Africa. How far does the current curriculum meet the often-stated goal of the nation to be the cyber island? This question needs to be dealt with. The interviews reveal that graduates from the secondary school level are not equipped with the required skills and capacities to carry out tasks at the call centres that have been set up by foreign direct investments (FDIs).

Relevant Infrastructure

Despite the country's ambition to become a 'cyber island', the majority of the schools still do not have computers. In primary education, it was often explained to the Peer Review team that about 20 computers will be distributed shortly and that an IT specialist teacher would be sent to each primary school. At the time of interviews, it was often the case that the students were taught about the computer with a picture on the blackboard – and not taught with the computer – except in a small number of 'elite' schools. The national statistics include data on the distribution of secondary schools and IT facilities and equipment in 2004.

A statistician at the Ministry explained to the Peer Review team that the number of computers only includes the ones used for administrations but not for teaching. Access to basic infrastructure needs to be developed in primary schools as a fundamental basis for improving practical teaching/learning processes, not knowledge about the computer (i.e. relevant teaching), and to meet the needs and levels of the learners and the demands of society (i.e. relevant curriculum).

Achievement

Achievement of the Reform

One of the greatest achievements is the legislation on compulsory education up to age 16. Implementation is to start in 2005, so it is too early to assess the real impact of this reform. Research needs to be done on this point. One possible option is to set up an observatory centre at a tertiary education institution, which will act as a liaison between policies and research (see section on tertiary education). The centre could help develop evidence-based policy-making.

The current system, however, carries a potential risk of reinforcing the 'U-curve' stratifications in primary school results. The gap created between the high-level achievers and the poor performers in primary school seems to widen at the secondary level. Is this an

example of the Matthew's effect – i.e. the rich get richer and the poor get poorer? If so, there is a need for strong government intervention to bridge the gap before the poor become entrenched in negative social and economic behaviour that make assistance more difficult to implement. It is the government's responsibility to set up a mechanism to make education effectively compulsory and contribute to solving social inequities.

Student Achievement: Participation, Repetitions and Dropouts

Widening participation concerns equitable distribution of learning opportunities. To measure such effects, factors hindering participation need to be collected such as dropout rates and absenteeism. The review team interviewed a statistician at the Ministry of Education and found that there are no national statistics to indicate dropout rates although the number of repeaters is collected. The SACMEQ Report (2003) introduces a cohort follow-up study of 21,240 students from Standard I till Form VI between 1998 and 2000. The study points to a significant drop in enrolment in the transition from primary to secondary education: 26% of the pupils in Standard I did not enter Form I. Furthermore, 60% of the same cohort did not reach Form V; 73% did not reach Form VI (Table 3.6). Concerning gender balance in participation, the study illustrates that girls outperform boys: transition rate from primary to secondary was 65 for boys and 75 for girls; from secondary to Form VI, it was 38% for boys and 42% for girls. The government also presents a cohort between 1990–2002 (Quality Education for All, 2003, p. 8), which reports similar trends.

The 2003 document cites high rates of repetition and dropouts across all levels as one of the major causes for reform. The SACMEQ Report points to the dropout rate of 14% of the original cohort at the end of general secondary who either dropped out or stayed to repeat the year. Previous cohort studies show that the rates of students from primary schools who reach Form V are 40 to 66.9%; and those entering Form VI are 27 to 35.7% (Table 3.6).

While the government promotes access and equity and attempts to mitigate competition on one hand, competition still seems to exist. Most of the stakeholders interviewed expressed the opinion that there should be a clear option to “the end of the secondary education scholarship”. Access to the scholarship is based purely on merit and, therefore not on a coherent equity policy. Such a scholarship will only result in accelerating and cultivating the culture of ‘selection rather than education’. Measures should be taken either to abolish it or change it into a scholarship based, for example, on a student's socio-economic background.

Issues and Barriers

Among the key issues for future orientation are: 1) developing appropriate indicators for further analysis; 2) researching systemic approaches to shared responsibility; and 3) ensuring inter-sector human capital development policy-making and implementation of lifelong learning.

Table 3.6. Cohort Survival Rates and Grade Enrolment Rates

Level	Survival rates			Grade-specific enrolment rates for a cohort		Transition rates	
	Grades	Boys	Girls	Boys	Girls	Boys	Girls
Primary	1	1.00	1.00	1.03	1.04	65%	75%
	2	1.00	1.00	1.03	1.04		
	3	1.00	1.00	1.03	1.04		
	4	1.00	1.00	1.03	1.04		
	5	1.00	1.00	1.03	1.04		
Secondary	6	1.00	1.00	1.02	1.03		
	7	0.65	0.75	0.67	0.78		
	8	0.57	0.66	0.59	0.68		
	9	0.51	0.61	0.52	0.63		
	10	0.43	0.53	0.45	0.56		
Form VI	11	0.31	0.39	0.31	0.41			38%	42%
	12	0.11	0.16	0.12	0.17		
	13	0.10	0.14	0.10	0.15		
School life expectancy (implied)				8.90	9.60		

Source: *SACMEQ Report*, 2003

Indicators

First and foremost, a lack of aggregated data has surfaced and is one of the critical barriers to informed policy-making and implementation on access and equity. To examine access and equity, a review exercise could use variables such as school places, enrolment rates, participation rates, dropout rates, repetition rates, absenteeism, levels of education, completion rates, school jurisdiction and location, learning opportunities outside the classroom, costs and financing of education and the students' profiles (e.g. socio-economic family backgrounds, ethnicity, sex, age, place of residence, mother tongue³⁵, learning difficulties, physical and mental disabilities, nutrition, health, and criminality). The national statistics currently produced by the Ministry of Finance and Economic Development only cover the basic figures, i.e. school places, enrolment rates, levels of education, school jurisdiction and location, linguistic provision, school certificate and higher school certificate passing rates and students' profiles (i.e. place of residence, sex, and age up to 20) (Central Statistics Office, 2004). There is a clear vision spelled out to promote

35. This applies to cases where the language of instruction is not the mother tongue.

equity³⁶. To promote informed policy-making on access with respect to equity, the introduction of a new set of indicators relevant to the Mauritian context is highly recommended, including the other stream - the pre-vocational schools.

By definition, there should be 100% enrolment rates from primary to secondary education (including both academic and pre-vocational streams). It is important to monitor the 'actual' enrolments and trends. The current official figures may overshadow the disadvantaged groups (e.g. dropouts, students with irregular attendance, street children, students with special needs, etc).³⁷

Furthermore, indicator development planning should benefit from international collaboration for capacity-building purposes. The result will help the nation to evaluate itself with reference to international benchmarking. For instance, the school life expectancy is estimated at 9.25 (8.9 for boys and 9.6 for girls) in Mauritius. Given that the enrolment rates in tertiary education are growing and that awareness of the importance of lifelong learning is starting to emerge, a new indicator could be planned to include post-secondary and tertiary education. This will allow the nation's positioning and directions for growth to be eventually included in international referencing on education life span. For instance, a child at the age of five in the OECD countries can now generally expect to undertake between 16 and 21 years of education during his lifetime (OECD, 2005).

Research on Systemic Approaches to Shared Responsibility

A systemic approach to shared responsibility should be explored for access from various perspectives. To break down the complex features of shared responsibility, the first step is to carry out a mapping exercise to identify current institutional arrangements and key stakeholders involved. For instance, one important issue for shared responsibility is costs and financing. Costs of education and returns on investment are concerns affecting governments, schools, NGOs, households, etc. and transverse common issues such as governance, quality assurance and equity. This type of mapping with respect to private-public partnerships can be one approach used to determine if the current system is efficient, beneficial and equitable. Secondary education became free, though not compulsory, for all students up to the age of 20 in 1977. It became compulsory up to age 16 in 2005. Is the funding fair enough to make the system work? Although secondary education is by definition free for all, costs may be incurred for private fee-paying secondary schools, vocational schools (i.e. IVTB), private investment in education (e.g. private

36. 2004, On Training Needs Assessment E/70/1/01/87(T) from the responses to the questionnaire.

37. The official figures may overshadow the number of street children. For instance, 1,118 students (from 5 to 16) with special needs who are enrolled in specialized NGO schools may not appear in the statistics as the NGOs are not registered by the government.

tutoring³⁸, non-formal fee-paying schools, etc.) and indirect costs (e.g. books, transport, uniforms, school supplies, etc.). Cost-sharing between the public and private sectors and co-financing among different ministries can be explored as an effective 'shared responsibility' strategy to re-allocate limited resources.

The public-private dimension of investment in education is blurred at all levels in Mauritius. The private sector plays a key role in education with a share of 83% for pre-primary; 24%, primary; 70%, general secondary; and 63%, pre-vocational in 2003 (Kulpoo. D. *et al.*, 2003). The secondary education landscape is becoming even more blurred and complex with a growing diversity on the supply side. Among private schools, there are not-for-profit and for-profit schools in Mauritius. The latter are a recent development. In 2001, the total number of schools was 136 comprising 34 state, 98 not-for-profit private and four for-profit private schools. The public share in secondary education increased from 30% in 2003 to 37% in 2005 following the compulsory secondary education policy. The NGOs are also active in providing non-formal education for illiterate adults and students with special needs³⁹, etc.

This ambivalence and complexity also apply to investment. The costs may bring private returns on investment (e.g. access to a full merit scholarship at the end of secondary school, securing a job upon completion of the level, etc.) and fiscal and social returns on investment (e.g. sustainable economic growth, human capital development, improved health of the nation, etc.). The public-private aspect makes it possible to examine incentives and disincentives of stakeholder behaviour and, therefore, adds a dimension to strategic planning on how to most efficiently and cost-effectively implement shared responsibility by reforming the current institutional arrangements.

Needs for Inter-sector Human Capital Development: Policy-making and Implementation of Lifelong Learning

Gross enrolment rates should exceed 100% to achieve the 'secondary education for all' agenda with a lifelong learning dimension. Current policies stress the transition from primary to secondary education. The results seem to have positive impacts through concerted efforts. As one way to relate the policies to socio-economic development policies of the nation, it is important to shed light on the 'hidden' population who should be served: i.e. the youth and adults who have not had access to secondary education before the 2005 compulsory policy implementation, or even to basic education.

38. Private tutoring used to take place on school property using public property (e.g. materials). The government attempted to hinder its use. As a result, teachers now pay for the use of property. Private tuition is estimated to run to 500 million rupees in total per year based on the interview with Mr. Rumjeet, Primary School Inspector from the Inspectors Union and Mr. Rams what from the Head Teachers Union.

39. The total number of NGOs requesting government registration in October 2005 was 36.

Moreover, education and earnings are positively linked. Completion of lower secondary education seems to form a break point beyond which additional education is awarded a particularly high premium in Mauritius (whereas in many OECD countries, upper secondary and post-secondary non-tertiary levels form a break point.) The lack of policy initiatives to support lifelong learning and labour market policies will result in a huge potential loss of human capital for the society as well as a potential barrier to individuals' well-being. In addition, Mauritius is moving towards an ageing society and the worker/pensioner ratio is declining. It is therefore important to align education policies to national human capital development policies by focusing on how to activate the latent labour force to prevent potential loss at an early age. Many OECD countries are facing a rapidly ageing population and have set up a system of recognizing experiential learning⁴⁰ either to provide the less skilled population with a second chance/access to education or to help them find a job.



➤ *Three students in the industrial and vocational training programme of the new reform during a break.*

©Photo Collection: I. B-L

40. Different terms are used in different countries.

Concluding Remarks: Strategic Planning and Shared Responsibility

The current policy context puts pressure on the government to ensure an effective, beneficial and equitable secondary education system. The government should benefit from setting priorities and strategically and coherently planning actions with timelines (short term, mid-term and long-term). Also, 'shared responsibility' plays a pivotal role because a system can only result from the full involvement of the key stakeholders (e.g. relevant ministries at the national and local levels, para-governmental structures, schools, NGOs, local communities, teachers, parents, learners, etc.). This is in fact one of the key elements of the Peer Review process.

The Ministry has prepared 'action plans'⁴¹. The documents clearly illustrate the rationales for the reform and lay out concrete actions to implement it. However, no time frame is included in the plans. Of course, a rigid time frame may be counter-productive, as actual implementations may bring not only positive results but also unforeseen or unintended outcomes. Therefore, the action plans should allow for flexibility in their timing. Nevertheless, these actions should be more strategically planned (e.g. broadly align timelines with other implementations within the education sector as well as priorities and timelines of non-education sectors, etc.) in order to be made operational more efficiently and effectively. In short, the action plan needs to place emphasis on three key areas: access through monitoring compulsory education, relevance through effective curriculum reform and achievement to permit the Mauritian child to acquire the fundamental competencies needed for the twenty-first century, before the age of 16.

41. The most recent 'action plans' may be represented by the 1998 Action Plan that laid the foundation for the abolishment of ranking and the introduction of compulsory secondary education and the 2001 New Reform Action Plan, which established the current policy implementations mentioned in earlier paragraphs.

Section IV

ANCHORING TERTIARY EDUCATION IN THE MAURITIAN EDUCATIONAL REFORM FOR A KNOWLEDGE SOCIETY

The Place of Tertiary Education in the Reform

The section below provides an analysis of the role and place of tertiary education in the reform initiated and conducted in Mauritius between 2000 and 2005. Special attention will be paid to examining how synergy can be created between the basic, secondary and tertiary levels to bring maximum benefits to the development of Mauritius as a knowledge-based society. In the Mauritian context, educational reforms need to be seen and understood in the broader context of democratization, liberalization and the widening of opportunities in a highly competitive global economy. Sound policies of inclusion, vibrant economic strategies that promote investments in employment, greater wealth creation and a strengthening of local cultures and traditions constitute some of the fundamental factors that were taken into consideration at the inception stage of the reform process.

Most of the reform concerns primary and secondary education. It was set out in a number of main policy documents:

- » *Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary Level - the Way Forward (2001)*;
- » *Curriculum Renewal in the Primary Sector (2001)*;
- » *Quality of Education for All and Bilan chiffré de la réforme de l'éducation*, which further elaborated the reform later on.

The key changes initiated, as mentioned earlier, entailed the following courses of action:

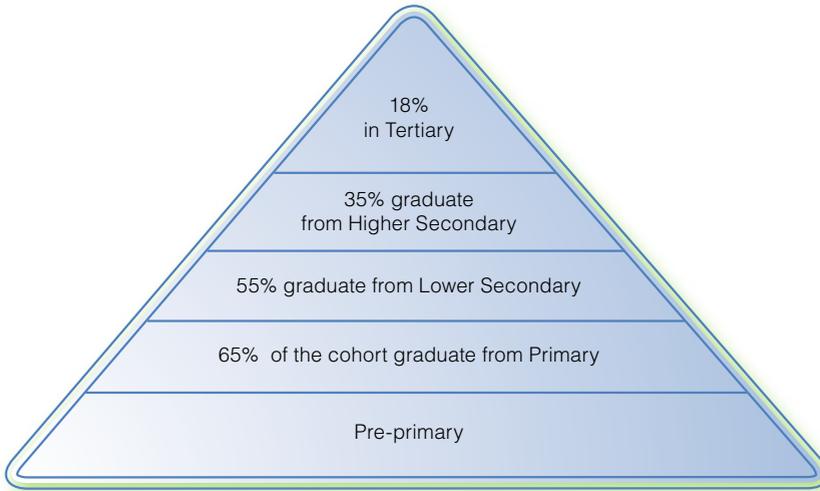
- » The renewal and revision of curriculum at the primary school level by increasing the number of required subjects and implementing and integrating curriculum in Standards I-III;

- » Introduction and implementation of ICT in school curricula through the building and equipping of 354 computer laboratories. Seven hundred and thirty primary school teachers would be recruited and trained for the ICT curricula;
- » Abolition of the ranking system to be replaced by a grading system;
- » Transformation of 'star' state secondary schools into Form VI colleges;
- » Decentralization of admission processes to the regions;
- » Increasing access through the construction of 40 new state secondary schools;
- » Identification of poor achievers in the early stages, with a view to undertaking remedial actions;
- » Expansion and strengthening of ZEP schools;
- » Introduction of e-learning in the school system;
- » Implementation of compulsory education up to age 16.

Regarding tertiary education, the underlying motives behind the Mauritian decision to initiate changes in the last five years were prompted by two factors:

- » At the national level, there was a severe problem of access and, to a certain extent, equity. While the intake rate was very low because of a shortage of space and teaching capacities, the pressure for access to higher education was increasing. One of the unintended results was that over 55% of total tertiary enrolment was in private institutions, distance education and overseas institutions. Publicly funded institutions accounted for 45% in 2004. Another consequence of the bottleneck was the intense pressure for expansion in higher education, rote learning in pre-university education and the emphasis on private tutoring. There is also a need to explore various funding strategies.
- » At the international level, a series of new developments was taking place and calling for fundamental changes. The revolution taking place due to the new communication and information technologies was, among others, a powerful force of change shaping the international world economy. In this context, Mauritius deemed it appropriate to quickly adjust to the new situation. The country also found it legitimate to seek ways and means of playing a major role in the Indian and Pacific Ocean region as a knowledge hub and an international service provider.

Figure 4.1. School Enrolment in Mauritius by Educational Levels



A white paper, which is being finalized, could provide a comprehensive and systemic reform agenda that will complement ongoing initiatives in other sub-sectors. The white paper is expected to provide the necessary framework in which both the publicly-funded and private tertiary institutions can operate. It could also contribute to the revitalization of higher education by enabling it to become more actively engaged in setting national priorities and national agenda.

As recommended by the Ministry of Education, the following pillars would be incorporated into the structure and content of the white paper:

- » Increasing and broadening access to a maximum of students;
- » Developing strategies aimed at meeting the human resources requirement of the country;
- » Developing a financially sustainable model to attract and effectively utilize public funds;
- » Designing a comprehensive framework for the sub-sector;
- » Institutionalizing effective governance for the tertiary sector;
- » Enhancing the quality of teaching/learning processes;
- » Ensuring efficiency, effectiveness and relevance of the programmes;
- » Advancing research;
- » Positioning Mauritius as a regional hub for education and training;
- » Developing knowledge as an industry.

Although this white paper is yet to be completed, it would be fair to observe that the essence of the changes undertaken in the period 2000 to 2005 was in keeping with these pillars.

Key Initiatives Undertaken during the Reform Period

When the reform was set out in the year 2000, there was almost no higher education in the equation. However, the changes that were initiated in the sub-sector were quite responsive to national and international imperatives. The following section discusses how these reforms complemented and contributed to the betterment of the education sector in particular, and the country in general.

Considerable progress has been made in tertiary education in Mauritius. Publicly funded institutions such as UOM, UTM, MIE, MCA and, MGI, as well as those under the Technical School Management Trust Fund and the Industrial and Vocational Training Board, are internationally recognized for the quality of their programmes. In addition, there are more than 60 private institutions at which overseas degrees are awarded by recognized institutions. There are also three regional institutions, one dental college, one medical college, and 55 overseas institutions offering distance education courses. The most popular programmes are information and technology, management, accountancy and education.

The above-mentioned institutions function under the umbrella of the TEC (Tertiary Education Commission), which was established in 1988 to supervise and co-ordinate the optimal use of resources allocated to higher education. It provides proper planning and guidance of the tertiary sub-sector.

The TEC plays a critical role in facilitating access, ensuring quality, supervising accreditation processes, funding PFIs, instituting dialogue within the sector and establishing a strong foundation and an enabling environment for the dynamic development of tertiary education in Mauritius.

Since 2001, the total expenditure on education has averaged 3.8% of the GDP, and education spending as a share of total public spending has averaged 15% over the same period.

There are a considerable number of Mauritians who attend overseas tertiary institutions. TEC statistics show that a total of 6,846 Mauritians studied overseas in 2004. Among the 2,107 students who left Mauritius in 2004, 22.6% went to Australia, 21.7% to the UK, 19.6% to France and 19.2% to India.

Continuing Challenges

Derrick Swartz⁴² summarizes the tensions confronting Commonwealth university systems in the twenty-first century as:

- » Competition for resources versus the need for collaboration;
- » The need for social relevance versus maintaining a critical intellectual role;
- » Demands for local involvement versus the need for the universities to address global trans-national concerns;
- » The necessity of attracting private sector capital versus concern for autonomy;
- » Value for money versus the public good.

Some major concerns in the Mauritian tertiary education system reflect these challenges.

Indeed, Mauritius provides an interesting illustration of such challenges in all three main areas of the 2000 education reform i.e. access, relevance and achievement. Before discussing each of these areas however, it is important to observe that the tertiary sub-sector is notable for its advantageous position at the summit of the educational pyramid. It is also a catalyst, a creator and disseminator of knowledge through teaching, research and public service.

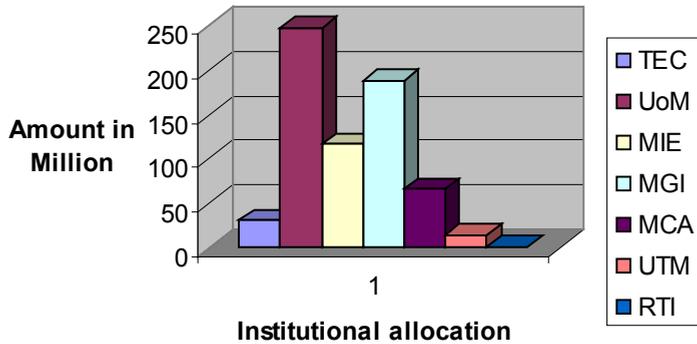
It is also important to note the symbiosis between quality, relevance and achievement within the sub-sector. To attempt to separate or compartmentalize them would be to risk losing the essence of meaningful development in the knowledge enterprise. Thus, facets of each of these crucial ingredients inevitably appear in the treatment of the others.

Table 4.1. 2005 Budget Allocation by the Government to Tertiary Institutions

Institution	Revised Budget 2004-05 Amount Rs (m)
TEC	31,6
UoM	249,0
MIE	117,2
MGI	189,5
MCA	66,0
UTM	14,8
RTI	2,0
Total	670,1

42. Richard Bournes, *Confronting Commonwealth University System in the 21st Century*, p. 46.

Figure 4.2. 2004-05 Revised Budget



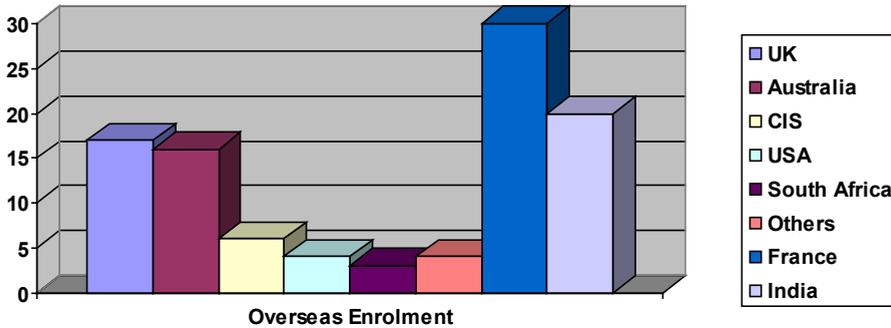
Access

It would be fair to observe that the issue of access at the tertiary level is approached without consideration for gender, race or religion as these three potential sources of inequities seem to have been properly addressed in Mauritius at the other levels of the education system. Therefore, the pre-requisite for access is largely academic merit.

Both quantitatively and qualitatively, the tertiary education sub-sector has made tremendous achievements despite the constraints it faces. The publicly funded institutions in particular are doing very well as they account for 44.9% of the total enrolment in

2004, with the University of Mauritius having the largest intake (24.5% of the total enrolment), followed by the MIE (8.5%), UTM (4.5%), MGI (1.6%) and MCA (0.6%). The remaining intake is provided by private and overseas institutions.

Figure 4.3. Distribution of Overseas Enrolment by Country of Destination, 2004⁴³



Source: Tertiary Education Commission Publications.

Another noticeable achievement of the sub-sector is the significant enrolment rate in graduate programmes with over 13.9% of the under-graduate cohort reaching the graduate levels while 3.9% continue to post-graduate levels.

Other commendable achievements are the mutually enriching collaboration among the Mauritian tertiary education institutions (UOM, MIE MGI and MCA) on one hand and, on the other, between these institutions and their overseas counterparts.

Despite these significant attainments, however, access to tertiary education is still rather limited. As indicated above, over 50% of high school graduates are still struggling, unsuccessfully, to have access to local public institutions. All the initiatives undertaken since the early 2000 to increase opportunities in this area have proved to be insufficient to meet demand. And the pressure from secondary education will only become stronger in the coming years. An underlying challenge to this problem is that of finance, as the economic prospects of the two main activities in the country (i.e., the sugar industry and textiles) are not promising⁴⁴. Added to this is the eventual competition for scarce resources and the need to maintain a fair balance of distribution between the various levels of education.

43. See: *Universities and Development : a report on the socio-economic role of universities in the developing countries of the Commonwealth*, p. 46; *Participation in Tertiary Education, 2004*, p.3

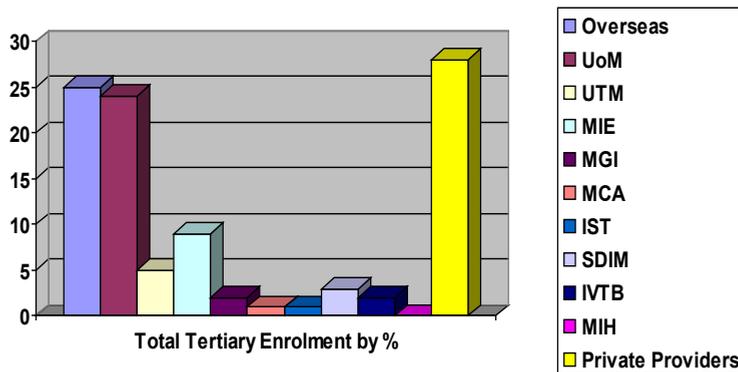
44. Interview with the Ministry of Finance officials on 28 October 2005

Relevance

The Language Issue

As with the other levels of the education system, the language issue constitutes a serious challenge in tertiary education. Mauritian language policy in education allows a number of languages to be used as the medium of instruction. In the present context, there are indications that the varying degrees of language competencies tend to reproduce social inequality especially at the tertiary level.

Figure 4.4. Access to Tertiary Education by Institution



The Place of Tertiary Education as a Hub and the Bridge between the Economy and Manpower Training

Mauritius' vision is to be a communication and information hub. However, discussions held with various stakeholders indicate that tertiary institutions have yet to fully align themselves with the requirements of this vision. Interviews held at the Cyber Tower indicated that many employers were not fully satisfied with the competencies of the graduates from local tertiary institutions. Indeed, ICT still remains a concern from the primary school level to the tertiary sub-sector. Another example was the development of curricula and the training of teachers for ICT programmes that are not supported by requisite facilities.

Extending Learning Opportunities to Disadvantaged Groups

A critical element of the mission of university and tertiary institutions is to reach out and cater to those who do not benefit from mainstream education, e.g. the elderly, the economically/socially disadvantaged and groups with special needs.

Seemingly, the tertiary education institutions are proactive enough. They should be encouraged and enabled to develop policy options for decision-makers and implementers

that address the pressing issue of widening opportunities for the disadvantaged. Indeed, the global issue is to establish a broad platform for lifelong learning for a society that aspires to be knowledge-driven.

Inculcating Mauritian Cultural Identity

Mauritian society and cultures are exceptionally rich and diversified. To preserve this formidable asset there is a crucial need to educate the upcoming generations on the country's cultural identity. A course in Mauritian studies, or a similar initiative, could be envisaged throughout the entire education system to satisfy this pressing need. The programme should contain salient ingredients that highlight the richness and diversity of Mauritius. Success in this module could be a sine qua non for the awarding of a degree, diploma or certificate in the tertiary level. Thus, the significant place of Mauritius in the global village/world economy could be more positively appreciated in the context of peaceful co-existence, cultural pluralism, unity in diversity and responsible citizenship. This, along with other facets, will yield tremendous dividends in the context of responsible and constructive pluralism.

Achievement

Despite very positive accomplishments, a few issues still need thorough examination in the area of achievement, including the following:

Involvement of Tertiary Education in the Reform Process

There is limited involvement of the sub-sector in monitoring and evaluating the reform. Indeed, there seems to be a major disconnect between tertiary education and what occurs at the other levels. In fact, current practices favour stronger links between tertiary institutions and business, while corresponding relationships with pre-university education are relatively limited. The MIE, through its mandate and operations, is perhaps one of the few exceptions. At this juncture, the challenge is to develop outreach programmes that foster dialogue and partnership with schools and community.

Place and Role of Research in the Reform Process

In addition, the place of research in the university system, as well as the role of research in providing leadership in the area of knowledge and reform implementation, needs to be revisited. Institutional autonomy and the capacity to sustain any of the institutions' programmes without government funding remain concerns. The issues at stake here include the freedom to mobilize additional resources, and the business of governance, i.e. autonomy in terms of defining the mission and direction of the institution, autonomy to monitor, etc. The challenge is for the university system to provide more research-based guidance and feedback to pre-university education. The MIE, in conjunction with other institutions such as University of Mauritius, should focus more on research in education.

It should play an observatory role in monitoring, evaluating and backstopping the implementation of the reform, in collaboration with the Ministry and other stakeholders. An education reform observatory unit would be an appropriate instrument for facilitating the bridging of knowledge, realities and policy-making.

Other Challenges

Other challenges include examinations, teaching/learning strategies and the private tutoring issue. They are discussed in Sections II and III

Recapitulation of Tertiary Education Critical Strategic Questions...

Policy Dialogue, and the Monitoring and Evaluation of the Reform

There were strong concerns about the limited engagement at the tertiary level in policy dialogue and the process of reform implementation. The limited *intra* and inter-institutional dialogue hampers the reform process and the capacity to improve access, quality and achievement.

This lack of involvement denies the reform process legitimacy, ownership and, above all, the critical dimension of available expertise. Tertiary institutions could play a major role in the reforms that are required at the lower levels. The Ministry needs to fully utilize existing resources at the tertiary level, thereby strengthening existing capacities for the reinforcement of the reform process. Recognizing local talent is not only cost effective but also fosters sustainability. This would help to create an enabling environment for attracting, retaining and using indigenous expertise, thus minimizing the brain drain. It would serve to further validate these institutions as centres of innovation and growth.

Strategic Plans as a Catalyst for the Development of the Sub-sector

Well-formulated and implemented strategic plans are critical as they help define and communicate institutional objectives. They set the modality of implementation in concurrence with internal targets and broader national objectives. They facilitate a coherent and structured approach to planning by incorporating realistic and achievable targets. They also provide a focus for systemic reviews. Departmental actions should dovetail with school/faculty plans, which in turn, should be coherent with national plans.

In reality, it was observed that while in some institutions the current strategic plans were available, in others such documents were in varying degrees of readiness. For example it was not evident in some institutions visited that: (a) the strategic plans of previous periods had been scrutinized for unfinished tasks and the identification of options for progress and (b) strategic plans exist for 2005 and beyond.

It is critical that these shortfalls be taken care of to permit the entire tertiary education sub-sector to function in a holistic and national manner, with relevant strategic plans, well-defined targets and shared deadlines.

Indeed, the financial and technical implications of the growth of this sector strongly suggest the need for the establishment of planning units with focal points in each institution to: (a) initiate and guide strategic planning; (b) collect planning data and undertake the necessary analysis; (c) assist in development planning and the monitoring of the implementation of key institutional changes; (d) liaise with the TEC; (e) formulate and plan strategies for mobilizing funds from the private sector and other sources; (f) plan institutional investments and endowments; and (g) be involved in functions considered necessary to institutional aspirations and national goals.

Sustainable Financial Development of the Sector

The pressure to increase access to tertiary education will inevitably impact the allocation of available public resources. Consequently there will be increasing competition for public resources necessitating the diversification of funding sources. Specifically, in the context of each institution, there is a need for more expertise and professionalism in analysis and forecasting of financial needs, as a prelude to applying for public funds as well as for mobilizing additional resources.

Student Loans

Consideration should be given to the introduction of student loans to enable tertiary institutions to expand access. However, precautions should be taken to ensure that this sub-sector remains accessible to eligible social groups and in particular, students from poor households.

Institutional Autonomy

While there are many dimensions to the concept of the autonomy of institutions at this level, financial independence is crucial for obvious reasons: to safeguard the freedom of institutions to manage teaching and research programmes and at the same time be innovative and at the cutting edge of knowledge.

The Role of the MIE in Present and Future Educational Reforms

The MIE is indeed the pedagogical development axis of the nation, the key institution for all tiers of education and the hub on which the basic excellence of all institutions fundamentally depends. It is the main provider of teachers in the country and thus has the key responsibility for ensuring the quality of content, curriculum development methodologies and delivery and school leadership. It would be advisable that a mechanism for closer

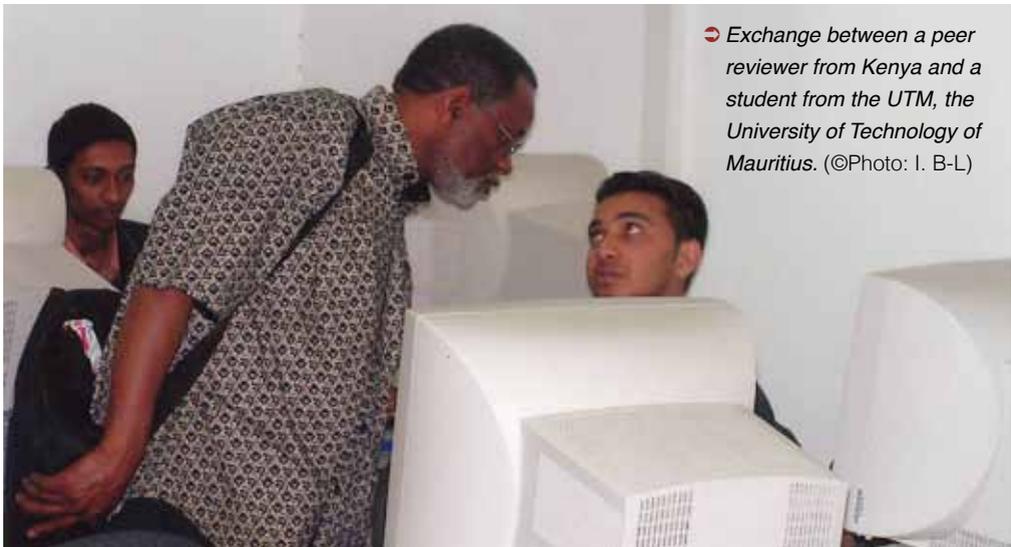
synergy between the MIE, the NCCRD and the Ministry be found in the design and implementation of the curriculum reforms.

The MIE has the potential of becoming a centre of excellence in education training, innovation and reform. While the basic structures are in place, there is a need to clarify its legal status, according it autonomy in its relationship with the Ministry of Education and to build and strengthen its capacity to deliver on its core mandate. This would entail building strong governing structures and academic and management leadership in education training. In the envisaged reform process, attention needs to be focused, inter alia on the multi-dimensional role of the MIE and the need to further empower it in terms of appropriate academic status (i.e. degree-granting status as a pedagogical university), funding, links, staff development and education research capacity.

Its unique capacity to offer different levels of training (Certificate, Advanced Certificate, Diploma, Degree, Post-graduate Certificate in Education, Masters) needs to be critically assessed and its strengths and weaknesses accorded due recognition.

The Quality of the Teaching Staff

Critical attention should continue to be paid to the quality of the teaching staff in terms of content and pedagogy by providing appropriate pre-service and in-service training programmes supported by strong internal and external mechanisms for quality assurance. A periodic review of staff workload should also be undertaken for optimal effectiveness.



Libraries Form a Critical Resource

The nature, quality and quantity of relevant material are important. This seems to be a service that has not been well maintained and provided for. In addition, the global development of ICT necessitates the rethinking of how to access the wealth of knowledge available online.

... and Recapitulation of Policy Optional Responses

Policy Dialogue and Formulation of Reforms

A mechanism for participation, consultation and dialogue could be established to enable tertiary institutions and other stakeholders to play a major role in educational reform at the lower levels of the education system. In this way, the Ministry would use the capacities and resources existing at this level to strengthen existing capacities and thereby contribute legitimacy, ownership and new ideas to the reform process.

Implementation, Monitoring and Evaluation

The Ministry of Education and Human Resources could institute a process for the systematic planning of implementation and the management of change, monitoring and evaluation of the reform processes. This could be done through training decision-makers at the Ministry, school managers and teachers to become catalysts, creating a sense of ownership in the process of change and participating in the design and implementation of reform.

The tertiary institutions, especially the universities and the MIE, could undertake more education research to provide guidance and feedback on the implementation process of pre-university educational reform. This would break the current disconnect between tertiary education and other levels of education.

These institutions could play an observatory role in collaboration with the Ministry and other stakeholders for monitoring, evaluating and backstopping the implementation of the reform.

Sustainable Financial Development of the Tertiary Sector

The pressure to increase access to tertiary education will inevitably lead to increased competition for available public resources, necessitating diversification of funding sources to meet the existing demand for higher education. Hence each institution could establish a planning unit to build and strengthen capacity, expertise and professionalism in

analysis and forecasting of financial needs not only for the purpose of applying for public funds, but also for mobilizing household, private sector and external resources.

The introduction of student loans could be considered, with all the caveats indicated above, to enable tertiary institutions to mobilize additional resources for expanding access and undertaking research and innovations.

Transformation of the MIE into a Centre of Excellence in Education

The MIE has the potential to become a centre of excellence in education training, curriculum development, research and innovation on education. The basic structures are in place. Hence the legal status could be changed to that of a university, bringing with it autonomy from the Ministry of Education and requiring it to attain the rigorous standards of a university. This would entail building strong leadership and governance structures, academic quality assurance mechanisms and institutional management to achieve excellence in education training, research and curriculum innovation.

This will mean additional investments in building and strengthening its capacities to deliver on the core business of educational reform – quality improvements, research and innovations in teaching and learning.

Curriculum Reform and Innovation

Curriculum reform, throughout all education tiers, should be continuous to make learning and teaching relevant to local and global needs, up-to-date and holistic. Curriculum evaluation should be a permanent feature of the Mauritian education system – providing evaluation and monitoring of all aspects of change and innovation. At the earliest juncture, research interests should be focused on enhancing the quality of learning and achievement through innovative methods that overcome constraints posed by current practices regarding the language of instruction, science teaching and private tutoring, among others.

Introduction of ICT in the Education System

The vision of the country as a communication and information hub is threatened by the lack of implementation of ICT programmes and innovations in the education system. Therefore, tertiary institutions should be enabled to take immediate actions to fully align themselves with the requirements of the country's vision, by working closely with the Ministry of Education and Human Resources and the private sector to oversee an effective and timely implementation of ICT curriculum, to train and motivate teachers and to provide appropriate equipment and facilities in education institutions.

Towards a Learning Society: Extending Learning Opportunities to All

A critical element of the mission of university and tertiary institutions is to reach out and cater to those who do not benefit from mainstream education. Therefore, tertiary institutions could contribute more to extending learning opportunities to disadvantaged groups (young people, the elderly, the economically and socially disadvantaged and those with special needs) in addition to building a learning society that enables the population to continue to acquire new knowledge and the skills needed in the rapidly changing knowledge society.

The tertiary institutions should be pro-active, forward-looking, innovative and constantly and creatively engaging policy-makers and implementers in dialogue targeted at encouraging continuous planning for the ever-changing need for human resources, and the updating and acquisition of new skills and knowledge.

Tertiary institutions in collaboration with government institutions and other stakeholders could establish a broad platform for lifelong learning for a knowledge-driven Mauritian society.

The establishment of a broad platform for lifelong learning for knowledge-driven Mauritan society is a critical challenge to tertiary education, needing close collaboration and partnership between the government, state institutions, private sector and other stakeholders.

Section V

MOVING THE VISION FORWARD

The analysis contained in the foregoing sections points to the following conclusions, which also constitute meaningful directions in which to move the process of educational reforms and policy development in Mauritius. The following are three closely related areas of concrete action that have been identified:

- » Addressing the policy environment;
- » Tackling fundamental policy decisions;
- » Fine-tuning on-going policy initiatives.

Addressing the Policy Environment

There are three major areas of concern under this heading:

- » Broadening the base for participation in the reform process;
- » Placing reforms in a systemic perspective; and
- » Improving the methodology of reforms and their management.

Broadening the Base of Participation in Educational Reforms

The Peer Review team heard complaints from all groups of stakeholders that most policy decisions came “from above”, that “the Ministry must have done it”, that “we were not consulted”... “perhaps some members of our association were consulted but as individuals”. Such complaints reveal some genuine ill-feeling towards reforms. This issue warrants attention from the government. The policy dialogues envisaged by the new Minister are therefore a welcome development. It would be worthwhile to institutionalize the process. It would then be necessary to draw from existing education constituencies (coherent stakeholder groups – tertiary institutions, teachers unions, parents associations, the private sector, etc.). The general feeling is that groups would like to be fully involved, both in macro and micro-levels of reforms and policy development.

Reforms from a Systemic Perspective

The issue here has two distinct but closely related facets, both part of what has come to be known as the ‘sector-wide approach’ – extending reforms all the way from basic to

higher education as well as moving school education forward with its outside-the-school counterpart. Despite the tertiary education institutions created during this period and the regulatory frameworks developed at the same time, Section IV of this report suggests that limited attention was paid to higher education in the reforms initiated in the year 2000, especially when this is compared to the demand for higher education. It is the peer reviewers belief that more attention should be paid to the sub-sector, mainly because basic education is a pipeline to higher education. Reforms in one sub-sector are bound to affect the other levels.

Moreover, it would be a misconception to restrict education to its formal component. First, the demarcation line between formal and non-formal education is vanishing, as more sectors in the wider society now generate and disseminate valuable knowledge. Second, a knowledge economy can best flourish in a learning society and the learning facilities and opportunities in such societies should exist in and out of the schools. Third, the state of development of Mauritius (its diversified economy, its 'ageing' population, the new skills required by a society becoming more sophisticated, etc.) requires a variety of structures and programmes (other than basic literacy and numeracy). Therefore, the envisaged policy dialogues would need to include an examination of ways of integrating



➤ *WGESA international peer reviewers meet with Honourable Dharam Gokhool, Mauritian Minister of Education and Human Resources. From left to right: Prof. Pai Obanya and Ambassador Dr. Olusegun Akinluyi (Nigeria), Prof. Ibrahima Bah-Lalya (Guinea), Honourable Dharam Gokhool (Mauritius), Ms. Angela Arnott (Swaziland), Prof. Kabiru Kinyanjui (Kenya) and Ms. Miho Taguma from the OECD. Note that Prof. Paulin Hountondji (Benin) is absent from the photo. (©Photo: I. B-L)*

formal and non-formal education and how best to use one to reinforce the other, in the context of a learning society that would build a knowledge economy.

Methodology and Management of Reforms

In addition to the point already mentioned on broadening the base of participation, the Peer Review team also observed the relatively low level of mobilization of the intellectual and technical resources of tertiary institutions in the reform efforts. The team, as elaborated on in Sections II and III, also observed the absence of clearly crafted action plans to guide the implementation of reforms. It would be a desirable, corrective measure to build these two 'forgotten dimensions' into future work on reforms.

Monitoring the reforms in a systematic and rigorous manner would also be a desirable, corrective measure. The team observed that this was lacking in the ongoing reforms. An observatory has been suggested for this purpose. Institutions that can take on this responsibility are not lacking in the country. The authorities may wish to look into the capacities of the MIE, as it could be a cost-effective option.

Addressing Fundamental Policy Issues

Three issues call for serious attention under this heading: the language question, examinations and technical/vocational education. The first two have been consistently highlighted in Sections I to III. Vocational and technical education was discussed mainly in connection with the pre-vocational initiative.



➔ *A graduate from the IVTB school system who is employed in the Mauritian Tourism Services. (©Photo: I. B-L)*

Language-in-Education Policy

The rich linguistic configuration of Mauritius has been extensively discussed in academic circles. How language can become a resource for quality education is also a subject of heated debate in different circles all over the country. The Peer Review team has had the privilege of following the debates in the course of its interaction with stakeholders. The consensus is that the English language (not being the home language of most learners) has tended to become a barrier to knowledge acquisition.

People learn best in the language they know best. Bilingualism is an asset in today's global reality. English is the world's most widely used language. The children of Mauritius have two other languages in which they are more proficient (Creole and French), and most social interactions take place in these languages. Laying the foundation of learning in the first language enhances mastery. Populations might insist on the 'official' language for instruction in schools because this would give their children a head start.

There are thus a great number of issues to be taken into consideration. Consultation is the beginning of the search for a solution. Decisions would be needed on 'what language at what level of education', or even 'what language for what school subject? Since English must be taught, at what stage would it be treated as a subject and at what stage as the language of instruction? Finally, what steps should be taken to lay a solid foundation for the study of English, to equip teachers and learners to master it effectively? Language-in-education decisions need to be accompanied by systematic language planning. In short, policy development in this area is not an easy task. Yet, an early decision has to be made as the language issue is fundamental to the success of educational reforms, and to how well children are able to learn..

Examinations

Examinations (particularly the CPE) are recognized by most stakeholders as the most intractable challenge facing education in Mauritius. The team saw examinations as thwarting the goals of education for all, as they tend to squeeze a large number of children out of the system, thereby causing the country to lose talent. A society aspiring to fully enter today's knowledge economy cannot afford to shut out a large proportion of its youth from the world of knowledge.

Again, the solution should be participatory. There must be a pedagogical value orientation that does not blame failure to learn solely on the learner. There must be radical decisions taken on what constitutes learning and how it should be measured. Terminal examinations would have to be critically questioned. A new pedagogy that places the learner first would have to be developed. Appropriate assessment procedures that detect learner problems early (and attend to them) would also have to be developed. In

short, a great deal of support activities will need to accompany the policy decisions that must be taken on examinations.

Technical and Vocational Education

A knowledge economy is essentially one in which knowledge (not raw materials or natural resources) will be the only essential commodity. Therefore, such a society cannot afford to channel only those who have failed to learn into technical/vocational programmes. A knowledge economy also requires more people with a sound general education and not just those with limited packages of practical skills. In that context, would today's vocational skills be useful tomorrow? These are issues to put on the table in any future policy dialogue, as the country attempts to develop world-class quality education.

Fine-Tuning Ongoing Initiatives

These are initiatives that were originally intended to address issues related to:

- » Access and equity;
- » Relevance;
- » Quality;
- » Higher education.

The three domains were explored in pre-primary, elementary and secondary education as well as in higher education.

Access and equity issues are concerned with the following:

- » The bottleneck saga: the recent reforms have not solved this problem. It could become an integral part of examination reforms;
- » Regional disparities: the report shows that some regions of the country are still disadvantaged in terms of teacher-pupil ratios, facilities and performance on examinations. The ZEP and pre-voc initiatives were expected to address these issues, but the extent to which they are tackling or exacerbating the problem is not clear. The government may wish to commission some rigorous studies on the initiatives;
- » Cost of primary education: the extra tutoring phenomenon: this is becoming commonplace in the country, to the disadvantage of those who cannot afford the fees charged. The fine-tuning exercise required here would have to be combined with other measures, like the fundamental questions discussed earlier.

Relevance issues are concerned mainly with curriculum and examinations. These have already been discussed. Curriculum overload is probably not the only issue. The problem

could be the entire curriculum process (objectives, content, materials, classroom procedures, assessment practices) and not simply content. Mauritius may wish to look at experiments in other countries, like South Africa's outcome-based curriculum. Examinations would require drastic reforms. Institutionalizing the SACMEQ process could be a starting point.

Concerning quality, the issues mentioned under 'relevance' also apply. In addition, the ICT-in-school programme will have to be revived, and in the qualitative manner that was originally intended.

On higher education, the major issues are co-ordination and quality, with specific reference to overseas programmes. The team was not able to examine this area closely. It would be necessary, however to draw attention to the fact that 'franchising higher education' has become a subject of serious, critical concern to the Association of African Universities and that South Africa has begun to regulate overseas providers of higher education in a very rigorous manner.

Finally, this concluding section has not discussed the question of resources to develop to implement educational reform. This is mainly because Mauritius has the most important resources needed to forge ahead: a clear vision, a stable policy and a strong political will.



➤ *The duly authorized representatives of the parties sign the Framework for Cooperation: the President of ADEA Dr. Ahlin Byll-Cataria (left) and the Senior Executive Officer of the Mauritius Ministry of Education, Mr. Devendra Parsad Ruhee (right). (©Photo: I. B-L)*

Annexes

Annex 1
List of people interviewed

Annex 2
Bibliography

Annex 3
Discussion paper on PRE By R. Sack

Annex 4
Planning paper on PRE By D. Debourou

Annex 5
Concept paper on PRE By I. Bah-Lalya

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Annex 2

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- *Proposals for the Establishment of Private*
- *Institutions or Branches, Sectors or Campuses of Overseas Institutions offering Post-Secondary Education*
- *Regulations for the Registration of Private Sector Education Guidelines for Programme Accreditation.*
- *Guidelines for the Establishment of Quality Assurance Systems*
- *Guidelines and Criteria for Self.*
- *Assessment and Academic Audit.*
- *Guidelines for Processing Applications for Recognition and Equivalence of Post-Secondary Educational Qualifications*

- *Criteria for use of the word “University” by private Institutions offering Post-Secondary Qualifications.*
- *Guidelines for Processing Applications for the Issue of a Certificate for the TEC on the construction of purpose-built building for the provision of Tertiary Education (tbe used for VAT exemption)*

Annex 3

Developing shared and broader visions for education in Africa through peer reviews

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ADEA Working Group for Education Sector Analysis

March 2003

Introduction

This is an exploratory piece of work. It explores how peer reviews could be a mechanism and a process for developing shared and broader visions for the development of education in Africa. Corollary to this would be the development of constituencies — within Africa and among Africa’s external financing and technical partners — to promote those shared visions and approaches. Much of this exploration draws upon the example of peer reviews as practiced by OECD, especially in non-OECD member countries. Peer reviews and sector analysis are then viewed as complementary elements in the formulation of educational policies characterized by both solid analytical grounding and strong ownership.

Peer reviews are seen in this paper as a means for extending critical cooperation between African countries and professionals in order to develop more effective educational policies and practices. A number of inter-governmental mechanisms currently exist in Africa that bring countries together for critical examination of their education policies. Examples of this include:

- » The *Southern Africa Consortium for Monitoring Educational Quality* (SACMEQ) and the *Programme d’Analyse des Systèmes Educatifs de la Confemen* (PASEC), both of which perform rigorous and detailed national assessments of pupil learn-

ing in order to inform policies aimed at improving the quality education systems. These programs use the very similar methodological tools in the countries in which they operate (Southern African for SACMEQ and Francophone African for PASEC).

- » The West African Examinations Council (WEAC), which manages standardized secondary school exams for five West African Countries (Ghana, the Gambia, Liberia, Nigeria and Sierra Leone). These countries have entrusted secondary school certification to WAEC.
- » SADC (the Southern African Development Community), which has several educational initiatives aimed at promoting regional educational policies. Examples include: the Technical Committee on Distance Education which aims at promoting and coordinating distance education in the region; and the Protocol on Education and Training under which member states agree to cooperate in areas of policies, minimum curriculum standards, and reporting in order to harmonize their education systems⁴⁵.

Analytical Depth and Ownership: an issue for effective development cooperation

There is broad agreement that the two pillars of effective educational policy formulation are (i) broad ownership of policies that (ii) are built on solid diagnoses of the context, the available resources (political, human, financial), and the strengths, weaknesses and constraints of the existing system and its policy environment.⁴⁶ *However, sector analysis itself, the second pillar, must also be owned by the concerned parties if it is to be effective in informing and moving the policy agenda forward. This paper suggests that peer reviews may be a particularly effective means for tackling the perennial problem of lack of national ownership of sector analysis.*

The importance of national ownership is underlined in the EFA report monitoring recently produced by UNESCO,⁴⁷ which points out that:

“The most critical ingredient in national EFA plans ... is the extent to which governments genuinely embrace a process of national reform. This obviously goes far beyond, and raises much more difficult issues, than the decisions about what assumptions to incorporate in cost and revenue projections. The danger is that national governments may agree to reform proposals in financing documents

45. See http://www.sadc.int/index.php?lang=english&path=legal/protocols/&page=p_education_and_training#article3.

46. See, ADEA, *Formulating Education Policy: Lessons and Experience from sub-Saharan Africa*, Paris: Association for the Development of African Education. 1996.

47. *EFA Global Monitoring Report 2002 — Education for All: Is the World On Track*. 2002. Paris: Unesco.

that are acceptable to the agencies, even if the technical or the political capacity to implement them is absent. Typical reforms — for example, relative decline in teachers' salaries, increases in class-size, introduction of double-shift teaching, etc. — may be underpinned by a very strong logical case, yet may prove impossible to implement because of the power of particular interest groups. It will be critically important to take the planning process well beyond the level of a costing exercise, if the size of past gaps between plans and implementation patterns are not to recur." (p. 191)

In other words, solid technical work is far from sufficient to guarantee the success of, for example, the far-reaching policies required to attain education for all by 2015. Furthermore, this points to an *ownership deficit or gap in the technical work* (sector analysis) expected to underpin sector reforms. Ownership, here, is taken to mean both (i) thorough understanding of the methods and conclusions of the sector work, and (ii) political internalization and acceptance of the ensuing policy conclusions. Simply put, the level and extent of ownership are often stronger in the North than in the South.

Interestingly, the "problem" of ownership, has been on the development community's agenda for about a decade. In the early 1990s, a major, in-depth World Bank report⁴⁸ ascertained an alarming rate of non-performing projects.⁴⁹ This report "discovered" that beneficiary countries of World Bank loans/projects had little sense of "ownership" of the development projects whose conception and elaboration were often determined by World Bank staff more concerned with the logic of their institution (and its "approval culture", according to that report) than by that of the country (the "borrower"). This resulted in heightened concern for projects and policies that are "country-driven" and owned.

48. Wapenhans, W. A. et al. 1992. *Effective Implementation: Key to Development Impact: World Bank Portfolio Management Task Force*. Washington, D.C.: World Bank.

49. Wapenhans was a vice-president of the World Bank. In an interview conducted on August 8, 1993 for the World Bank's Oral History Program, he states, «There is a declining trend in project performance, highly concentrated in IDA countries and the Bank is contributing to it because of the presence of an approval culture. To remain the leading and preeminent institution that it is, it needs to reverse, and it can reverse to its earlier emphasis on performance. It should not resort to more bureaucracy, to a further invitation to promote compliance. It should not invite its staff, including its managers, to protect their rear. Such an emphasis would further foster risk aversion, not only of staff but also of managers. If not contained, it could retard development." (See: <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,,pagePK:34991~theSitePK:29506~contentMDK:20042044,00.html>.)

A similar analysis could be made for the sector analyses conducted by many agencies.⁵⁰ This raises two questions

- » Given the desirability of solid analytical underpinnings for policy formulation, what would it take to ensure “ownership” of sector analysis whose content is rather technical?
- » Could some form of peer review serve this purpose and, thereby, take on a mediating function between the analytical depth of sector analysis and the more political concerns (including feasibility) of policy makers?

In other words, two dimensions need to be covered: (i) the analytical/technical, and (ii) ownership and feasibility. The former is rather specific and could probably be reduced to a set of analytical approaches (projections/scenarios of enrollments, teacher needs and financial requirements; management analysis; assessment and determinants of learning; etc.). Technicians can do this. However, care must be taken to ensure that capacity development is closely associated with this work. The second dimension is more diffuse and requires both the capacity to understand the technical/analytical and the more pedagogical abilities to bring this material to the stakeholders and policy makers.

This paper takes a quick, and perhaps oversimplified look at the peer review and sector analysis products and their processes as generally practiced. From this, it appears that the peer reviews are relatively strong on ownership and weak on analysis, whereas sector analyses are relatively stronger on analysis and (often notoriously) weak on ownership. However, in order for expertise and analysis to effectively influence policymaking, they need to be understood and “owned” by the policy makers and stakeholders. This, therefore, may well be the point of complementarity between sector analysis (more technical) and peer review (more “political”).

This can be seen as a complementarity between two essential functions: (i) knowledge development for policy formulation, and (ii) making this knowledge and its policy im-

50. Indeed, this has been done within the World Bank in a report by A. Schwartz & R. Sack, “Sector Work and Project Performance in Education: A Review of Bank Experience.” (January 1996. PSP Discussion Paper Series, 85; Poverty and social Policy Department, Human Capital Development and Operations Policy, World Bank). The concluding paragraph states: “Education sector objectives are by definition long-range, as they face major time lags between market signals (from the labor market) and production (of graduates). This condition means that success of education financing policies, for example, is often dependent on nonfinancial parameters that are poorly understood and controlled by policy actors. Such slippery parameters argue for inclusion of a broad spectrum of continual sector work that would take a variety of forms (sociological/anthropological, institutional, political analyses) and venues (Bank sector work, university research, agencies) that the Bank should encourage. They also argue for “nationalization” of sector work, at least to the extent that (a) it promotes the insights that only nationals can bring to sector work, and (b) increases the probability that national policymakers and concerned parties will recognize their situations in the abstractions of sound education sector work. Sector work should be viewed as a continuing process that only rarely comes up with definitive results.” (p. 34)

plications well known and understood (popularization, vulgarization). The knowledge development function is accomplished by technical analyses, which are done by sector analysis. The vulgarization function, which includes broader examinations and discussions of these analyses and their policy implications, can be done in the context of (note: “of”, not “by”) peer reviews. In this tandem of sector analysis and peer review, the role of the latter would be to provide mediation between the knowledge and analyses produced by the sector analyses and the absorptive capacities (in technical, political, policy, implementation and feasibility terms) of the policy and decision makers.

The remainder of this paper focuses how education sector peer reviews are currently done in the context of the OECD and how this may be applicable to and adaptable for Africa.

OECD and Peer Reviews

The concept and practice of peer reviews appears to be well anchored within OECD as a working method and as a tool for cooperation between its member countries. Indeed, these very terms are in the title of an OECD paper on the subject (Pagani 2002) that will be summarized in this section of the paper.

Writing for OECD, Pagani states that

“Peer review can be described as the systematic examination and assessment of the performance of a State by other States, with the ultimate goal of helping the reviewed State improve its policy making, adopt best practices, and comply with established standards and principles. The examination is conducted on a non-adversarial basis, and it relies heavily on mutual trust among the States involved in the review, as well as their shared confidence in the process” (p. 4).

Since the OECD process is undertaken within the framework of an international organization, which does not provide any form of financial support to its members or other countries, it is felt that these peer reviews tend to create a “system of mutual accountability” between the OECD participating States.

Quite logically, Pagani links peer review with peer pressure. Educators know all about the pedagogical merits of peer group pressure! As Pagani points out:

“The peer review process can give rise to peer pressure through, for example: (i) a mix of formal recommendations and informal dialogue by the peer countries; (ii) public scrutiny, comparisons, and, in some cases, even ranking among countries; and (iii) the impact of all the above on domestic public opinion, national administrations and policy makers. The impact will be greatest when the outcome of the peer review is made available to the public, as is usually the case at the OECD.

When the press is actively engaged with the story, peer pressure is most effective. Public scrutiny often arises from media involvement.” (pp. 5-6).

OECD appears to be the international organization with the most extensive experience in peer reviews. They are done in many of the sectors in which OECD operates: economic policy; environment; development cooperation; public management service; trade; financial, fiscal and enterprise affairs; science, technology and industry; education, labor and social affairs; and agriculture and fisheries. Mostly, the peer reviews are done in the 30 OECD member countries.⁵¹ Increasingly, OECD is doing them in non-member countries, such as China, Russia, Peru, Chile, the Balkan and the Baltic countries.

The peer reviews are designed for four functions:

- » Policy dialogue. According to Pagani,
 - ♦ “during the peer review process, countries systematically exchange information, attitudes and views on policy decisions and their application. This dialogue can be the basis for further co-operation, through, for example, the adoption of new policy guidelines, recommendations or even the negotiation of legal undertakings.” (p. 11)
- » Transparency, where
 - ♦ “the reviewed country has the chance, in the course of a peer review, to present and clarify national rules, practices and procedures and explain their rationale” (p. 11)
- » Capacity building. Pagani points out that
 - ♦ “peer review is a mutual learning process in which best practices are exchanged. The process can therefore serve as an important capacity building instrument – not only for the country under review, but also for countries participating in the process as examiners, or simply as members of the responsible collective body.” (p. 12)
- » Compliance
 - ♦ “An important function of peer review is to monitor and enhance compliance by countries with internationally agreed policies, standards, and principles.” (p. 12)

It is interesting to note that there is no standard mechanism for the peer reviews. According to Pagani (p. 7), they all contain four structural elements: “a basis for proceeding; an agreed set of principles, standards and criteria against which the country per-

51. Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

formance is to be reviewed; designated actors to carry out the peer review; and a set of procedures leading to the final result of the peer review.” In other words, the peer reviews are very process oriented.

In general, sector peer reviews are undertaken at the request of the country to be reviewed.

- » The principles, criteria and standards used in the peer reviews can include: (i) the assessment of a country’s performance as it implements policy recommendations; (ii) specific indicators and benchmarks (e.g., targets to achieve); and (iii) legally binding principles, such as the performance of members in the application of the Codes of Liberalization.
- » The actors include (i) the reviewed country; (ii) the examiner countries (the peers) which may serve on a rotating basis or may be selected on the basis of relevance to the situation of the reviewed country; and (iii) the OECD Secretariat, which provides support for the exercise by producing documentation and analysis, organizing meetings and missions and facilitating the whole process.
- » Each peer review has its own procedure. This said, there is a common pattern, that includes: (i) a preparatory phase of background analysis that may be prepared by the country under review; (ii) the consultation phase, which includes on-site visits and close contact with the country under review, and which culminates with a report that concludes with a section on recommendations; and (iii) the assessment phase, where the draft report is discussed at a meeting of the body responsible for the review. Generally, approval of the final report is by consensus. Often, the final report gives rise to a press release which summarizes the main issues for the media.

Pagani points out (pp 12-13) that the effectiveness of the peer review depends on a combination of several factors:

- (a) Value sharing and convergence among participating countries on the criteria for evaluating performance.
- (b) Commitment of the participating countries in terms of human and financial resources, and full engagement in the process.
- (c) Mutual trust, since the peer review process is a cooperative and non-adversarial process. It is also recognized that the peer review process can, itself, contribute to this confidence building.
- (d) Credibility, which is linked with the objectivity, transparency and the quality of the work. As Pagani points out, “the main threat to the credibility of the process is the possibility of attempts by the reviewed State to unduly influence the final outcome.”

Pagani (p. 13) concludes by pointing out that when these factors are in place

- ♦ “peer review can serve as a stimulus to incremental change and improvement. Through the accompanying effect of peer pressure – including both persuasion by other countries and the stimulus of domestic public opinion – peer review can create a catalyst for performance enhancement which can be far-reaching and open-ended.”

Formally speaking, the OECD education committee (composed of representatives of member countries’ education ministries) is the primary audience for the peer reviews. The meaning of this is different for member and non-member countries, with the former having formal obligations to the organization (i.e., the community of members). The country under review is, of course, a prime audience for the review and it is expected by all that the review will serve the education development interests of the country. Indeed, the whole exercise is structured to favor country ownership of the review.

Education sector peer reviews

OECD produces three types of education sector peer reviews⁵²:

- (a) Reviews of National Policies for Education. These reviews cover all the sub-sectors and focus on the overall policy context and performance of the education sector.
- (b) Sub-sector Reviews focus on specific sub-sectors, such as early childhood education, higher education, etc.
- (c) Thematic Reviews of National Policies for Education treat specific themes across a group of countries. A recent example of this would be the thematic review of national education policies in the ten Balkan countries that comprise the “Stability Pact for South Eastern Europe”.

For OECD member countries, peer reviews are an integral part of membership — they provide the basis for OECD’s “system of mutual accountability” between its member countries. A striking example of OECD’s practice of mutual accountability — although not a peer review in the formal sense — is PISA (Program for International Student Assessment) where a sample of 15 year old students in OECD member countries⁵³ is tested to assess their levels of cognitive skills and competencies. According to OECD⁵⁴:

52. See <http://www.oecd.org/EN/documentation/0,,EN-documentation-4-nodirectorate-no-no--4,00.html> for lists of the OECD reviews.

53. Plus others, including: Brazil, China, Hong Kong, Latvia, Poland and the Russian Federation.

54. <http://oecdpublications.gfi-nb.com/cgi-bin/OECDBookShop.storefront/EN/product/961999051P1>. Also see <http://www.pisa.oecd.org>, and OECD, *Measuring Student Knowledge and Skills: A New Framework for Assessment*. May 1999.

“Assessing young people near the end of their compulsory schooling provides a significant indication of educational systems performances. The literacy approach: knowledge, skills and competencies are not tested in terms of school curricula but rather in terms of what is likely to equip young people for life.”

Peer reviews in non-member countries are based on that country’s demand for the exercise. Aspirations for OECD membership are often a factor that motivates a non-member countries to request a peer review. For European countries not members of the European Union, there is also the perception that an OECD peer review will bring the country closer to the EU. Indeed, some countries aspiring for membership in OECD and/or the EU perceive that the peer review will be part of the process that favors this.

This paper focuses on peer reviews in non-member countries. The following is based on information received from the unit that works with non-member countries.

The review process

The education sector Peer Reviews are demand-driven. They are done at the request of reviewed countries — be they OECD member states or not. Countries may have any number of substantive reasons for requesting the review. They include:

- (a) The need for an independent view of the education system on the eve of a reform;
- (b) The desire of a newly installed government for independent views and advice on the state of the education sector, or one of its sub-sectors;
- (c) Parliament may mandate an OECD review in the context of a law or appropriation;
- (d) Providing visibility to the education sector by making it known to other countries;
- (e) A need or desire to establish comparisons with other countries in a context of regional cooperation

In other words, the countries perceive a clear political interest in the peer reviews.

Chile, for example, is about to undertake such a review with results expected in early 2004. According to the undersecretary of education, Chile expects that the review will provide a complete x-ray of the education system that will reveal its strengths and weaknesses.⁵⁵ For Slovenia, Latvia, Lithuania and Estonia — all of which are scheduled to join the EU in 2004 — the peer reviews are seen as part of a whole in their cooperation with OECD.

55. According to an interview in La Segunda of 26 September 2002.

Organization, financing and staffing. The OECD Secretariat organizes the Reviews. When the peer review is for OECD member countries, that country finances it. For non-member countries, financing for the review comes from a combination of OECD (for its own staff time and travel, plus consultants), other agencies (bilateral and multilateral) that contribute to the staffing of the missions, and the country under review.

The OECD Secretariat puts together the professional teams of peer reviewers. At present, the Secretariat has an informal pool of about 50 professionals from which it composes its country teams. Team selection is done by the responsible OECD staff member. In addition to professional competence, criteria for selection of team members include their availability and the overall fit of the personalities of the team members (“no prima donnas”; “esprit d’équipe”). Geographical and institutional balance is also of concern: an effort is made to include team members from similar non-OECD countries and to include staff of relevant development agencies such as the World Bank and the European Commission. In addition, there is generally one team member who has been either minister or a senior civil servant. The review teams consist of around 6 to 12 members, depending on the review, including 1-2 OECD professional staff.

The chain of events for these reviews is as follows:

1. OECD Secretariat receives request from country
2. Approval by OECD’s education committee
3. OECD and the country look for financing for the review
4. Preliminary visit to country by OECD Secretariat member responsible for peer reviews and the review team leader (the “Rapporteur”)
5. Country prepares background documentation
6. Team visit to country under review; generally for 2 weeks
7. Report writing; editing; feedback; request for supplementary information; comments from team members
8. Team leader(s) return to country to deliver draft report, discuss it, and receive comments
9. Report is published as a “Restricted Document”
10. Report is presented and discussed at a meeting of the Education committee. Timing: $\pm 7-8$ months after the site visit (step 6)
11. Report is published (for OECD member countries, ± 18 months later there is a report on how recommendations were implemented, or why they were not implemented)

12. Follow-up meeting (in country) with a broad base of stakeholders. Timing: ± 3 months after education committee meeting (step 10)

Promotion of dialogue and policy discussions based on informed opinion is a central objective of the peer reviews. Attainment of this objective is built into the process throughout the chain of events. However, the last step in the chain of events — the in-country follow-up meeting — is the key for this. Observing one such meeting (in Lithuania) was most instructive.

This meeting, held in the Parliament of Lithuania, was attended by 196 people, 25 of whom were not from Lithuania (OECD Secretariat, other Baltic and OECD non-member countries). The meeting resembled an education *états généraux*, in terms of both its composition and its program. It was attended by people from:

- » all aspects and sub-sectors of the education system, including: university rectors and officials; researchers; curriculum developers; ministry, district and municipal officials; education and teacher associations; vocational training institutions; and, even, the military academy;
- » elected officials, including members of parliament, mayors and deputy mayors, and the president of the Lithuanian Students' Union; and
- » economic sectors, such as representatives from the Labor Market Training Authority, the labor unions, the Lithuanian Science Council.

The program of the meeting focused on the role of parliament in the formulation of education policy and included an overview of the findings of the Peer Review, critical discussions on how the education system meets the needs of individual and society and the impact of the exercise.

Document status and readership. The Peer Reviews are public documents, available to all. The documents are easily readable and devoid of technical jargon. Readership includes policy makers, ministry officials and educators all the way down the chain to school directors and teachers.⁵⁶ This, of course, promotes ownership of the document, which appears to be high. Indeed, the Reviews are seen as a good vehicle for government to get information through the system, including difficult policy messages. The resulting peer review report is a product of all OECD constituents: the reviewed country, the peer countries, the OECD secretariat, and the OECD education committee composed of representatives of all 30 countries.

56. For example, OECD reports during the holiday season, they receive "cards from teachers, heads of orphanages, university professors (and rectors), rural teachers, researchers from Tallinn to Vladivostok via Tirana ... [about] how important [the peer review] was for their morale, their learning about/understanding reform, giving them ideas for new ways of teaching/work, showing parents what should be done, proving to their mayor or governor that they need better support and so on" (Email of Dec. 19, 2002 from Ian Whitman, OECD),

The contents of the reviews

The peer reviews are not “sector analyses”, as the World Bank and other institutions use this term. They are peer reviews in every sense of the term. They are descriptive, judgmental, impressionistic, and full of adjectives. There are no detailed cost and financing analyses, no flow models and no “studies” or pieces of original research. And, the peer reviews contain a fair number of recommendations, which are not intended to be prescriptive.⁵⁷62 Rather, they are intended to highlight and encourage action of specific issues for reform. The legitimacy of the Reviews is derived from the qualities of the team members. Clearly, the peer reviews are well informed by existing statistics and research, background information and, when available, studies prepared by the country under review. Interviews, visits to schools and other education institutions during the two-week “site visit” are the major source of information.

Most importantly, the reviews are conducted by a team of recognized professionals — the peers — whose credentials and, therefore, legitimacy are independent of the OECD. In this context, we need to remember that OECD is not a financing agency, even though staff from some financing agencies — at those agencies’ expense — participate in the teams to non-member countries. In other words, the legitimacy of the team is enhanced not only by its members’ professional credentials and reputation, but also by the fact that OECD has no financial or policy interest in the contents of the review. In addition to this, OECD does not produce broad policy statements that serve as reference for its staff and members.

In theory, the information basis for the reviews consists of (i) background studies done by nationals in the country to be reviewed; (ii) background documentation put together by the OECD Secretariat; (iii) information collected by the team members during a two-week mission to the country, plus available documentation, statistics, etc. In practice, the background information (for the Slovenia, Latvia and Lithuania reviews) was limited to existing documentation, some of which had to be translated into English, and that no new work was done prior to the site visit.

The major event leading up to the production of the peer review is a two-week “site visit” in the country. These visits meet with a broad variety of actors and stakeholders in and around the education system. Mission members interview people, visit schools and

57. Recommendations are made throughout the text of the reviews, in the context of the topic under discussion. Recommendations are also summarized in the concluding chapter that focuses on overall policy. There are 39 recommendations in the last chapter of the Lithuania review. The Estonia review does not explicitly make recommendations; rather, it identifies 18 problems and areas for improvement. The final chapter of the Latvia review contains 5 fairly detailed recommendations. Some examples of the number of recommendations in the final section of Balkan country reviews are: Albania, 71; Bulgaria, 37; Croatia 39; Kosovo, 38; Romania, 31; and Serbia, 39.

other institutions and acquire relevant documentation and statistics. For example, the Latvia review team visited, among them, about 80 educational institutions.

As is pointed out in the very first pages of the Reviews for Estonia, Latvia and Lithuania

- » “The intent of an OECD review is not to evaluate a country’s education policy but to place those policies in comparative perspective. The Baltic States reviews emphasized both themes that cut across all three countries as well as issues that were unique to each country. Particular attention was given to:
 - ♦ Identifying and respecting the unique geography, demography and economy of each state.
 - ♦ Identifying good practice in policy and process that could be shared among the three countries and with other OECD Member and non-Member states.
 - ♦ Avoiding the uniform application of inappropriate policies to diverse problems.
- » The reviews focused in particular on the perspective of the state and the public interest and the interaction between state policy and institutions (providers), students/learners, and other clients of the education system (social partners, for example).”

By and large, the structure of the peer review reports follows that of the education system. The Reviews begin with a chapter on the overall country context: history, geography, demography, economy, governmental structure and cultural factors. This is followed by a chapter on an overview of the education structure: enrollments, financing and the legal framework. Then there are chapters for each level of the system, from pre-school and primary to vocational, adult and higher education. Some reports have chapters on topics such as access and equity, curriculum, evaluation, assessment and learning outcomes, and teachers and other personnel. Recommendations are to be found in each chapter and are recapitulated in a concluding chapter that focuses on future challenges and strategic policy development.

The Review documents are relatively non-technical; their language is straightforward and accessible. In contrast to the more technical sector analysis studies produced by the World Bank and other agencies, paragraphs in the OECD Peer Review studies frequently begin with (‘X’ is the country under review):

- » “It was not clear to the OECD how X ...”
- » “The OECD urges X ...”
- » “The OECD is also concerned that ...”
- » “The OECD team heard concerns about ...”
- » “The OECD team was impressed by X’s ...”

- » “The OECD team supports ... “
- » “The OECD gained the impression that ... “
- » “The OECD endorses ... “
- » “The OECD team does not endorse ... “
- » “The OECD team recognizes that ...”
- » “The review team emphasizes that ...”
- » “The review team saw little evidence of ... “
- » “The review team found few people who were content with ...”
- » “The OECD review team generally agrees with the approach of X to ...”
- » “The review team was impressed by and wholly agrees with ...”
- » “The OECD commends X for ...”
- » “The OECD team recommends that ...”

Implications for Africa

An African Precedent: NEPAD and peer reviews

The New Partnership for Africa’s Development (NEPAD) has already launched the idea of peer reviews in a paper entitled “The African Peer Review Mechanism (APRM)”.⁵⁸ The following quotes from this statement refer to the mandate and purpose of the NEPAD peer reviews.

- » “The *mandate* of the African Peer Review Mechanism is to ensure that the policies and practices of participating states conform to the agreed political, economic and corporate governance values, codes and standards contained in the Declaration on Democracy, Political, Economic and Corporate Governance. The APRM is the mutually agreed instrument for self-monitoring by the participating member governments.”
- » “The primary *purpose* of the APRM is to foster the adoption of policies, standards and practices that lead to political stability, high economic growth, sustainable development and accelerated sub-regional and continental economic integration through sharing of experiences and reinforcement of successful and best practice, including identifying deficiencies and assessing the needs for capacity building.”

As seen from these quotes, the APRM is intended to focus on the macro economic and broad political issues related to governance. The broader, global context for this is the need, recognized by NEPAD, to attract foreign direct investment. Regardless of the region of the world, it is well known that stability, capacities and certain governance values are a necessary condition to attract such investments.

58. http://www.au2002.gov.za/docs/summit_council/aprm.htm

Most likely, this is why the Fifth Summit of the Heads of State and Government Implementation Committee (HISC) of NEPAD refers to the proposed APRM “as the lynchpin and the litmus test of NEPAD,” whose primary objective “is for African countries to learn from each other and create constituencies within the continent and abroad for its shared visions and approaches to socio-economic development and political transformation.”⁵⁹ Furthermore, “in the spirit of mutual responsibility and accountability that is embedded in NEPAD, the HISC underscored the need for mutual review of development partners in terms of their commitment to Africa.” In this context, the HISC calls for the UN Economic Commission for Africa (ECA) and OECD to “conclude work on the institutional framework for this review.” It is worth noting that at the end of that Summit, eleven countries signed the Draft Declaration of Intent on Implementation of APRM.

In this context, it appears that the timing is right to explore the feasibility and utility of peer reviews for the promotion of viable education policies in Africa. The principle of peer reviews — for macroeconomic and governance issues — has been adopted by NEPAD, which has requested OECD to work on developing an institutional framework for this. Furthermore, three OECD member countries have indicated their readiness to provide support to OECD-assisted peer reviews in Africa.

Doing education peer reviews in Africa

Now that we’ve caught a glimpse of what peer reviews are all about, and given that we are familiar with sector (or policy) analysis, we need to ask if these two useful instruments for policy formulation are complementary and, if so, how and to what end. We need to understand is what is each one’s specific function and comparative advantage with respect to the other, as well as with respect to the processes of education policy formulation and the need for improved dialogue around these processes. Can peer reviews replace sector analyses? After all, effective policy formulation is the end for which peer reviews and sector/policy analyses are the means. The remainder of this section will explore the applicability of this for the education sector.

So, let’s assume agreement (i) on the existence of an “ownership gap over the knowledge development functions (sector analysis) and the ensuing policy formulation processes, (ii) on the need for mediation in order to reduce this gap, and (iii) that peer review is a reasonable means for getting it done and, thereby, addressing the gap. We now need to explore avenues for doing education sector peer reviews in Africa.

59. Communiqué (draft) issued at the end of the Fifth Summit of the Heads of State and Government Implementation Committee (HISC) of the New Partnership for Africa’s Development, Abuja, Sunday, 03 November 2002. This summit was attended by 8 heads of state, 1 vice-president, 1 deputy prime minister, 8 ministers and the interim chairman of the African Union. Subsequent quotes in this paragraph are also taken from this Communiqué.

One of the lessons from the OECD peer reviews is that they are demand driven; the countries are motivated to have them done. The reasons for this are political, in that OECD represents an imprimatur — for reasons related to regional integration (Europe) or “belonging” (to the OECD club). Countries not only request such reviews, but they often provide some or all of the financing for them. However, it is important to remember that these reviews are not linked to financing; OECD provides no financial assistance.

A major characteristic, and lesson, of the OECD peer reviews is that they are done by teams of independent professionals organized by an agency that has no financial, political or institutional stakes in the recommendations produced by the review. Therein lies the currency of these reviews, their legitimacy. The OECD peer review process indicates that three major issues have to be addressed in order to move forward:

- (a) The organizational context in which peer reviews would be carried out; by and large, this means developing capacity for peer reviews in the African institutional environment;
- (b) The demand for education sector peer reviews in Africa; and
- (c) Scenarios for doing it.

Developing the capacity. What could the organizational context be for the African context? First of all, of course, it is useful to think of criteria. Based on the OECD peer review model, what follows are some possible criteria for decisions concerning organizations that could carry out the peer reviews (these criteria may be modified; others could be added):

- » Not a financing agency.
- » Organization with African experience; perhaps even one whose mission is to promote regional, or sub-regional integration.
- » Organization with experience, expertise and staff in organizing missions and in the field of education.
- » Access to networks of education professionals and agencies.
- » Reputation is a factor for recruiting team members, generating resources, and inspiring confidence in the substance of the review which will become a public. In other words, the perceived legitimacy of the organizational context in which peer review is carried out is crucial to the success of the exercise.

What follows is a list of organizations that respond, more or less, to the criteria indicated above. Several organizations are indicated (others could be considered), along with the advantages and disadvantages of each. Faithful to the spirit of exploration, this table is incomplete; the blanks need to be filled in. A wide-ranging discussion of each is necessary.

Organization	Advantages	Disadvantages
ADEA (WGESA?)	<ul style="list-style-type: none"> ♦ WG has experience analyzing sector work throughout the continent ♦ The force of the network (access to individuals and agencies) ♦ Members include African education ministers and their financing partners 	
African Union NEPAD	Continent-wide Peer review mechanisms already proposed for macroeconomic and governance issues	Little experience No institutional capacities
OCDE	Extensive experience with peer reviews	Not an African institution; little African experience
SACMEQ PASEC	<ul style="list-style-type: none"> ♦ Multi-country groups organized around specific tasks ♦ Active ministerial participation 	Focused on specific issues of assessment, not on broader policy issues
SADC ECOWAS/ CDEAO	<ul style="list-style-type: none"> ♦ Existing structures, with staff for education sector ♦ Major institutions working for regional integration 	Limited to member countries
UN ECA	Requested by NEPAD to work on institutional framework for peer reviews	
UNESCO	Historically, the UN specialized agency for education	
UNICEF	<ul style="list-style-type: none"> ♦ Large education staff ♦ Presence throughout Africa 	A funding agency

Team composition also needs to be addressed. The team should be composed of professionals who command the respect of the major stakeholders. Team leadership is especially important since the reputation and legitimacy of the team is likely to be associated with that of its leader. In countries where external financing plays a major role, it would be advisable to have team members either from those agencies (and at their expense) or whose reputation they respect. Taken as a whole, criteria for the composition of the peer review team should include the following:

- » Professional stature and reputation in the field of education in general and in education in Africa in particular.
- » Experience at the highest levels (e.g., ministerial, permanent secretary) in government.
- » Ability to operate independently of agencies and governments.
- » Coverage of the education sub-sectors, including issues of pedagogy, financing and management.
- » Ability to understand the technical/analytical issues, all the while comprehending issues and constraints related to feasibility (political, social, cultural, organizational, implementation).

- » Ability to work well and smoothly as a team.
- » Good communication skills vis-à-vis all stakeholders, national and external.
- » In addition, it will be necessary to address the question as to whether teams should be exclusively African or included Northern professionals.

Financing the reviews. In order to ensure ownership and commitment, the ideal situation would be for the countries to finance the reviews. Various sources of in-country financing could be explored, including using resources from externally financed projects. The major cost element would be the fees and travel costs of the team members. Very roughly, costs could vary from \$50,000 (e.g., if all team members are from neighboring countries) to \$200,000 (if several team members come from the North).

Developing the demand is more of a political exercise. Countries would need to perceive an incentive for the peer review. Two incentive factors come to mind: (i) a drive toward regional integration, and (ii) the need to attract financing and agreement with financial partners. It will be necessary to address this issue directly. The first step in doing this would be to identify relevant stakeholders. They would be, first and foremost, countries where peer reviews would take place. Secondly, they would be other relevant stakeholders such as external financing partners. Then, a consultative exercise with selected actors — both on the demand side (countries) and on the supply side (organizations) — should be organized. One possible venue for this could be the ADEA Steering Committee.

Scenarios. A model for doing peer reviews exists — it is the OECD model, described in paragraphs 0 through 40. It should be noted, however, that the organizational capacities of OECD include dedicated staff for this work. Although this may be lacking in most of the organizations indicated in paragraph 50, lack of such experience and staff is not debilitating. Once the organizational issues are worked out, the detailed scenario should be negotiated between the country to be reviewed and the organization (and team) that will be doing it. This would help promote ownership of the process, especially when it comes to the very first exercises. This said, the chain of events outlined in paragraph 30 could provide a useful point of reference

Next step

It will be necessary to gain critical feedback on the explorations contained in this paper. The April 2003 ADEA Steering Committee and Bureau of Ministers meetings would be prime venue for this. The part of the agenda on the applicability of peer reviews for Africa could include:

- (a) A brief presentation and overview of the OECD peer review approach: (i) how and why they are done; (ii) their role within OECD, as an organization; and (iii) the processes and content of OECD peer reviews.
- (b) Discussion of the adequacy and appropriateness of the analysis contained above, with focus of the complementarities between sector analysis and peer review.
- (c) How it could be done in Africa.
- (d) Then, discussion should focus on strategy: the advisability and feasibility of getting the ball rolling. This would include (i) who, what organization, should do it; (ii) agreeing on criteria to establish a roster of team members; (iii) assessing and developing the demand for such exercises; and (iv) an appropriate venue for a consultative process
- (e) Finally, the next steps should be thought through — who and what organization(s) and ministries to contact.

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People Interviewed

OCDE

Staff

- » Mr. Barry McGaw, Director, Directorate for Education
- » Mr. Bernard Hugonnier, Deputy Director, Directorate for Education
- » Mr. Abrar Hasan, Head, Education and Training Policy Division, Directorate for Education
- » Mr. Ian Whitman, Principal Administrator, Directorate for Education
- » Mr. Gregory Wurzburg, Principal Administrator, Directorate for Education

Consultants

- » Ms. Johanna Crighton, Consultant, UK
- » Ms. Indra Freiberga, Consultant, Latvia
- » Mr. Aims McGuinness, Senior Associate, National Center for Higher Education Management Systems, USA

Others

- » Ms. Yael Duthilleul, World Bank
- » Mr. Gaby Hostens, Director General for Secondary Education, Ministry of the Flemish Community, Belgium, and member of the OECD Education Committee
- » Ms. Viljana Lukas, State Under Secretary, Head of International Relations, Ministry of Education, Slovenia
- » Ms. Epp Rebane, Education Policy Advisor, Ministry of Education, Estonia
- » Mr. Jim Socknat, retired World Bank sector manager for education
- » Ms. Dita Traidis, Director, Agency for Vocational Education and Development Programs, Latvia
- » Ms. Vaiva Vibraite, former Deputy Minister of Education, Lithuania

Annex 4

PEER REVIEWS

by **Djibril Debourou**

ADEA Working Group for Education Sector Analysis

Porto-Novu, October 6, 2003

Introduction

The Working Group on Education Sector Analysis (WGESA) has proposed organizing peer reviews to formulate educational policies in ADEA African member countries. Peer reviews and sector analyses are complementary activities in educational policy development processes. Peer reviews are a standard and well-tested practice in OECD member countries. The philosophy and outcomes of this approach have drawn the attention of the WGESA, which wishes to test it in ADEA African member countries. The interest that NEPAD has shown in peer reviews has unexpectedly broadened the perspectives of the Working Group project.

General principles of peer review

Peer review institutes a particular type of co-operation between states: the states undertake a systematic examination and evaluation of the performances of other states for the purpose of helping those who undertake the review process to improve the development of their policy and to adopt better practices.

Peer review has an even more effective impact as the outcomes are broadly disseminated to the those who shape public opinion in the states concerned.

Peer review many concern all the state's sectors of life: the economy, the environment, public management, business, financial questions, science and technology, industry, etc. Education is only one link in the chain.

The success of a peer review presupposes four fundamental rules:

- » policy dialogue: exchanges of views between countries on policy decisions and their applications;
- » transparency: the countries examined provide all useful explanations requested by the peers;
- » strengthening of capacities: this intervenes, by force of circumstances, between the peers and the human resources of the countries examined;
- » respect for agreements: each party undertakes to respect the share of work incumbent on it throughout the process.

Peer review steps

A country or a group of countries asks the Working Group to examine their education system by setting up the peer review process. The actors are designated, which includes the country examined, the examining countries (the peers), the WGESA co-ordination, which provides constant assistance through the production of papers and analysis, through the organization of meetings and missions that can facilitate and strengthen the process.

Apart from any national particularities that could modify the peer review procedure, there is a common structure:

- (i) the country examined, in a preparatory phase, analyzes the context;
- (ii) field visits and information exchanges with the peers give rise to a recommendation paper;
- (iii) next follows the evaluation phase during which the review draft report is discussed during the WGESA Steering Committee meeting;
- (iv) The final report must be the subject of a press release that highlights the principal problems.

Such a process requires:

- » a community of values and a convergence of views on the evaluation criteria of the performances among the countries that take part in the review;
- » a commitment on the part of the participating countries;
- » mutual trust so that the peer review is a process of co-operation and does not turn into a process of confrontation;
- » credibility, which breaks down into objectivity, transparency and the quality of the work.

To sum up, the exercise is structured to favour the appropriation of the review by the country examined.

Sector review of education as an intervention area of peers

The WGEDA can initiate three types of sector reviews of education by peers.

- (a) reviews of national educational policies that cover all the sub-sectors, taking an interest in the general context of the policies and the performance of the sub-sector;
- (b) sub-sector reviews that focus on particular sub-sectors such as the enrolment of girls in school, higher education; etc.;
- (c) thematic reviews of national educational policies that deal with specific themes common to a group of countries.

Organization, financing and staff

The WGESA co-ordination organizes the reviews. When the peer review concerns one country, the WGESA co-ordination helps this country to finance it. It makes a contribution by paying for travel and the consultants. The countries, supported by the ADEA, could arouse the interest of financial organizations (bilateral and multilateral) in the exercise. The WGESA Steering Committee forms professional peer review teams with a respect for geographic and institutional balances. Insofar as possible, the team will include a member who has been a minister, parliamentarian or high-ranking civil servant. The size of the teams will be determined by the WGESA co-ordination depending on the nature of the task to be accomplished.

The approach is organized as follows:

- (i) the Executive Secretariat of the ADEA receives a country's request;
- (ii) approval by the Executive Secretariat and the WGESA co-ordination;
- (iii) the ADEA and the country look for financing;
- (iv) preliminary visit to the country by a member of the WGESA co-ordination and a member of the Steering Committee. The latter will be the rapporteur;
- (v) the country prepares the source paper;
- (vi) visit to the country by the review team (two weeks);
- (vii) writing of the report; publication, feedback; possible request for additional information;

- (viii) the co-ordinator and his rapporteur (cf. point iv) go back to the country to present the report, encourage discussion and gather comments;
- (ix) the report is the subject of a limited discussion;
- (x) implementation and follow-up meeting;
- (xi) implementation evaluation report, about 18 months later.

Nature and content of peer reviews

In the paper entitled “The Mechanism of Peer Review,” the New Partnership for the Development of Africa (NEPAD) initiated the idea of peer review. Its spirit is identical to that of OECD peer reviews. But the NEPAD paper stresses macro-economic questions and the major problems concerning governance, which determine the contexts suitable for attracting direct foreign investments.

Peer reviews are not traditional “sector analyses.” The country requesting the review may demand a sector analysis in due form from the peers. In this case, it must be carried out by professional teams whose credibility, and accordingly whose legitimacy, does not depend on the ADEA.

The NEPAD review initiative

In the paper entitled “The Mechanism of Peer Review,” the New Partnership for the Development of Africa (NEPAD) initiated the idea of peer review. Its spirit is identical to that of OECD peer reviews. But the NEPAD paper stresses macro-economic questions and the major problems concerning governance, which determine the contexts suitable for attracting direct foreign investments.

Returning to the immediate concerns of the WGESA, we will mention that the two pillars of an effective formulation of educational policies are:

- (i) a broad appropriation of policies that
- (ii) are developed based on the solid diagnosis of context, available resources (political, human and financial), strengths and weaknesses, constraints of the system as well as its political environment.

In the EFA follow-up report, recently published by UNESCO, may be read “the degree of real commitment by governments in the adoption of national reforms constitutes the most critical element in national EFA plans...” It is clear that solid technical work is not enough to guarantee the success of the large-scale policies required to achieve Educa-

tion For All by 2015. This demonstrates the inadequacy of the appropriation of technical work (sector analysis).

Appropriation must be understood as:

- (i) the total comprehension of the methods and conclusions of sector work and
- (ii) the internalization and political acceptance of the policy conclusions that emerge from it.

It is possible that peer pressure is more effective in favouring the appropriation of analysis work (sector analysis, policy analysis) than pressure directly associated with the financing of organizations. To support this observations, let us refer to a World Bank paper that admits that the countries benefiting from loans or projects showed a not very high level of appropriation of the development project whose design and development were often carried out by World Bank staff, more concerned with the logic of their institution than by that of the country in question (the borrower). Consequently, greater attention is now paid to projects and policies steered by the countries and exclusively belonging to them. The same observations could be made concerning the sector analyses carried out by many agencies.

Conclusion

If we wish to be brief, we may say that peer reviews are relatively strong on appropriation and weak on analysis, while sector analyses are relatively strong on analysis and (a well-known fact) weak on appropriation. However, for expertise and analysis to have an effective influence on policy decision-making, they must be understood and appropriated by political officials and stakeholders. This is where sector analysis (eminently technical) and peer review (more political) may complement each other.

Annex 5

Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa

By I. Bah-Lalya

A WGESA Contribution to the ADEA 2004 Bureau of Ministers Meeting

Geneva, April 2004

Background

A first concept paper on Peer Review was prepared by the WGESA Steering Committee and was presented to the ADEA Bureau of Ministers in Windhoek and to the ADEA Forum of Ministers in Mauritius during the December 2003 Biennial. WGESA and OECD convened in January 2004 to examine ways and means to implement the recommendations of the two meetings. They suggested that WGESA be involved in one or two OECD activities, gather information and prepare a short concept paper on ways to implement Peer Review initiatives in Africa. WGESA developed a draft and presented it for discussion and amendment to its Steering Committee Meeting held in Maputo in March 2004. The result is presented below.

Fundamentals of Peer Review⁶⁰

Peer Reviews provides an appropriate mechanism for developing shared and broader visions for the development of education in Africa defined as a comprehensive examination of a

60. Most of the findings above are explored in detail in two documents produced by WGESA (consultants: Richard Sack and Djibril Debourou) and distributed during the Mauritius Biennial to clarify the benefit of conducting Peer Review in Africa (See annexes).

system's performance by other peer systems. Peer review broadens visions, helps the reviewed system improve its policies and practices and insures compliance with agreed-upon standards. Peer countries also benefit considerably from the process.

Peer Review smooths cooperation among African countries and with professionals outside the continent. It eases cooperation among African educational systems, as key reviewers are educators and policy-makers from African countries. It strengthens partnerships between South and North, as reviewers from the North are also involved in the reviewing teams. It could provide a suitable mechanism for initiating and sustaining reform initiatives in the context of Africa as it relies on soft persuasion techniques.

Peer Review facilitates appropriation. It is not a one-fit-all exercise imposed by experts from outside the system but a negotiated process relying rather on a highly interactive strategy between the reviewers and the system reviewed.

Peer review facilitates program resourcing. The review process leads to developing constituencies around the reviewed program within Africa and among African external financing/technical partners.

Main thrust of activities during the conducting of an exploratory Peer Review undertaking in Africa

Working parameters

The exploratory Peer Review could be conducted in two to three selected African countries to review the adequacy of education policies and the nature and quality of their implementation. It could examine in particular the extent to which:

- » The educational policies were appropriately formulated and implemented;
- » The processes of designing and implementing could be improved;
- » The mobilization and the use of resources and capacities could be made more effective.

Key steps

These are variations on the ways Peer Review is designed, according to the objectives sought and the partners in place. Despite this however, Peer Review is structured around four or five major phases:

- (i) A preparatory stage starting with the reviewed country's intent to undergo a Peer Review exercise;

- (ii) A self-evaluation step by the reviewed country, which is critical for the remaining work;
- (iii) A review undertaken by an international team to continue and complete the self-evaluation work initiated it;
- (iv) A national consultation to compare and combine findings from the two sources (the country self-evaluation, and the international review). During this stage, a synergy is developed between the two teams and their products, the reports validated, their results shared with broader education stakeholders and the foundation for implementation strategies set.

Whenever needed, an evaluation report is eventually developed, at a later date, to assess the impact of the Peer Review exercise in the reviewed country and abroad.

It takes about a year to complete a Peer Review. Under current conditions, the steps to envisage for an exploratory undertaking in Africa are as follows:

1. Decision by the country to undertake the Peer Review. This is done in the form of a letter addressed to ADEA by the Ministry of Education of the country. The ADEA Bureau of Ministers would provide an appropriate venue for identifying the countries interested in the Peer Review;
2. ADEA examines the request and formally designates WGESA as its implementing structure. The ADEA Bureau of Ministers and ADEA Secretariat could carry this step out;
3. Roles and functions are discussed, approved and shared;
4. Preliminary visit to the country by WGESA is organized to discuss the details of the review and prepare the source paper;
5. A set of recommendations and guidelines is developed to facilitate the assessment of the system's performance. Specific indicators, benchmarks and other numerical targets could be developed, against which the system's performances could be measured. WGESA, with the technical backup of OECD and IIEP, prepare these guidelines;
6. The Memorandum is completed under the supervision of a subcommittee of the ADEA Steering Committee from data gathered in 2, 3, 4 and 5. Such a subcommittee would comprise the president, two agencies, two ministers and the executive secretary. The role and functions of major stakeholders including the country are spelled out in a MOU, which is discussed, approved and signed. ADEA and the country conduct this step;

7. Funds are raised by the country and the ADEA Secretariat. The estimated budget is given in point 5 below;
8. The country conducts self-evaluation within a framework developed in step 5 above, with the technical assistance of WGESA if needed;
9. The review team, in collaboration with WGESA, conducts the country consultation during which key MOE leaders are met, discussions are held with competent authorities, on site field visits conducted, etc. At the end of this process a first draft is developed, which would comprise (i) the country self-evaluation, and a short descriptive of the country challenges and opportunities; (ii) an analytical section and (iii) a summary section that puts together, in a concise manner, the key findings and the recommendations;
10. The draft is shared with limited country leaders and key members of the review team. Adjustments are made to account for the newest changes and other considerations such as political/social matters, etc.;
11. The final report is prepared after discussions are held in plenary sessions with representatives of the parties included in the review and other stakeholders, such as civil society;
12. The report is released with a boost from the media and other dissemination means (workshops and so on).

An implementation evaluation report could be envisaged about 18 months later, to account for the implementation of the recommendations.

Coordination: Peer Review, a highly participatory exercise

Roles of key stakeholders

Peer Review is highly consensual and interactive. Therefore, it is important that the role of each actor be discussed, clearly delineated and approved by all. The following is a basis for determining each stakeholder's role in the present context. This could be modified according to the discussions to take place among the partners:

1. *The country or educational system*: triggers the review process through an application request, makes documents and data available, responds to questions and requests, completes self-evaluation during the preparatory phase, facilitates contacts and on-site visits of the Peer Review team and contributes to financing of the review;
2. *ADEA*: sets the framework, provides the political backup, coordinates the overall undertaking, sets basic standards, contributes to fund-raising and quality control;

3. *WGESA, within IIEP, as the implementing body:* supports the review process by producing documents and analyses, identifying the Peer Review team in collaboration with other stakeholders, organizing meetings and missions, stimulating discussions, upholding quality standards in collaboration with specialized institutions and maintaining continuity as the keeper of the historical memory of the process;
4. *African experts (peers) compose the core of the international team.* This peer team examines the documents gathered and/or produced by the reviewed country team, participates in discussions with the reviewed country and ADEA, participates in field missions as needed and contributes to preparing the final documents;
5. *International advisors* provide back-up for the international team and as such, examine the documents gathered and/or produced by the reviewed country team, participate in discussions with the reviewed country and ADEA, participate in field missions as needed, and contribute to preparing the final documents. The team coordinator will play a lead speaker role;
6. *OECD:* acts as an advisory body to provide guidelines, contributes to the quality control of the reports, proposes and participates in the selection of international experts, assists in fund-raising and plays a role in analyzing the final product.

The national team, a key player in the Peer Review implementation process

With the Peer Review exercise, and as explained above, countries are expected to trigger the review process through an application request, make documents and data available, respond to questions and requests, complete self-evaluation during the preparatory phase, facilitate contacts and on-site visits of the Peer Review team and contribute to the financing of the review. A national team is set to supervise the implementation of the tasks identified above.

The countries should, under the authority of the Ministry of Education, nominate this team, which ideally comprises: representatives from civil society including NGOs, teachers unions, parents associations, the business sector involved in education and the private sector. The size of the national team is negotiated.

The international review team, a key partner in capacity-building and quality control

The Peer Review external team is composed of experts from African countries, supported by international experts. Its duty is to examine the documents gathered and/or produced by the country team, It participates in discussions with the reviewed country, plays a lead speaker role in the debate, and participates in field missions as needed.

The international team is proposed by WGESA, with the technical advice of OECD. The team is nominated by the ADEA/SC Subcommittee and approved by the reviewed country.

Selecting the pilot countries

The criteria

Criteria include:

1. Willingness to undertake a Peer Review exercise and contribute to it;
2. Major sector programs in process in the country;
3. Existence of a network of in-country partners that are supportive of the process and willing to contribute to funding it, with seed grant provided by ADEA;
4. Fairly good statistical data base or monitoring system;
5. A pattern of successfully conducting collaborative undertakings with ADEA and or WGESA;
6. Availability of national experts;
7. ESA Review already conducted could be a plus;
8. Geographic and linguistic distribution.

Illustration of countries likely to meet criteria

Under current conditions in Africa, several countries meet these criteria. For example:

Burkina Faso: PDDEB is being implemented (2001-2010), good researchers, build on WGESA work/relations in reviewing 1994-1999 sector analyses. As for geographic distribution, Burkina Faso represents an interesting case of a Sahelian West African country that has conducted ESA reviews prior to possible Peer Review exercise.

Kenya: has a national sector program in implementation. A history of excellent relationship with ADEA and IIEP. MOE is a member of Bureau of Ministers. National pool of experts available.

Mauritius: has a national sector program under implementation. A history of excellent relationship with ADEA and IIEP. Has successfully organized and carried out the Biennial 2003. Is in the process of launching a new wave of reform initiatives to improve quality education. As for geographic distribution, Mauritius proposes an interesting example of an African island country that has successfully conducted a major educational reform.

Mozambique: Strong advocates among development partners (SIDA, Irish Aid, DAN-IDA, Holland, etc.); can also draw on WGESA work/relations in reviewing 1990-1998 sector analyses, 1999 interviews for partnerships study, 2004 WGESA Steering Committee Seminar findings, etc. Could propose a good representation of educational issues encountered in Southern and Eastern Africa.

Niger: Sector plan (PDDE) in initial stages of implementation (2003-2013). Interest and motivation from Ministry. Existence of an inter-sector ESA unit willing to locally supervise the exercise. Existence of a broad network of in-country and international partners that could support the process. Fairly good statistical data base or monitoring system. A pattern of good cooperation with ADEA and WGESA. As for geographic distribution, Niger could represent Sahelian West African countries

Funding and budget estimates

Funds are raised by country and ADEA. A Peer Review exercise could take between \$50,000 and \$200,000 to be completed depending on the composition of the teams and the level of contribution from the reviewed country and the size of the country and the themes to be reviewed (for example: Non-formal Education, the implementation of a specific reform, etc.). On average, it is fair to expect between \$85,000 and \$125,000 to conduct a full Peer Review in sub-Saharan African countries.

To illustrate, items for a 100,000 USD budget could be as follows:

Preparation of the Review by the targeted country	10,000 USD
This includes	
» Identifying and collecting the basic reference documents	
» Preparing the conditions for the self evaluation process	
» Managing and coordinating the self evaluation process	
Travel and DSA	40,000 USD
This includes:	
» In country travels	
» International travels	
Coordination	20,000 USD
This includes:	
» The Peer Review Team coordinator	
» Elaboration of the framework for the study	
» Other costs	

Peer reviewer Honoraries	20.000 USD
This includes	
» Leader of the international team	
» Members of the international team	
Dissemination of the report findings	10.000 USD
This includes	
» Drafting of the final report	
» Media coverage	
» Conferences, workshops	
Total	100,000 USD

Tentative calendar

The entire process would take at least a full year (four to six months to prepare, six to eight months to execute) and the evaluation 18 months later. As to a time frame, the steps identified above could be as follows:

April- May Y1	The country expresses desire to undertake the Peer Review through a letter addressed to ADEA by the Ministry of Education. ADEA Bureau of Ministers examines the request and formally designates WGESA as the implementing structure, and sets out the role of each stakeholder. A subcommittee of ADEA/SC is formed.
May-June Y1	Country(ies) is (are) selected and fund-raising starts.
July-August Y1	Preliminary visits to the countries are organized by the WGESA Steering Committee to discuss the details of the work.
August-Sept. Y1	Recommendations and guidelines are developed to facilitate the Review, a proposal is completed and the MOU developed.
End Sept. Y1	MOU are signed. WGESA, with the support of OECD, proposes the names of experts to compose the team. The list is submitted to the country for approval.
Oct- Nov Y1	Funds are raised by country with support of ADEA and OECD.
Dec Y1-Jan Y2	Country conducts self-evaluation and prepares documentation and self-report by national review teams.
Jan -March Y2	The international Peer Review team conducts the country consultation.
March-April Y2	First draft is released and shared with limited audience.
End of May Y2	Final report is released, validated with national audiences and advocated.
12-18 months later	An implementation evaluation report is eventually developed.

The key points and issues identified above are discussed in the two documents produced by WGESA and referred to earlier.

Mauritius is one of the top African countries in term of educational achievement. Among other realizations, this country has attained universal primary education and gender equity. Education is compulsory up to the age of 16 and effectively managed.

Despite these commendable results, the country still struggles with a high rate of failure of children from poor families as well as unequal distribution of opportunities. It is also struggling with a difficult choice regarding the languages of teaching and learning. Considerable differences are therefore observed in achievement scores between students from different milieus.

An educational reform was engaged between 2000 and 2005 to address these issues. At the end of the process, national and international peers were assembled by ADEA and the concerned country to conduct a review aiming at measuring the extent to which the policies were appropriate and their implementation conducive to addressing the identified challenges. The areas of Access and Relevance were particularly scrutinized. This exercise led to useful recommendations that are presented in the present report.

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