



Barbados

Education for All 2015 National Review

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National Education For All 2015 Review Barbados Report



- 1 Early Childhood Care and Education
- 2 Universal Primary Education
- 3 Learning Needs of Youth and Adults
- 4 Improving Adult Literacy
- 5 Gender Parity & Equity in Education
- 6 Quality of Education





National Education For All 2015 Review Barbados Report

July, 2014

Ministry of Education, Science, Technology and Innovation

Planning, Research and International Relations Unit

In collaboration with the

National Education For All 2015 Review

Steering Committee



Co-ordinated by the Planning, Research and International Relations Unit

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ABBREVIATIONS

ADE	-	Associate Degree in Education
AIR	-	Apparent Intake Rate
ANER	-	Adjusted Net Enrolment Rate
ATFE	-	Advisory Task Force on Education
BAC	-	Barbados Accreditation Council
BCC	-	Barbados Community College
BIMAP	-	Barbados Institute for Management and Productivity
BSAB	-	Basic Skills Assessment Battery
BSSEE	-	Barbados Secondary Schools Entrance Examination
BVTB	-	Barbados Vocational Training Board
CAPE	-	Caribbean Advanced Proficiency Examination
CARICOM	-	Caribbean Community
CCSLC	-	Caribbean Certificate of Secondary Level Competence
COHSOD	-	Council for Human and Social Development
CRT	-	The Criterion Referenced Test
CSEC	-	Caribbean Secondary Education Certificate
CSME	-	Caribbean Single Market and Economy
CSOs	-	Civil Society Organisations
CVOs	-	Caribbean Vocational Qualifications
CXC	-	Caribbean Examinations Council
ECCE	-	Early Childhood Care and Education
ECE	-	Early Childhood Education
EFA	-	Education for All
ETR	-	Effective Transition Rate
ETTC	-	Erdiston Teachers' Training College
GDP	-	Gross Domestic Product
GER	-	Gross Enrolment Ratio
GNP	-	Gross National Product
GPI	-	Gender Parity Index
ICT	-	Information and Communication Technology
ISCED 11	-	International Standard Classification of Education 2011
IT	-	Information Technology
LAMP	-	Literacy Assessment and Monitoring Programme
MDGs	-	Millennium Development Goals
METI	-	Ministry of Education, Science, Technology and Innovation
MICS	-	Multiple Indicator Cluster Survey
NACE	-	National Advisory Commission on Education
NER	-	Net Enrolment Ratio
NGO	-	Non-Governmental Organisations
NIR	-	Net Intake Rate
OECD	-	Organisation of Economic Co-operation and Development
OECS	-	Organisation of Eastern Caribbean States



PIRLS	-	Progress in International Reading Literacy Study
PTR	-	Pupil/Teacher Ratio
SIDS	-	Small Island Developing State
SJPP	-	Samuel Jackman Prescod Polytechnic
SPBMP	-	Schools' Positive Behaviour Management Programme
TVET	-	Technical/Vocational Education and Skills Training
UIS	-	UNESCO Institute for Statistics
UNDP	-	United Nations Development Programme
UNESCO	-	United Nations Educational Scientific and Cultural Organisations
UNICEF	-	United Nations Children's Fund
UNPD	-	United Nations Population Division
UWI	-	University of the West Indies, Cave Hill Campus



NATIONAL EDUCATION FOR ALL 2015 REVIEW **BARBADOS REPORT**

BACKGROUND

The Dakar Framework for Action 2000 detailed the Education For All (EFA) goals and strategies which many countries around the world agreed to pursue by 2015. An important element of that pledge was the commitment to undertake systematic monitoring of the progress made towards the achievement of the EFA goals.

The invitation issued by United Nations Educational Scientific and Cultural Organisations (UNESCO) to Member States to conduct a National EFA 2015 Review and to prepare a country report summarizing the outcomes, presented the opportunity for the Ministry of Education, Science, Technology and Innovation (METI) Barbados to undertake a comprehensive review of national achievements in education that are directly related to the six EFA goals.

The six EFA Goals are:

Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Goal 2: Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.

Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes.

Goal 4: Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Goal 5: Eliminating gender disparities in primary and secondary education by 2015, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Goal 6: Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.



PURPOSE AND METHODOLOGY

The purpose of the National EFA 2015 Review is to critically evaluate Barbados' progress made towards the achievement of the EFA goals since 2000 and to report on the findings. It will also highlight any gaps and challenges identified which may need to be addressed in the post 2015 period.

A simple descriptive approach was used to gather, collate and analyze data about the six EFA goals. A systematic and comprehensive review of information, documents and administrative data was undertaken as a first step. A variety of internationally-agreed indicators were used to track national performance.

Quantitative data analyses were conducted using administrative education statistics, population censuses, the UNESCO Institute for Statistics (UIS) database, a Multiple Indicator Cluster Survey (MICS) Report (2012) and primary and secondary data sources. The quantitative data were disaggregated by sex to identify differences, disparities and gaps.

Qualitative analyses based on policy documents and findings from in-country research papers and reports were also used. A series of tables and charts have been used to display the findings.

A participatory approach was used in the preparation of the report. A National EFA 2015 Steering Committee was established with members being drawn from among several key stakeholders. The purpose of the committee was to oversee the preparation of the National Report, undertake a review of national EFA activities and engage in dialogue on the outcomes of initiatives to determine the level of success, gaps and remaining challenges. Five Thematic papers were prepared by teams led by members of the Steering Committee.

A National Stakeholders Forum was held to provide an opportunity for Non-Governmental Organisations (NGOs), Development Partners, Civil Society Organisations (CSOs), Government Departments and Ministries to contribute towards the analysis of national EFA progress and the compilation of the report.

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SECTION 1: INTRODUCTION

1.1 INTRODUCTION

This report summarizes Barbados' progress towards the achievement of the UNESCO Education For All Goals. The report presents the country's experiences in implementing various strategies and initiatives aimed at achieving the EFA goals, lessons learnt, emerging issues and challenges and projected initiatives to be pursued in the post-2015 period to address the emerging issues and challenges.

Education has traditionally been the engine of economic and social development for Barbados as seen in the significant investment in human capital by successive governments over the decades. Universal access to primary and secondary education was achieved since the 1980s. Since 1990, the Government of Barbados has demonstrated a strong commitment towards achieving the internationally agreed goals for education through its consistently high allocation of finance to education. On average, 16% of government expenditure and 6% of Gross Domestic Product (GDP) have been spent on education to sustain the gains achieved over the last three decades.

1.2 BARBADOS COUNTRY PROFILE

1.2.1 Geographic Location

Barbados is the most easterly island in the Caribbean chain of islands, located at latitude 13 degrees north and longitude 59 degrees west. This mainly coral limestone island is 34 kilometres (21 miles) long and 23 kilometres (14 miles) wide and occupies a total land area of 416 square kilometres (166 sq. miles). Barbados is relatively flat, rising from the west coast in a series of terraces to a ridge in the centre. The highest point on the island rises to 340 meters (1 100 ft) above sea level. The capital of Barbados is Bridgetown which is the main commercial centre. It was founded in 1628 and has a population of approximately 80 000. Bridgetown received a UNESCO designation as a World Heritage site in 2011. For administrative purposes the island is divided into 11 parishes.

Barbados enjoys a stable tropical climate with temperatures ranging between 20 and 30 degrees centigrade. Annual rainfall averages 1,254mm at sea level to 1,650mm at the highest point.

1.2.2 Demographics

Barbados is one of the most densely populated countries in the world with a population density averaging 622 per square kilometre. There is a residential population of 284 644 with a relative balance of 142 631 females and 142 013 males



(UNPD). The under 18 population is 69 039, comprising 33 561 girls and 35 478 boys. Barbados has been experiencing a low birth rate of 12.23 per thousand and a very low population growth rate of 0.35% in 2013. The infant mortality rate stood at 11.63 per thousand the end of 2012. The average life expectancy is 76.4 years.

There are six major ethnic groups in Barbados - Black, White, Chinese, East Indian, Arab and Mixed. In the 2000 Census, approximately 92.9 percent of the population was Black and the remaining 7.1 percent comprised persons of White, East Indian, Chinese, Arab and Mixed ancestry.

1.2.3 Political and Governance System

Barbados was founded by a British expedition in 1627. The island remained a British colony until it gained Independence on November 30, 1966. Since then, Barbados has been a member of the Commonwealth. The country was also admitted to the United Nations in December 1966, just a month into its first year as an independent nation.

Barbados has a monarchical system of governance with the Queen being the Head of State and is represented on the island by a Governor General. The Prime Minister is the Executive Head of Government who is elected through a multi-party electoral system that is based on the British Westminster model. Barbados has a long tradition of parliamentary practice dating back to 1639 when the first Parliament was established. There is a bi-cameral legislature with elected members sitting in the House of Assembly and appointed members sitting in the Senate.

1.2.4 Economy

Barbados is a Small Island Developing State (SIDS) with a fragile natural resource base and an open economy. The main foreign exchange earners are tourism, international business, financial services and banking, manufacturing, the sugar industry and agriculture.

Barbadians generally enjoy a high quality of life. It has been ranked as a high middle income country. In 2013 the country was ranked 31 by the United Nations Development Programme (UNDP). Barbados' per capita income stood at \$25 000 in 2012.

Over the last decade, Barbados sustained real GDP growth averaging 2.6 percent; a low fiscal deficit of 2.5 percent; a comfortably high Net International Reserves (NIR) level, moderate price stability; and unemployment levels in the single digits. However, this small open economy remains vulnerable to a number of external shocks, as evidenced by the current recession which started in 2007.



1.2.5 Education

Education has been one of the key pillars of Barbados' development. Successive Governments have consistently invested about 6 percent of GDP in education from pre-primary to tertiary level. Education is generally tuition-free at the point of delivery and is compulsory for persons between ages 5 and 16 years old. Education is accessible to all, regardless of age, sex, wealth, ethnic or racial background.

The education system in Barbados has four main levels - Pre-Primary/ Early Childhood, Primary, Secondary and Post-Secondary/ Tertiary. The pre-primary level caters to students between the ages of 3 and 5 years, while the primary level includes students in the 5 to 11 age group. The secondary level generally caters to students in the 11 to 16 age group.

Education is predominantly provided in public institutions. At the pre-primary, primary and secondary levels there are privately operated schools. Specifically, there are presently 10 public pre-primary schools, 71 public primary schools, 20 private primary schools, 22 public secondary schools and 11 government-assisted private secondary schools. The privately owned schools account for approximately 9% of the primary and secondary school population.

At the post-secondary/tertiary level, Government also dominates as the primary provider of education. There are three government-owned institutions, namely, the Barbados Community College, the Erdiston Teachers' Training College and the Samuel Jackman Prescod Polytechnic. While the University of the West Indies - Cave Hill Campus is a regional institution, it receives a substantial amount of finance from the Government of Barbados through the payment of economic costs for Barbadian students.

There are also a number of private institutions offering courses at the post-secondary/tertiary level, ranging from small institutions offering a variety of technical and vocational courses to more established institutions such as the Barbados Institute for Management and Productivity (BIMAP) and the Barbados Workers' Union Labour College.

Although the delivery of education in Barbados mainly takes place within the formal system, there is also some non-formal education provision. This generally takes the form of Adult and Continuing Education in areas related to literacy, life skills and vocational skills. Traditionally, non-governmental organisations (NGOs) have been the major providers of non-formal education, which has included community outreach programmes and parent education programmes. In addition, private post-secondary institutions provide opportunities for continuing education. However, the Government also contributes to this sub-sector through its Adult and Continuing Education Programme, delivered at three centres across the island, and through



various courses offered at the Barbados Community College. The University of the West Indies also offers a Continuing Education Programme.

The Ministry of Education administers and regulates all matters pertaining to education in the island. Policy is formulated by the political directorate and is executed by a technical team led by the Chief Education Officer, and by an administrative team headed by a Permanent Secretary, who serves as the Chief Accounting Officer.

At the school level, the primary schools have Advisory Committees, while the secondary schools are managed by Boards of Management. In addition, advisory bodies and committees are established from time to time to advise the Ministry on various education-related matters.

1.3 REGIONAL PARTICIPATION AND COMMITMENT TO EFA

Since the 1970s, Barbados has been a strong and committed member of the regional body known as the Caribbean Community (CARICOM). This organisation plays a pivotal role in harmonising regional efforts at integration and cooperation towards achieving common development goals.

Barbados has been a major partner and member of the regional body CARICOM. Decisions taken at the regional level, particularly by the Council for Human and Social Development (COHSOD) further strengthened the regional commitment to the EFA goals.

Prior to the World Conference on Education For All held by UNESCO in Jomtien 1990, major efforts were being undertaken in the Caribbean region to address education related development issues. In 1989, the regional Advisory Task Force on Education (ATFE) which was established by the Standing Committees of Ministers with responsibility for education in the CARICOM region was assisted by UNESCO in conducting consultations on basic education. The overall aim of the ATFE mandate was to develop a coordinated regional approach to the problems of educational development.



The output from the efforts of the ATFE was a regional education policy framework entitled “The Future of Education in the Caribbean”. It covered several aspects of education including:

- i. Early Childhood Education; Primary Education; Secondary Education; and Tertiary and Higher Education
- ii. Education for Special Needs
- iii. Language Learning
- iv. Mathematics and Science Education
- v. Technology and the Curriculum
- vi. School and the World of Work
- vii. Adult Education
- viii. Teacher Education
- ix. Management and Administration of Schools
- x. Financing of Education

That framework played an important role in the development of the Barbados White Paper on Education Reform 1995 and the subsequent education reforms instituted since 1998.

In July 1997, the CARICOM Heads of Government, at their meeting held in Montego Bay in Jamaica, adopted the profile of the Ideal Caribbean Person. It was felt that the characteristics of this ideal person should underpin the regional development efforts. Education was seen as crucial to such development in light of the need to enhance the quality of education that was accessible to all Caribbean children.

A major regional effort was the development of a Plan of Action for Education For All in the Caribbean. The Action Plan, which was developed through a consultative process, was based on the results of research conducted by several leading education practitioners in CARICOM. It aimed at redressing the twin problem of (i) the region's children being eliminated from the school system before attaining adequate education levels considered necessary for satisfactory social functioning, and (ii) the lack of preparation for the world of work of those who make it through the system.

The Plan of Action for Education for All in the Caribbean 2000-2015 provided for:

- i. Early Childhood Care and Education
- ii. Enabling Teachers
- iii. The Use of Information and Communication Technology (ICT) in instruction and management of education
- iv. Performance and Accountability of all stakeholders, national investments and resource mobilization
- v. Involvement of civil society



- vi. Education of Youth and Adults including at the secondary level
- vii. Primary Education

Barbados and other regional countries made a commitment to:

- i. Ensure that the Action Plan was presented for approval by Cabinet by March 2000; tabled in Parliament by April 2000; presented for endorsement by Council for Human and Social Development (COHSOD); presented for acceptance by the Heads of Government; and circulated and discussed widely in all Caribbean countries by December 2000.
- ii. Work assiduously with other stakeholders to ensure the implementation and continuous monitoring and updating of the Plan of Action.
- iii. Take responsibility for catalysing regional action on targets in areas in which each country/agency accepted a monitoring role.
- iv. Provide the necessary information and resources to, and facilitate the work of, the monitoring technical team, coordinated by the UNESCO Adviser on Education in the Caribbean and including representatives.
- v. Reporting at regular meetings of the Caribbean Ministers' of Education on progress toward targets set in the Action Plan

Details of the Caribbean EFA Plan of Action 2000-2015 will be presented in section 2 of this report.

Barbados further demonstrated its commitment to the EFA goals through regular attendance and participation in regional and hemispheric consultations, meetings, seminars and workshops organized by UNESCO to build capacity at the national and regional levels to generate the statistics required for the effective monitoring of the EFA goals.

1.4 NATIONAL STRATEGIES, POLICIES, PLANS AND TARGETS FOR EDUCATION

Commitment to EFA

Barbados has been a member of UNESCO since 1970 and has participated in and supported several UNESCO initiatives and programmes. In 1990, Barbados supported the call at the UNESCO World Education Conference on Education For All held in Jomtien for a global commitment to achieve the internationally agreed goals.

Since 1990, a number of education initiatives have been articulated to advance national efforts towards the achievement of the goals.

In 1991 the Minister of Education appointed the National Advisory Commission on Education (NACE) to undertake, inter alia:



- i. An overall examination and review of the educational services and report on their effectiveness in meeting national development needs
- ii. A review of the need for Rationalization of the educational system at primary, secondary and tertiary level
- iii. An examination of the overall cost of education in the context of the national budget and allocation at various levels of education
- iv. A review of the Curricula of schools and other educational institutions
- v. An assessment of the adequacy of training programmes for teachers at all levels of the system
- vi. A review of the existing legislation and institutional framework
- vii. An assessment of learning and learning outcomes at primary and secondary levels

In 1994 the National Advisory Commission on Education developed a set of proposals for the reform of the Barbados Education System. This was followed in 1995 with The White Paper on Education Reform. The White Paper was the foundation of the Barbados programme of action to support national efforts to achieve the EFA goals. Under the theme “Each One Matters – Quality Education For All” this policy document set out the proposed reforms to the Barbadian education system that were deemed necessary to achieve the national goals.

The major reform policies related to:

- i. Expanding access to Early Childhood Education
- ii. Ensuring that all primary children achieve acceptable standards of literacy and numeracy
- iii. Providing a sound foundation for entry into the world of work through secondary education
- iv. Expanding and enhancing tertiary education
- v. Special Needs Education and At-risk students
- vi. Student assessment and examinations
- vii. Teachers – recruitment, training, appraisal and empowerment
- viii. Governance of schools
- ix. Management of the Education System
- x. Education costs and efficiency

Another important national initiative which underpinned the EFA effort was the Education Sector Enhancement Programme EduTech 2000 and the associated Master Plan 1997 for the integration of Information Technology into the School System. The key elements of the programme were:

- i. Civil works involving major rehabilitation and repairs to public primary and secondary schools



- ii. Teacher training and technical assistance to enhance pedagogical delivery and ICT skills and Information Technology (IT) integration in the classroom
- iii. Institutional strengthening
- iv. Procurement and installation of IT hardware and software
- v. Reform of the curricula to incorporate twenty-first century demands
- vi. A pedagogical shift from teacher-centred to child-centred constructivist methodologies
- vii. Project-based and collaborative learning among students of primary and secondary schools

In 2002 the Ministry of Education also articulated its Education Sector Strategic Plan 2002-2012. This strategic plan detailed several strategies that supported the national effort to sustain the achievement of the EFA goals. Strategies included:

- i. Early Childhood, Primary and Secondary Education
- ii. Special Needs Education
- iii. Student performance; assessment methods and instruments; and learning outcomes
- iv. Tertiary education and rationalisation of post-secondary institutions
- v. Adult and Continuing education
- vi. Teacher training and development; Teacher Appraisal
- vii. Establishment of a National Accreditation Agency
- viii. Curriculum reform
- ix. Education and student support services

The period since 2002 saw the implementation of several initiatives associated with the Strategic Plan.

During this period a number of critical developments occurred. Teachers had access to the curriculum in Early Childhood Education (ECE), Remedial Education and Physical Education. Erdiston College established a Division of Continuing Education, where professional as well as community courses were offered; a one year day release programme in Information Technology for teachers was started.

In 2002/2003, Erdiston College partnered with Mount St. Vincent University of Canada, an institution which specialises in Special Needs Education to offer Bachelor's and Master's programmes to teachers. The large-scale reform was also witnessed in other areas of teacher professional development.

In 2002, the training for graduate teachers at the primary level commenced at Erdiston College. This development was facilitated by the offering of a two-year part-time programme in the Diploma in Teaching. This programme was short-lived,



and was replaced by the Diploma in Education (Primary) in 2006, which was offered on a one-day release basis for one year.

In 2003, the two year full-time in-service training programme for non-graduate teachers at primary level was also replaced by the Associate Degree in Education (ADE). This degree programme continues to be offered on a two year full-time basis, and like other training programmes, is free at the point of delivery. The Induction Course was re-instituted for recruits to the Teaching Service and a special course was organised for mature, unqualified teachers. A postgraduate In-Service Diploma in Education for secondary teachers commenced at the School of Education, Cave Hill, and a Preliminary In-Service Course for teachers of approved private schools also began at Erdiston College.

The Erdiston Teachers' Training College also collaborates with the Samuel Jackman Prescod Polytechnic (SJPP) and the Barbados Community College (BCC) to provide training and certification mainly for teachers at the secondary level in the Technical and Vocational areas such as Business Education, Industrial Arts and Home Economics.

The Basic Skills Assessment Battery (BSAB) was introduced in 2001. The aim was to measure the readiness of students to begin the curriculum in the first grade of primary school. The results are used by teachers to design appropriate developmental activities for young children.

The Criterion Referenced Test (CRT) was also introduced to assess the level of student mastery of the curriculum at Grade 2 and Grade 4. The weaknesses identified by teachers provide the opportunity for early intervention and remediation to ensure quality learning outcomes for students before transitioning to secondary schools.

In the year 2000, the primary challenges facing the Ministry of Education centred on the quality of teaching and instruction; the quality of learning outcomes among primary students; the learning outcomes among secondary students, and the readiness of school leavers to either enter the world of work or to pursue further studies. The main targets for the Ministry of Education were to achieve universal access to Early Childhood Education, improve student performance at the primary and secondary levels, introduce ICT across the curriculum at primary and secondary levels and improve the school infrastructure.



1.5 INSTITUTIONS RESPONSIBLE FOR IMPLEMENTING AND COORDINATING EFA AND COORDINATION MECHANISM

The primary responsibility for coordinating and implementing activities associated with the education for all goals fell to the Ministry of Education. However, the Erdiston Teachers' Training College also played a crucial role in the training and preparation of teachers to fulfil their roles in the EFA thrust.

The College contributed to the achievement of the EFA goals through ensuring that teachers were competent in:

- i. instructional and lesson planning specific to content areas;
- ii. the integration of technology in the teaching/learning process;
- iii. the utilisation of classroom assessment as a strategy to promote learning;
- iv. the use of action research as a viable strategy to develop sound teaching/learning practices; and
- v. the utilisation of pedagogical knowledge grounded in the theory of constructivism.

1.6 PARTNERSHIPS WITH OTHER MINISTRIES, AGENCIES, CIVIL SOCIETY ORGANISATIONS AND INTERNATIONAL DEVELOPMENT PARTNERS

The Ministry of Education also sought partnerships to ensure the achievement of the EFA goals. The Child Care Board, the Ministry of Health, the Barbados Vocational Training Board, the Ministry of Social Care, the Probation Department and United Nations Children's Fund (UNICEF) are among the partners that worked with the Ministry throughout the period.



SECTION 2



SECTION 2: MAIN CHALLENGES IN- 2000 AND TARGETS FOR 2015 NATIONAL EFA 2015 REVIEW

2.1 MAIN CHALLENGES IN 2000 AND TARGETS FOR 2015

This section of the report addresses the relevance of EFA within the country context in the year 2000. It examines the overall development status and the situation of education in Barbados in relation to the six internationally agreed goals of the EFA as measured by the country's performance against the 18 core EFA indicators. The results were used to obtain a comprehensive assessment of the progress, achievements and gaps in the provision of primary and secondary education as part of the EFA 2000 Assessment.

2.2 BACKGROUND TO THE ASSESSMENT OF THE OVERALL EFA SITUATION AND CHALLENGES IN BARBADOS IN 2000

The national development policies of successive Barbadian governments have been based on a philosophy of social development that embraces education as an instrument of social and economic development. Over several decades prior to 1990, education was enunciated as the bedrock of Barbados' development of its human capital. This has been demonstrated in the high percentage of government expenditures allocated to education.

At the time of the articulation of the global commitments to Education for All in Jomtien, Barbados had already made significant strides in the provision of high levels of access to primary and secondary education. The high participation rates in primary and secondary education are underpinned by compulsory education legislation and further demonstrate the success of the policies and programmes implemented at the time. Therefore achieving the EFA goals and sustaining the gains in education were both relevant and important for Barbados.

In preparation for the Education for All Year 2000 Assessment, an International Consultative Forum on Education for All was organized by UNESCO which laid the foundation for the technical guidelines provided to all countries. The guidelines assisted in shaping the preparation of the national assessments. Barbados participated in that global initiative that sought to harmonize a comprehensive construction of the picture of country progress towards the EFA goals since 1990.

The aim of the Year 2000 Assessment was to assist countries in identifying the priorities and strategies for overcoming obstacles to the provision of education for all and act as a catalyst for accelerating progress. The collection and analysis of quantitative and qualitative data constituted an essential part of the assessment. It



also provided the opportunity to revise or develop national plans of action to advance the provision of education. The expected results were anticipated to be useful for policy-makers, planners and administrators of national education systems in the private and public sectors.

In 1999, the Ministry of Education engaged the services of Dr. Leonard Shorey who compiled the Barbados Education for All Year 2000 Assessment Report. That report formed the baseline for the tracking of Barbados' progress in achieving the EFA goals from 2000 to 2015.

In addition, there was the articulation of a regional EFA Plan of Action entitled **"Education for All in the Caribbean Plan of Action 2000-2015"**. That plan was developed through a consultative process that was based on the results of research conducted by several leading education practitioners in the Caribbean region. The consultations included Caribbean Ministers of Education, technocrats and educators from the region, as well as other stakeholders in education from the NGO and the private sector community as well as from inter-governmental, bi and multi-lateral agencies. That consultative process culminated in a meeting of the Caribbean Education Ministers and Stakeholders at which they agreed to the Caribbean Plan of Action 2000-2015.

2.3 RESULTS OF THE BARBADOS 2000 ASSESSMENT: OVERALL EFA SITUATION AND CHALLENGES

2.3.1 Data Analysis

Data were collected and entered into a database and spreadsheet files provided by UNESCO which contained macros that automatically carried out various pre-determined calculations to highlight selected aspects of the data provided. Those calculations related specifically to "Indicators" of components of the education system. The data analysis covered cohorts over the periods 1993 to 1997.

The cohort analysis compared the results of two successive years of schooling on a given group of pupils. The analysis determined the proportion of students who progressed through the system as well as the proportion of wastage, i.e. the proportion of those in the initial group of pupils who did not complete the programme.

The data provided for UNESCO were analysed with respect to 18 Indicators that were selected to present an overall view of the educational system.



Indicator 1: Gross enrolment in early childhood development programmes

This indicator measures the participation level of young children between the ages of 3 and 5 in early childhood development programmes. The result produces an indication of the coverage of pre-primary education and the capacity of the country to prepare young children for primary education.

In Barbados, data were collected and analyzed on children aged 3 and 4 years. During the period 1990 to 1997, the gross enrolment ratio (GER) in pre-primary education ranged from 52.7% in 1990 to a high of 70.2% in 1995.

Indicator 2: Percentage of new entrants to grade 1 who have attended some form of organized early childhood development programme during at least one year.

This Indicator takes into account the number of pupils entering the first year of the primary school programme "who have attended some form of organised early childhood development programme". It provides a gauge of the level of preparation of students for primary education through the early childhood education programmes available in the country.

In Barbados there is compulsory school attendance legislation. The primary school age range is 5 - 11 years and at age five years all children are required by law to enter primary schools, either public or private.

The data analysis shows that in the years 1990-1997 at least 70% of pupils entering the primary school programme had previously attended early childhood development programmes. This proportion had in some years reached as high as 94%.

The data also indicated that in nearly every case, a somewhat higher proportion of pupils attending private schools had some prior early childhood education or development experience compared with pupils in the public school system. This was not surprising since there was a greater likelihood that the parent who opted to send his/her child to a private primary school would already have secured prior education for the child either in the public system or in a private preparatory school.

Gender parity was maintained throughout the period with a gender parity index (GPI) of either 1.1 or 1.0.



Indicator 3: Apparent gross intake rate in primary education

Indicator 4: Net intake rate in primary education

In the area of primary education, the international target was to achieve universal access to and completion of this level of education by all eligible children. It therefore assumes improvement of internal efficiencies and the provision of adequate resources and infrastructure.

The Apparent Intake Rate (AIR) provides a measure of the general level of access provided in the country for students at the primary level. It also gives some indication of the capacity of the education system to provide access to grade 1 for the official school-entrance age population. The AIR is the "total number of new entrants in the first grade of primary education, regardless of age, expressed as a percentage of the population at the official primary school-entrance age".

In Barbados for the period 1990 – 1997, the Apparent Intake Rate did not fall below 85.4% and in some cases rose as high as 100%. This relatively high AIR reflects the high degree of access to primary education provided in Barbados in the period leading up to 2000.

A second measure of determining the coverage of primary education provided is through the Net Intake Rate (NIR). The NIR determines "the proportion of new entrants to primary grade 1 who are of the official primary school-entrance age as a percentage of the corresponding population". Consequently "a high Net Intake Rate (NIR) indicates a high degree of access to primary education for the official primary school-entrance age children and a high proportion of pupils of the same age in the first primary grade".

In Barbados all children are expected by law to enter primary schools at five years of age. Therefore, during the period 1990 to 1997 Barbados did not record a problem with children over the age of five entering school for the first time.

The data revealed that the "new entrants of all ages" was the same in number as "new entrants of primary school entrance age". Therefore "a high degree of access to primary education" was provided in Barbados between 1990 and 1997.

It should be noted that the discrepancy between the "new entrants of primary school age" and the "school entrance age population" may be due to the fact that the latter is an estimate based on the Census figures. Such projections can be expected to differ somewhat from the actual enrolment figures recorded, and can result in figures of over 100%.



The Gender Parity Index was maintained at either 0.9 or 1.0, indicating that there was essentially equality of educational opportunity for children of both sexes prior to the year 2000.

Indicator 5: Gross Enrolment Ratio

The Gross Enrolment *Ratio (GER)* is widely used to demonstrate the level of participation in and capacity of the primary education system. The GER reflects "the total enrolment in primary education, regardless of age, expressed as a percentage of the eligible official primary school-age population in a given school-year".

In Barbados between 1990 and 1997 the GER ranged from 94.7% to 100%. This was a clear reflection of a high degree of participation in primary education in Barbados whether the pupils belonged to the official age-group or not. It also shows that Barbados had the capacity to accommodate all of its primary school-age population.

Indicator 6: Net Enrolment Ratio

The Net Enrolment Ratio (NER) gives a more accurate measurement of the level of student participation in primary education by pupils that belong to the official primary school age. The "*Net Enrolment Ratio*" (NER) reflects the "enrolment in primary education of the official primary school age-group expressed as a percentage of the corresponding population.

In Barbados, since all children between the ages of 5 and 16 years of age are required by law to attend school it was not surprising that a high GER and a high NER were recorded. The NER for Barbados was 94.7% which was identical to the GER. The high NER recorded demonstrated the high degree of participation in primary education of the official primary school age-group.

The overall promotion rate (male/female) ranged from 94.4% to 100%. The repetition rate was 0% which was an inevitable consequence of the policy of automatic grade promotion. The drop-out rate did not exceed 5.6% in any grade and actually fell to 0% in Grade 7. The recorded survival rate of not less than 83.6% was a clear indication that a high proportion of the cohort of pupils entering Grade I reached Grade 5.



Indicator 7: Public expenditure on primary as a percentage of gross national product (GNP) and of total public expenditure on education (all levels)

Indicator 8: Public current expenditure on primary education per pupil as percentage of gross national product (GNP) per capita

Public expenditure on primary expressed as a percentage of GNP and of total public expenditure on education shows the relative share of expenditure on primary education within the overall public expenditure on education. Expenditure at this level is an indication of the priority placed on primary education within the context of national education policies and resource allocation.

Public current expenditure on primary education per pupil as a percentage of GNP per capita measures the average cost of a pupil in primary education in relation to the country's GNP per capita. These indicators reflect a measure of the level of investment in primary education.

Between 1990 and 1997, the expenditure on primary education fluctuated between 25.1 % and 29.3% of total public expenditure on education in a population that ranged between 260,000 and 266,000 of whom between 27,000 and 29,000 were persons of primary school age. These figures included estimates of "expenditure from other Ministries that impact on education".

In Barbados, the Central Bank does not produce figures for GNP. Therefore, figures for GDP were reported instead.

Indicator 9: Percentage of primary school teachers having the required academic qualifications

Indicator 10: Percentage of primary school teachers who are certified to teach to national standards

Teachers' academic and professional qualifications, instructional methods and techniques and classroom management approaches are important factors that contribute towards the achievement of the EFA goals. The percentage of qualified and certified teachers provides an indication of the preparation of the teaching force with the necessary pedagogical skills to deliver the curriculum in an effective manner.

Indicators 9 and 10 focused attention on the number of teachers in the education system and their academic qualifications and professional training. Indicator 9 related to the number of primary school teachers who possessed at least the minimum academic qualifications required by the public service for individuals to



teach at the primary level. This number is expressed as a percentage of the total number of primary teachers. The indicator therefore measured the proportion of teachers who met the basic academic qualifications for teaching. It is also an indication of the quality of the human resources involved in teaching at the primary level. The EFA 2000 Assessment baseline data revealed that 100% of teachers had the basic qualifications required for teaching.

In Barbados teachers are not recruited to the Government (public) primary schools unless they possess the minimum academic qualifications required for appointment to the teaching service. These are a minimum of four (4) subject passes at "General Proficiency" level in the examinations set by the Caribbean Examinations Council (CXC).

Indicator 10 related to the number of professionally trained and certified teachers as a percentage of the total number of primary school teachers. It sought to measure the proportion of teachers trained and equipped with the pedagogical skills to effectively deliver the primary curriculum.

Certification to teach in Barbados is dependent on successful completion of a two-year training programme at the Government's Erdiston Teachers' Training College or in comparable programmes elsewhere, such as in the Faculty of Education of the regional University of the West Indies. Teachers in the private primary schools do not necessarily have to meet these criteria although some of the teachers in these schools meet or surpass the minimum criteria previously described. The available data indicated a high proportion of persons certified to teach, rising as high as 93.8% in 1996.

The available data did not provide information about teachers in the private schools beyond the year 1992, and the data did not allow disaggregation, by gender, of the teaching qualifications possessed by teachers in the public system.

The high percentage of qualified teachers recorded in Barbados did not take into account the years of experience of teachers, variations in classroom conditions, teaching methods, teaching materials or teacher status. These factors combine to determine the quality of teaching and ultimately the impact on learning outcomes for students.

Indicator 11: Pupil-teacher ratios in primary education

The pupil-teacher ratio is a measure that is used to gauge the level of human resource input relative to the size of the student population. The size of the pupil-teacher ratio gives an indication of the potential demand on the teacher's ability to provide appropriate individual attention to students based on the relative size of the



class. There is generally some expected relationship between student learning outcomes and the level of effective teacher engagement of each student.

The baseline study revealed that between 1990 and 1997, pupil-teacher ratios varied from 1:16.2 to 1:20.5 in the public primary schools. The data available did not permit disaggregation with respect to public and private primary schools.

The data about teachers in the private primary schools were not available after 1992. As a consequence, the teacher: pupil ratios were calculated with respect to teachers in the public system only. The teacher-pupil ratios appeared to be somewhat lower than would actually appear if the missing data were available.

Indicator 12: Repetition rate in primary education by grade

The repetition rate provides a barometer of the internal efficiency of the education system. A low repetition rate suggests that there is a high flow or promotion rate in the system.

The Barbados education system generally provides for automatic promotion from one grade to the next level. There were therefore no data of the kind required for a response to Indicator 12, since grade repetition was not a feature of the country's primary education system.

However, in 1996 the Ministry of Education introduced a system of "flexible transfer" from primary to secondary. This system in effect facilitates the repetition of the last year of grade 6 by those students who are deemed to have not mastered the basic skills required to commence the secondary curriculum. Such students are given the opportunity to defer for one year the writing of the transfer examination.

The percentage of the cohort that deferred writing the Barbados Secondary Schools Entrance Examination between 1996 and 1999 was used as a proxy for calculating the primary repetition rate. The average annual percentage of pupils that deferred writing the Secondary School Entrance Examination between 1996 and 2000 was 4.9%.

Indicator 13: Survival rate to Grade 5

Indicator 14: Coefficient of Efficiency

Indicators 13 and 14 sought to measure the internal efficiency of the education system. An important aspect of any education system is the number of pupils who complete the entire school programme compared with the number who "drop out" or "fall out" for one reason or another.



The survival rate is a measure of the holding power and internal efficiency of the education system. It provides information on the retention of pupils from grade to grade in schools and conversely the magnitude of pupil drop-out by grade. The survival rate is an important indicator since it is often used as a pre-requisite for sustainable literacy.

The coefficient of efficiency is a synthetic indicator of the internal efficiency of an educational system. It provides information on the efficiency of the educational process in producing graduates by examining the consequences of repetition and drop-out.

In 1997 the survival rate to grade 5 was 94% while the coefficient of efficiency stood at 87.8%. The relatively high survival rate and co-efficient of efficiency give some indication of the economic efficiency and resource utilisation in expediting the movement of primary school students through the Barbadian education system. However, the efficient flow of students through the primary education system does not equate to achievement of the desired learning outcomes for students graduating from primary education.

Attention in the Year 2000 Assessment also focused on the learning achievement and outcomes of pupils at the primary level. The intention was to examine learning achievement pertaining to the attainment of minimum learning levels or the mastery of basic skills such as literacy, numeracy and life skills.

Indicator 15: Percentage of pupils having reached at least grade 4 of primary schooling who master a set of nationally defined basic learning competencies

This indicator sought to measure the learning achievement of grade 4 primary school pupils in basic learning competencies, particularly in literacy and numeracy.

The data for this indicator related to the proportion of pupils who met specified attainment levels at the end of six years of primary school education. The judgment was based on the pupils' performance in the annual Barbados Secondary Schools Entrance Examination (BSSEE) which determines transfer and placement of students to the secondary schools across the country.

The transfer examination is administered in May of each year. It is normally taken by pupils who will be over the age of 10 years but under the age of 13 years on the first of September in that calendar year. The examination consists of tests in English, including comprehension and free expression (composition writing). The Mathematics test focuses on the basic skills which pupils are expected to master prior to entering the secondary school.



Since the 1990s, the Ministry of Education took the view that pupils who scored below 30% on these tests were in need of remedial attention and special provisions had been set up to provide them with extra guidance and assistance. For the purpose of responding to the requirements of Indicator 15 the pupils deemed to have "mastered basic learning competencies" were those who scored at least 30% and over in the English and Mathematics examination papers.

It is also to be noted that the data selected for analysis were taken from the 10-year olds. The rationale for doing this was as follows:

Pupils who entered secondary schools in September 1999 as 11-year olds, actually sat the BSSEE in the preceding May as 10-year olds. The reality of this situation therefore justifies basing "achievement" performance on pupils in this latter age group in each year for which data were provided.

The data revealed that between 1991 and 1997 over 70 % of students taking the BSSEE mastered the basic skills in English ranging from a high of 85.6% in 1992 to a low of 73.9% in 1997. In Mathematics over 75% mastered the basic skills during the corresponding period ranging from 71.4% in 1995 to 83.6% in 1992.

In the category of "life skills" there was no information available on which to base a response in relation to pupils' acquisition of "life skills".

Indicator 16: Literacy rate of 15-24 year olds

Indicator 17: Adult literacy rate; percentage of the population aged 15+ that is literate.

Indicator 18: Literacy gender parity index; ratio of female to male literacy rates.

The literacy rate among 15-24 year olds and adults is an important indicator of the outcomes of basic education and a reflection of the effectiveness of the primary education system. It also provides a measure of the quality of human resources particularly the capacity for further intellectual growth and enhanced contribution to national development through economic, social and cultural elements.

There were no hard data available to undertake an assessment of literary levels in Barbados at the time of the Year 2000 Assessment.

Training in Essential Skills

The section of the Report dealing with Essential Skills required information that was seldom available. Specifically it requested that countries "measure impacts" and



"give quantitative data and empirical evidence where available". Unfortunately, such information was unavailable for any assessment to be made.

In summary

In Barbados, there is little wastage at the primary level since education is compulsory and readily available to all pupils from the first year of the primary education. In addition, primary school age pupils are normally promoted to the next higher class at the end of each academic year so that there were no figures on repetition in the primary system.

There was no gender disparity recorded in the education provisions of the country and access to education was open equally to boys and girls. Therefore gender equality was evident in all tables where it was calculated; in the majority of cases the result was 1.0 and the ratio never rose above 1.1 nor fell below 0.9.

A high percentage of teachers in the primary system were professionally trained. Such training consists of satisfactory completion of a two-year training programme at Erdiston Teachers' Training College. Appropriate training may also be secured elsewhere. For example, through the Faculty of Education of the University of the West Indies at one of its campuses or through a College or University approved by the Government of Barbados. Comparable and equivalent training received at other teacher training institutions may also be accepted.

Appointment to the primary teaching service in public schools requires that the applicant hold a minimum of four (4) subject certificates at "General Proficiency" level in the regional examinations set by the Caribbean Examinations Council (CXC). Teachers in private schools do not necessarily have to meet these qualifications as a condition of employment.

2.4 NATIONAL TARGETS FOR 2015

In 2002, the Ministry of Education articulated its new Education Sector Strategic Plan which stated the Strategic Goals, Priorities and Targets to be attained by 2012.



The following strategic initiatives were identified that were aligned with the EFA goals:

Pre-primary and Primary

- i. Universal access to early childhood education (ECE).
- ii. Increase in the number of students who are educationally well rounded, confident, mannerly, respectful of authority and the rule of law.
- iii. Widespread use of Standard English by teachers as well as students.
- iv. Increase in the number of students scoring above 30% in the Barbados Secondary Schools Entrance Examination (BSSEE).
- v. Increase in the number of students speaking a foreign language.
- vi. Increased participation and achievement of excellence in sports and cultural activities.
- vii. Increase in the number of students pursuing healthy lifestyles.

Secondary

- i. Increase in the number of students leaving school with proper certification.
- ii. Increase in the number of students specialising in Science and Technology.

Tertiary

- i. Increase in the number of students attending post-secondary and tertiary institutions.
- ii. Promotion of freedom of movement of skilled personnel.

Professional Development

- i. Increase in the productivity and effectiveness of teachers.

Institutional

- i. Increased accountability of institutions, departments and individuals.
- ii. Greater efficiency in the use of financial and human resources within the schools and the Ministry.



iii. Establishment of independent Mechanisms of evaluation.

The Barbados National Strategic Plan 2006-2025 complemented the Education Sector Strategic Plan. Goal three of the National Strategic Plan identified specific objectives, strategies, targets and indicators for the development of the education sector over the plan period. Below is an extract from the Barbados National Strategic Plan 2006-2-25.

Table 1: Extract from National Strategic Plan of Barbados 2006-2025

GOAL THREE: "Strength and unity": <i>Building Social Capital.</i>			
Objectives	Strategies	Targets	Indicators
3.1 To Expand the Level and Quality of Education and Training.	<p>3.1 Continue the educational initiatives of the Education Sector Enhancement Programme (ED UTECH) and the Curriculum Reform Programme to ensure that everyone is educated to his or her full potential.</p> <p>3.2 Promote at all educational levels, the development of critical thinking skills and an entrepreneurial outlook.</p> <p>3.3 Increase access to, and enrolment in, tertiary education using appropriate modalities such as distance and e-learning to facilitate the achievement of a graduate in every Barbadian household.</p> <p>3.4 Enhance adult education, training and lifelong learning.</p> <p>3.5 Equip the population with skills to function in the global economy.</p> <p>3.6 Enhance the intellectual capability of the public to research, analyse and understand global processes that may impact on Barbados.</p> <p>3.7 Provide universal access to nursery education.</p> <p>3.8 Promote the</p>	<p>3.1 Internationally recognised accreditation agencies established by 2008.</p> <p>3.2 75% certification of all students leaving secondary school by 2012.</p> <p>3.3 70% of persons age 18-30 either enrolled in or having tertiary education by 2025.</p> <p>3.4 100% literacy rate.</p> <p>3.5 Significant growth in the development of knowledge-based, high value services.</p> <p>3.6 100% access to computers and information and communications technology for all Barbadian households.</p>	<p>3.1 Number of international recognised accreditation agencies established by 2008.</p> <p>3.2 Proportion of children leaving secondary school with certification by 2012.</p> <p>3.3 Proportion of persons age 18-30 with tertiary education and enrolled in tertiary education.</p> <p>3.4 100% literacy rate.</p>



GOAL THREE: "Strength and unity": <i>Building Social Capital.</i>			
Objectives	Strategies	Targets	Indicators
	<p>improvement and strengthening of technical and vocational education and training.</p> <p>3.9 Promote a judicious mix of private and public sector involvement in the provision of education and training opportunities.</p>		
3.10 To Achieve Gender Equity and Equality.	<p>3.1 Ensure the integration of gender into all areas of national planning and development so that women and men can benefit equally from existing opportunities.</p> <p>3.2 Conduct gender sensitivity training at all levels of the public sector, private sector and civil society.</p> <p>3.3 Promote the gender mainstreaming of national development policies and programmes so that equality and equity between men and women can be achieved.</p> <p>3.4 Develop a framework of indicators, tools and methods for incorporating, monitoring and evaluating gender in policy making and planning.</p>	<p>3.1 Adoption of a national policy on gender by 2008.</p> <p>3.2 The implementation of a gender management system by 2008.</p> <p>3.3 Gender sensitivity training workshops conducted in all Government departments by 2009.</p> <p>3.5 Prepare and disseminate information on gender and development issues to focus public attention on the human rights of women and men and promote gender equity and equality.</p> <p>3.6 Continue to monitor the implementation of international conventions to which Government is a signatory, including the Convention on the Elimination of all Forms of Discrimination.</p> <p>3.7 Strengthen existing relationships and further develop linkages with local, regional and international agencies, working in the area of gender and deepen participation in the activities of these agencies.</p> <p>3.8 Amend legislation where necessary to reflect gender equality.</p> <p>3.9 Develop a research programme to focus on gender issues of national concern.</p>	<p>3.1 National gender policy adopted by 2008.</p> <p>3.2 Gender management system established by 2008.</p> <p>3.3 Number of Government departments in which gender sensitivity workshops are held by 2009.</p>



GOAL THREE: "Strength and unity": <i>Building Social Capital.</i>			
Objectives	Strategies	Targets	Indicators

At the regional level, there was agreement on a Caribbean Action Plan which identified regional and national to be reached by 2015. These targets were based on the EFA Caribbean situation analysis undertaken and the challenges identified. Barbados, as part of the wider Caribbean, indicated its commitment to the realisation of the Caribbean EFA goals and targets expressed in the Plan of Action for Education For All in the Caribbean 2000-2015. The seven-point plan included the following goals:

- i. Early Childhood Care and Education
- ii. Enabling Teachers
- iii. The use of Information and Community Technology (ICT) in instruction and management of education
- iv. Performance and Accountability of all stakeholders, national investments and resource mobilization
- v. Involvement in civil society
- vi. Education of Youth and Adults including at the secondary level
- vii. Primary Education

Some of the key regional targets included:

- i. Application of standards for caregivers and teachers in 100% of countries.
- ii. 100% of ECCE population "reached" quality ECCE programming.
- iii. Appropriate certification of all teachers before classroom practice.
- iv. Improved teacher professionalism.
- v. At least 6% of GDP spent on education.
- vi. 100% functionally literate population.
- vii. Universal access and participation in secondary education that is relevant to the needs of the Caribbean.
- viii. Improved attainment by youth and adults (secondary level) achieved by 80% in 100% of countries.
- ix. Implementation of measures in primary education to ensure improved enrolment, retention, participation and attainment by both genders resulting in 100% improvement in gender parity.
- x. Improved attainment levels achieved by 80% of the target group (Primary Education) in 100% of countries.



2.5 CHALLENGES FOR ACHIEVING EACH EFA GOAL AND STRATEGY

The Year 2000 Assessment revealed that Barbados had made significant progress since 1990 in moving national efforts along the path to achieving the EFA goals. However, the baseline data analysis for the year 2000 revealed that there were some gaps and challenges that remained to be addressed between 2000 and 2015.

There was clearly a gap in the provision of access to early childhood education in Barbados. While the participation rate was relatively high, there was enough of a gap that required some attention to achieve the national target. The target for 2015 is to achieve universal access at this level.

At the primary level, Barbados had achieved a high level of coverage with universal access to this level of education. Also there was generally a high level of pupil participation in school. Two challenges faced the country in the quest to achieve the EFA goals by 2015.

The first was to sustain efforts to maintain the high enrolment levels attained in the 1990s and to keep the internal efficiency rates high. It was therefore imperative to reduce the number of students that deferred writing the Barbados Secondary School Entrance Examination.

The second challenge pertaining to primary education was the need to improve the quality of learning outcomes for the small percentage of students who failed to master the basic literacy and numeracy skills at the completion of primary education. This would require some important inputs. First, there was the need to sustain the level of financial input at the primary level. To achieve this it would be contingent on the performance of the national, regional and global economies since Barbados is a small open economy that is vulnerable to external economic shocks. Secondly, sustaining the high percentage of certified teachers at the primary level who possess the pedagogical skills required to achieve high levels of learning outcomes for students.

While Barbados generally recorded a very high basic literacy rate, as shown in successive UNDP reports, there was a general view that some efforts were required to improve the adult literacy rates and the learning and life skills of young adults.



SECTION 3



SECTION 3: PROGRESS TOWARDS THE EFA GOALS

This section of the EFA 2015 Review tracks Barbados' progress towards the achievement of the six EFA goals. A combination of quantitative and qualitative indicators will be used to evaluate available evidence that highlight national progress since 2000. There will be the examination of data to assess the levels of access and participation in the level and type of education and to describe the quality and efficiency of education in Barbados. It will also explore any possible disparities and inequalities present in the education system. The presence of potential gaps, issues and remaining challenges will be highlighted.

3.1. EARLY CHILDHOOD CARE AND EDUCATION (ECCE)

Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Introduction

In Barbados, education has been used as one of the pillars of economic and social development. It has also been universally accepted that investment in good quality early childhood care and education programmes contributes to the quality of the education system and the quality of learning outcomes of students throughout their education journey.

In recognition of the economic and social benefits of early childhood care and education, successive Governments in Barbados have committed to achieving universal access to pre-primary education for children under the age of five. In 2005, the Ministry of Education embarked on a three-phased Pre-primary Expansion Programme to provide an additional 1600 places at this level. In phase 1 of the expansion programme, existing Government primary schools accommodated approximately 400 pupils while six new public nursery schools were established. In phase 2 another six public nursery schools are expected to be established by 2015. This programme also included the allocation of additional teaching and learning resources as well as appropriate training for teachers to facilitate this programme.

Analysis of Progress Toward Goal 1 Since 2000

Access and Participation

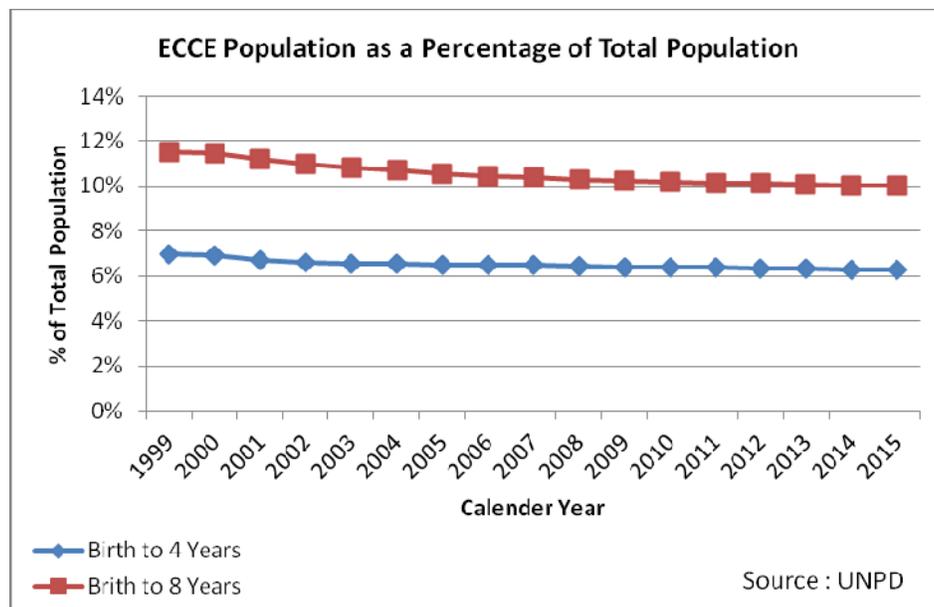
Since 2000, Barbados, through the efforts, programmes, policies and strategies of the Ministry of Education, the Ministry of Health and the Child Care Board, has recorded significant progress in the National effort to attain the target of providing universal access to Early Childhood Care and Education (ECCE) by 2015. One key measure of the expansion in ECCE coverage is through the assessment of access



and participation in early childhood care and education programmes. There are four types of ECCE facilities in Barbados. First, there are Government day care facilities that are managed by the Child Care Board. Secondly, there is a vibrant private sector day care and nursery component where such facilities are required by law to register with the Child Care Board. The private nursery schools that are offering formal education are required by law to be registered with the Ministry of Education. Finally there are public nursery (Pre-primary) schools and nursery units in public primary schools. These institutions are mandated to operate within the national standards established. In addition, all of these institutions that offer formal education fall within the International Standard Classification of Education 2011 (ISCED 11).

The early childhood age group represented 13% of the population in 2000. The birth to aged 4 group represented 7% of the population. Growth in this age group remained stable representing a marginal decline to 6% of the population in 2012. Overall, there was a marginal decline in the early childhood population representing 11 % in 2012. (see Figure 1).

Figure 1: ECCE Population as Percentage of Total Population



The 1999 baseline data for participation in ECCE revealed that gross enrolment in early childhood care and education (ECCE/GER) reached a high of 70.2% in 1995. The tracking of the ECCE GER since 2000 revealed that there was a consistent GER of around 81% overall for the period (Figure 2). In Barbados, access to education and ECCE services are equally open to boys and girls. Since 2000, there was a steady increase in gross enrolment in pre-primary and ECCE programmes reaching a



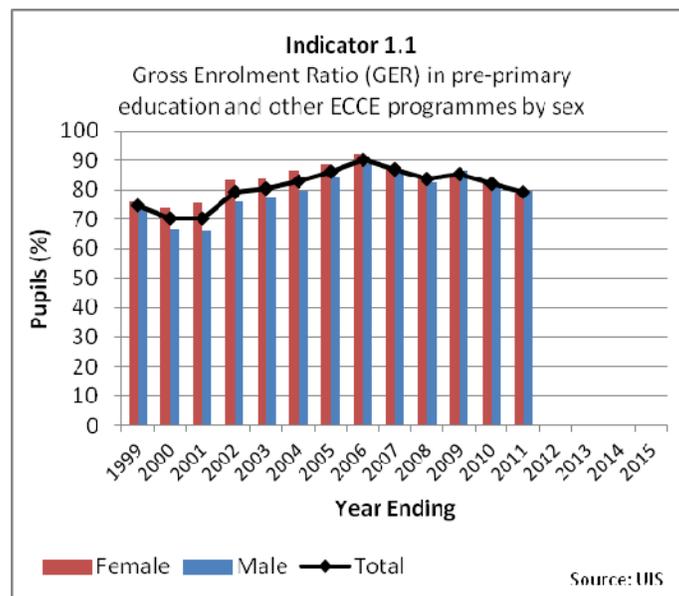
peak of 90% in 2006. However, between 2007 and 2011 there was evidence of a marginal but consistent decline reaching 85% in 2011. The male GER averaged around 79%, while the female GER was around 83%. Gender parity was sustained over the period with levels ranging from 1.1 in 2008 to 0.99 in 2011; reaching a peak of 1.14 in 2001 and a low of 0.97 in 2009.

The results of this analysis confirm that there was an expansion in ECCE coverage and participation since 2000. While Barbados has not reached the target of universal access, significant progress has been recorded. With a gross enrolment ratio in excess of 90%, there is evidence of very good progress towards the universalisation of ECCE in Barbados. The trajectory is also positive in the direction of reaching the goal by 2015.

Indicator 1.1

Gross Enrolment Ratio (GER) in pre-primary education and other ECCE programmes by sex

Figure 2: Gross Enrolment Ratio (GER) in pre-primary education and other ECCE programmes by sex



Note: includes pre-primary programmes in public schools and some private schools only. Public and private child care centres are not included.

Access to early childhood education is an integral part of the right to education in Barbados. There is provision in the Barbados Education Act Cap 41 for pre-primary education to be part of the system of public education. The Education Act states that "a child of the age 3 years may be admitted to a nursery school or a nursery



department of a public primary school". Therefore, while Barbados maintains compulsory education for pupils between ages 5 and 16, the legislation does not mandate compulsory enrolment of pupils under 5 years of age. The policy of the Government of Barbados is to provide access to ECCE for all children whether in public or private institutions.

Indicator 1.2

Percentage of new entrants to primary Grade 1 who have attended some form of organised ECCE (Early organized ECCE programme, by sex

Over the period 2000 to 2011, the data show that consistently 100% of new entrants to the first grade of primary education, both males and females, had attended some form of organised ECCE programme. This result clearly demonstrates a significant increase over the percentage recorded prior to 2000 which ranged between 70 and 94 percent. It is evident that a high proportion of pupils have consistently been prepared to undertake the primary education curriculum.

The preparation of new entrants to Grade 1 of primary education is supported by the Basic Skills Assessment Battery (BSAB) which was introduced in 2001 to determine the readiness of pre-primary pupils to start the curriculum in the first grade of primary education. The BSAB is one of several programmes introduced by the Ministry of Education aimed at enhancing the quality of students' learning and achievement at the ECCE level. The general support given to and positive reception of this initiative by parents and teachers is also a firm indication of the value that Barbadian parents place on their children obtaining a solid educational foundation at an early age regardless of the social or economic circumstances of pupils.

In Barbados, public institutions provide the greatest number of places in pre-primary education when compared with the capacity of private institutions. In terms of public nursery schools that serve 3-4 year olds, there were four such facilities prior to 2005. Since 2005, six (6) more nursery schools have been established bringing the total to 10 public nursery schools. Additionally, the government has added nursery classes to primary schools.

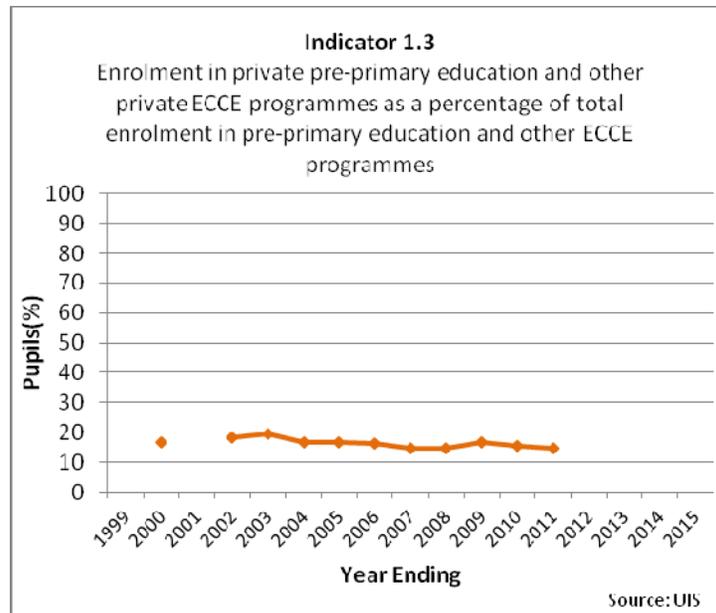
Private institutions however play a vital role in supporting the attainment of the national targets. In the case of other private ECCE programmes there has been an increase in access provided as well.



Indicator 1.3

Enrolment in private pre-primary education and other private ECCE programmes as a percentage of total enrolment in pre-primary education and other ECCE programmes

Figure 3: Enrolment in private pre-primary education and other private ECCE programmes as a percentage of total enrolment in pre-primary education and other ECCE programmes



Note: The total includes pre-primary programmes in public schools and some private schools. Public and private child care centres are not included.

Based on data available to the Ministry of Education over the period, the proportion of students enrolled in private pre-primary and other ECCE programmes range from 16.54% in 2000 to 14.56% in 2011. In 2003, the highest percentage was recorded at 19.54 (Figure 3). This confirms the high level of public provision of pre-primary education when compared with private institutions.

Barbados has made significant progress in the area of ECCE. Babies and toddler pre-schoolers (birth to 3 cohort) are served in day care centres. In 2013, there were 15 government day care facilities with a total capacity of 1056 children (Table 2). Additionally, 161 private day care centres were registered with the Childcare Board in 2012. The total number of children served in these centres was 6000. This total number of children (7056) represents a GER of 90%. In Barbados, the majority of babies and toddlers receive ECCE in private day care facilities. Therefore, given that enrolment of pre-school children in organized day care facilities is not mandatory,



the high gross enrolment ratio recorded suggests that Barbados is very close to providing universal access to pre-primary early childhood care and education programmes.

Table 2: Number of Public and Private Day Care Centres Serving Babies and Toddlers by Year

Number of Public and Private Day Care Centres Serving Babies and Toddlers by Year		
Year Ending	Private	Public
2005	129	m
2006	138	15
2007	165	15
2008	m	15
2009	153	15
2010	162	15
2011	165	15
2012	165	15
2013	161	15

Source: CCB

m: missing

The following table shows the number of facilities serving 3-4 year olds in Barbados.

Table 3: Number of Public Nursery and Primary Schools with Classes Serving 3-4 Year Olds

Number of Public Nursery and Primary Schools with Classes Serving 3-4 Year Olds		
Year Ending	Nursery Schools	Primary Schools
2000	6	49
2001	6	42
2002	6	48
2003	6	48
2004	6	47
2005	6	48
2006	6	50



Number of Public Nursery and Primary Schools with Classes Serving 3-4 Year Olds		
Year Ending	Nursery Schools	Primary Schools
2007	7	48
2008	7	53
2009	8	49
2010	8	48
2011	8	49

Source: METI

Since 2000, there was a marginal increase in the percentage (64% to 69%) of pre-primary classes in the 3-4 age group in public primary schools that provided formal education services to this cohort of pupils. The expansion of nursery classes in primary schools was evidently aligned with the Ministry's pre-primary expansion programme.

The following table shows the number of children accessing ECCE services in the government nursery schools and nursery classes in public primary schools.

Table 4: Children in Public Nursery Schools and Nursery Classes in Public Primary Schools by Year

Children in Public Nursery Schools and Nursery Classes in Public Primary Schools by Year		
Year Ending	Nursery Schools	Primary Schools
2000	443	1180
2001	447	1216
2002	336	1268
2003	349	1226
2004	374	1308
2005	347	1386
2006	428	1400
2007	500	1400
2008	592	1225
2009	704	1277
2010	672	1077
2011	748	1262

Source: METI



In 2011, two thousand and ten (2010) children were attending government nursery schools and nursery classes located in primary schools. The number represented a GER of 28%.

While it has been accepted that the quality of ECCE programmes is vital for the sustained educational development of citizens, there have been no national studies that examine the quality of ECCE provided in public pre-primary schools or pre-primary classes in public primary schools. The mere increase in pre-primary schools or expansion in the number of pre-primary classes that are attached to primary schools does not signify a commensurate enhancement in the quality of education provided.

Quality of Teaching Force in ECCE

During the period under review, attention has been paid to increasing the number of trained teachers in ECCE. Since the commencement of the pre-primary expansion programme under the aegis of the Ministry of Education, a teacher training component was included to enhance the pedagogical skills of teachers working at the pre-primary level in the facilities included in the expansion programme.

The quality of the teaching force at the ECCE level was measured through an examination of the percentage of professionally trained and certified teachers according to the national standards as set out in the Civil Establishments Act, Qualification Order 2001.

Indicator 1.4

Percentage of trained teachers in pre-primary education and other ECCE programmes at pre-primary education and/or ECCE according to national standards, by sex

In Barbados, the programme of training and certification of teachers is not separated by learning levels such as ECCE or primary education. All teachers at the primary and ECE levels pursue the same training programme.

Since 2000, there was a steady decline in the percentage of trained teachers in pre-primary education and other ECCE programmes over the period from 84.70% in 2000 to 54.02% in 2011 (Table 5). The decline in trained teachers became evident since the enrolment of teachers in the certified teacher training programmes was low between 2000 and 2008. In addition, the percentage of male teachers in pre-primary and other ECCE programmes was low. At the same time there was the annual expected attrition of teachers through retirement and other factors.



As stated earlier, in 2005, the Government of Barbados embarked on a pre-primary expansion programme which included special training for teachers in the nursery and primary schools that expanded their programmes. This in-service training programme sought to enhance the ECE teaching strategies and methodologies of teachers at the early childhood level. In addition, short in-service professional development workshops were conducted for teachers in Literacy, Mathematics and Language Development with a special focus on ECE.

Barbados also contributed to the development of the CARICOM Regional Guidelines for Developing Policy, Regulation and Standards in Early Childhood Development Services which was supported by UNICEF and UNESCO. The Guidelines set out the benchmarks for quality ECCE services in the region which are also followed by Barbados.

In 2008 Ministry of Education and ETTC implemented a programme to accelerate the training of teachers due to declining numbers of qualified teachers at the primary level. This initiative is expected to show a positive turn around in the percentage of trained teachers by 2015. It should be noted that in Barbados there are very few males who teach at the ECCE level.

Table 5: Percentage of trained teachers in pre-primary education and other ECCE programmes at pre-primary education and/or ECCE according to national standards, by sex

Indicator 1.4					
Percentage of trained teachers in pre-primary education and other ECCE programmes at pre-primary education and/or ECCE according to national standards, by sex					
Year Ending	Female %	Female Count	Male %	Male Count	Total %
1999	m	m	m	m	m
2000	m	m	m	m	84
2001	80	258	100	27	81
2002	78	253	83	24	78
2003	79	75	61	22	79
2004	81	137	78	31	80
2005	70	234	85	22	72
2006	69	200	78	14	70
2007	66	207	100	10	67
2008	58	204	100	9	59
2009	57	198	58	7	57
2010	58	179	0	0	58
2011	55	184	29	4	54

Source: UIS

m: missing

Note: no data on the minimum academic qualifications of private pre-primary teachers. Indicator therefore based on all trained pre-primary teachers



In Barbados, no minimum academic qualifications are established for private pre-primary teachers and data on the qualifications of these teachers were unavailable at the time this report was written. The downward trend of this indicator is a cause for major concern.

In addition to the Basic Skills Assessment Battery, the Ministry introduced the Criterion Referenced Test (CRT) at the early childhood level in an effort to enhance the quality of education at this level. The CRT was designed to ensure that teachers and parents could obtain vital information on students' mastery or lack thereof of the basic curriculum. Teachers are given the opportunity to provide the necessary remediation for students before they transition to secondary education. The test is administered at the end of Infants B (Grade 2) and Class 2 (Grade 4). It has become an integral part of the teaching and learning process at the primary level.

Investment in ECCE

Over the last three decades, successive governments in Barbados have committed significant financial resources to the provision of early childhood care and education through the day care facilities and nursery facilities in centres and schools. The indicator on public expenditure on pre-primary education and other ECCE programmes measures the level and consistency of financial commitment to this level of education.

In addition, there is universal access for all children from birth to public health care offered through the public polyclinics and the lone national hospital. This includes the monitoring of all aspects of child development through health checks and assessments, immunizations and general health care across the island.

Indicator 1.5

Public expenditure on pre-primary education and other ECCE programmes as a percentage of total public expenditure on education

In the case of government expenditure on pre-primary education, the financial allocations for pre-primary and primary education are not traditionally disaggregated but treated as a block. Therefore, for the purposes of this indicator, expenditure in pre-primary was determined based on the amount of financial allocations provided to primary education in proportion to the enrolment in pre-primary education. The analysis shows that on average approximately 5% of public expenditure was spent on pre-primary education. That amount has remained relatively stable over the period (Table 6).



Table 6: Public expenditure on pre-primary education and other ECCE programmes as a percentage of total public expenditure on education

Indicator 1.5	
Public expenditure on pre-primary education and other ECCE programmes as a percentage of total public expenditure on education	
Year Ending	Public Expenditure on Pre-primary
1999	m
2000	m
2001	4.0958
2002	4.4741
2003	4.1523
2004	4.5054
2005	4.8308
2006	5.6305
2007	5.5086
2008	5.5333
2009	5.52
2010	5.5611
2011	5.7408
<i>m: missing</i>	
<i>Source: METI</i>	

In the case of other ECCE programmes, the majority of care and services for babies and toddlers offered in Barbados are through private institutions as indicated previously. The expenditure by the Child Care Board would provide a reasonable measure of public investment in ECCE services.

Learning Environment

The pupil/teacher ratio is one of the indicators that measures progress in achieving quality in the teaching and learning environment. It measures the level of human resource input in terms of the number of teachers relative to the size of the pre-primary population in this particular case. In Barbados, the Ministry of Education maintains a policy of fifteen pupils to one teacher in public pre-primary schools. This policy however does not bind private pre-primary institutions and Child Care facilities.



Indicator 1.6

Pupil/Teacher Ratio (PTR) in pre-primary education (and/or Children-Caregiver Ratio in early childhood care programmes)

The analysis of available data revealed that the pupil teacher ratio (PTR) in pre-primary education maintained a constant rate over the period under review. The PTR ranged from 16.66 in 2000 to 16.15 in 2011. The average PTR was around 17.02 with a peak ratio in 2007 of 18.94 and the lowest in 2011 at 16.15. The data presented reflect public education institutions (Table 7).

Table 7: Pupil/Teacher Ratio (PTR) in pre-primary education (and/or Children-Caregiver Ratio in early childhood care programmes)

Indicator 1.6 Pupil/Teacher Ratio (PTR) in pre-primary education (and/or Children-Caregiver Ratio in early childhood care programmes)	
Year Ending	Pre-primary PTR
1999	17.61
2000	16.66
2001	16.3
2002	17.29
2003	17.1
2004	17.72
2005	17.72
2006	m
2007	18.94
2008	16.34

Indicator 1.6 Pupil/Teacher Ratio (PTR) in pre-primary education (and/or Children-Caregiver Ratio in early childhood care programmes)	
Year Ending	Pre-primary PTR
2009	16.79
2010	16.19
2011	16.15

Source: UIS

m: missing

Note: The data presented reflect public education institutions.

Note however, that the data shown here does not include data from most of the private day care facilities.

In addition to satisfactory pupil teacher ratios being maintained throughout the period, the Ministry of Education continued to provide care and learning support to teachers at the nursery level in public schools through the Parent Volunteer Support Programme which was originally introduced in 1996. There was also the introduction



of Early Childhood Subject Coordinators in all public primary schools and public pre-primary schools. These will be elaborated on later in Section 4 of the report.

Summary of Progress Towards Achievement of Goal 1 since 2000

The early childhood population (birth to 8) decreased marginally since 2000 while the 0-4 age group remained relatively stable over the period. Moreover, there was no disparity between males and females in access to ECCE in Barbados since access to education is open equally to boys and girls. Therefore, the expansion that occurred means more services were provided to children during this review period. Additionally, this expansion equally benefitted both genders. Progress can be measured by an increase in the number of private day care centres registered with the Childcare Board, and, an increase in the number of government nursery schools and an increase in the number of nursery classrooms in public schools that enrolled pupils in the under 5 age group.

Remaining Gaps, Issues and Challenges

In the area of early childhood care and education there are some challenges that remain to be addressed by 2015 and beyond. The Childcare Board still reports that annually there is a significant number of babies and toddler pre-schoolers on its waiting list to be enrolled in government nurseries (in 2013 this number was 3394). There is a large demand for access to public day care centres that outweighs the demand. This shortfall is addressed in the number of private day care centres that are available which total 161 in 2013 compared to the 15 government day care centres. However, access to private centres may be limited and/or represents a financial burden for parents who may be struggling to pay for private day care services.

Even though access and participation are clearly measurable in Barbados, fewer data elements are available to measure quality and efficiency in ECCE. The only data noted above that relates to quality is the number of trained teachers in pre-primary education and other ECCE programmes. This number declined considerably during this reporting period. Moreover, government spending in ECCE appears to have declined marginally during this reporting period.

Remaining gaps in ECCE pertain to data collection, specifically in the area of teacher training in ECCE. Data on the number of trained teachers in the private day care were missing during this review period and these data are necessary to better report on the quality and efficiency of existing services in ECCE. Additionally, no data are available on parent participation even though their participation is noted by the Ministry of Education in their strategic plan as important to ECCE.

One significant challenge is the lack of collated data. While data for babies and toddlers pre-primary are collected by the Childcare Board, data for 3-4 year olds are collected by the Ministry of Education. Data collected on the 0-4 age groups should



be aggregated yearly to provide a clear picture of the ECCE services provided in Barbados.

Finally, incomplete data on the number of day care centres and nurseries (public and private) that serve children in the 0-4 age groups limited the analysis in this area for the period under review.

3.2 UNIVERSALISATION OF PRIMARY EDUCATION

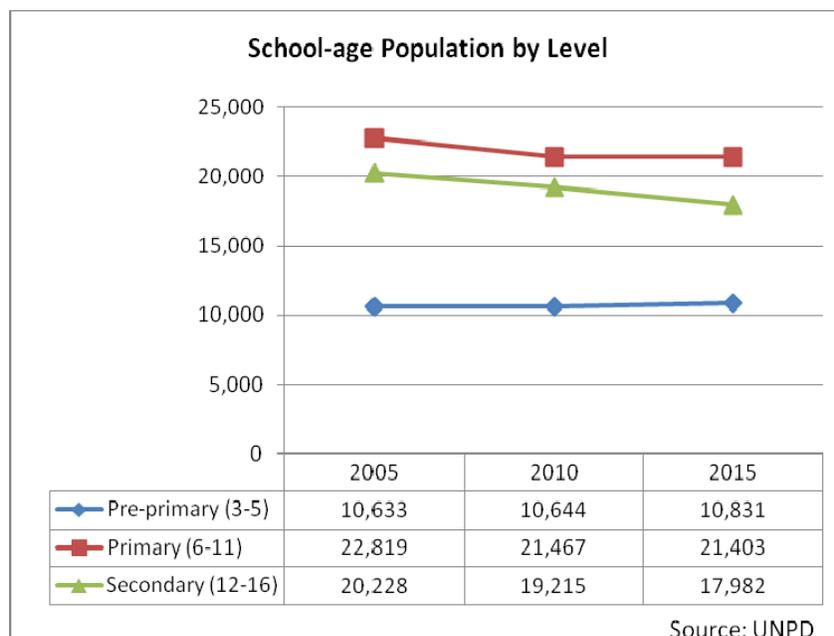
Goal 2: Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.

Introduction

Since the 1970s, Barbados had attained universal access to primary education. Education is generally provided tuition-free at the point of delivery from pre-primary to secondary level.

In Barbados, the official primary school age is 5-11 years old. This group represented 10.51% of the national population in the year 2000. Since 2000, there was a steady marginal decline in the primary school-aged population (figure 4). By 2010 this group represented 8.92% of the total population. The observable decline in this cohort of the population is a reflection of the very low fertility rate in Barbados.

Figure 4: School-age Population by level





While universal access to primary education has been achieved, the national focus since 2000 has been on the quality of teaching and learning outcomes for students at this level.

Analysis of Progress Towards Goal 2 Since 2000

Access and Participation

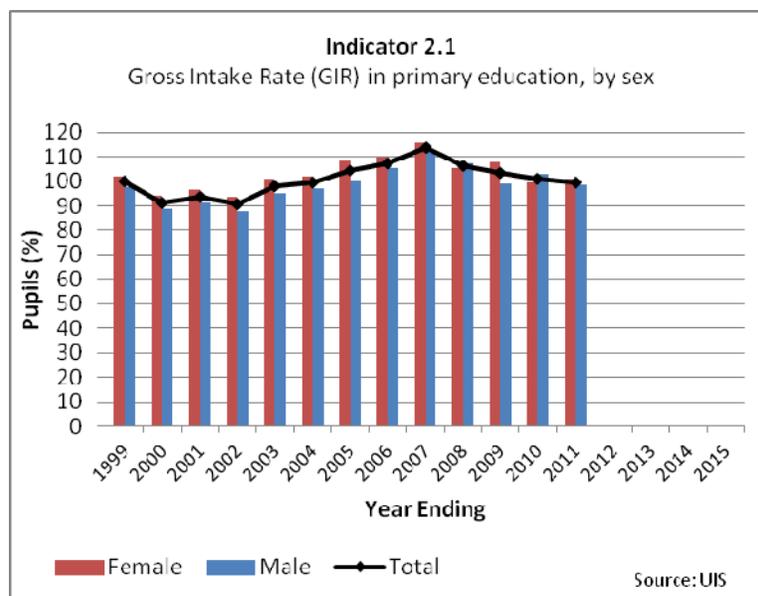
The baseline assessment data for primary education revealed that prior to the year 2000, Barbados had attained wide coverage at this level and had the capacity to accommodate the primary school-aged population. The GIR ranged from 94.7% to 100%. The NIR was similarly very high for those pupils of the official school-entrance age. The analysis of data since 2000 revealed that Barbados maintained its wide coverage of primary education and sustained the capacity to meet the enrolment demand of pupils in the official school-entrance age.

The overall gross intake rate (figure 5) averaged around 101% for the period under review. Since the 1999 base year, the GIR declined to its lowest levels (91%) in 2000 and 2002. After 2003, there was a steady increase in GIR reaching a peak in 2007. However, in the period between 2007 and 2011, the gross intake rate declined steadily and averaged 105% (Figure 5).

Indicator 2.1

Gross Intake Rate (GIR) in primary education, by sex

Figure 5: Gross Intake Rate (GIR) in primary education, by sex

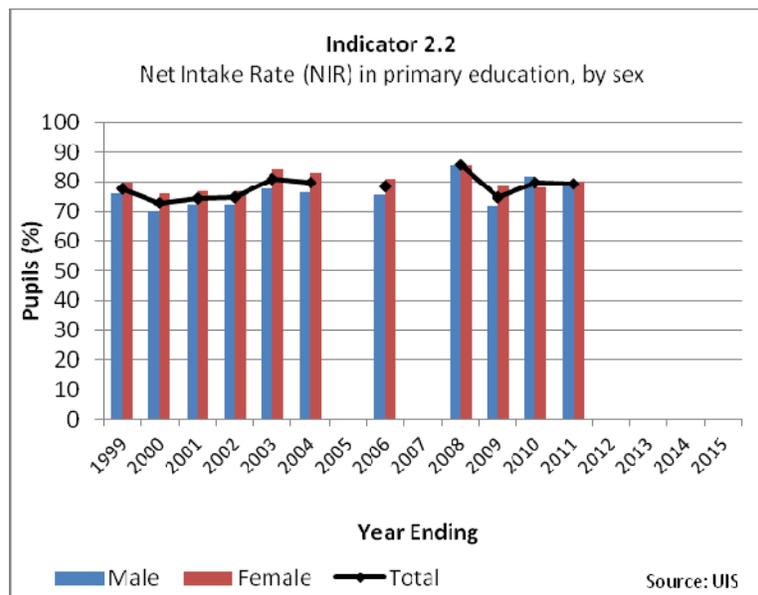




For the period under review, the net enrolment of new entrants to the first grade of primary education averaged about 78% of the population of pupils of compulsory school entrance age (Figure 6). This low percentage of the cohort may be due to data quality relative to inconsistencies in the date at which ages were calculated, that is, either at the beginning or the end of the school year.

Indicator 2.2 Net Intake Rate (NIR) in primary education, by sex

Figure 6: Net Intake Rate (NIR) in primary education, by sex

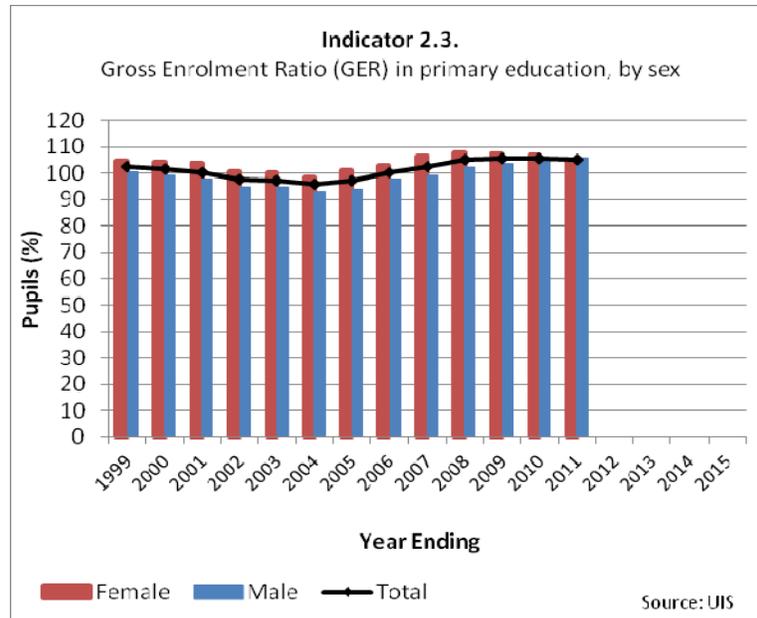




Indicator 2.3 Gross Enrolment Ratio (GER) in primary education, by sex

During the period 2000 to 2011, Barbados continued to record high participation rates in primary education for boys and girls. Barbados maintained a high GER over the period from 101.6 in 2000 to 105.3 in 2011 (Figure 7). The lowest point was recorded in 2004 at 95.71. Generally, there were more females enrolled than males.

Figure 7: Gross Enrolment Ratio (GER) in primary education, by sex

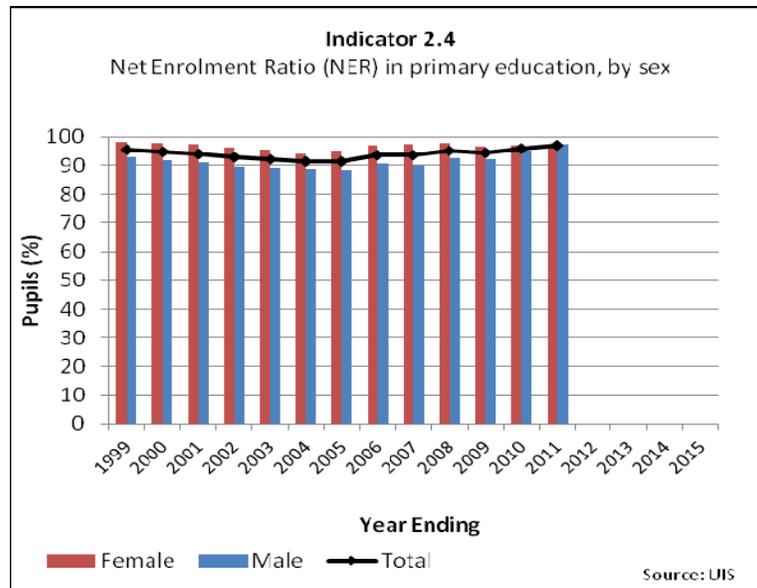


In the period 2000 to 2004 there was a marginal decline in the overall NER from 94.67 to 91.17 followed by a consistent and steady increase to 97.08 in 2011.



Indicator 2.4
Net Enrolment Ratio (NER) in primary education, by sex

Figure 8: Net Enrolment Ratio (NER) in primary education, by sex



Indicator 2.5
Adjusted net enrolment ratio (ANER), by sex

The adjusted net enrolment rate (ANER) at the primary level shows a similar trend to the NER over the period 2000 to 2011 for both boys and girls with girls maintaining a slightly higher ANER.

Table 8: Adjusted net enrolment ratio (ANER), by sex

Indicator 2.5			
Adjusted net enrolment ratio (ANER), by sex			
Year Ending	Female	Male	Total
1999	97.98	92.95	95.36
2000	98.01	91.74	94.73
2001	97.34	90.88	93.96
2002	96.15	89.54	92.69
2003	95.63	89.25	92.28
2004	94.16	88.53	91.2
2005	95.01	88.18	91.42
2006	96.92	90.62	93.61
2007	97.49	89.83	93.47
2008	97.89	92.61	95.13



Indicator 2.5			
Adjusted net enrolment ratio (ANER), by sex			
Year Ending	Female	Male	Total
2009	96.52	92.04	94.2
2010	97.17	94.97	96.04
2011	96.84	97.41	97.13

Source: UIS

Quality and Efficiency

Data will be presented on several indicators that measure progress in achieving quality in the teaching and learning environment.

Indicator 2.6

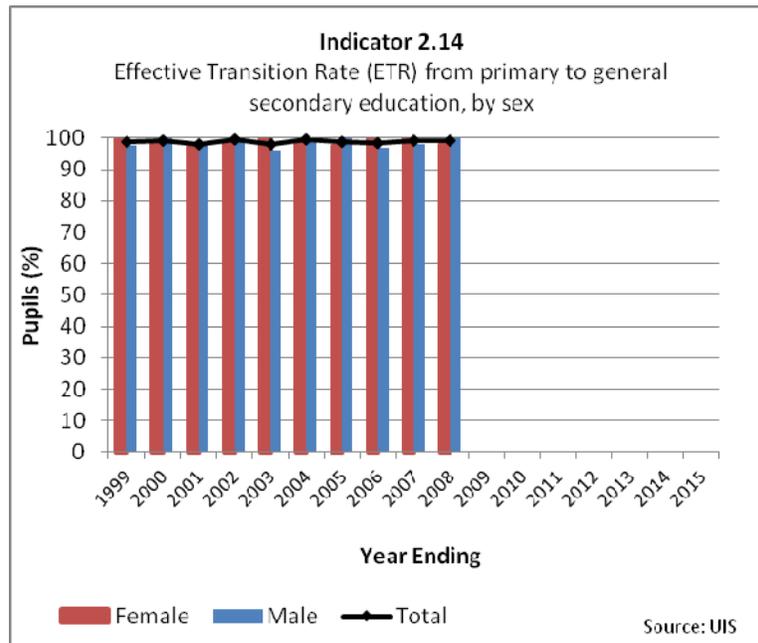
Effective Transition Rate (ETR) from primary to general secondary education, by sex

The effective transition rate is one of the indicators that measures progress in achieving efficiency in the education system.

In Barbados, there is a policy of Flexible Transfer, which allows students between the ages of 10 and 12 to transition from primary to secondary education. Essentially, all students attending Primary school are allocated a place in Public or Private secondary schools. Figure 9 shows that there was an ETR of 100% from primary to general secondary education for both males and females.



Figure 9: Effective Transition Rate (ETR) from primary to general secondary education, by sex



Quality of Teaching Force

The proportion of teachers at the primary level who possess the required academic qualifications to teach at primary education level according to national standards is one of the indicators that measures progress in achieving quality in the teaching and learning environment

Indicator 2.7

Number and percentage of teachers in primary/basic education by level of academic qualification, and with required academic qualifications to teach at primary education level according to national standards, by sex

As stated in the Year 2000 Assessment, the percentage of qualified and certified teachers in the teaching service provides an indication of the level of preparation of the teaching force with the necessary pedagogical skills to effectively deliver the national curriculum. The baseline assessment (1999) revealed that Barbados had the quality of the human resources prepared for teaching at the primary level. All teachers in public primary schools had the basic academic qualifications required for teaching.

In Barbados, all teachers hired in the public sector possess the minimum required qualifications. The data presented refers to public schools only. There is no pre-determined standard for teachers in private schools.



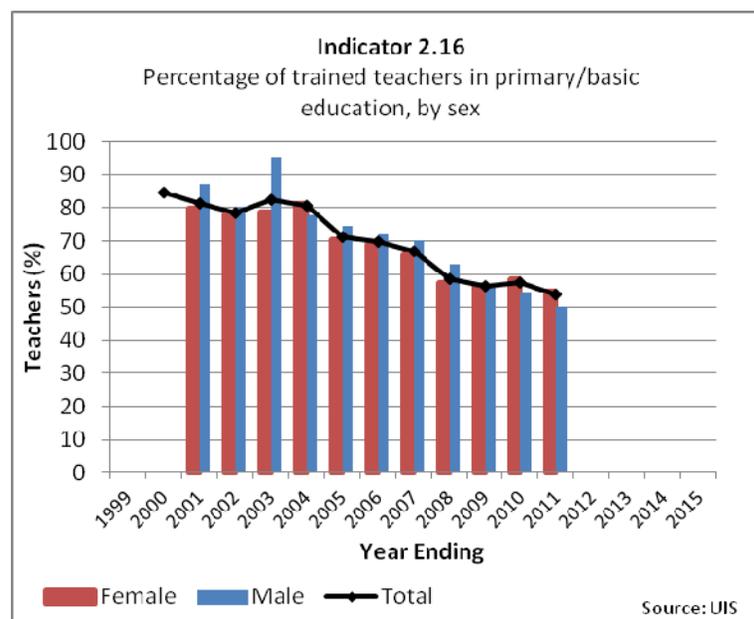
Indicator 2.8 relates to the number of professionally trained and certified teachers as a percentage of the total number of primary school teachers. It sought to measure the proportion of teachers trained and equipped with the pedagogical skills to effectively deliver the primary curriculum.

The available data indicated a high proportion of persons certified to teach, rising as high as 93.8% in 1996.

Indicator 2.8 Percentage of trained teachers in primary/basic education, by sex

Prior to 2000, Barbados recorded a high proportion of teachers, as high as 93.8% in 1996, who were professionally certified to teach at the primary level. Since 2000, the proportion of trained teachers in primary education declined steadily averaging around 70% (Figure 10). Although the percentage of trained males exceeds that of trained females for a number of years during the period, this does not indicate training disparity; since the population of female teachers surpasses that of the male teachers.

Figure 10: Percentage of trained teachers in primary/basic education, by sex





Learning Environment

The Pupil/Teacher Ratio at the primary level is another indicator that measures progress in achieving quality in the teaching and learning environment

Indicator 2.9

Pupil/Teacher Ratio (PTR) in primary/basic education

Between 1990 and 1999, the pupil teacher ratio at the primary level varied from 1:16.2 to 1:20.5, mainly in public institutions. During the period under review, the pupil teacher ratio in primary education declined from 1:17.57 in 2000 to 1:13.09 in 2011. This indicator is a reflection of the high level of human resource input into primary education in Barbados in terms of the number of teachers relative to the size of the pupil population. It also signifies an average small class size at the national level.

Table 9: Pupil/Teacher Ratio (PTR) in primary/basic education

Indicator 2.17	
Pupil/Teacher Ratio (PTR) in primary/basic education	
Year Ending	Primary PTR
1999	17.77
2000	17.57
2001	17.04
2002	15.9
2003	15.8
2004	15.77
2005	15.15
2006	14.67
2007	14.54
2008	13.46
2009	14.14
2010	13.01
2011	13.09

Source: UIS



Investment in Education

Over the last three decades, public expenditure on education has consistently exceeded 16%. There is a clear indication of the level of commitment to education by successive governments in Barbados. As a result, Barbados has consistently recorded a high level of human development on the UNDP's human development index.

Indicator 2.10

Total public expenditure on education as a percentage of GNP/GDP

In the period 1990-1999, the government of Barbados consistently invested approximately 6% of GDP on education.

Public expenditure on education experienced its highest increase between the years 2000 and 2001 but remained steady thereafter, maintaining an average of about 5.6 percent of Barbados' GDP over the period.

Table 10: Total public expenditure on education as a percentage of GNP/GDP

Indicator 2.18	
Total public expenditure on education as a percentage of GNP/GDP	
Year Ending	Public Expenditure
1999	4.255
2000	4.622
2001	5.939
2002	5.771
2003	6.123
2004	5.911
2005	5.564
2006	<i>m</i>
2007	5.104
2008	5.098
2009	5.39
2010	5.887
2011	<i>m</i>
2012	5.61

m: missing

Source: UIS



Indicator 2.11

Total public expenditure on education as a percentage of total government expenditure

In the period 1990-1999, the government of Barbados consistently expended approximately 16% of the national budget on average on education.

Table 11: Total public expenditure on education as a percentage of total government expenditure

Indicator 2.19	
Total public expenditure on education as a percentage of total government expenditure	
Year Ending	Public Expenditure
1999	12.85
2000	12.71
2001	15.63
2002	13.45
2003	14.4
2004	15.37
2005	13.37
2006	<i>m</i>
2007	11.96
2008	12.04
2009	13.82
2010	14.93
2011	<i>m</i>
2012	13.44
<i>m: missing</i>	
<i>Source: UIS</i>	

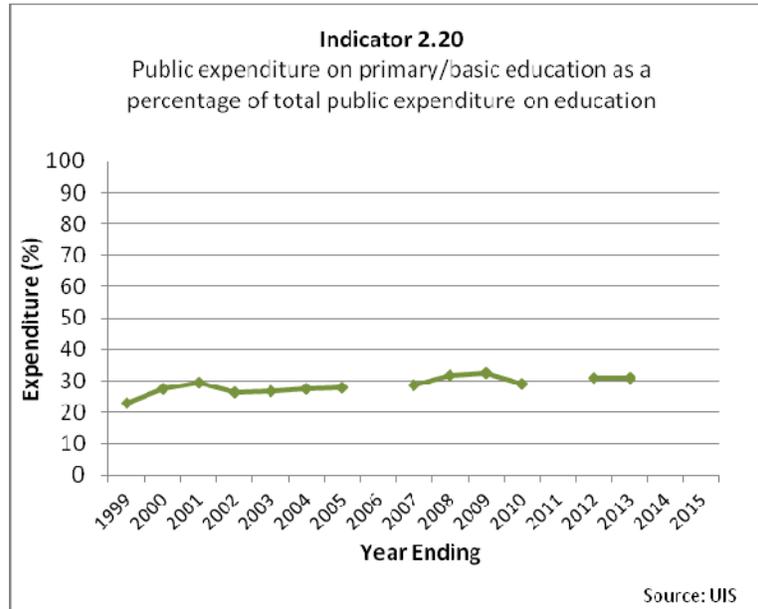
In Barbados, during the period under review, the public expenditure on education as a percentage of total government expenditure fluctuated between 15.63% in 2001 and 11.96% in 2007. It registered levels from as high as. The figure of 13.44% recorded in 2012 is consistent with the overall average of 13.74% for the period. The observed decline in public expenditure on education as a percentage of the national budget is a reflection of the economic challenges that the Barbadian economy has been facing since 2007.



Indicator 2.12

Public expenditure on primary/basic education as a percentage of total public expenditure on education

Figure 11: Public expenditure on primary/basic education as a percentage of total public expenditure on education



Expenditure on Primary education represented approximately 29% of government's total expenditure on education for the period. There was a sharp increase of around 5% points between the 1999 base year (22.83%) and 2000 (27.65%), after which public expenditure on primary education exhibited relatively moderate fluctuations for the remainder of the period (Figure 11).



Indicator 2.13

Public current expenditure on primary education as a percentage of GNP/GDP

Table 12: Public current expenditure on primary education as a percentage of GNP/GDP

Indicator 2.21	
Public current expenditure on primary education as a percentage of GNP/GDP	
Year Ending	Public Expenditure
1999	0.89
2000	1.169
2001	1.487
2002	1.381
2003	1.477
2004	1.478
2005	1.497
2006	<i>m</i>
2007	1.397
2008	1.526
2009	1.713
2010	1.607
2011	<i>m</i>
2012	1.622
<i>m: missing</i>	
<i>Source: UIS</i>	

Barbados' public current expenditure on primary education registered an average of 1.4% of GDP over the period.

Indicator 2.14

Public current expenditure on primary education per pupil as a percentage of GNP/GDP per capita

The current expenditure per pupil in primary education per capita (The percentage of each citizen's earnings contributing to each pupil at the primary level) increased slightly over the period; varying between 12.72 in 2000 and 20.93 in 2009.



Summary of Progress Towards Achievement of Goal 2 since 2000

Prior to 2000, the baseline data revealed that Barbados had attained the universalisation of access to primary education for the relevant population. During the period since 2000, Barbados maintained its achievement of universal access to primary education for all boys and girls. There were consistently high levels of pupil participation by both sexes throughout the period. The high participation levels corresponded with high completion rates and high effective transition rates for pupils from primary education to secondary education.

Efficiency was maintained at the high level with an average of 5% of pupils deferring the writing of the Barbados Secondary Schools Entrance Examination at age 11+ to complete transition on time. There was a very low level of inefficiency recorded at the primary level due to the policy of flexible transfer from primary to secondary education. There was evidence of a gradual decline in the percentage of trained teachers. However, a programme was introduced to halt the decline and restore the percentage of trained teachers to a satisfactory level by 2015. The pupil teacher ratio at the primary level showed evidence of a decline between 2000 and 2011. Finally, public expenditure on primary education remained relatively stable since 2000.

Remaining Gaps, Issues and Challenges

There were some issues that require some attention. During the period there was a considerable decline in the percentage of professionally qualified teachers at the primary level. The challenge for the Government of Barbados was to restore the percentage of professionally qualified teachers to the high levels of the 1990 by the year 2015.

In addition, there was a steady decline in the pupil teacher ratio. The challenge is to determine whether there was a concomitant improvement in the quality of learning outcomes for pupils at this level given the low pupil teacher ratio and the relatively small class sizes.

There was also a clear decline in the percentage of public finances spent on primary education as a percentage of the national budget. This was evidently associated with the economic circumstances in the country and the reduction in budget allocations to the Ministry of Education. The main challenge is to sustain public expenditure on education at around 16% of the National Budget or 6% of GDP.



3.3 MEETING THE LEARNING NEEDS OF YOUTHS AND ADULTS

Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes

Introduction

This goal places focus on the acquisition of skills and the learning achievement and outcomes of young people and adults. It also considers the level of participation in secondary education and assesses progress in reaching effective completion of this level of education. Successful completion of secondary education provides a useful gauge of the acquisition of the foundational skills necessary for sustainable livelihoods, entry into the world of work, obtaining decent jobs and for effective functioning in society.

Analysis of Progress Towards Goal 3 Since 2000

Access, Participation and Quality

Indicator 3.1: Youth (15 -24 years old) literacy rates by sex

This indicator measures the number of young persons aged 15-24 who can both read and write with understanding a short simple statement about their everyday life. It seeks to reflect the outcomes of basic education and the effectiveness of the primary and secondary education system in preparing young people for the transition to employment or further study.

The evidence for this indicator was derived from the Barbados National Census Reports 2000 and 2010. The literacy rate measured in 2000 has remained consistent over the years at 99% for persons 15-24 years. The Multiple Indicator Cluster Survey (MICS) report of 2012 confirms this high literacy rate among the youth population even though the focus was on female literacy. The high youth literacy rate is a reflection of the high level of pupil participation in primary and secondary education and its effectiveness in inculcating the foundational skills of reading and writing that are necessary for life.

Indicator 3.2: Number and Percentage Distribution of Youth (aged 15-24) by Educational Attainment (highest level of education completed or attained e.g. primary, lower secondary, upper secondary, tertiary) and by sex

In the area of highest level of education attainment, the data revealed that in Barbados between 2000 and 2010 a high percentage of both male and female persons aged 15-24 years had attained up to a secondary level of education as their highest level of education. However, the percentage showed a gradual decline over the period as the percentage of males and females attaining post-secondary



education increased commensurately. A very small percentage of males and females were recorded as attaining only primary education. It is evident that since 2000 there was a negligible number of persons having only a primary education as their highest level attained.

The data on males (Figure 12) show that the completion of secondary education was their highest attainment level during the period 2000-2010. There was a steady decline from 79.8% to 69.03% which represented a 10.5 percentage point decline. This decline corresponded with a gradual increase in the percentage of males that recorded completion at the post-secondary/tertiary level. During the same period, males recorded a marginal decline from 22.01% to 21.41% in post-secondary/tertiary education as their highest level attained. This represented a very small and insignificant 0.6 percentage point decline.

In the case of females during the period 2000-2010, it was observed that a negligible percentage of females had recorded primary education as their highest level attained (Figure 13). Over the period, the majority of females indicated that their highest level of education attained was secondary. The percentage of females completing secondary education as their highest attainment level, declined from 75.9% to 60.23%. This represented a 14.96 percentage point decline. At the same time there was a concomitant increase in the percentage of females recording post-secondary/tertiary education attainment as their highest level.

The percentage of males attaining a Post-Secondary/ Tertiary education increased by about 13% points from 15.23% in 2000 to 28.92 in 2010. The females recorded a slightly higher percentage increase over the same period moving from 21.42% to 38.4%.



Figure 12: Number and percentage distribution of youth (aged 15-24) by educational attainment (highest level of education completed or attained e.g. primary, the lower secondary, upper secondary, tertiary) and by sex (Males)

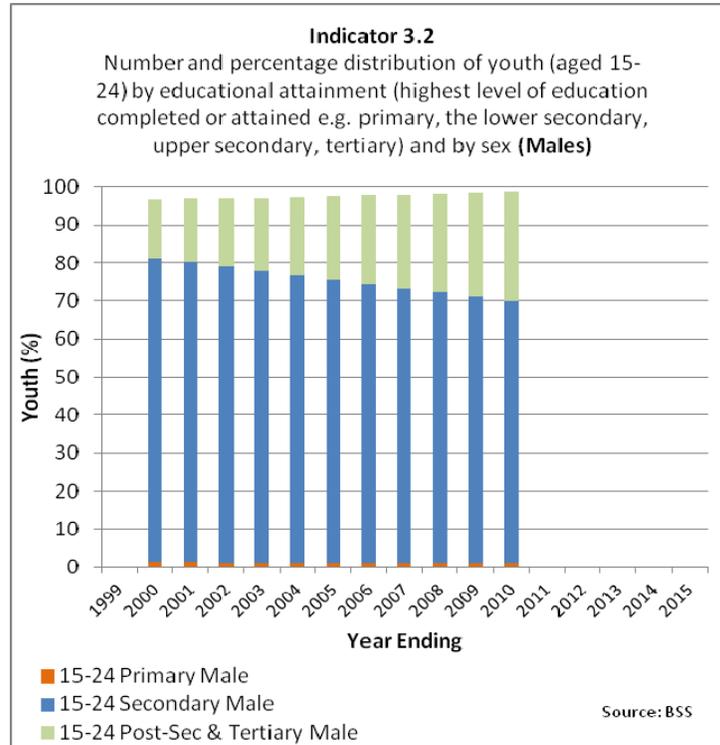
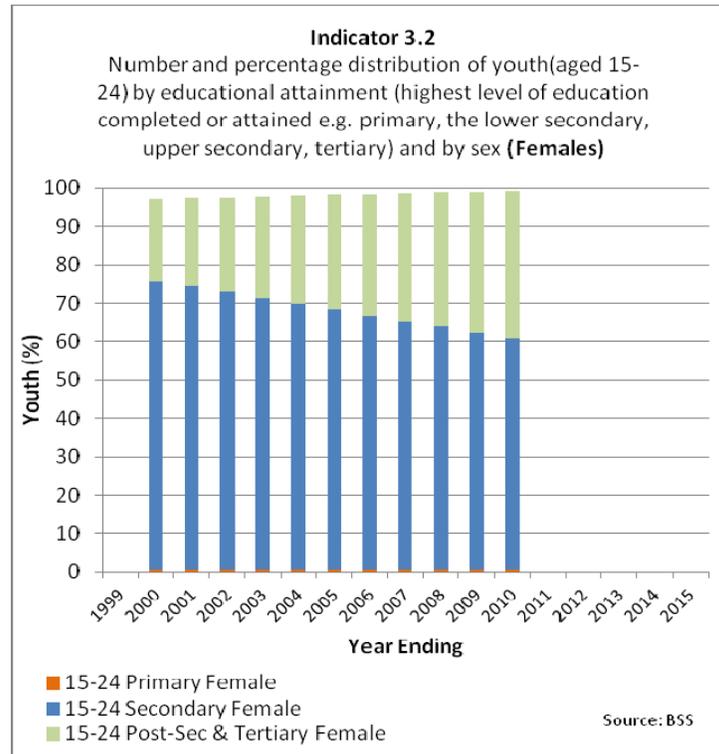




Figure 13: Number and percentage distribution of youth (aged 15-24) by educational attainment (highest level of education completed or attained e.g. primary, the lower secondary, upper secondary, tertiary) and by sex (Females)



Overall, for the period 2000 to 2010, there was a steady decline in the percentage of students reporting the completion of secondary education as their highest attainment from 77.64% to 64.78%. This represented a 12.86 percentage point decline. At the same time, there was an expansion in the percentage of both sexes completing post-secondary/tertiary education as their highest education level attained with a corresponding marginal decline in secondary-only graduates.

Indicator 3.3 Gross Enrolment Ratio (GER) in secondary education by type of programme (general; technical and vocational education and training; non-formal education and skills training) and by sex

In Barbados, a general education is provided during the first three years of secondary education (Grades 7-9). This is a unique feature of the Barbadian secondary education system. The proportion and distribution of students enrolled in secondary education according to the type of programme provides a reflection of the capacity of the system to accommodate the secondary school-aged population and to prepare young persons for entry into the world of work or for further study.



The gross enrolment ratio in Secondary education remained consistently high at an average of 104 % over the period 2000 to 2011. An examination of male to female GER (Figure 14 and 15) in Secondary education revealed that there was a marginal difference between the sexes with females averaging over 100 percent (109%) and males marginally below 100 percent (99%). The high secondary gross enrolment ratio recorded further demonstrated the capacity and participation at this level. Barbados maintained universal access to secondary education during the period 2000-2011.

It was evident that there was adequate provision to meet the learning needs of the secondary school-aged population in either public or private institutions.

Figure 14: Gross Enrolment Ratio (GER) in secondary education by type of programme (general; technical and vocational education and training; non-formal education and skills training) and by sex (Females)

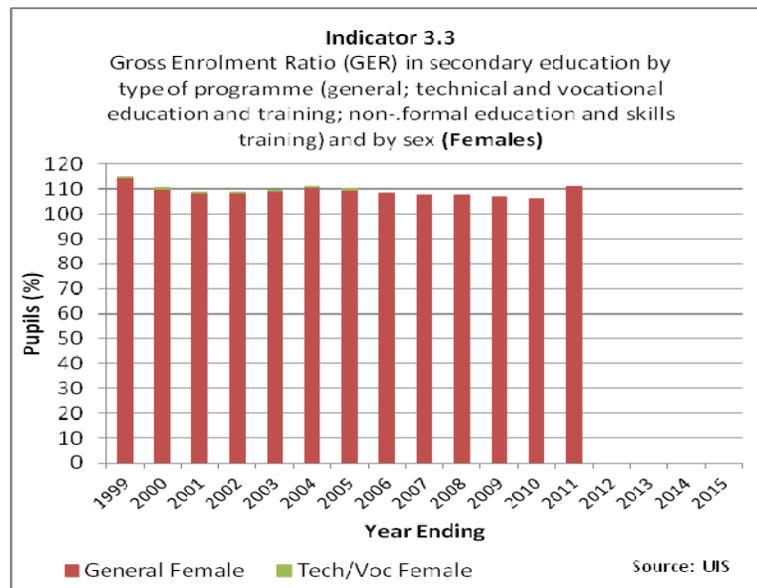
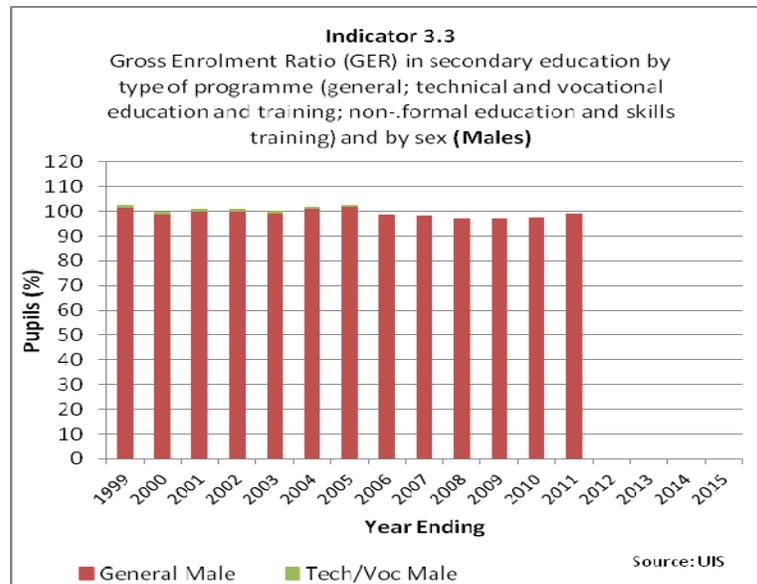




Figure 15: Gross Enrolment Ratio (GER) in secondary education by type of programme (general; technical and vocational education and training; non-formal education and skills training) and by sex (Males)



Indicator 3.5

Number and percentage distribution of technical/vocational education and skills training (TVET) centres and/or programmes for young people and adults by type (formal and/or non-formal)

Since 2000, there have been 3 main public institutions providing post-secondary technical/vocational programmes in Barbados. The Samuel Jackman Prescod Polytechnic (SJPP), the Barbados Community College (BCC) and the Barbados Vocational Training Board (BVTB). The programmes of the BVTB focus primarily on job-related skills and competencies. The BVTB oversees the administration of a number of Satellite Training Centres across the island. These centres varied in number between 5 and 7 over the period (Table 13).



Table 13: Number and percentage distribution of technical/vocational education and skills training (TVET) centres and/or programmes for young people and adults by type (formal and/or non-formal)

Indicator 3.5	
Number and percentage distribution of technical/vocational education and skills training (TVET) centres and/or programmes for young people and adults by type(formal and/or non-formal)	
Year Ending	BVTB Satellite Centres
1999	m
2000	6
2001	6
2002	6
2003	6
2004	6
2005	6
2006	6
2007	6
2008	7
2009	7
2010	6
2011	6
2012	5
2013	6
<i>m: missing</i>	
<i>Source: TVET Council</i>	

The BCC has also operated one technical/ vocational training centre since 2000. Between 2000 and 2007, there were 6 centres. These increased to 7 for the year 2008-2009. Then between 2009 and 2013, there were 6 centres except for 2012 when one centre was not available.

Indicator 3.6 Number and percentage distribution of young people and adults enrolled in different types of technical/vocational education and skills training (TVET) centres and/or programmes by sex

Analysis of data for the SJPP, revealed that enrolment among males for the period 2000-2012 was higher than it was for females. However, in 2005, the enrolment for females was higher than it was for males. Generally, the enrolment peaked in 2007 and fell gradually until 2011.



For BCC, the data are not disaggregated in faculties. Therefore, there is no reference to the percentage of TVET students enrolled. However, the enrolment figures at BCC show that females significantly out-numbered the males by ratio of 2:1. Enrolment peaked between 2007 and 2011 with a peak of approximately 3400 in 2009.

Figure 16: Number of young people and adults enrolled in different types of technical/vocational education and skills training (TVET) centres and or/programmes, by sex (SJPP)

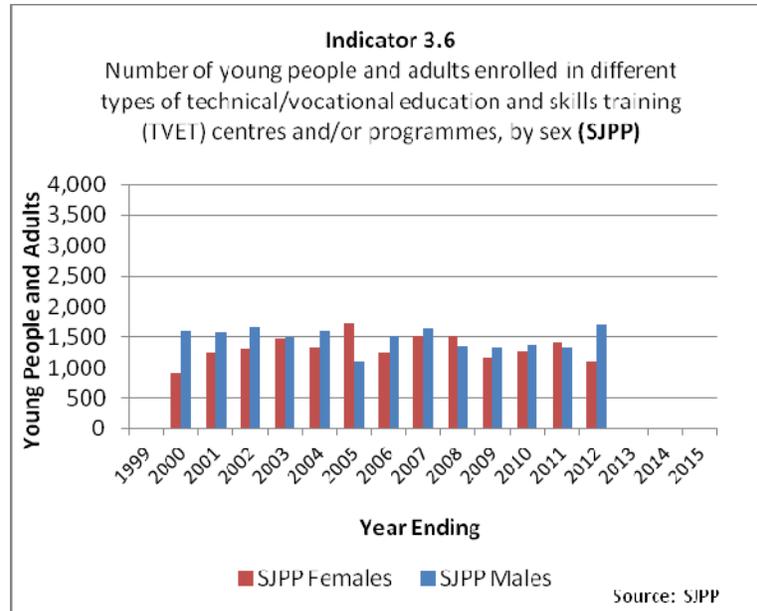
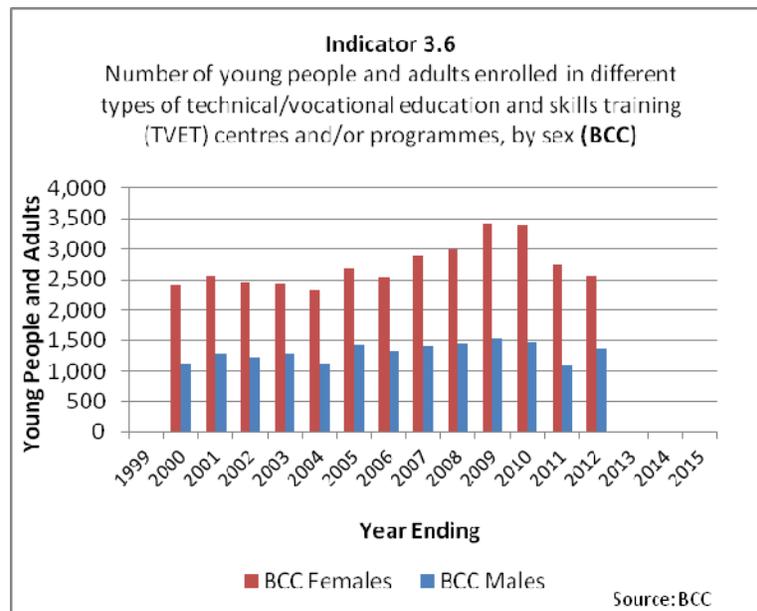




Figure 17: Number of young people and adults enrolled in different types of technical/vocational education and skills training (TVET) centres and or/programmes, by sex (BCC)



Investment in Education

During the period under review, the Government of Barbados continued to invest significantly in secondary and tertiary education. The distribution of public current expenditure by level of education gives some indication of the priority places on that level of education in national policy and resource allocation. It also serves as a measure of government spending according to education level on areas such as emoluments, teaching materials, scholarships, other operational costs and student support services. Capital expenditures are excluded from this analysis.

Indicator 3.10a Percentage distribution of public current expenditure on education by level, Secondary

At the secondary level, the analysis of expenditure shows that very close to one-third of the funds allocated by the Ministry of Finance were spent on secondary education (Table 14). This remained relatively stable throughout the period.

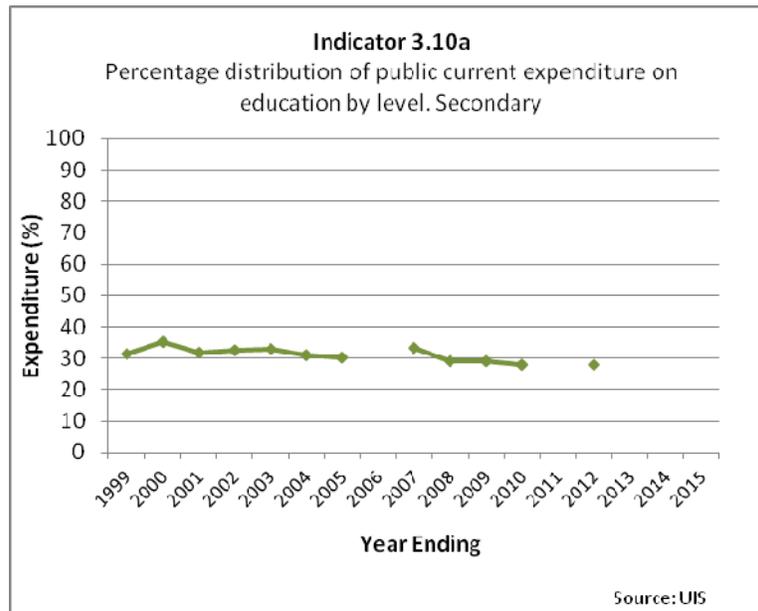


Table 14: Percentage distribution of public current expenditure on education by level, Secondary

Indicator 3.10a	
Percentage distribution of public current expenditure on education by level, Secondary	
Year Ending	Public Current Expenditure
1999	31.33
2000	35.24
2001	31.87
2002	32.71
2003	32.96
2004	30.96
2005	30.16
2006	<i>m</i>
2007	33.16
2008	29.16
2009	28.95
2010	28.16
2011	<i>m</i>
2012	27.95
<i>m: missing</i>	
<i>Source: UIS</i>	



Figure 18: Percentage distribution of public current expenditure on education by level, Secondary

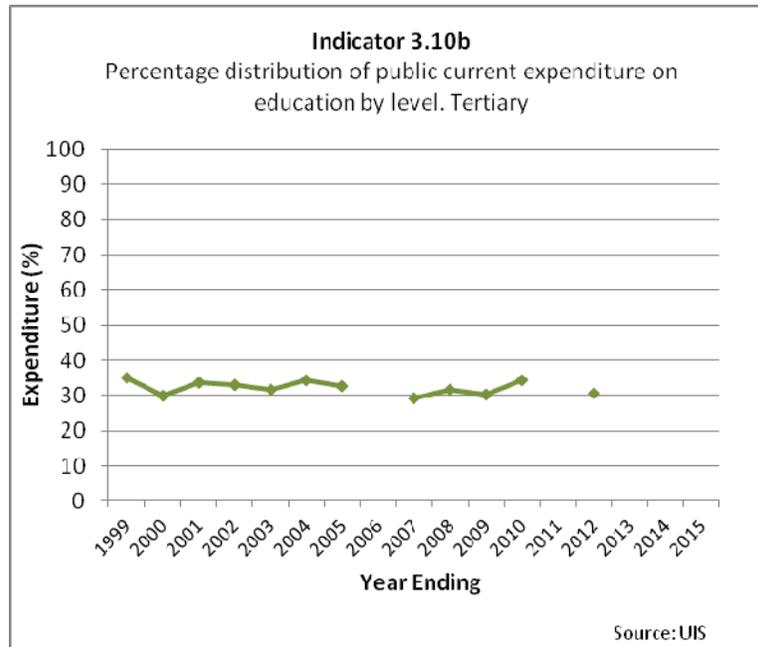


A similar picture emerged with regard to expenditure at the tertiary level with close to one-third of the funds allocated to the Ministry of Education during the period being spent on tertiary education.



Indicator 3.10b Percentage distribution of public current expenditure on education by level. Tertiary

Figure 19: Percentage distribution of public current expenditure on education by level. Tertiary

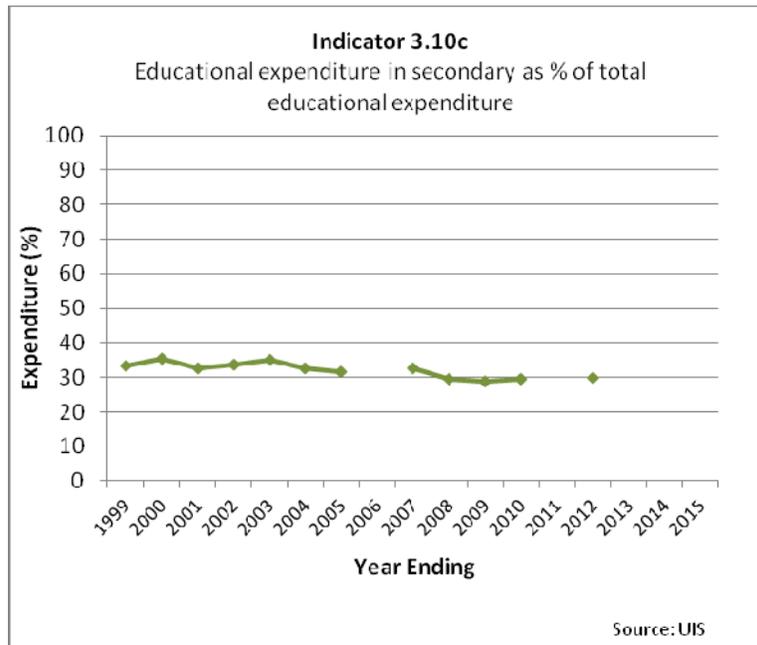


In contrast to the previous indicators, the following indicators on current expenditure are expressed as a percentage of both current and capital expenditures. The analysis highlights the relative weight between current and capital expenditure.



Indicator 3.10c Educational expenditure in secondary as % of total educational expenditure

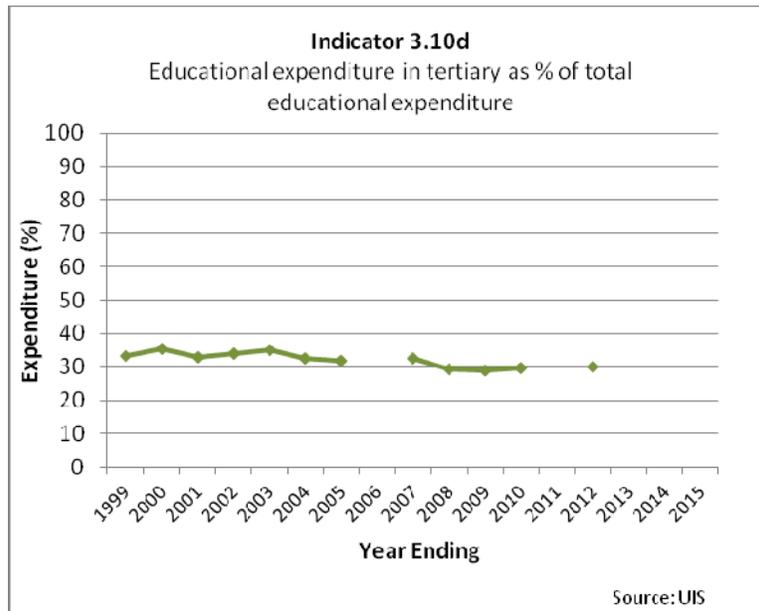
Figure 20: Educational expenditure in secondary as % of total educational expenditure





Indicator 3.10d Educational expenditure in tertiary as % of total educational expenditure

Figure 21: Educational expenditure in tertiary as % of total educational expenditure





Summary of Progress Towards Achievement of Goal 3 since 2000.

The analysis of data shows that Barbados maintained a high level of participation in and completion of secondary education between 2000 and 2010. Formal secondary schooling is known to be the most effective medium to foster the development of the skills and competencies required for work and life. The analysis supports the view that Barbados has sustained efforts in this area. There was evidence of an increase in the percentage of youth and adults aged 15-24 who attained at least a post-secondary/tertiary education as their highest level of education attainment completed.

Throughout the period, Barbados maintained universal access to secondary education along with gender parity. Despite economic challenges during the period, the Government of Barbados maintained adequate financial input at the secondary level. Barbados also continued to provide opportunities for young people to complete technical and vocational education and training and to acquire work-related skills. Despite recent economic challenges the Government of Barbados continued to maintain adequate levels of financial input into secondary education.

Remaining Gaps, Issues and Challenges

The analysis of progress in meeting the learning needs of youth and adults revealed a number of gaps, issues and challenges that require attention. The first relates to the growing demand for places in the technical and vocational education and training, especially among males. The demand for such programmes exceeded the availability of spaces. The challenge for the government is to explore the available options to expand capacity in the existing institutions that provide technical and vocational education and training.

An associated issue relates to the increase in demand for work experience through job attachment and internship, mentorship programmes to be facilitated by the training institutions and businesses. There is the need for enhancement of partnerships with industry partners that hold the keys to improving the provision of these kinds of opportunities for our young people.

Consideration also needs to be given to the expansion in the number and variety of continuing education courses are offered by agencies such as the UWI Open Campus, SJPP, BCC, ETTC, and the Barbados Institute of Management and Productivity (BIMAP). Such an expansion would greatly assist in meeting the national human resources development needs and to meet the learning and life skills needs of young people in Barbados.

Finally, a major challenge is in the area of expanding youth entrepreneurship. Expanded opportunities for young persons interested in starting their own businesses are needed to take advantage of the entrepreneurial activities in



technical and vocational education that will contribute towards national development.

3.4 IMPROVING ADULT LITERACY LEVEL

Goal 4: Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Introduction

This goal seeks to measure the efforts to reduce the levels of adult illiteracy at the global level, particularly among women. Internationally, the importance of literacy in contributing towards social and economic development is recognized. The associated indicators assess the impact of the diversity of policies and programmes implemented to foster and develop literacy. In Barbados, the reform of the national curriculum in 2000 was underpinned by a philosophy and programmes geared to develop among students the ability to read and express themselves fluently and to write effectively.

There are two factors that underpin the monitoring of literacy rates for this report. First, there is the UNESCO definition of literacy and data on educational attainment in Barbados. The indicators reflect the attainment of persons completing the primary and secondary education system.

Analysis of Progress Towards Goal 4 Since 2000

Progress on Adult Literacy

Indicator 4.1: Adult (15 years and over) literacy rates by sex

This indicator differs slightly from the youth literacy indicator which focused on persons aged 15-24. The adult literacy indicator measures literacy among the adult population, that is, all persons over the age of 15, inclusive of the youth.

Barbados recorded a high basic literacy rate of 99%. This rate was similar to the rate recorded for the 15-24 age group. The high basic literacy rate suggests the existence of an effective primary and secondary education system with associated literacy programmes that have enabled a large proportion of the adult population to acquire the skills and abilities to participate meaningfully in daily life.



Indicator 4.2

Proportion of adults (15+) by highest level of education completed or attained (primary, lower secondary, upper secondary, tertiary) and by sex

Improving adult literacy among persons in the population aged 15 years and over particularly among females was established to be an important global target. The data revealed that between 2000 and 2010, Barbados sustained a high proportion of females and males aged 15 and over attaining at least a secondary or post-secondary education. The analysis of data for this indicator revealed a higher proportion of males and females in the 15 and over population attaining only up to a primary education when compared with the 15-24 age population. This result reflects the presence of much older persons in the population in the 25 and over age group who might have only attended primary school. It is evident that since 2000, there was a marginal but steady decline in the percentage (18.37% to 13.9%) of persons having attained only a primary education. Again, this may be a reflection of the aging population in Barbados.

The high adult literacy rate among males and females aged 15+ over the period demonstrates the accumulated achievement of primary and secondary education in imparting the basic literacy skills necessary for intellectual growth, daily living and communication among this segment of the population. It also signifies the potential of young adults to contribute towards the social, economic and cultural development of Barbadian society.



Figure 22: Proportion of adults (15+) by highest level of education completed or attained (primary, lower secondary, upper secondary, tertiary) and by sex (Males)

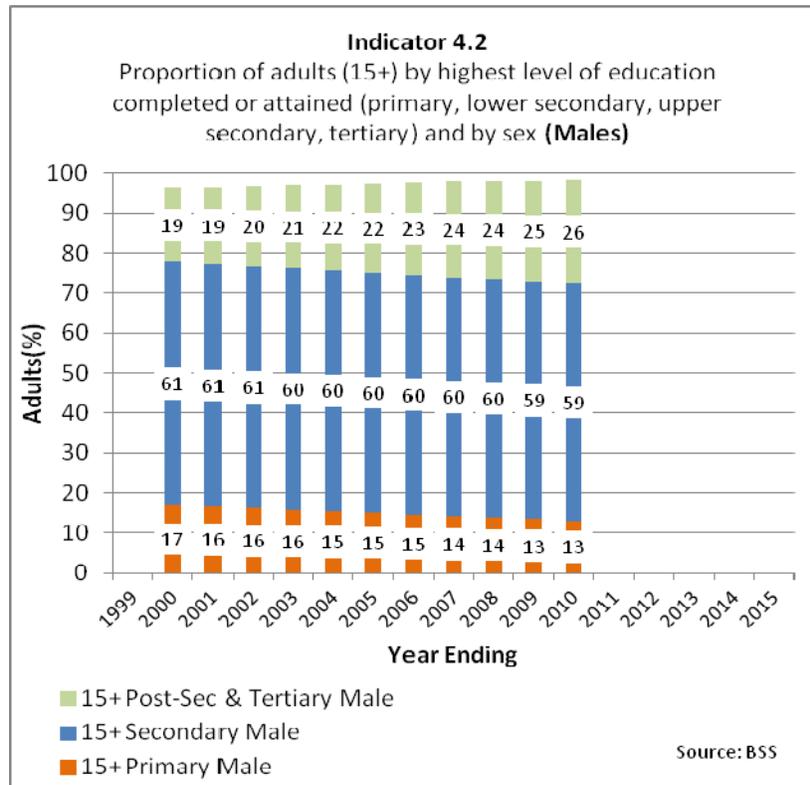
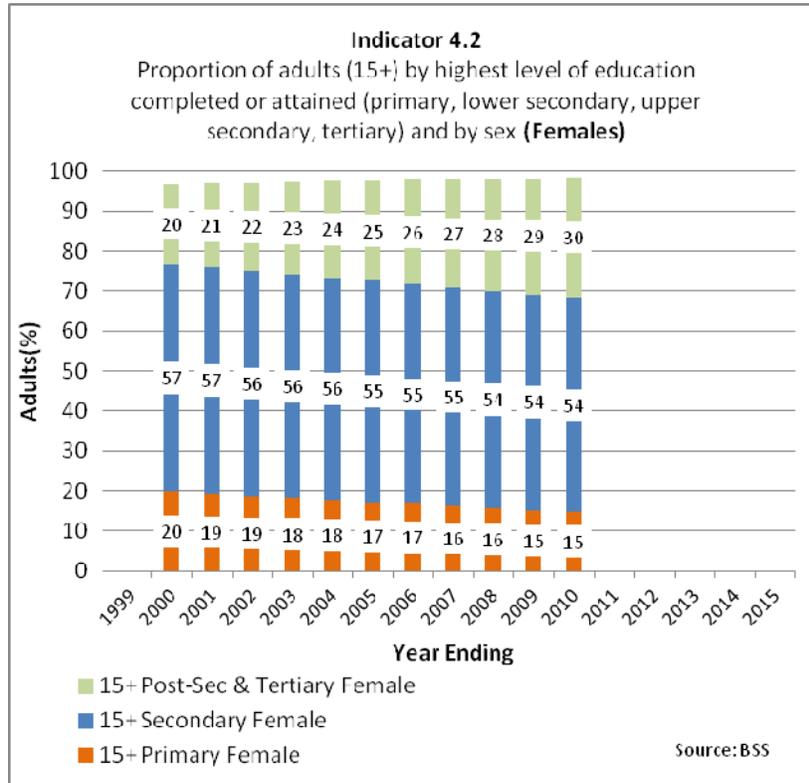




Figure 23: Proportion of adults (15+) by highest level of education completed or attained (primary, lower secondary, upper secondary, tertiary) and by sex (Females)



When the data for this indicator were disaggregated by sex it revealed that between 2000 and 2010 there was a 3.81% decline among adult males aged 15+ who had attained only a primary education and a corresponding marginal decline among those with only secondary completion. However, there was a concomitant increase in the percentage of males recording attainment of post-secondary/tertiary education as their highest level moving from 19% in 2000 to 26% in 2010.

In the case of females, there was a decline of 5% among adults aged 15+ who recorded attaining a primary education only as their highest level of education. There was also a corresponding marginal decline among female adults aged 15+ who recorded attaining up to a secondary level education. Similar to the observation among males, there was an increase in the percentage of females from 20% in 2000 to 30% in 2010 who recorded a post-secondary/tertiary education as their highest level of attainment.

Overall, there was a greater percentage of females 15 years and over completing tertiary education than males.



Progress in Adult Literacy And Continuing Basic Education Programmes

Indicator 4.3: Number and percentage distribution of adult literacy and continuing basic education programmes (institutions) by type of programme

The expansion in adult literacy and continuing basic education programmes was deemed to be critical in reducing the level of potential adult illiteracy in Barbados. Prior to 2000, there were several institutions in the public and private sector in Barbados that offered continuing education programmes for adults. The Continuing Education Programmes offered in public institutions were supported by the Programme of Adult Education legislation passed in 2002.

Over the period 2000-2010, there was a substantial increase in the number of institutions offering adult literacy and continuing basic education programmes. Public and private institutions that offered the Caribbean Examinations Council Caribbean Secondary Education Certificate in English were used as a proxy for "institutions offering adult literacy and continuing basic education programmes". One limitation related to this indicator is lack of data to support disaggregated analysis by the type of programmes.

Table 15: Number and percentage distribution of adult literacy and continuing basic education programmes (institutions) by type of programme

Indicator 4.3 Number and percentage distribution of adult literacy and continuing basic education programmes (institutions) by type of programme		
Year Ending	Private Institutions offering CSEC	Private Institutions offering CSEC English
1999	<i>m</i>	<i>m</i>
2000	6	6
2001	6	6
2002	6	6
2003	7	6
2004	7	7
2005	10	10
2006	11	10
2007	10	10
2008	11	11

Indicator 4.3 Number and percentage distribution of adult literacy and continuing basic education programmes (institutions) by type of programme		
Year Ending	Private Institutions offering CSEC	Private Institutions offering CSEC English
2009	11	10
2010	13	12
2011	14	12
2012	14	13
2013	12	11
<i>m: missing</i>		
<i>Source: METI</i>		

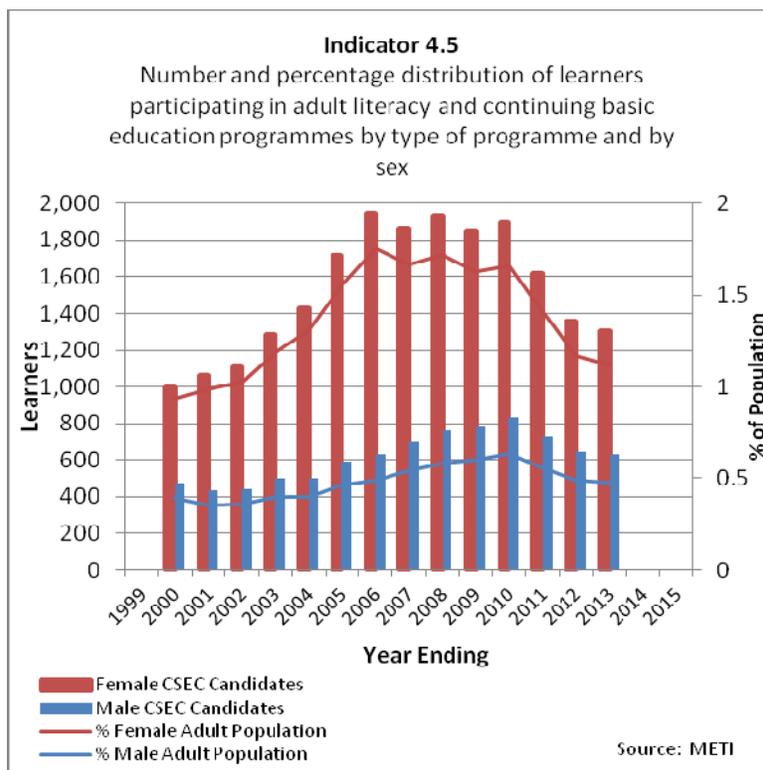


Indicator 4.5 Number and percentage distribution of learners participating in adult literacy and continuing basic education by type of programme and sex

The number of learners participating in adult literacy and continuing basic education programmes (CSEC candidates) increased steadily from 2000 until 2006. The noticeable decline in the percentage of learners participating in continuing education programmes in the period 2010-2013 coincides with the severe economic challenges experienced by the country.

During the same period the number of institutions offering adult literacy and continuing basic education programmes increased. Female participation significantly outnumbered that of males throughout the period. The number of female candidates represented less than 2% of the 15+ population of females while the male candidates accounted for less than 1% of the 15+ male population. On average less than 0.5% of the male and female populations 15 years and over studied English in continuing education programmes over the period.

Figure 24: Number and percentage distribution of learners participating in adult literacy and continuing basic education programmes by type of programme and by sex





Further analysis revealed that a smaller percentage of persons participated in programmes specifically including English Language. Again, females outnumbered males in such programmes.

Indicator 4.6 Number and percentage distribution of learners participating in adult literacy programmes by sex, and/or basic continuing education programmes by type of programme and sex

The analysis of data on the number of Candidates from Continuing Education Adult Institutions for the period 2000-2012 sitting Caribbean Secondary Education Certificate (CSEC) examinations revealed a steady increase since 2001 reaching a peak in 2006. Between 2006 and 2010 the numbers remained stable followed by a slight decline between 2011 and 2012. It is noteworthy that the participation of females significantly outnumbered that of males, 71% to 29%.

Figure 25: Number and percentage distribution of learners participating in adult literacy and continuing basic education programmes by type of programme and by sex (CSEC English A)

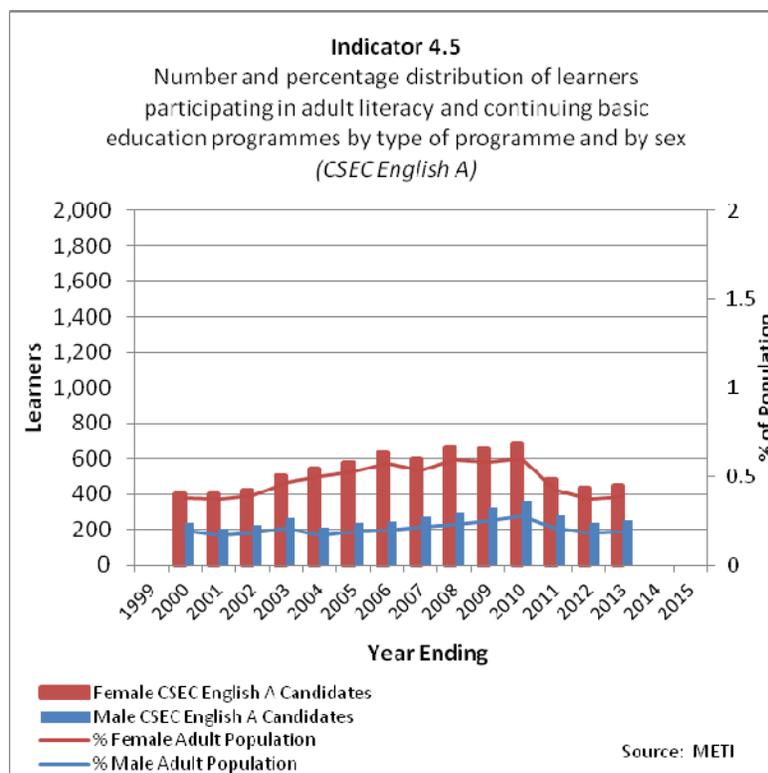
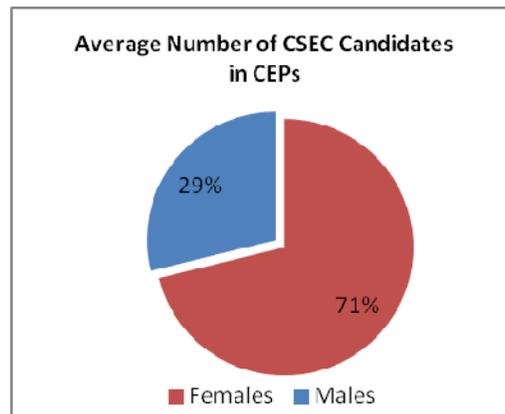


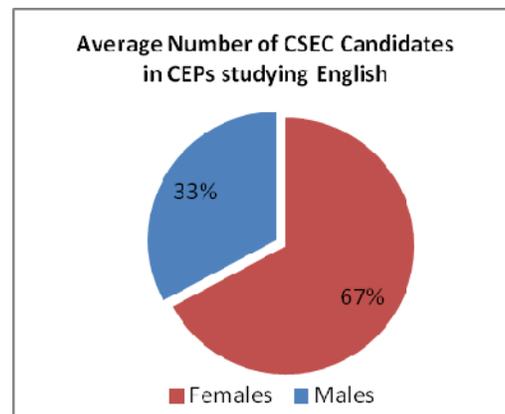


Figure 26: Average Number of CSEC Candidates in CEPs



The data reveal that the number of CSEC Candidates for the period 2000-2010 from Continuing Education/ Adult Institutions rose significantly with peaks occurring in 2006, 2008, and 2010. There were more females taking these exams than males.

Figure 27: Average Number of CSEC Candidates in CEPs studying English



Indicator 4.7: Completion rate in adult literacy and/or basic continuing education programmes by type of programme and by sex

The percentage of males and females completing continuing education programmes (passing CSEC) remained relatively steady over the period averaging around 62% and 67% respectively over the period (Figure 28). The percentage of males and females completing the course in English averaged lower around 44% and 50% respectively (Figure 29).



Figure 28: Completion rate in adult literacy and/or basic continuing education programmes by type of programme and by sex (CSEC English A)

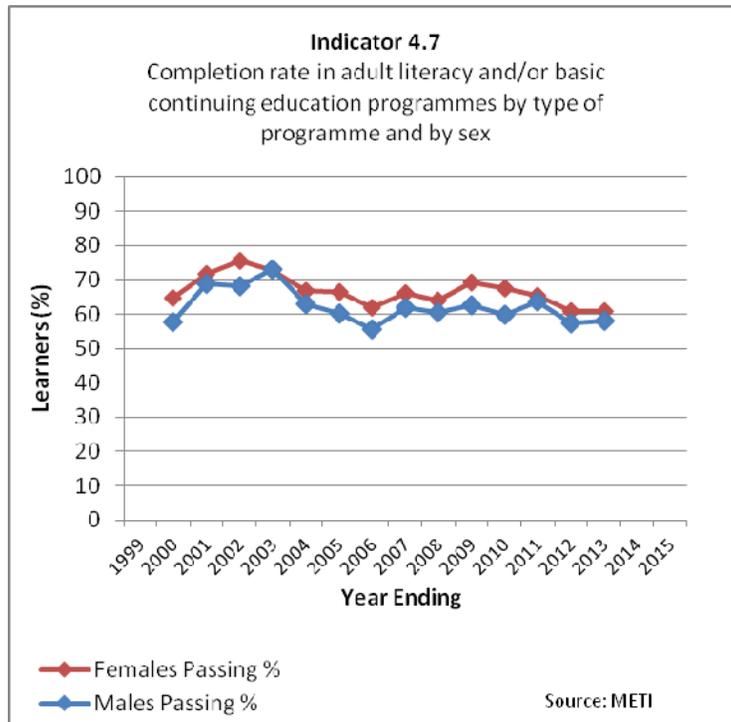
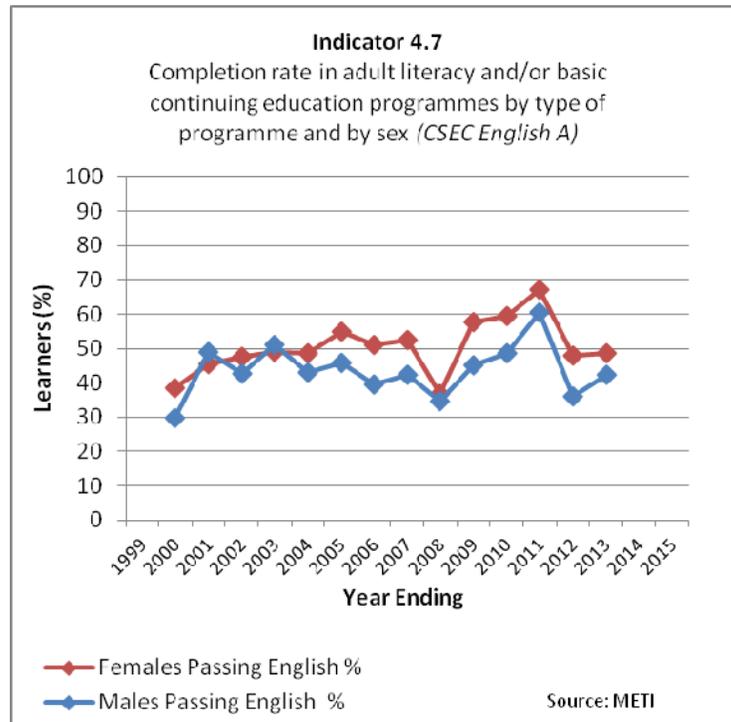




Figure 29: Females enrolled as percentage of total enrolment by level of education (pre-primary, primary, lower and upper secondary education)



Summary of Progress Towards Achievement of Goal 4 since 2000

Barbados maintained a high adult literacy rate between 2000 and 2010. High levels of secondary education completion were also recorded over the period. A high percentage of the adult population had attained at least a secondary or post secondary/tertiary education which signalled a high literacy rate. There was also adequate access to adult literacy and continuing education programmes with a greater percentage of females participating in such programmes than males. However, since 2010, there was evidence of a steady decline in participation in such programmes. This period coincides with the challenging economic conditions in the country.

Remaining Gaps, Issues and Challenges

While Barbados has done quite well in maintaining high levels of participation in primary and secondary education and provided sufficient opportunities to access adult literacy and continuing education programmes, there is still some concern at



the national level about the learning outcomes, qualifications and skills acquired by adults after several years of schooling.

There is also concern surrounding the literacy levels among the adult population. While Barbados maintained high levels of basic literacy as defined by UNESCO, the real concern relates to the level of functional literacy. There are still international differences in reaching agreement on defining functional literacy and standardized measurements for international comparability. The challenge for Barbados is undertaking a national Literacy Assessment and Monitoring Programme (LAMP) Survey to arrive at a clear determination of current literacy levels that are not solely determined by the reading, writing and numeracy skills acquired and developed through pedagogical processes in schools and other institutions suitable for youth and adults

Another major challenge is the capture of data and relevant information on Continuing Education Programmes offered either in public or private institutions or settings appropriate for youths and adults. Some steps are required to harmonize approaches in this regard to facilitate more effective monitoring, evaluation and reporting.

Other challenges include the following:

- i. The need to institute initiatives to reduce and eliminate the stigma attached to adult literacy programmes.
- ii. Expanding the number of persons trained in androgogy to deliver remedial programmes for adults.
- iii. The development of a culture of practice among teachers that embraces the use of alternative assessment and performance-based assessment strategies for persons who have a fear of traditional examinations.
- iv. Development of a comprehensive programme in adult education with a special focus on literacy that would be integrated into the course offerings of various institutions of learning.
- v. Ensuring universal implementation of the Caribbean Certificate of Secondary Level Competence (CCSLC). This will ensure that all Barbadian students are certified in the foundational knowledge and skills required for life and living.



3.5 GENDER PARITY AND EQUALITY IN EDUCATION

Goal 5: Eliminating gender disparities in primary and secondary education by 2015, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Introduction

The Year 2000 Assessment Barbados Report, along with the data presented under goals one and two clearly demonstrate the level of gender parity in the participation of boys and girls in the education system at the pre-primary, primary and secondary education levels. It reflects positively on the progress made in Barbados prior to and since 2000 which is supported by legislation guaranteeing equal rights to quality education for both sexes that is free. While the international focus was on eliminating gender disparities by 2005, with a special focus on equity and equality for girls, the challenge for Barbados was sustaining the provision of equal and fair access to education for both sexes up to and beyond 2015.

Over the period 2000-2015, Barbados continued to provide significant investment in educational, social and other support services to ensure that all children from birth to age 16 have equal access to education. These include free textbooks at the primary level, a subsidized textbook loan scheme at the secondary level, free travel on state-owned buses, a subsidized school feeding programme, a school uniform grant, free health care and subventions and bursaries to Government-Assisted private schools.

The data presented for the tracking of progress relating to this goal will demonstrate the sustained efforts in Barbados to maintain parity in the education system at the primary and secondary levels.

Analysis of Progress Towards Goal 5 Since 2000

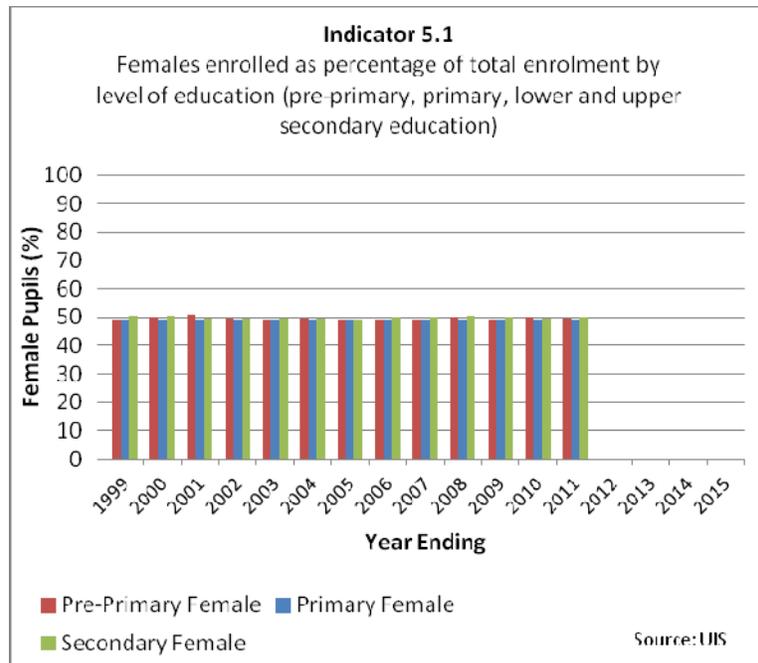
Participation, Disparity and Equity

Indicator 5.1: Females enrolled as percentage of total enrolment by level of education (pre-primary, primary, lower and upper secondary education)

This indicator measures the proportion of females participating in the various levels of education compared with the participation of males. The analysis revealed that there was an equal level of enrolment maintained over the period at the each level of the education system from pre-primary to secondary level. Females accounted for approximately 50% of the enrolment throughout the period (Figure 30). This finding is supported by the gender parity index recorded at each of the levels.



Figure 30: Females enrolled as percentage of total enrolment by level of education (pre-primary, primary, lower and upper secondary education)



In Barbados, there is equal access to education at all levels. Between 2000 and 2010, gender parity was maintained at the primary and secondary levels of the education system (Table 16). The full participation of boys and girls was facilitated without obstacles.



Table 16: Gender Parity Index for GER in Pre-primary, Primary and Secondary Education

Gender Parity Index for GER in Pre-primary, Primary and Secondary Education			
Year Ending	Pre-primary	Primary	Secondary
1999	1.041	1.042	1.12
2000	1.108	1.048	1.11
2001	1.142	1.061	1.08
2002	1.095	1.067	1.08
2003	1.082	1.057	1.092
2004	1.09	1.058	1.086
2005	1.048	1.074	1.07
2006	1.041	1.053	1.106
2007	0.997	1.073	1.097
2008	1.031	1.053	1.111
2009	0.972	1.039	1.103
2010	1.011	1.024	1.091
2011	0.99	0.986	1.122

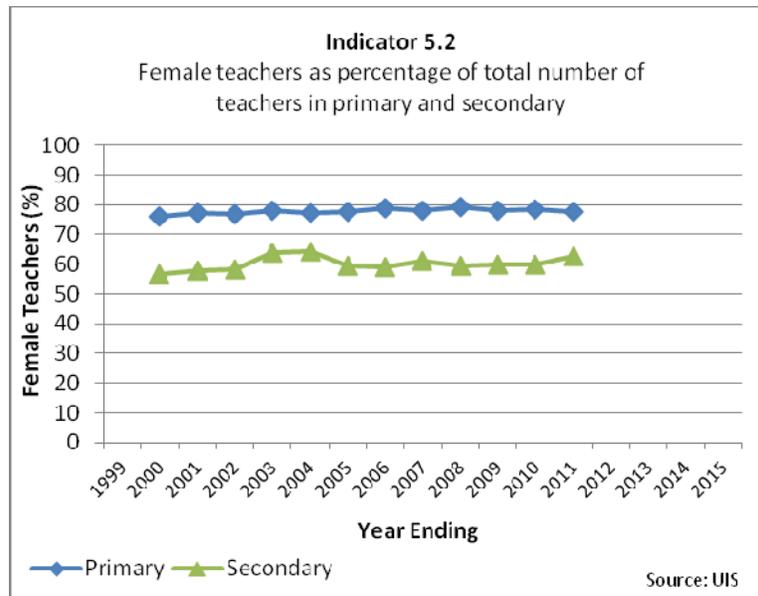
Source: UIS

Indicator 5.2: Female teachers as percentage of total number of teachers in primary and lower and upper secondary

Since the early 1990s Barbados has experienced female domination of the teaching service. Over the period 2000-2011 females represented at least two-thirds of the compliment of teachers at the primary and secondary levels. The percentage levels remained relatively stable ranging from 66.32 in 2000 to 70.65 for secondary female teachers in 2011. At the primary level, the percentage of female teachers was consistently in excess of 70 % throughout the period. The disparity in the percentage of female to male teachers has implications for the education system which is struggling to provide enough adult male role models for boys and young men across the system



Figure 31: Female teachers as percentage of total number of teachers in primary and secondary



Indicator 5.3 Percentage of female school headmasters/principals/managers by level of education (pre-primary, primary, lower and upper secondary education)

The proportion and deployment of school leaders by sex at the different levels of education gives some indication of the measure of parity relating to the distribution of instructional leaders across the education system.

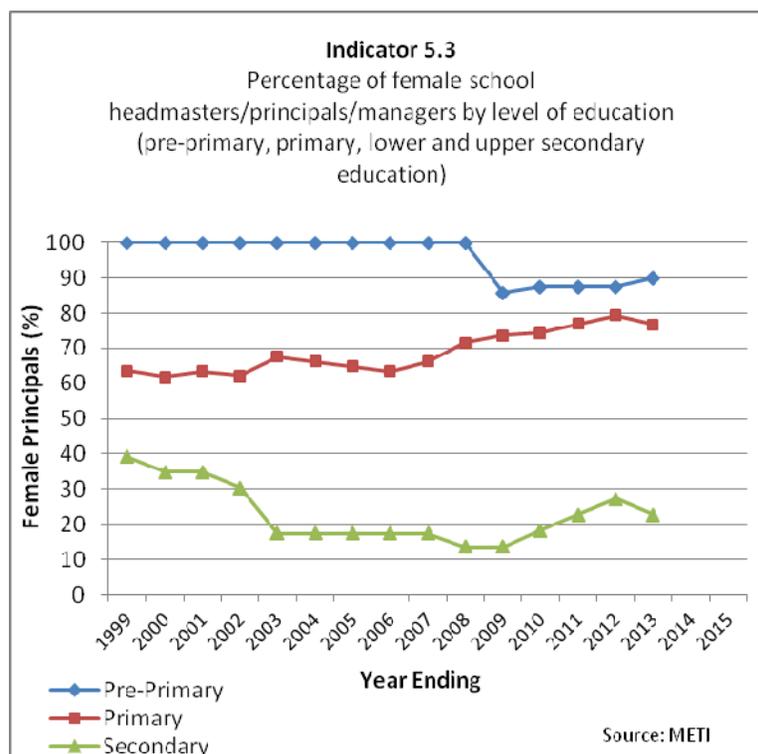
The analysis of data for the period 2000 to 2013 revealed that at the pre-primary level school there was a significant disparity in favour of females where between 1999 and 2008 public pre-primary schools were dominated by female principals. That dominance was only slightly broken since 2009 when 15% of principals were male. The percentage male principals marginally declined to 10% in 2013.

At the primary level, the extent of female dominance of public primary school leadership was moderated by a higher percentage of males assuming management positions when compared with those at the pre-primary level. Since 1999, there has been a steady increase in the proportion of female principals moving from around 64% to as high as 80% in 2012. The declining percentage of male principals from 38% in 2000 to 20% in 2012 raises some concern as Barbados seeks to improve the presence of males both in the classroom and in school leadership at the primary level.



In stark contrast, the situation was very different at the public secondary school level. The analysis shows that there was a gender disparity in favour of males in the leadership position. Less than one-third of the principals in public secondary schools was female over the period 2000 to 2013. There was a rather sharp decline in the percentage of female principals between 1999 and 2003 from 39% to about 13% in 2008-2009. From 2003 to 2007 the proportion of female principals remained steady but very low in comparison to the percentage of male principals. There was evidence of a gradual increase in the percentage of female principals between 2009 and 2013 from 13% to 23%.

Figure 32: Percentage of female school headmasters/ principals/ managers by level of education (pre-primary, primary, lower and upper secondary education)

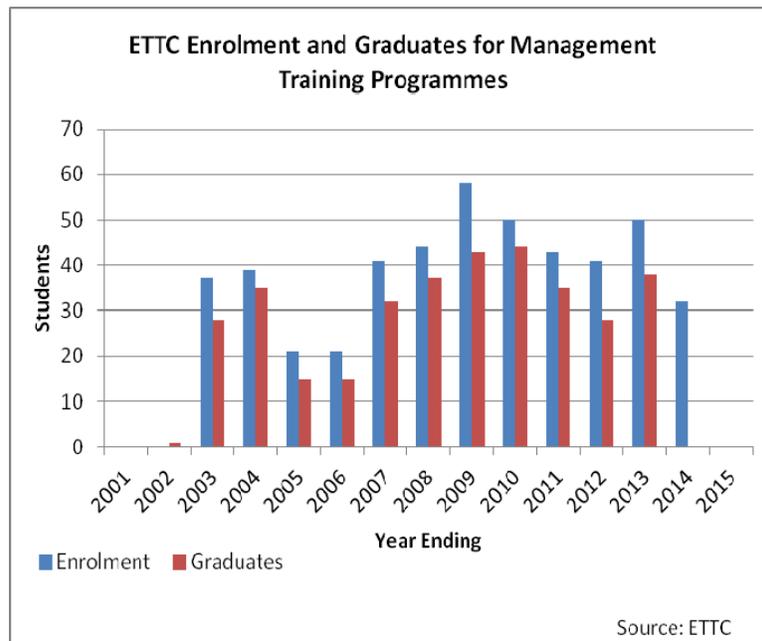


In the area of school leadership training, the numbers of persons enrolling for school administration and management training since 2000 remained relatively steady over the period, except for 2005-2006 where there was an observable decrease. The



percentage of persons graduating ranged between 68% in 2012 and 90% in 2004 (Figure 33).

Figure 33: ETTC Enrolment and Graduates for Management Training Programmes



Indicator 5.4: Percentage of female chief education officers at central, provincial, district and local government education offices

The responsibility for the administration of the technical operations and pedagogical functions of the education system in Barbados falls to the Chief Education Officer. From 1994 to 1999, a female headed the technical and pedagogical functions of the Ministry of Education for the first time in the history of the island. During the period 2000 to 2009, a female continued to head the technical arm of the education system. However, since 2009, a male has been appointed in the post of Chief Education Officer.

Indicator 5.5a: Gender Parity Index for Adult and youth literacy rates

The literacy gender parity index for adult and youth literacy measures the ratio of female to male literacy rates. It highlights progress towards gender equity in literacy and the level of learning opportunities available for women in relation to those for men. It also serves as an indication of the empowerment of women in Barbadian society. Based on the definition of literacy used earlier in this report and the data analysis presented, it is evident that gender parity in adult and youth



literacy rates was sustained over the period under review. The evidence of parity among youth and adults with at least primary education, coupled with the literacy rate presented in the MICS report of 2012 for females, suggests a similar literacy rate for males.

Indicator 5.5p: Gender Parity Index for Percentage of teachers with pre-service teacher training by level of education

Over the period 2000 to 2011, the Barbados education system maintained an in-service teacher training practice. Therefore the proportion of teachers with pre-service teacher training remained negligible over the period.

Indicator 5.5q Gender Parity Index for Percentage of teachers with in-service teacher training by level of education

In Barbados a policy of in-service training of teachers is still in force. This indicators examines the proportion of females to males with in-service teacher training across the three levels, pre-primary, primary and secondary.

At the pre-primary level, the measurement of gender parity regarding teachers with in-service training was insignificant since it has already been shown that very few males are assigned to teacher at the pre-primary level. The fluctuating GPI at the pre-primary level between 2007 and 2011 was associated with the very small number of males assigned to teach at that level over the years.

However, parity was maintained at the primary and secondary levels with regard to the percentage of female and male teachers with in-service teacher training. The GPI for the percentage of teachers with in-service training at the Primary and Secondary levels remained relatively stable from 2001 to 2011.

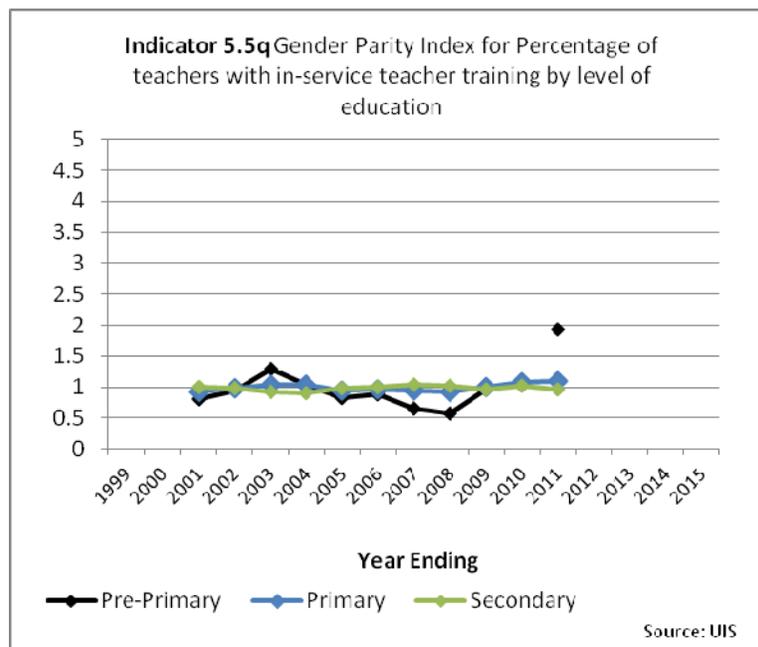


Table 17: Gender Parity Index for Percentage of teachers with in-service teacher training by level of education

Indicator 5.5q			
Gender Parity Index for Percentage of teachers with in-service teacher training by level of education			
Year Ending	Pre-Primary	Primary	Secondary
1999	<i>m</i>	<i>m</i>	<i>m</i>
2000	<i>m</i>	<i>m</i>	<i>m</i>
2001	0.799	0.918	1.01
2002	0.944	0.974	0.985
2003	1.292	1.035	0.923
2004	1.046	1.045	0.904
2005	0.833	0.946	0.992
2006	0.89	0.958	0.993

Indicator 5.5q			
Gender Parity Index for Percentage of teachers with in-service teacher training by level of education			
Year Ending	Pre-Primary	Primary	Secondary
2007	0.659	0.939	1.038
2008	0.576	0.915	1.031
2009	0.97	1.011	0.967
2010	<i>m</i>	1.074	1.022
2011	1.928	1.093	0.972
2015	<i>m</i>	<i>m</i>	<i>m</i>
<i>m: missing</i>			
<i>Source: UIS</i>			

Figure 34: Gender Parity Index for Percentage of teachers with in-service teacher training by level of education





Summary of Progress Towards Achievement of Goal 5 since 2000

Barbados maintained gender parity between the sexes at the pre-primary, primary and secondary levels over the period 2000-2011. The educational, social and other support services necessary to sustain high participation by all pupils regardless of their socio-economic status were maintained by the Government of Barbados. There were therefore no obstacles to the participation of pupils at the various levels of education over the period.

In the case of the teaching service, females outnumbered males at all levels of the system. The education system maintained the provision of pre-service preparatory training for new entrants to teaching. The formal in-service programme to professionally certify teachers remained in place during the period. While there was a noticeable decline in the number of professionally certified teachers between 2000 and 2008, measures were introduced to halt the decline. The effects of those measures should be evident by 2015.

Remaining Gaps, Issues and Challenges

Barbados has performed very well in eliminating gender disparities and inequalities in education among students at the pre-primary, primary and secondary levels. However, there was evidence of gender gaps in the percentage of male to female teachers at the primary and secondary levels. This observed disparity in the teaching force has implications for the education system which is struggling to provide enough adult male role models for boys and young men across the system.

Another challenge confronting the education system is the disparity in the male to female school leaders. There were contrasting results at the pre-primary and primary levels where the disparity favoured females when compared with the secondary level where the disparity favoured males. Addressing the disparities at all levels will require special attention by the policymakers.

3.6 QUALITY OF EDUCATION

Goal 6: Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Introduction

In Barbados, the concept of quality of education articulated within the Dakar Framework for Action has been embraced. While quality is not framed and defined specifically in the national legislation, at the central administration level, emphasis has been placed on policies and programmes that focus on the characteristics and



learning outcomes of students, the training and competence of teachers, the process of pedagogical delivery by teachers and their interaction and impact on learners, appropriate and relevant national curricula, effective school leadership and good governance and equitable and adequate resource allocation.

The provision of universal access to primary and secondary education along with high participation rates from pre-primary to secondary does not automatically imply the inculcation of the knowledge and skills and desired learning outcomes. Learning outcomes are generally measured through standardized assessment instruments. In Barbados, since the goals of universal primary and secondary education have been achieved, a focus on the quality of the education system provides a better assessment of the provision of education services at all levels.

Teachers generally play an important role in determining the quality of student learning outcomes and the overall quality of education systems. Factors such as teacher attitudes and motivation, pedagogical approaches such as quality of instructional methods and techniques, teacher's interactive style and teacher-student interaction, classroom management and length of instructional time all play vital roles in determining the quality of education and the impact of imparting knowledge to students.

Analysis of Progress Towards Goal 6 Since 2000

Improved Teaching Quality

Indicator 6.1 Number and percentage distribution of teachers by academic qualification, level of education (pre-primary, primary, lower and upper secondary education) and sex

The results for this indicator revealed that a very small percentage of the total number of teachers with Bachelor's degrees was assigned to teach at the pre-primary level. On average 4.75% of these were female. In the case of males at this level, the percentage was negligible due to the small number of male teachers (0.33%) who are assigned to teach at this level. The percentage of non-graduate females at the same level stood at an average of 3.59% when compared with 0.45% for males.

At the primary level, the average percentage of female graduate teachers was 20.67% compared with 5.27% for males. The percentage of non-graduate female teachers at the same level stood at an average of 15.29% when compared with 5.05% for males.



Interestingly, the average percentage of female graduates teaching at the secondary level stood at 20.93%. This compared favourably with female graduate teachers at the primary level.

In contrast, a higher average was recorded among secondary graduate male teachers (13.94%) when compared with primary graduate male teachers (5.27%).

In the non-graduate category of teachers at the secondary level, there were more non-graduate males than females. The percentage of non-graduate females stood at an average of 3.3% when compared with 6.43% for males.

Figure 35: Percentage distribution of teachers by academic qualification, level of education and sex (Graduates)

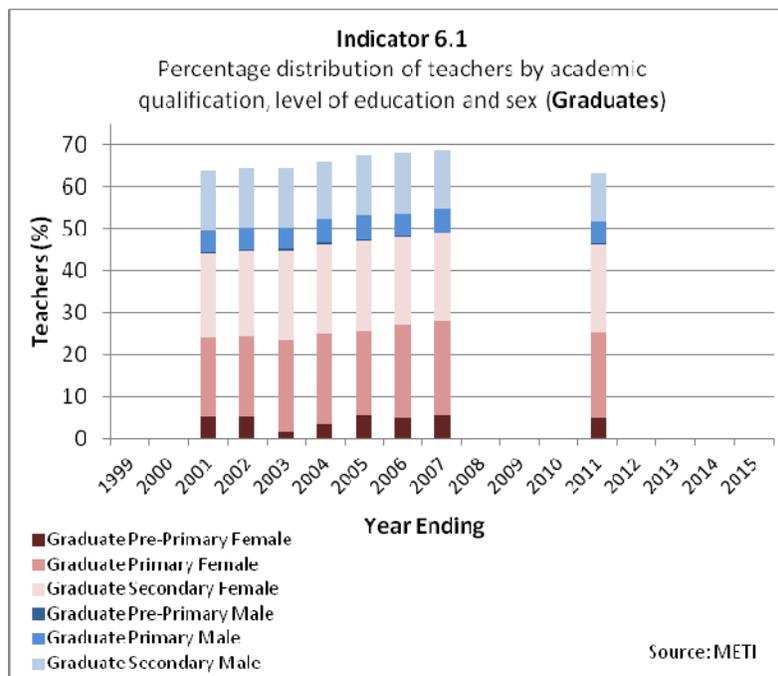
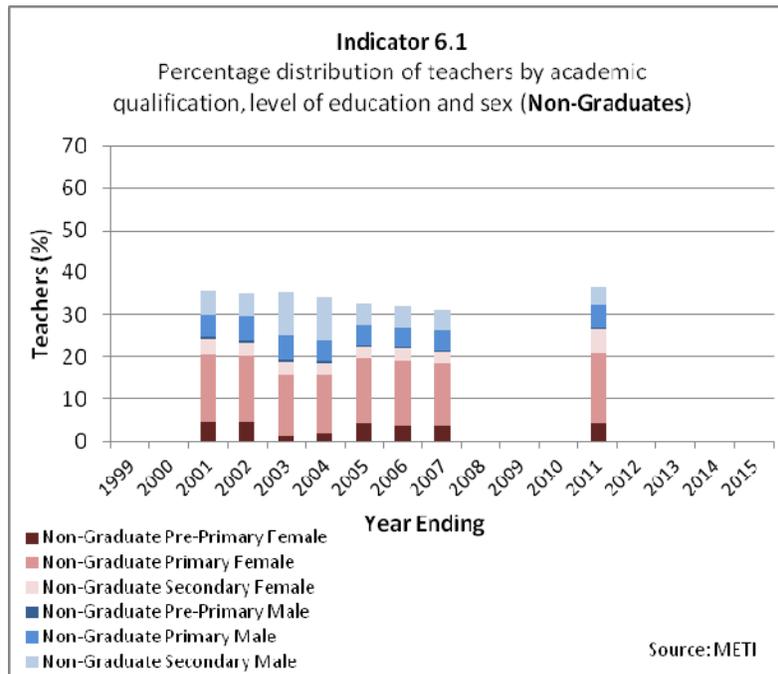




Figure 36: Percentage distribution of teachers by academic qualification, level of education and sex (Graduates)



The comparison of percentages of graduate teachers by sex revealed that there is a disparity in the teaching force in the favour of females. The percentage of graduate female teachers significantly outweighs that of males.

A high proportion of the Barbados teaching force has attained Undergraduate Bachelor degrees. Since 2001, this percentage has been consistently over 60%. However, there is some inequity across the three education levels, with the proportions of teachers possessing a Bachelor’s degree increasing steadily from Pre-primary (5.16%) to Primary (25.52%) to the Secondary level (32.76%).

Indicator 6.2 Percentage of trained teachers who are certified to teach according to national standards education by level of education (pre-primary, primary, lower and upper secondary education) and by sex

An indicator of the quality of the teaching force is the proportion of professionally trained teachers in the teaching service. In Barbados, the reference to trained teachers who are certified to teach according to national standards refers to persons who possess a teacher’s training diploma or a teacher’s training certificate. Such certification signifies that teachers are in possession of professional qualifications as specified in the Civil Establishment Act (Qualifications) Order 2001.



The Year 2000 baseline assessment revealed that in the period prior to 1999, Barbados enjoyed a very high percentage of its total teaching staff being professionally qualified according to the national standard. The percentage reached as high as 93.8% in 1996.

In the specific case of this indicator, the percentage of trained teachers who are certified to teach according to national standards education by level of education (pre-primary, primary, lower and upper secondary education) and by sex, 100% of trained teachers at all levels of the education system in Barbados are certified to teach according to the national standards. However, the percentage of trained teachers in proportion to the total number of teachers in the public service has seen a decline in the period between 2000 and 2010.

A review of data from the EFA Global Monitoring Report (2013/14) indicates that as of 2011, Barbados' complement of trained teachers was recorded as 47% at the Pre-Primary level and 55% at the Primary level. Due to a lack of data, comparison with the Caribbean and developing countries could only be done at the Primary level (Table 2). This showed that Barbados' 55% of trained Primary teachers lagged behind the Caribbean (71%) and the rest of the developing world (87%) with respect to trained Barbadian Primary teachers. This is a worrisome trend since, at the primary level and indeed beyond, it is critical that at this formative stage of their development, students be exposed to professionally trained and certified teachers.

Table 18: Comparison of Trained teachers (%) for Barbados, Caribbean and Developing Countries

Comparison of Trained teachers (%) for Barbados, Caribbean and Developing Countries									
	Barbados			Caribbean			Developing Countries		
	Total	M	F	Total	M	F	Total	M	F
Pre-Primary	47*	21*	48*	--	--	--	--	--	--
Primary	55*	51*	57*	71	59	87	87	83	88
Secondary	--	--	--	57	55	61	--	--	--
* : National estimate -- : No data available									
Source: EFA Global Monitoring Report, 2013/14									



In Barbados, The Erdiston Teachers' Training College is the main teacher training institution. The College was established in 1948 and has survived several decades of change and modifications to its programme of teacher training and preparation.

The Erdiston Teachers' Training College delivers four types of teacher training programmes:

- i. The Diploma in Education programme for untrained university graduates at the secondary and primary levels
- ii. The Certificate in Educational Management and Administration designed to equip prospective school administrators/practicing administrators with fundamental management and administrative skills.
- iii. The Two Year In-Service Programme or Associate Degree in Education (ADE), designed to equip untrained, non-graduate teachers of primary and secondary schools (forms 1-3) with required pedagogical skills, and the Certificate in Adult Education for TVET Teachers.
- iv. The Induction Course designed to introduce untrained and inexperienced teachers to some basic approaches to lesson planning and teaching. It is a one-day-a-week release in-service programme conducted over the period of one year.

A careful review of national efforts to address teacher training gaps in Barbados was undertaken. The Diploma in Education which is the professional teacher training programme for untrained university graduates at the secondary and primary levels experienced the biggest increase in the numbers of teachers enrolled and graduating. The analysis of data revealed that enrolment in this programme moved from a range of 28 to 77 teachers being enrolled between 2003 and 2007 to consistently recording enrolments exceeding 100 students since 2008. This period coincided with the initiatives that were introduced by the Ministry to expand the provision of teacher training. There was also a very noticeable improvement in the graduation rates with consistently high rates exceeding 84% since 2004.



Table 19: ETTC Enrolment by Teacher Training Programme

ETTC Enrolment By Teacher Training Programme			
Year Ending	Diploma	Associate Degree	Total
2001	<i>m</i>	31	31
2002	<i>m</i>	62	62
2003	95	62	157
2004	75	43	118
2005	28	43	71
2006	43	58	101
2007	77	58	135
2008	100	45	145
2009	124	45	169
2010	143	62	205
2011	145	61	206
2012	170	5	175
2013	116	67	183
2014	124	61	185
2015	166	0	166
<i>m: missing</i>			
<i>Source: ETTC</i>			

Table 20: ETTC Graduates by Teacher Training Programme

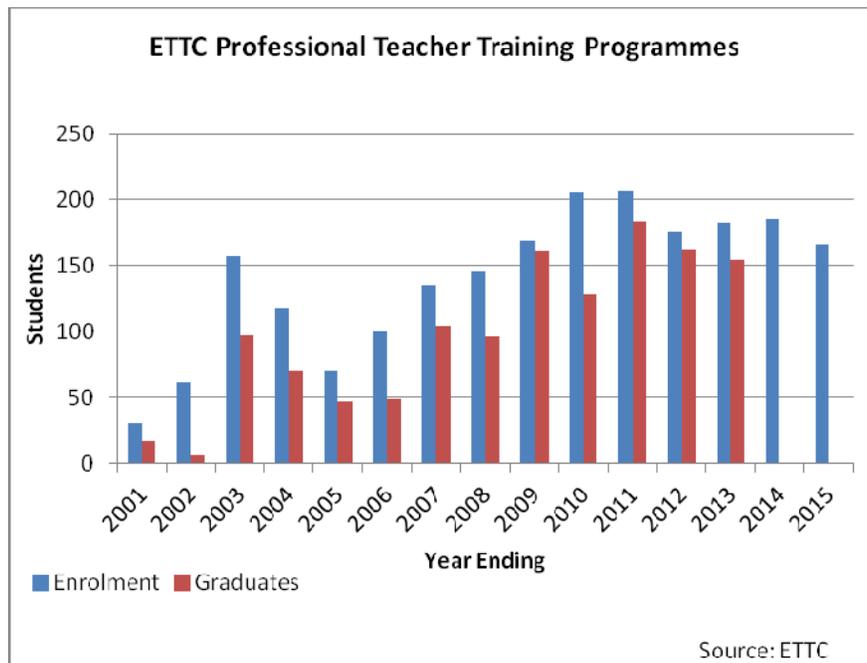
ETTC Graduates By Teacher Training Programme			
Year Ending	Diploma	Associate Degree	Total
2001		17	17
2002	1	5	6
2003	49	48	97
2004	63	8	71
2005	28	19	47
2006	40	9	49
2007	70	34	104
2008	87	9	96
2009	124	37	161
2010	124	4	128
2011	142	42	184
2012	158	5	163
2013	113	41	154
<i>Source: ETTC</i>			



In contrast to the Diploma in Education, the enrolment numbers in the Two Year In-Service Programme or Associate Degree in Education (ADE), though small, remained relatively stable since 2002. This programme is designed for untrained, non-graduate teachers of primary and secondary schools. However, there were much wider variations and indeed fluctuations in the graduation rates in this programme when compared with the Diploma in Education.

Overall, when the numbers for the two programmes were combined, there was an improvement in the recorded numbers of teachers completing professional teacher training programmes since 2007. The analysis shows that apart from 2001-2002, there was a steady increase in enrolment in In-service professional certificate courses for teachers since 2003 and levelling off between 2010 and 2013. There was a commensurate steady increase in the numbers of teachers graduating as well.

Figure 37: ETTC Professional Teacher Training Programmes



In the area of professional development, the Erdiston Teachers' Training College offered a range of In-service professional certificate courses over the period since 2000. Some of the courses included the Vocational Teachers' In-service Training, Early Childhood Education, Special Needs Education and Physical Education.



Throughout the period, a pre-service Introductory Course for Novice teachers was also offered.

While there are some positive trends as it relates to the quality of Barbados' teaching force, there remains some areas of concern which need to be addressed to ensure that the goal of quality education is realized. These include a need to:

- i. Raise the minimum academic qualification bar for entry into the teaching profession
- ii. Establish a Pre-service professional training system which would mandate that all prospective teachers be trained before entering the classroom
- iii. Introduce career ladders to allow for varying career paths for teachers within the service
- iv. Introduce mentorship programmes which would pair novice teachers with experienced teachers
- v. Establish a Professional Association of Teachers (Teaching Service Commission) to enhance the status of teaching as a profession

Improved Learning Environment

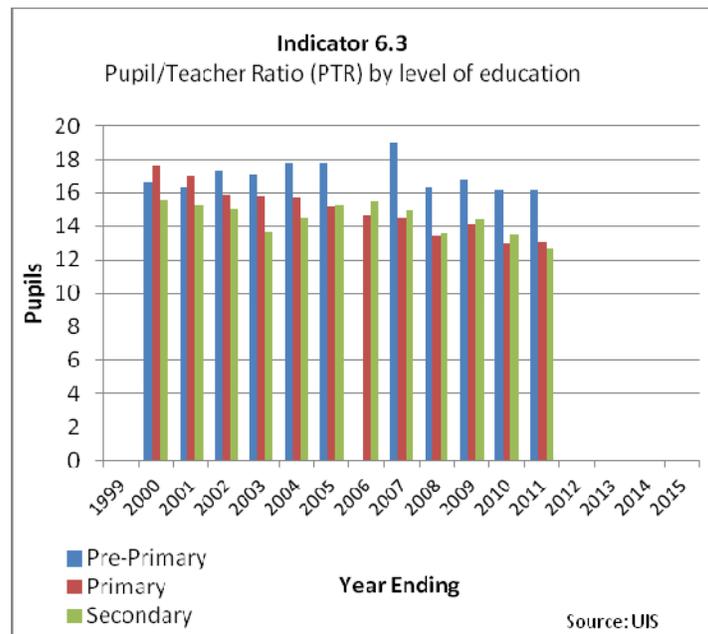
Indicator 6.3 Pupil/Teacher Ratio (PTR) by level of education (pre-primary, primary, lower and upper secondary education)

In the period prior to 2000, the pupil-teacher ratios across the education levels in Barbados were relatively small. Since 2000 the average PTR across levels remained relatively low and experienced a marginal decline when compared with the baseline figures. The PTR at the pre-primary level remained relatively stable at around 1:17. This might have been influenced by Ministry of Education's policy of allocating 15 students to one teacher at this level.

At the primary level there was a gradual decline in the PTR from 17.57 in 2000 to 13.09 in 2011. The PTR at the secondary level also recorded a marginal decline between 2000 and 2011 from 15.59 to 12.69.



Figure 38: Pupils/Teacher Ratio (PTR) by level of education



With respect to the pupil-teacher ratios, since 2000, there has been a gradual downward trend in the PTR at the primary and secondary levels. At the pre-primary level the PTR has shown some stability over the period with an unusual spike in 2007. As of 2011, these ratios have levelled off at approximately 16 for the Pre-Primary level, 13 for the Primary level, and 13 for the Secondary level (Figure 2). A comparison of Barbados' 2011 figures with those of the Caribbean and developing countries (Table 1) shows that at the Pre-Primary level Barbados index of 16 is well below that of the average for developing countries of 25. In the case of Primary level, the ratio of 13 pupils to 1 teacher, is about half of that for both the Caribbean and developing countries averages of 26:1 and 27:1 respectively. Similarly, the Secondary level of 13:1 remains below the averages for the Caribbean (18:1) and the 19:1 ratio for developing countries. Interestingly, Motivans, Smith, and Brunerforth (2005) argue that a pupil-teacher ratio of 40:1 has been widely accepted as sufficient to provide quality education. Based on this standard, Barbados can be regarded as having excelled on this performance indicator.



Table 21: Pupil/Teacher Ratio (PTR) by level of education (pre-primary, primary, lower and upper secondary education)

Indicator 6.3			
Pupil/Teacher Ratio (PTR) by level of education (pre-primary, primary, lower and upper secondary education)			
Year Ending	Pre-Primary	Primary	Secondary
1999	<i>m</i>	<i>m</i>	<i>m</i>
2000	16.66	17.57	15.59
2001	16.3	17.04	15.25
2002	17.29	15.9	15.02
2003	17.1	15.8	13.63
2004	17.72	15.77	14.52
2005	17.72	15.15	15.26
2006	<i>m</i>	14.67	15.5
2007	18.94	14.54	14.97
2008	16.34	13.46	13.57
2009	16.79	14.14	14.45
2010	16.19	13.01	13.48
2011	16.15	13.09	12.69
<i>m: missing</i>			
<i>Source: UIS/METI</i>			

The research has shown that there is an inverse relationship between student performance and pupil-teacher ratios such that as pupil-teacher ratios increase, there is a corresponding decline in student performance. It is generally assumed that a low pupil teacher ratio is associated with smaller classes giving rise to the opportunity for teachers to give more individual attention to students. Thus, there is the expectation of better student performance. This has not necessarily been the case in Barbados.



Table 22: Comparison of PTR for Barbados, the Caribbean and Developing Countries (2011)

Comparison of PTR for Barbados, the Caribbean and Developing Countries (2011)			
	Barbados	Caribbean	Developing Countries
Pre-Primary	16.15	---	25**
Primary	13.09	26**	27**
Secondary	12.68	18**	19**

** : UIS partial estimate

Source: EFA Global Monitoring Report, 2013/14

Indicator 6.4 Pupil/Class Ratio (PCR) by level of education (pre-primary, primary, lower and upper secondary education)

This indicator examines the ratio of the number of pupils to the number of classrooms across the education system at the various levels.

Data for the most recent years show that the pupil class ratio at all levels of the education system remained stable. The average for pre-primary stood at 18 while primary recorded 21 and secondary was the highest at 28.

Table 23: Pupil/Class Ratio (PCR) by level of education (pre-primary, primary, lower and upper secondary education)

Indicator 6.4					
Pupil/Class Ratio (PCR) by level of education (pre-primary, primary, lower and upper secondary education)					
Year Ending	Pre-Primary	Primary	Lower Secondary	Upper Secondary	Secondary
2008	17	22	28	28	28
2009	17	21	28	27	28
2010	18	21	28	26	27
2011	18	22	28	26	27

Source: UIS/METI



Improvement in Resources and Teaching Aids

Indicator 6.6 Current public expenditure on textbooks and other learning materials as a percentage of current public expenditure by level of education (primary, lower and upper secondary education)

While it has been accepted that indicators such as the current public expenditure spent on textbooks and other classroom learning materials is a significant measure of the quality of education. Unfortunately, the available data on public financing of education are not disaggregated to allow for analysis at the level of materials such as text books. Generally, at the primary level, parents bear the majority of the costs of text books since they have the responsibility to acquire the students' textbooks.

In 2008, the Government introduced a Text Book Scheme for primary schools. Text books were procured and distributed to all public primary schools in 2008. The goal was to provide text books in the core subject areas of the national curriculum. At December 2011, all public primary schools had been issued with text books to cover the curriculum in Language Arts and Mathematics.

In 2011 the Ministry of Education introduced a programme to provide workbooks to disadvantaged and vulnerable groups of students at the primary level. At September 2011, one thousand and twenty-nine (1029) students from across the primary system benefited from this programme.

At the secondary level there is a subsidized textbook loan scheme where pupils pay a rental fee of \$75 per annum. The scheme is self financing and therefore analysis of data across the secondary schools has proven to be a challenge.

Indicator 6.7 Teachers' compensation as a percentage of current public expenditure by level of education (primary, lower and upper secondary education)

This indicator focuses on the amount of public expenditure that is devoted to teachers' emoluments as a percentage of total public expenditure on education. The analysis of data revealed that in Barbados teachers' emoluments account for a very high percentage of current public expenditure particularly at the tertiary level.

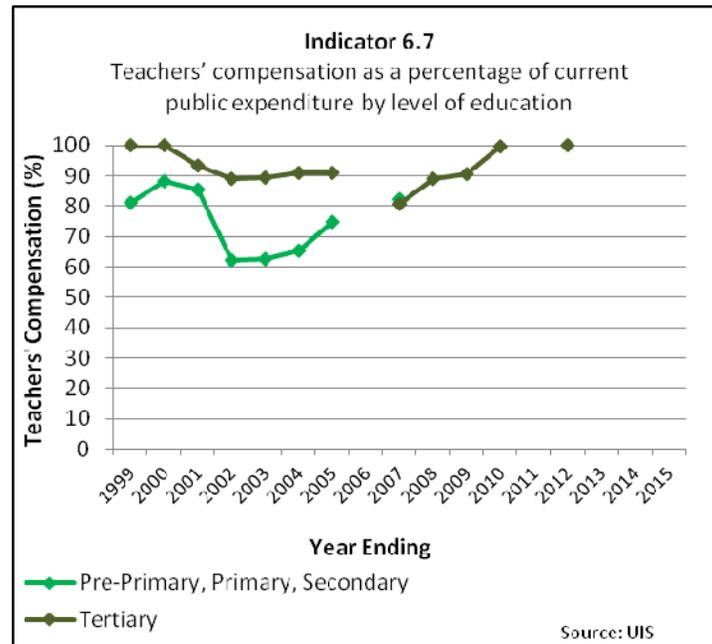
In 1999, 81% of public expenditure on pre-primary to secondary education went into paying teachers' salaries. There was a slight increase in 2000 followed by a sharp decline between 2001 and 2004. Since 2004 there is evidence of a gradual increase reaching a peak in 2007 which is relatively close to the 1999 level.

In the case of tertiary education, the percentage of current public expenditure on teachers' salaries remained very high over the period with a slight drop in 2007. The



high level of expenditure on teacher compensation suggests that the remaining financial resources have to be spread across several areas of demand such as facilities and maintenance and teaching resources. This clearly has implications for the quality of education.

Figure 39: Teachers' compensation as a percentage of current public expenditure by level of education



Improvement in Facilities

It is generally agreed that all individuals in educational institutions have a right to quality educational facilities, a physical space that supports multiple and diverse teaching and learning programmes and pedagogies, including current technologies; one that demonstrates optimal, cost-effective building performance and operation over time; one that is in harmony with the environment; and one that encourages social participation, providing a healthy, comfortable, safe, secure and stimulating setting for its occupants. In Barbados the Safety and Health At Work Act 2005 has established the standards for quality work environments at the national level, including schools.

According to the Organisation of Economic Co-operation and Development (OECD), research has demonstrated that there is a relationship between student performance as measured by achievement and behaviour and the condition of the built environment. The school environment should therefore be safe, secure, comfortable, accessible, well-ventilated, aesthetically pleasing and be an integral



component of the conditions of learning. The Government of Barbados continues to support the maintenance of high quality school environments.

It is well established that there is a positive relationship between the quality of school buildings and student achievement. Factors such as air quality, cleanliness, lighting, ventilation, noise and acoustics, overcrowding, internal walls and temperature have an impact on the health, performance and attendance of students and teachers.

Indicator 6.8 Percentage of schools with improved water sources by level of education (pre-primary, primary, lower and upper secondary education)

In Barbados, 100% of schools at all levels have adequate high quality potable drinking water.

Indicator 6.9 Percentage of schools with improved sanitation facilities (i.e. with separate toilets for girls) by level of education (pre-primary, primary, lower and upper secondary education)

In the case of sanitation facilities, 100% of schools at all levels have adequate and improved sanitary facilities for boys and girls. There is no disparity in the provision of these facilities for either sex.

Barbados' health regulations dictate that all public schools across all three levels of education (Pre-primary, Primary and Secondary education) must have water borne facilities as well as water tanks which allow for the continued functioning of schools in the event of water outages. There are cases where schools may need to close due to problems with water outages. This occurs mainly because the tanks, in some instances may not have the capacity to supply the needs of the students and staff in cases of prolonged outages. This therefore has implications for the time-on-task that is lost and by extension the quality of education that is being delivered.

Improved Student Learning Outcomes

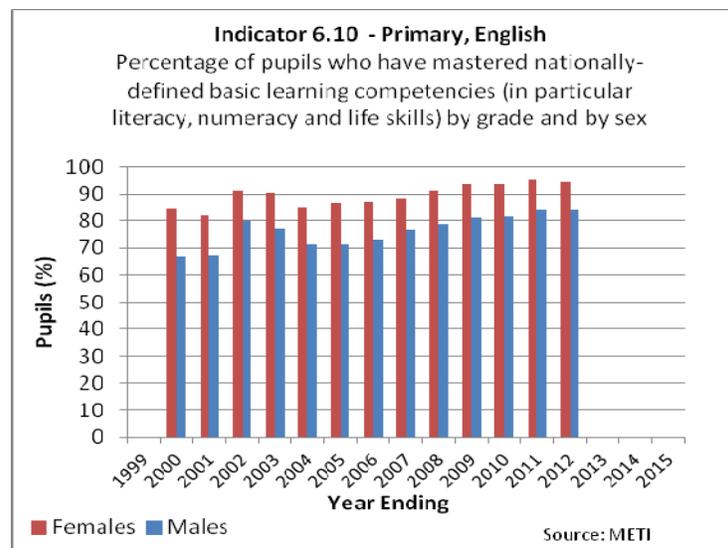
Indicator 6.10 Percentage of pupils who have mastered nationally-defined basic learning competencies (in particular literacy, numeracy and life skills) by grade (e.g. 3rd and last grade of primary education, and 8th grade or last grade of lower secondary education) and by sex

This indicator seeks to capture mastery of literacy, numeracy and life skills at two points, the end of primary school and the end of lower secondary. In Barbados there is no national assessment for lower secondary school and no assessment for life skills.



In the baseline assessment conducted in 1999, it was found that on average over 70% of students at the primary level had mastered the basic literacy and numeracy skills. In the period since 2000, the data show that at the primary level, a high proportion of females pupils consistently demonstrated mastery of the basic literacy competencies. Female pupils consistently recorded between 81% and 95% who scored greater than 30 % in the BSSEE English between 2000 and 2012. In the case of males the range was between 67% and 83% scoring greater than 30% in the BSSEE over the period. The percentage of males mastering the basic learning competencies was lower than that of females over the period.

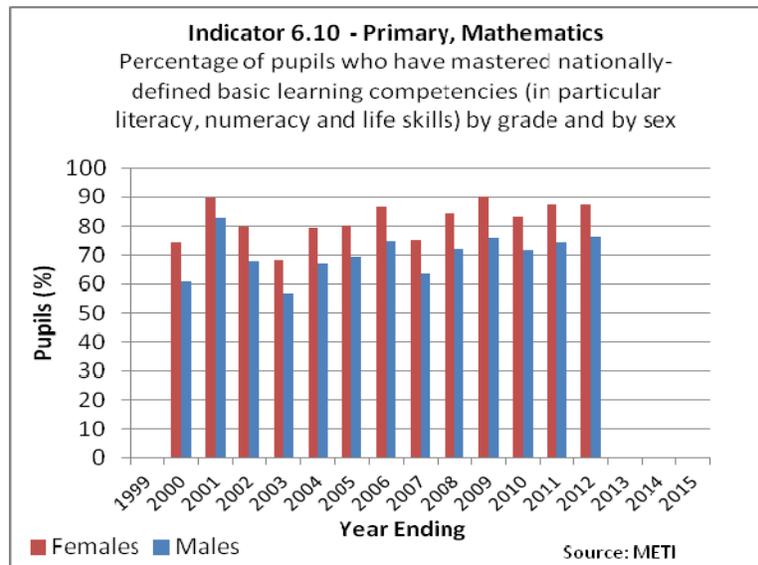
Figure 40: Percentage of pupils who have mastered nationally-defined basic learning competencies (in particular literacy, numeracy and life skills) by grade and by sex



In the area of numeracy competency, females also consistently demonstrated higher learning outcomes than males. The percentage of females that scored more than 30% in the Mathematics portion of the BSSEE ranged between 74% and 87%. Among the males the range was 61% to 82%.



Figure 41: Percentage of pupils who have mastered nationally-defined basic learning competencies) in particular literacy, numeracy and life skills) by grade and by sex (Primary Mathematics)



The analysis of the BSSEE English and Mathematics results from 20007-2012 revealed that while the performances were generally satisfactory, there is evidence of a gender gap between males and females in literacy and numeracy learning competencies.

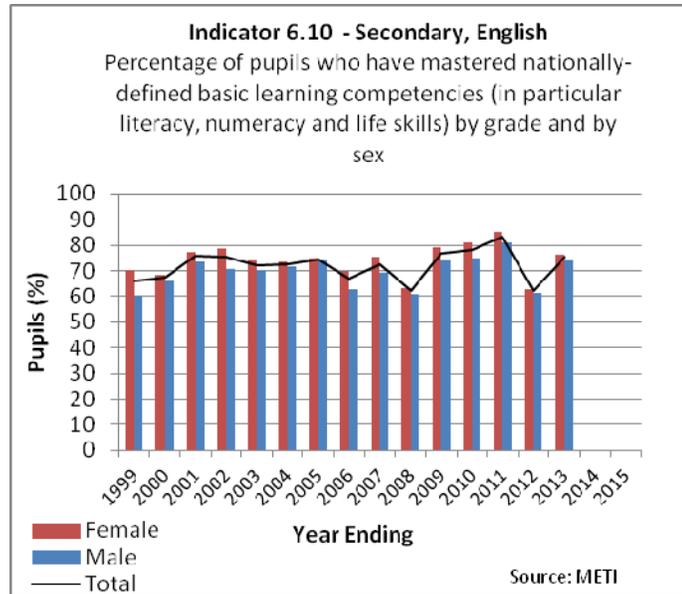
Generally, the level of mastery of the basic literacy and numeracy skills at the primary level has been sustained throughout the period in alignment with the baseline performance.

At the secondary level, student performances in the regional Caribbean Examinations Council (CXC) Secondary Education Certificate (CSEC) in English A and Mathematics were used as proxies to determine the level of mastery of the basic literacy and numeracy skills for this indicator. The CSEC examinations are usually taken at the end of the secondary education cycle which is around Grade 11.

The analysis shows that on average about 73.9 % of females who wrote the English A examinations between 2000 and 2013 obtained a passing grade compared with 69.7% of males who wrote the same examination. While this analysis presents a satisfactory picture of literacy competence some caution should be exercised in using this result to generalize to the secondary cohort since during the period under review there was no national standardized assessment for lower secondary (Grade 9).



Figure 42: Percentage of pupils who have mastered nationally-defined basic learning competencies (in particular literacy, numeracy and life skills) by grade and by sex

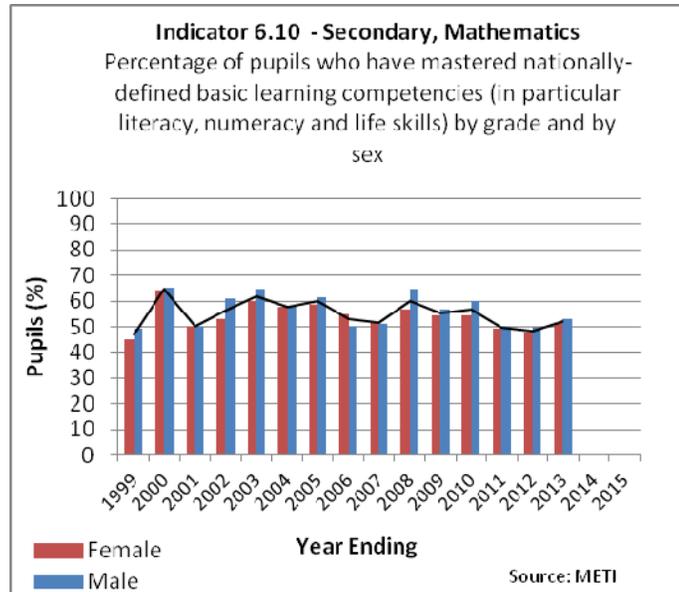


In Mathematics, the analysis shows that the overall average pass rate was lower than in English. On average 53.97% of females had a passing grade over the period compared with 56.43% of males. Males recorded a slightly higher percentage passing than females.

Evidently, just under two-thirds of the students who wrote the Mathematics examination received a passing grade. This is cause for concern regarding the numeracy competencies of secondary students.



Figure 43: Percentage of pupils who have mastered nationally-defined basic learning competencies (in particular literacy, numeracy and life skills) by grade and by sex (Secondary Mathematics)



Improved Education System

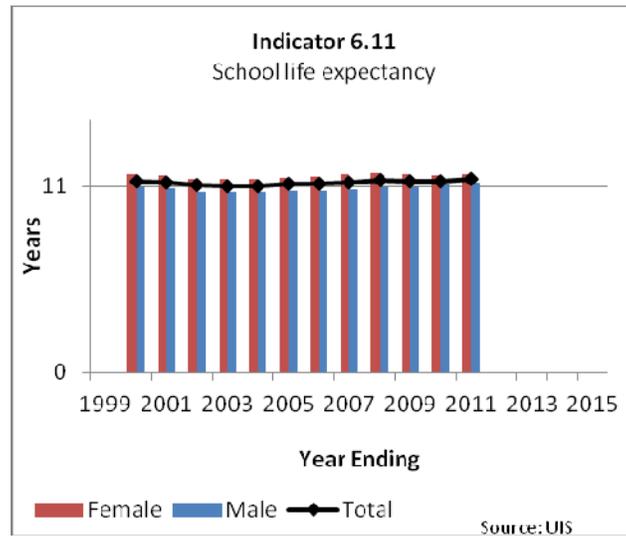
Indicator 6.11 School Life Expectancy

School life expectancy looks at the total number of years of schooling which a child of a certain age can expect to receive. It gives an indication of the level of development of the education system in terms of the number of years of education that a child can expect to achieve. A relatively high school life expectancy indicates a greater probability for children to spend more years in education and higher overall retention within the system.

In Barbados, the school life expectancy remained constant over the period at around 11 years. Males spent an average of 11 years, while females usually spent one year longer at 12.



Figure 44: School life expectancy



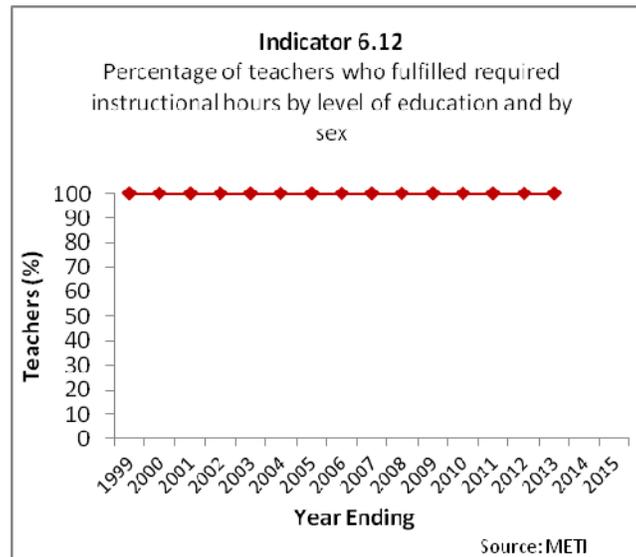
Indicator 6.12 Percentage of teachers who fulfilled required instructional hours by level of education (pre-primary, primary, lower and upper secondary education) and by sex

In Barbados, the Education Act, Cap 41, mandates two instructional sessions with an aggregate of 5 hours per school day. The structure of the education system in Barbados demands all teachers at pre-primary, primary and secondary to provide instruction and learning experiences during the school day that are consistent with a full time-table based on the national curriculum.

The data analysis shows that all teachers met the required number of instructional hours during the period under review.



Figure 45: Percentage of teachers who fulfilled required instructional hours by level of education and by sex



Summary of Progress Towards Achievement of Goal 6 since 2000

Overall, these low ratios across all three educational levels underscore the efforts made by Barbados' Ministry of Education to ensure that teacher recruitment efforts have kept pace with any increases in the student enrolment.

The proportion of graduate teachers across the levels of education remained quite stable since 2000 with the exception being 2011 when there was a marginal decline in the percentage of male graduate teachers at the secondary level and the percentage of female graduate teachers at the primary level. The proportion of non-graduates remained quite stable as well over the period. In general there was a disparity in favour of females to males in the teaching service.

During the period, there was a decline in the percentage of trained teachers. However, measures were instituted to halt the decline. These measures are expected to result in a turn-around in the percentage of trained teachers by 2015. There was an observable gradual decline in pupil teacher ratios at the primary and secondary levels.

The support programmes of the Ministry of Education ensured that there was equity in access to appropriate learning materials such as text books at the primary and secondary levels. There was provision of adequate clean potable water for all pupils as well as proper sanitary facilities.



Through the period, students continued to demonstrate mastery of the basic literacy and numeracy skills.

Remaining Gaps, Issues and Challenges

The analysis has shown that overall Barbados has made tremendous strides in providing universal coverage at the primary and secondary levels for school-aged pupils and a high level of coverage at the pre-primary. Indeed the data indicate that the country has met the targets for universal access to basic education. However, in the area of quality education, there are some concerns that have emerged. Specifically, the proportion of untrained trained teachers particularly at the pre-primary and primary levels; the low entry qualifications for the teaching service; teacher shortages in some subjects, particularly Mathematics and Science; gross under representation of males in the teaching service, particularly at the primary and pre-primary levels; and inadequate teacher induction, among others.

To address these gaps and issues, consideration will be given to several initiatives. These include having a greater focus on teacher development through the provision of scholarships to teachers tied to specific subjects; mandatory pre-service teacher training; a strengthening of teacher professional development; closer collaboration between schools and teacher training institutions, improved teacher induction programmes, and improved career prospects for teachers through a career path and professional standards for teachers.

In the Barbadian context, special emphasis will be placed on:

- i. Reducing the proportion of temporary teachers versus permanent teachers.
- ii. Increasing the intake of teachers at the teacher training institutions to bridge the gap between the number of trained and untrained teachers;
- iii. The introduction of a policy of pre-service teacher training.
- iv. The introduction of a system of substitute teachers
- v. Introducing a policy on formal pre-service professional training as a prerequisite for entry to the service.
- vi. Institutionalising a teacher mentorship system across the school system.
- vii. Expanding capacity building in the area of teacher training in Technical and Vocational areas. As the leading teacher training institution, Erdiston Teachers' Training College does not have a staff complement that



addresses the needs of student teachers who function in Technical and Vocational Education. For the most part, this training is outsourced to practitioners in the TVET council, the Samuel Jackman Prescod Polytechnic and other Skills Training institutions.

- viii. The establishment of a teacher licensure system that has built-in requirements for continuous in-service training. To ensure teacher quality, teachers must be committed to lifelong learning and a continuous upgrade of their pedagogical skills to remain relevant in the classroom. Currently, beyond the initial teacher training there is no other requirement for teachers to upgrade their skills. A teacher licensure system pegged to continuous in-service training would ensure that teacher quality meets established best practices in the respective disciplines.
- ix. Reversing the underrepresentation of male teachers in the system especially at the Early Childhood Level. It has been argued that teaching and caregiving in general has been the domain of women for many years and as a result of the historical impact of lower pay for jobs done by females, it is usually difficult to attract males to the teaching service. Even when this is achieved, there is a tendency for males to leave the service for better paying administrative positions. If Barbados is to meet the goal of quality education then the gap between the number of male and female teachers must be narrowed, if not eliminated.
- x. Introduction of a framework for professional standard and career ladders, which would include the following: career steps, differentiated roles and responsibilities, predetermined criteria for placement and advancement to the next level, benchmarks for progression along the career ladder,
- xi. Review of the existing criteria for teacher evaluation to include formative and summative approaches, and the institutionalisation of staff development programs for professional growth.
- xii. Participation in international assessments and tests such as Progress in International Reading Literacy Study (PIRLS).



SECTION 4



Section 4: IMPLEMENTATION OF EFA STRATEGIES

4.1 EFA Implementation Strategies

The Dakar Framework for Action identified twelve EFA implementation strategies that served as guides for the general roll-out of national activities in support of the pursuit of the EFA goals. The proposed strategies were:

1. Mobilize strong national and international political commitment for Education for All, develop national action plans and enhance significantly investment in basic education
2. Promote EFA policies within a sustainable and well-integrated sector framework clearly linked to poverty elimination and development strategies
3. Ensure the engagement and participation of civil society in the formulation, implementation and monitoring of strategies for educational development
4. Develop responsive, participatory and accountable systems of educational governance and management
5. Meet the needs of education systems affected by conflict, natural calamities and instability, and conduct educational programmes in ways that promote mutual understanding, peace and tolerance, and that help to prevent violence and conflict
6. Implement integrated strategies for gender equality in education that recognize the need for change in attitudes, values and practices
7. Implement education programmes and actions to combat the HIV/AIDS pandemic as a matter of urgency
8. Create safe, healthy, inclusive and equitably resourced educational environments conducive to excellence in learning, with clearly defined levels of achievement for all
9. Enhance the status, morale and professionalism of teachers
10. Harness new information and communication technologies to help achieve EFA goals
11. Systematically monitor progress towards EFA goals and strategies at the national, regional and international levels



12. Build on existing mechanisms to accelerate progress towards Education for All

The articulation of the EFA implementation strategies coincided with the preparation and subsequent implementation of the Barbados Education Sector Strategy 2002-2012.

Barbados' efforts to achieve the EFA goals were supported by the introduction and implementation of several strategies and the continuation of relevant existing strategies. The strategies span numeracy, literacy, assessment, ICT, teacher training, early childhood education and adult education.

4.2 Universal access to pre-primary education

Pre-primary Expansion Programme

The achievement of universal access to pre-primary education by 2015 was identified by CARICOM and the Government of Barbados as a major priority. In 2005, the Government of Barbados embarked on a pre-primary expansion programme to achieve universal access by 2015. The aim was to close a deficit of 1600 school places for children in the pre-primary age cohort. The first phase of the programme sought to accommodate 550 pupils in existing public primary schools and in newly established public Nursery schools. Between 2005 and 2013 six new nursery schools have been established creating an additional 400 school places for 3-5 year olds. Additionally, with the increase in nursery classes in public primary schools total enrolment of under-fives also increased since 2000. The Ministry of Education has so far succeeded in reducing the deficit of 1600 by 50%

Several constraints impacted on the ability of the Government to expedite the expansion of pre-primary education. These included limited financial resources, access to adequate and suitable lands for the construction of nursery schools and the availability of suitable pre-existing structures to accommodate nursery schools.

In 2011, the Ministry of Education engaged in a public-private partnership with the Maria Holder Memorial Trust, which is a registered Charity in Barbados, to construct the Maria Holder Nursery School. Subsequently, in 2012 the Ministry of Education signed a Memorandum of Understanding with the Maria Holder Memorial Trust, for the financing and construction of six additional nursery schools. These schools, which should be completed by 2015, will significantly contribute towards the further reduction of the outstanding deficit of 800 school places for under-fives.

The public-private partnership with this non-governmental organization (NGO) has contributed significantly towards the achievement of the national objective of universal access to pre-primary education by 2015.



Basic Skills Assessment Battery

Since September 2001, the Ministry of Education has been administering the Basic Skills Assessment Battery (BSAB) to all pupils on entry to the Reception (ages 4-5) classes in public schools. The test has been designed to measure the readiness of pupils to begin the curriculum in the first grade of primary school. The performance of pupils on the BSAB has been used to gather information on the degree of readiness of the pupils at the time of test. The information is required to determine the educational programme necessary to help meet the learning needs of each child.

Since the inception, approximately sixty thousand (60,000) pupils have been assessed. While the test has been generally well administered, a major limitation has been the effective use of the test results by many teachers and school leaders to determine the appropriate developmental programmes for pupils.

The review of this policy and programme will be required to ensure that the appropriate mandate is issued to school leaders and classroom teachers so that the results of the test can be used to design appropriate development activities for the young pupils.

4.3 Ensuring free and compulsory primary education of good quality.

Under the second goal, the Government of Barbados pursued initiatives to support the progress made in primary education. One such initiative was the Criterion Referenced Test.

Criterion Referenced Test

Since 2000, the Ministry of Education continued to administer the Criterion Referenced Test to students in Grade 2 and Grade 4. These tests assess the pupils' mastery of knowledge, skills and competencies in Mathematics, Language Arts and Reading Comprehension. The profiles produced on the strengths and weaknesses of pupils provide teachers with information to target the student's deficiencies and the opportunity to work on an individual basis with each student.

The CRT has been well administered since 2000. However, a major concern is the limited use of the results by teachers and school leaders to maximize the potential of the assessment. The Ministry of Education is currently engaged in a project to address the constraints limiting the effective use of the CRT. The School Teacher Effectiveness Plans that are being developed through the Effective Schools Project will assist significantly in overcoming the observed constraints



Primary Schools Textbook and Workbook Scheme

In 2008, the Government pledged to introduce a Text Book Scheme for primary schools. The Ministry of Education commenced the phased procurement and distribution of text books to all primary schools in 2008. The goal was to provide text books in the core subject areas of the national curriculum. By the end of 2013, fifty-four (54) public primary schools had been issued with text books to cover the curriculum in Language Arts, Mathematics and Science.

One of the constraints with this initiative relates to finance. While the government has honoured its commitment to provide the textbooks, the economic challenges in the country have made it very difficult to sustain this programme. One possible solution is using the available technologies to move towards e-libraries and e-books in the future to save on the cost of providing, maintaining, repairing and replacing damaged books.

In addition to the provision of text books for schools, in 2011 the Ministry introduced a programme to provide workbooks to disadvantaged and vulnerable groups of students at the primary level. Since the implementation of this policy approximately three thousand students from across the primary system have benefited from this programme.

Reduction in Students Scoring Below 30% in the National Primary Exit Examination

In the 2002-2012 Strategic Plan, the Ministry of Education identified an “increase in the number of students scoring above 30% in the Barbados Secondary Schools Entrance Examination (BSSEE)” as a key strategic priority. Since 2000, there is evidence of a decrease in the proportion of the primary cohort scoring less than 30% in the BSSEE moving from 27.33% in 2000 to 14.83% in 2010. There is commensurate evidence to show that there has been an improvement in the competencies demonstrated by students in English and Mathematics. The majority of students have demonstrated some basic level of proficiency in English and Mathematics throughout the period.

Schools’ Positive Behaviour Management Programme

In 2006 the Ministry of Education in collaboration with UNICEF embarked on an initiative called the Schools’ Positive Behaviour Management Programme (SPBMP). The Schools’ Positive Behaviour Management Programme (SPBMP) is a holistic initiative aimed at creating and maintaining a school-wide system which caters to providing quality education. This approach has been empirically validated and used



by educators around the world. It was initially piloted in one primary school but has since been expanded to include all public primary and secondary schools.

The SPBMP has five main pillars which are:

- i. Enhancement of the pedagogical skills of teachers;
- ii. Training and Professional development;
- iii. Institutionalisation of a whole-school behavioural model and enhanced approaches to discipline;
- iv. Increased student participation, especially in school governance; and
- v. Increased parent and community involvement in the life of the school.

The objectives of the SPBM programme include:

- i. Building on the positive practices that already exist in schools;
- ii. The creation of orderly and effective learning environments;
- iii. Making discipline fair, consistent and transparent for all children;
- iv. Greater involvement of parents and the community in developing effective schools;
- v. Encouraging greater use of positive approaches to discipline in the school and home; and
- vi. Encouraging positive interactions among caregivers and their children.

The aim of the programme is to develop among students the capacity and responsibility for managing their own behaviours while teaching them life skills such as conflict resolution. In the case of teachers, the aim is to facilitate the development and use of positive behaviour management strategies thereby eliminating the need to resort to corporal punishment.

Since the inception, the staff of all public nursery, primary and secondary schools as well as tertiary institutions including the University of the West Indies, BCC, ETTC, SJPP, BVTB have been sensitized and trained in the principles of the SPBMP. Other stakeholder groups namely, Churches, civil society organizations such as Boy Scouts and Girl Guides Associations and the National Sports Council have been sensitized and trained and have participated in the programme.

Some constraints have impacted the programme. These included challenges with obtaining the buy-in of some parents, particularly parents of the most vulnerable children, financing the roll-out of the programme on a national scale and fostering the desired behavioural change at the national level.

The Ministry of Education undertook several initiatives to address these constraints. First, financing and programming expertise were obtained from a partnership with UNICEF to support the SPBMP. Secondly, three corporate sponsors provided financial



contributions to programme. A documentary entitled *A New Learning Environment* was developed to sensitize the public about the SPBMP principles and to offer strategies for reinforcing positive discipline among children in Barbados. That documentary was aired on national television. These initiatives highlight the multifaceted approach undertaken by the Ministry of Education to obtain public support for the programme.

The Ministry of Education will also be pursuing the following objectives in the short to medium term:

- i. The development and adoption of national SPBMP standards;
- ii. An increase in the number of teachers, parents and members of society who no longer accept or use corporal punishment as the primary means of discipline at school or home; and
- iii. An increase in the number of trained educators who have replaced the use of corporal punishment with alternative approaches to discipline.

Two key lessons learnt were that the process of behaviour change is a long and challenging one and there is a need for a national policy on behaviour management for the education system.

4.4 Ensuring that the learning needs of all young people and adults are met

Secondary Education

Increase in the number of students leaving school with proper certification.

In keeping with Government's pledge to make school a rewarding experience for every child and to ensure the relevance of education to the national developmental goals, the secondary education programme sought to increase the number of students leaving secondary schools with adequate certification by placing particular emphasis on increasing the number of school leavers with the appropriate knowledge, skills and competencies to successfully enter the job market or to embark on some form of economic enterprise.

To ensure the achievement of this goal, two new programmes were introduced to enhance the chances of school leavers obtaining some form of basic secondary level certification. These were the Caribbean Vocational Qualification (CVQ) and the Caribbean Certificate of Secondary Level Competence (CCSLC).



Caribbean Vocational Qualifications (CVQs)

In 2010 the Ministry of Education introduced the Caribbean Vocational Qualification (CVQ) to secondary schools.

The CVQ is a competency-based qualification which focuses on:

- i. providing all students with the opportunity to leave secondary school with certification in a skill;
- ii. allowing students to take a mix of technical and vocational subjects and traditional subjects taken for the Caribbean Secondary Educational Certificate (CSEC);
- iii. enhancing the students' qualifications for entry-level employment;
- iv. contributing to a well-trained workforce at the national level; and
- v. facilitating the movement of skilled persons within the Caribbean Single Market and Economy (CSME).

Caribbean Vocational Qualifications are work-based qualifications that assess a person's competence in a work role. CVQs assess the knowledge, skills, and attitudes individuals need to perform their jobs effectively. They are delivered and assessed in a Competency Based Education and Training Format. CVQs were implemented through a tripartite arrangement between the Ministry of Education, the TVET Council and CXC. Each organization plays a specific role in the programme.

The key constraints related to the training of adequate numbers of assessors to facilitate the programme, the costs associated with the required upgrades to school facilities for the practical components and the time the implementation process took.

To ensure the success of the programme, the Ministry of Education ensured that the necessary funding was allocated to the schools. In addition, the partnership with the TVET Council was used to expedite the training of assessors. Finally, the Ministry identified a focal point whose responsibility was to ensure the successful implementation of the programme.

Caribbean Certificate of Secondary Level Competence (CCSLC)

In 2011, the Caribbean Certificate of Secondary Level Competence (CCSLC) was introduced in secondary schools in Barbados. The CCSLC incorporates the skills, abilities, attitudes and values that all secondary school leavers should have. The programme is flexible and makes provision for students of a wide range of abilities. In the development of the syllabuses, content, competencies, attitudes and values that are required for the work place have been incorporated.



The CCSLC is mandatory for all students at the secondary level and represents the foundational certification required for all school leavers. Students are awarded the CCSLC on successful completion of a minimum of five (5) subjects based on syllabuses developed by CXC specifically for this programme.

There is provision for the programme to be covered in 3 to 5 years depending on the ability of the students. There is also provision for those persons who do not complete it in 5 years to continue it at the government's continuing education centres. Additionally, the CCSLC serves as a foundation for more advanced studies at the secondary level, the world of work, and life as a citizen in the CARICOM region.

The Barbados model of the examination includes four Core Subjects (English, Mathematics, Science, and Social Studies), and an Enrichment Programme (which includes a community service component).

The Caribbean Certificate of Secondary Level Competence (CCSLC) is designed to meet the Learning Needs of Youths and Adults.

4.5 Adult and continuing education

Literacy

A national policy on Reading was developed and introduced in 2007 to establish clear guidelines and principles for the delivery of reading instruction in Barbadian schools. The policy provides a framework for the implementation of curriculum initiatives in a way that extends literacy opportunities for all students and contributes to national development.

Adult and Continuing Education

In 2012, a National Committee for Literacy and Adult Education was established following the successful hosting of a National Consultation on Literacy and Adult Education in Barbados. The National Consultation was convened under the theme *Harnessing the Power and Potential of Literacy and Adult Education for a Sustainable and Viable Future*. The consultation was an output from the Sixth International Conference on Adult Education (CONFINTEA VI) **Belem Framework for Action** where Barbados made a commitment to design policies to improve quality and equity in adult education.

The hosting of the national consultation was a firm demonstration of Barbados' commitment to partner with UNESCO to ensure that every child, woman and man is provided with appropriate opportunities to develop literacy and other important competencies so that personal, social and national development would be assured.



The purpose of the National Committee is to monitor the implementation of the Belem Framework for Action in Barbados and to devise a Strategic Policy which would be part of the nation's Strategic Plan for Literacy and Youth and Adult Education in Barbados.



SECTION 5



SECTION 5: PROSPECTS FOR POST-2015

5.1 OVERALL LESSONS LEARNT

Over the last two decades Barbados has been experiencing extremely low birth rates resulting in a marginal decline in the early childhood population. This clearly has implications for policymakers in planning for child care and education services for this population group even though there is a high demand for access to day care and pre-primary education facilities. This demonstrates the awareness of parents and the value that they place on ensuring that their children get a sound, early start to their education journey.

A major lesson learnt was that the significant investment in human capital by successive governments over the decades has been the foundation for the attainment of universal access to primary and secondary education. On average, 16% of government expenditure and 6% of GDP have been spent on education to sustain the gains achieved over the last three decades. Such investments underpin Barbados' high ranking on the UNDP's human development index.

The provision of appropriate facilities and amenities for all students at all levels of the Barbados education system such as clean water, sanitation, adequate text books and other teaching and learning resources and a range of social amenities including free travel on state-owned buses have ensured equality and equity across the education system regardless of social class and wealth. There have been no disparities in access to or participation in education in Barbados from pre-primary to secondary throughout the period from 2000.

The main challenge for the post-2015 period is enhancing the quality of learning outcomes for students at all levels of the education system.

5.2 MAIN LESSONS LEARNT WITH REGARD TO EACH EFA GOAL

Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

The investment in expanding the number of public facilities providing ECCE is generating increased demand for access. This augurs well not only for reaching the target by 2015 but also for enhancing the quality of student learning in later years. Another lesson learnt is that there is a need for specialized training of more teachers in early childhood education teaching methodologies and strategies to enhance the quality of teaching at that level.



There is also a need for enhanced collaboration across the Ministries of Education, Health and Child Care Board aimed at providing a coherent, harmonized national approach to the provision of ECCE services.

Goal 2: Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.

Barbados continued to provide equal and universal access to primary education over the period. Boys and girls equally continued to enjoy unhindered access to education at this level as a result of the programmes instituted by the Government of Barbados.

High levels of pupil participation were maintained throughout the period. This is an indication that the policies and systems that support student participation such as the mandatory school attendance legislation have continued to be enforced and that there were high levels of compliance.

Public expenditure on education remained relatively high despite marginal declines which became evident since the 2008 financial crisis and efforts to contained expenditure to control the fiscal deficit.

The low numbers enrolled in teacher training programmes in the early part of the last decade due to financial constraints along with the level of teacher attrition during the period resulted in a significant decrease in the ration of professionally trained teachers. The programme of teacher training instituted since 2008 is already showing signs of halting the decline in the ratio of trained teachers and an upswing in the numbers of teachers with appropriate training in pedagogy.

One key lesson learnt was that Barbados still has some work to do to ensure even greater levels of student learning outcomes in the future. While the level of student remained fairly stable throughout the period, there is a need to aim for higher levels of teacher, school leader and school effectiveness in both quantitative and qualitative indicators to achieve improved teaching and learning outcomes at the national level.

Goal 3: Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes.

Greater emphasis has to be placed on health and family life education at the secondary level with particularly attention being paid to imparting life skills among the youth. This is an area of deficiency which requires urgent attention.



There is a growing demand in Barbados, particularly among males, for access to technical and vocational education and training programmes. The Ministry of Education has responded through the introduction of the Caribbean Vocational Qualifications which are competency-based programmes that certify the knowledge, skills, and attitudes of individuals in relation to the jobs that they perform.

There is also a growing demand for work related experience in the form of job attachments, internships and mentorship programmes.

Goal 4: Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Whereas Barbados continues to see the benefits of high participation in primary and secondary education in the recorded literacy levels among youths and adults, there is a growing concern about the functional literacy in the country. Participation in the planned regional literacy assessment and monitoring programme (LAMP) survey will assist greatly in establishing beyond doubt the current functional literacy levels in Barbados.

The introduction of the Continuing Education Programme in the 1990s has proven to be a major benefit to several young persons in Barbados providing them with a second chance to complete their formal education. Evidently, more females than males are taking advantage of such opportunities.

Goal 5: Eliminating gender disparities in primary and secondary education by 2015, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Barbados has provided equal access to primary and secondary education for boys and girls over the period. However, there has been the emergence of gender disparity in favour of girls in the learning outcomes measured. The challenge for Barbados is developing strategies to ensure improved academic performances among boys and young men.

There is clear evidence that the teaching service has attracted more females than males resulting in a gender disparity in favour of females. The lesson here is for the Ministry of Education to explore career pathways and incentives that would be attractive both female and male teachers.

Goal 6: Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.



The key lesson learnt under this goal is the value of the national investment in high quality educational facilities and resources for all students and teachers.

Another lesson learnt relates to the importance of emphasizing quality education at all levels if we are to ensure excellence of all students. While some progress has been observed in the inculcation of essential skills through the Health and Family Life Education curriculum, there is still a great deal of work to be done to impart in pupils and youth the required life skills that will ensure a better life for all.

In order to maintain high levels of teacher quality, there must be continuous and consistent investment in the professional development of teachers and trainers of trainers.

Barbados has to seize the opportunity to institute a policy of pre-service training of teachers and to introduce a system of national standards for teachers and school leaders through a teacher licensure programme.

It is also evident that the Barbados education system has reached a plateau after achieving significant milestones decades ago and therefore requires innovative measures to rekindle a renewed thrust to enhance the quality in teacher training, classroom pedagogy, learning outcomes, school leadership and administration and system management and accountability.

5.3 MAJOR EMERGING DEVELOPMENT CHALLENGES

The analysis of data has revealed that Barbados has maintained its coverage of universal primary and secondary education. Very high participation levels have been sustained along with consistent gender parity being recorded since 2000. At the pre-primary level, the country is approaching universal access and has maintained high participation levels with equal opportunities for boys and girls.

However, there are some emerging trends that are likely to impact educational development in Barbados in the post-2015 period that need to be addressed.

The first relates to issues of quality in several areas. The Global Monitoring Report of 2005 pointed to five factors which are critical to quality education. These include (a) strong educational leadership (b) emphasis on acquiring basic skills (c) an orderly and secure environment (d) high expectations of pupil attainment and (e) frequent assessment of pupil progress. Other factors increasingly being found to be important are the use of well-structured and sustained teaching, reinforcement of concepts, effective classroom management and organisation, in-service and or school-based development of teachers and parental support and involvement with the school.



There are some emerging opportunities that can assist in moving Barbados further along the path to improved quality in education. The first is facilitating greater parental involvement in schools. The fostering of better relations between the home, community and school have positive implications for improved learning outcomes for students and higher quality pedagogical practices in the classroom as well as improved school leadership and management.

Another issue relates to the need for public-private sector partnerships in education to find ways of meeting the rising costs of education. While the state continues to invest high levels of funds in education, the state will be unable to continue to carry that financial burden. It will require the private sector, Non-governmental Organizations, Civil Society Organizations and other benefactors to commit vital resources to support the maintenance of a high quality education system in Barbados. Such entities can also play a pivotal role in contributing to enhanced policy in support of improved inclusive quality education and accountability across the education system for the benefit of all students and teachers.

5.4 A NEW VISION OF EDUCATION TOWARDS AND BEYOND 2015.

The analysis of progress in education in Barbados since 2000 demonstrates that there is urgent need for innovating and energizing a new paradigm in education in Barbados to arrest the static, sterile and lethargic nature of the current system to place it on a new path of development in the post-2015 period.

To achieve the necessary refocusing of the system of education in Barbados, national efforts will be coalesced around three key themes, Sustainability, Quality and Good Governance and Accountability in Education.

Sustainability

Sustainability has been identified as a major priority for Barbados. As stated earlier, Barbados has achieved significant gains in education over the last four decades. Even though we have reached a peak and plateaued, sustaining the gains achieved in access and coverage and maintaining the high participation levels and gender parity are vital foundational elements if we are to continue to develop in the future. Maintaining the high levels of public and national investment in education at all levels will also be pivotal to ensuring the sustainability of our gains.

A vital component will also be in the area of education for sustainable development given Barbados' small size, vulnerabilities and the importance of environmental protection and disaster risk reduction and management.



Education Quality

In Barbados, the concept of quality of education articulated within the Dakar Framework for Action has been embraced. While quality is not framed and defined specifically in the national legislation, at the central administration level, emphasis has been placed on policies and programmes that focus on the characteristics and learning outcomes of students, the training and competence of teachers, the process of pedagogical delivery by teachers and their interaction and impact on learners, appropriate and relevant national curricula, effective school leadership and good governance and equitable and adequate resource allocation.

The concept of education quality in all of its facets is very important to Barbados inclusive of the learning outcomes of students, the training and competence of teachers, the process of pedagogical delivery by teachers and their interaction and impact on learners, appropriate and relevant national curricula, effective school leadership and good governance and equitable and adequate resource allocation. These elements will be at the centre of national efforts, policies and programmes in the post-2015 period. Particular emphasis will be placed on quality learning outcomes among males at all levels while sustaining the high levels of performance of females. Existing programmes will be expanded to ensure the quality of teaching and classroom pedagogy and school leadership to meet the needs of the twenty-first century learner across the various intelligences and learning styles. In addition to the focus on students and learning outcomes, priority will also be given to teachers and school leaders to ensure that we have a well-trained and highly qualified teaching service with special emphasis on gender balance.

The opportunity will be taken to develop and establish national standards for teachers and school leaders, a change in teacher recruitment policy to embrace pre-service training for all teachers, raising the profile of the teaching service to attract more males while enhancing teacher entry qualifications and providing improved continuous professional development for teachers, school leaders and system managers and inspectors.

Other major prospects for education in Barbados include enhancing the provision of technical and vocational education and skills development, along with competency-based education, expanding and diversifying the provision of continuing adult education and training programmes and fostering a culture of lifelong and life-wide learning.

Maintaining the quality of school and educational facilities according to national standards for buildings, safety, learning materials, basic services and learning infrastructure including water, sanitation, building quality/learning space-environment/safety, recreational facilities, furniture and equipment, ICTs will also be given priority.



Good Governance and Accountability

Maintaining good governance and accountability in Education has been identified as a priority for Barbados in the post-2015 period. While the education system in Barbados has operated free of corruption for several decades, the phenomenon of governance and accountability has been raised in several quarters in recent years as a result of growing international concerns which have been focusing on more than pupil coverage and participation in education. There is now greater emphasis being placed on what learning takes place while in formal school. The spotlight is on the quality of teachers and teaching and school leaders and school management for results. Teachers and school leaders are now being held to stricter accountability standards than ever before.

During the National Stakeholders Forum the view was advanced that Barbados needs to safeguard the purity of its education system and maintain the high standards that have evolved over the decades. It was suggested that priority be given to enhancing governance and accountability at two levels, the school and the system.

At the level of schools improved accountability among teachers and school leaders will focus on:

- i. Ensuring equity in the learning environment
- ii. Maintaining effective classrooms and schools based on the correlates of effective schools
- iii. Ensuring that the learning needs of all learners across the various domains of learning are met by highly trained and competent teachers and school leaders
- iv. Ensuring greater efficiency and transparency in the management of educational resources, particularly financial resources.
- v. Improved relations with parents and community bodies
- vi. Establishing protocols to ensure teacher and school leader accountability to students, student bodies, parents and communities.

At the system level consideration will be given to:

- vii. Enhancement of the regulatory system to ensure the development and imposition of standards of conduct, pedagogy and school management
- viii. Introduction of modern legislation to support the new directions of the education system to ensure accountability and compliance with the stated policies
- ix. Establishment of codes of practice for teachers and school leaders and managers



- x. Enforcing national standards for teachers and school leaders
- xi. Improved monitoring of pedagogical practice, quality assurance and accountability at all levels of the education system.



SECTION 6

SECTION 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Recapitulation of major findings and conclusions

Situation in 2000

The baseline data analysis for the Year 2000 Assessment revealed that Barbados had made significant progress during the decade of the 1990s in moving national efforts toward the achievement of the EFA goals. However, some gaps and challenges were evident that required strategic interventions to ensure success by 2015.

There was a gap in the provision of access to early childhood education despite relatively high participation rates. The target for 2015 was to achieve universal access at this level.

At the primary and secondary levels, Barbados had achieved universal access and a high level of pupil participation in school. The aim was to sustain the high enrolment levels attained in the 1990s and to keep the internal efficiency rates high. The second challenge focussed on the need to improve the quality of learning outcomes for the small percentage of students who failed to master the basic literacy and numeracy skills at the completion of primary education and those who completed secondary education with insufficient qualifications, skills and competencies. Another challenge was sustaining the high percentage of professionally certified teachers at the primary and secondary levels who possessed the pedagogical skills required to achieve high levels of learning outcomes for students.

In the area of financing education, Barbados was providing adequate levels of public funding to public schools and educational institutions. The aim was to sustain the level of financial input despite the threat of national, regional and global economic challenges.

Finally, while Barbados generally recorded a very high basic literacy rate, as shown in various international reports, there was a general view that some efforts were required to improve the adult literacy rates and the learning and life skills of young adults.

6.2 MAJOR FINDINGS AND CONCLUSIONS

Goal 1: There was an overall expansion in access to ECCE in Barbados since 2000 despite a marginal decrease in the early childhood population. This expansion was supported by an increase in the number of private day care centres registered with the Child Care Board, an increase in the number of government nursery schools and an increase in the number of nursery classes in public primary schools. At the same

time, there was no evidence of any disparity in access to ECCE between boys and girls.

In sum, Barbados has improved and expanded access to ECCE for all children. The policy of provision of public ECCE has ensured that no one from a vulnerable group or no disadvantaged child has been excluded from quality early childhood care and education in Barbados. Therefore, with the progress made since 2000 it may be concluded that Barbados is well on the path to achieve the target of universal access to ECCE by 2015.

Goal 2: The baseline data revealed that Barbados had attained universal access to primary education prior to 2000. The analysis for the period since 2000 has shown that Barbados maintained its achievement of universal access to free and compulsory primary education of good quality for all boys and girls. There were consistently high levels of pupil participation by both sexes throughout the period. The high participation levels corresponded with high completion rates and high effective transition rates for pupils from primary education to secondary education.

High levels of efficiency were also maintained with an average of 5% of pupils deferring the on-time transition to secondary education. This corresponded with a very low level of inefficiency recorded at the primary level due to the policy of flexible transfer from primary to secondary education.

There was evidence of a gradual decline in the percentage of trained teachers. However, a programme was introduced to halt the decline and restore the percentage of trained teachers to a satisfactory level by 2015.

The pupil teacher ratio at the primary level showed evidence of a decline between 2000 and 2011.

Public expenditure on primary education was adequate and remained relatively stable since 2000.

From the evidence provided, Barbados has attained and maintained universal access to quality education for all pupils of primary school age.

Goal 3: Barbados maintained universal access to secondary education, high levels of participation in and completion of secondary schooling along with maintaining gender parity in the post 2000 period. There was evidence of an increase in the percentage of youth and adults aged 15-24 who attained at least a post-secondary/tertiary education as their highest level of education completed.

During the period, there was an expansion in the provision of opportunities for young people to complete technical and vocational education and training and to acquire work-related skills and adequate certification of learning outcomes.

Despite economic challenges during the period, the Government of Barbados maintained adequate financial input at the secondary level.

It may be concluded that the level of participation in and completion of secondary education by young people and adults in Barbados corresponded with the acquisition of appropriate foundational skills and learning achievement necessary for sustainable livelihoods, entry into the world of work, obtaining decent jobs and for effective functioning in society.

Goal 4: In the period under review, Barbados maintained a high adult literacy rate. A high percentage of the adult population had attained at least a secondary or post secondary/tertiary education which signalled a high literacy rate.

In addition, there was adequate access to adult literacy and continuing education programmes with a greater percentage of females than males participating in such programmes. However, since 2010, there was evidence of a steady decline in participation in such programmes. This period coincided with the challenging economic conditions in the country.

All youth and adults in Barbados, especially women, were provided with and enjoyed equitable access to basic and continuing education. The evidence is clear that women sought to maximise the opportunities which were provided.

Goal 5: Barbados maintained gender parity between the sexes at the pre-primary, primary and secondary levels over the period 2000-2011. The educational, social and other support services necessary to sustain high participation by all pupils regardless of their socio-economic status were maintained by the Government of Barbados. There were therefore no obstacles to the participation of pupils at the various levels of education over the period.

In the case of the teaching service, females outnumbered males at all levels of the system. The analysis also showed that females dominated school leadership positions at the pre-primary and primary levels whereas males dominated at the secondary level.

New entrants to the teaching service were provided with the opportunity to participate in pre-service preparatory training to facilitate smooth transition to the classroom. The formal in-service programme to professionally certify teachers remained in place during the period. While there was a noticeable decline in the number of professionally certified teachers between 2000 and 2008, measures were

introduced to halt the decline and to set the system on a path to regain high levels of quality certified teachers by 2015.

In the area of gender parity in adult and youth literacy rates, it was evident that parity was maintained throughout the period.

Clearly, the policies and programmes that support the provision of education in Barbados ensured the maintenance of gender parity at all levels of the education system. Boys and girls at primary and secondary level were guaranteed full, equal and equitable access to basic education of good quality since 2000.

Goal 6: The attainment of quality education outcomes for students and teachers was a top priority for Barbados following the positive indicators demonstrated in the baseline data presented in the Year 2000 Assessment.

One of the major findings under goal six was the maintenance of a high proportion of graduate teachers in the education system at all levels. The proportion of graduate teachers across the levels of education remained quite stable since 2000 with the exception being 2011 when there was a marginal decline in the percentage of male graduate teachers at the secondary level and the percentage of female graduate teachers at the primary level. The proportion of non-graduates remained quite stable as well over the period. In general there was a disparity in favour of female to male graduates in the teaching service.

During the period, there was a decline in the percentage of professionally trained teachers. However, measures were instituted to halt the decline. These measures are expected to result in a turn-around in the percentage of trained teachers by 2015.

There was an observable gradual decline in pupil teacher ratios at the primary and secondary levels. Overall, these low ratios across all three educational levels underscore the need to ensure that student learning outcomes are reflective of the opportunities for improved individual attention for students that can redound to improved achievement levels. While students continued to demonstrate mastery of the basic literacy and numeracy skills during the period, there is room for improvement in overall performance.

The provision of adequate financial resources and support programmes by the Ministry of Education ensured that there was equity in access to appropriate learning materials such as text books at the primary and secondary levels. There was also provision of adequate, clean, potable water for all pupils as well as proper sanitary facilities.

Essentially, the policies, programmes and initiatives funded and implemented by the Government of Barbados since 2000 contributed in a major way to the enhancement of the quality of all aspects of education in the country. While the results of the learning outcomes of students at all levels were commendable and worthy of high recognition, there was evidence that more work is required to achieve even greater excellence in the future in literacy, numeracy and essential life skills.

6.3 Recommendations for the government for future education development ECCE

In the area of early childhood care and education the following recommendations are advanced.

- i. Continue the efforts to expand access to ECCE services in the public and private sectors.
- ii. Enforce compliance with the national and regional standards for ECCE.
- iii. Improve the system for measuring quality and efficiency in ECCE.
- iv. Expand the training of teachers and caregivers in ECCE
- v. Maintain adequate levels of public financing of ECCE.
- vi. Improve the systems for data collection, particularly from private day care facilities and private pre-schools.

Primary Education

The key recommendation for primary education is to continue to design, develop and implement policies and programmes to ensure the provision of equitable and high quality inclusive basic education for all students. This can be achieved through the following supporting initiatives:

- i. Instituting a comprehensive policy in teacher preparation and training that is sustainable and will maintain high levels of professionally trained, qualified and competent teachers up to and beyond 2015.
- ii. Continue to design and develop comprehensive programmes to ensure improvement in the quality of learning outcomes for pupils at the primary level.
- iii. Accelerate the national initiatives and efforts to expand school effectiveness across the primary system of education.
- iv. Maintain the high levels of investment in providing quality inclusive primary education. This will require the provision of adequate public finances of about 16% of the national budget or 7% of GDP.

- v. Recruit teachers who have first degrees in Education.
- vi. Institute a BSC Programme of training in teacher education and classroom management

Learning Needs of Youth and Adults

Secondary education holds the key to ensuring that young people and adults are equipped with the knowledge, skills, competencies and appropriate attitudes necessary for sustainable livelihoods, entry into the world of work, obtaining decent jobs and for effective functioning in society. To ensure that the learning and skills needs of youths and adults are, met the following recommendations are being suggested:

- i. Expanding capacity in the existing institutions that provide technical and vocational education and training.
- ii. Enhancing partnerships with industry partners to improve the provision of opportunities for work experience through job attachment, internships and mentorship programmes for young people.
- iii. Expanding the number and variety of continuing education courses offered by education institutions including adult literacy programmes.
- iv. Developing a culture of practice that embraces the use of alternative assessment and performance-based assessment strategies for persons who have a fear of traditional examinations.
- v. Facilitating participation in the proposed regional Literacy Assessment and Monitoring Programme (LAMP) Survey to arrive at a clear determination of current literacy levels in Barbados.

Quality Education

A key focus of education development in Barbados in the future will be on the quality of all aspects of the system. To ensure the enhancement of the quality of education the following recommendations will be considered:

- i. Mainstreaming education for sustainable development in all curricula, education policies and programmes, teacher and school leader preparation, and professional development initiatives.

- ii. The design, development and implementation of improved career prospects for teachers through a system of appropriate career paths and professional standards for teachers.
- iii. Introducing a policy of mandatory pre-service professional training as a prerequisite for entry to the service.
- iv. Development and institutionalisation of a teacher mentorship system across the school system.
- v. Establishment of a teacher licensure system to support the professionalization of teaching, including provisions for continuous in-service professional development and training.
- vi. Introduction of incentives to encourage more males to pursue teaching as a viable career option to reverse the underrepresentation of male teachers in the system.
- vii. Introducing a framework for professional standards and career ladders for teachers.
- viii. Reviewing the existing criteria for teacher evaluation to include formative and summative approaches, and the institutionalisation of staff development programs for professional growth.
- ix. Participation in international assessments and tests such as Progress in International Reading Literacy Study (PIRLS).

6.4 New directions for the international community for education development and cooperation

Barbados supports the efforts by the United Nations, UNESCO, Commonwealth Secretariat and other organisations to establish global frameworks for the continued development of education and the setting of new targets and benchmarks for the post-2015 period. It is evident that developed countries and some others have benefited significantly from the results of participation in international assessments such as Trends in International Maths and Science Study (TIMSS), Programme for International Student Assessment (PISA) and other international assessments. Such benefits are out of the reach of developing countries and Small Island Developing States (SIDS) for varying reasons.

Yet, it is imperative that all children, regardless of the development status of their countries, accomplish more than mere attendance and completion of primary or secondary schooling. Barbados supports the need to focus on 'access plus learning'

as advocated by the Learning Metrics Task Force with particular emphasis on the various domains of learning. The extent of learning while at school should be measured and used as a gauge to determine the return on the investment in educating children.

Barbados is appealing for consideration to be given to supporting development cooperation and continued capacity building for SIDS and other developing countries to ensure that the new targets and goals set by the international community for the post-2015 education agenda are met by all countries within the new time frames.

SECTION 7: REFERENCES

Barbados. Ministry of Education. (1981). Education Act Cap. 41. Bridgetown, Barbados. Author.

Barbados. Ministry of Education. (1993). Education Sectoral Plan 1993-2000. Bridgetown, Barbados. Author.

Barbados. Ministry of Education, Youth Affairs and Culture. (1995). White Paper on Education Reform – Each one matters, Quality education for all. Bridgetown, Barbados. Author.

Barbados. Ministry of Education, Youth Affairs and Culture. (1998). EduTech – an educational policy framework for Barbados. Bridgetown, Barbados. Author.

Barbados. Ministry of Education, Youth Affairs and Culture. (2000). Curriculum 2000 – rationale and guidelines for curriculum reform in Barbados. Bridgetown, Barbados. Author.

Barbados. Ministry of Education, Youth Affairs and Sports. (2002). Strategic Plan 2002-2012. Bridgetown, Barbados. Author.

Barbados. Ministry of The Civil Service. (2001). Civil Establishment Act Cap. 21: Civil establishment qualifications order. Bridgetown, Barbados. Author.

Barbados. Statistical Service. (2000). Barbados population and housing census 2000. Bridgetown, Barbados: Author.

Barbados. Government of Barbados. (2005). Safety and Health At Work Act, 2005. Bridgetown, Barbados. Author.

Barbados. Ministry of Economic Affairs and Development. (2007). Global excellence, Barbadian traditions: The national strategic plan of Barbados, 2006-2025. Bridgetown, Barbados. Author.

Barbados. Ministry of Education, Youth Affairs and Sports. (2007). Policy Document – national reading policy. Bridgetown, Barbados. Author.

CARICOM. ND. Regional guidelines for developing policy, regulation and standards in early childhood development services. Georgetown, Guyana: Author.

CARICOM. (1993). The future of education in the Caribbean: Report of the CARICOM advisory task force on education. Georgetown: Caribbean Community Secretariat.

CARICOM. (1997). Report of the second special meeting of the standing committee of ministers responsible for education. Georgetown, Guyana: Author.

Commonwealth Ministerial Working Group. (2012). Commonwealth recommendations for the post-2015 development framework for education. London: Commonwealth Secretariat.

Government of Barbados. (2004). Report of the national commission on law and order. Bridgetown, Barbados: Author.

Learning Metrics Task Force. (2013). Toward universal learning: what every child should learn. Montreal: UNESCO Institute for Statistics & Centre for Universal Education at Brookings.

Motivans, A., Smith, T. & Brunerforth, M. (2005). Monitoring global needs for 2015. Teachers and Educational Quarterly. Montreal: UNESCO Institute for Statistics.

Obidah, J., Aubourg-Rieble, S. & Vera, J. (2012). Project Completion Report: Education Sector Enhancement Project (ESEP).

Shorey, L. (1999). Education For All: The Year 2000 Assessment Barbados Report. Bridgetown, Barbados: Ministry of Education, Youth Affairs and Culture.

UNESCO Institute for Statistics. (2006). International Standard Classification of Education 97. Paris: Author.

UNESCO. (2003). The leap to equality: Gender and education for all. E F A Global Monitoring Report 2003/04. Paris: UNESCO.

UNESCO. (2004). The quality imperative. E F A Global Monitoring Report 2005. Paris: UNESCO.

UNESCO. (2005). Literacy for Life. E F A Global Monitoring Report 2008. Paris: UNESCO

UNESCO. (2014). Teaching and learning: achieving quality for all. E F A Global Monitoring Report 2013/14. Paris: UNESCO

UNESCO International Consultative Forum on Education For All. ND. The Year 2000 Assessment Technical Guidelines. Paris: Author.

World Bank. (2003, April). Monitoring educational performance in the Caribbean (Report No. 24337). Washington, DC: Author.

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