

2012

PRISMS OF POSSIBILITY

A REPORT CARD ON EDUCATION IN JAMAICA



Programa de Promoción de la Reforma Educativa en América Latina y el Caribe
Partnership for Educational Revitalization in the Americas



Taking Responsibility

2012

PRISMS OF POSSIBILITY

A REPORT CARD ON EDUCATION IN JAMAICA



Programa de Promoción de la Reforma Educativa en América Latina y el Caribe
Partnership for Educational Revitalization in the Americas



Taking Responsibility

COPYRIGHT © 2012 PREAL and CAPRI

All rights reserved

Project Director: Damien King, Ph.D.

Lead Researcher: Dawn Sewell-Lawson

Research Assistant: Grace-Camille Munroe, Ph.D.

Administrative Support: Laura Levy and Stacy-ann Robinson

Layout and Design: Lauren Watkis

TABLE OF CONTENTS



Mission	4
Acknowledgements	5
Executive Summary: A Report Card on Education in Jamaica, 2012	6
Diagnosis	
I - Enrollment- Most young people attend school until they are 16, but enrollment drops sharply beyond that	8
II - Staying in School- Most students complete at least some secondary schooling, but a significant number of Jamaicans have no certification	11
III - Test Scores- Jamaican students are not learning what they need to succeed	14
IV - Equity- Young men and the poor are underserved by the Jamaican education system	18
Outlook	
V - Standards- The country is on target to have sufficient standards, but enforcing and maintaining them has to be a priority	23
VI - Assessment System- Jamaica's rich array of tests are often not used to improve learning	25
VII - Management and Accountability- Jamaica is developing a monitoring and management system that holds education providers accountable	28
VIII - Teaching Profession- Government is taking steps to safeguard the teaching profession through standards and professional development	31
IX - Expenditure- Spending on education remains high, but disparity at different education levels needs to be addressed	35
Recommendations	39
Appendix	40
Bibliography	61

LIST OF FIGURES, TABLES AND BOXES



Graphs

Graph 1: Enrollment Rate by Age Group, 1990-2009, Selected Years	8
Graph 2: Early Childhood Net Enrollment Rates, Selected Countries, 1999 and 2009	9
Graph 3: Certification Level of Population 25-59 Years, Selected Years, 2000-2008	11
Graph 4: Secondary School Drop Out Rates, Selected Years, 1990-2010	12
Graph 5: Attendance Rates at Primary and Secondary Levels, 2004-2010	13
Graph 6: Percent of Grade 11 Students Passing 4 and 5 or More CSEC Subjects, 2005-2010	15
Graph 7: Average Pass Rate for All Candidates in CSEC Mathematics, Selected Countries, 2005-2009	16
Graph 8: Performance in GSAT Mathematics and Language Arts Exams, 2004-2011	16
Graph 9: Gender Parity for Enrolment at Tertiary Level, Selected Areas, 2000 and 2008	19
Graph 10: Percentage of Children Showing Mastery in Selected National Assessments, by Gender, Most Recent Year, 2007-2010	19
Graph 11: Performance in Selected CSEC Subjects, by Gender, 2008	20
Graph 12: Highest Level of Certification, Population 14+, by Consumption Groups, 2008	21
Graph 13: Illiteracy Level by Region, 1999 & 2008	21
Graph 14: Performance in GSAT, by School Type, 2009/2010	22
Graph 15: Percent of Trained Teachers with a University Degree by School Levels, Selected Years, 1990-2009	33
Graph 16: Teachers' Annual Salaries in Public Institutions, Primary Level (PPP \$US), 2009	33
Graph 17: Number of Students Per Teacher, Primary and Secondary, 1990-2010	34
Graph 18: Change in GDP and Share of GDP Allocated to Education, 2005-2010	35
Graph 19: Share of Education Budget by Education Level, 2010	36
Graph 20: Enrollment Distribution by Education Level, 2010	36
Graph 21: Ratio of Per Student Expenditure at Other Education Levels in Relation to Per Student Expenditure at the Primary Level, Selected Years, 1990-2010	37

Boxes

Box 1: Recent Programs to Expand Secondary Enrollment	10
Box 2: Selected Strategies to Improve Literacy and Numeracy, 2010	17
Box 3: The Alternative Secondary Transitional Education Programme (ASTEP)	25
Box 4: Investing In Early Childhood Education	36

Appendix

Graph A1: Net Enrollment at the Secondary Level, Selected Countries, 2009	40
Graph A2: Highest Level of Education of Population 25-59 Years, Selected Years, 2000-2009	40
Graph A3: Highest Level of Education of Population 19-24 Years, Selected Years, 2000-2009	41
Graph A4: Graph A4 Number of School Days in the Year, Selected Countries	41
Table A1: Two Main Reasons Given by Parents for Not Sending Children to School, Selected Years, 2000 - 2009	42
Graph A5: Percentage of Passes in CSEC by Grade Achieved, 2005-2010	42
Graph A6: Percentage of Grade 11 Students that Sit CSEC Mathematics and English Language, 2002 - 2010 ..	43
Graph A7: Number of CSEC Subjects Sat by Grade 11 Cohort, 2005-2010	43
Graph A8: Number of CSEC Subjects Passed, 2005-2010	44
Table A2: Average Scores in GSAT Examinations, by Subject, 2005-2011	44



Table A3:	Grade 4 Literacy and Numeracy Scores, 2005-2010	45
Graph A9:	Mastery Rate in Grade 4 Literacy Assessment, 2005-2011	45
Table A4:	Performance in GSAT by Gender, 2009/2010	46
Graph A10:	Distribution of Students Passing at least 4 CSEC Subjects by Gender, 2010	46
Graph A11:	Enrollment by Gender, 2009	47
Graph A12:	Distribution of Tertiary Students by Consumption Group, 2000 and 2008	47
Graph A13:	Highest Level of Examination Passed, by Region, Out of School Population Aged 14+, 2008	48
Graph A14:	Performance in CSEC English Language by School Type, 2002 – 2008	48
Graph A15:	Performance in CSEC Mathematics by School Type, 2002 – 2008	49
Graph A16:	Performance in GSAT Mathematics by Private and Public Primary Schools, 2000-2010	49
Box A1:	Strategies for Improving Boys Performance in School- Mutual Building Societies Foundation Centres for Excellence Project	50
Box A2:	Tracking Progress Toward Learning Goals: The Mutual Building Societies Foundation Centres of Excellence	51
Box A3:	Key functions of the Curriculum Development Unit	51
Table A5:	Overview of Assessments included in Jamaica’s National Assessment Program	52
Table A6:	Components of CSEC Profile for Selected Subjects	53
Box A4:	Private Sector Helps Students Cover CSEC Fees in Business Topics	53
Box A5:	Key Pieces of Legislation Governing the Jamaica System of Education	54
Table A7:	Education Regions with Parishes	54
Box A6:	National Education Strategic Plan (2011-2020): Legislative and Policy Agenda	55
Table A8:	Distribution of Functions in the Institutional Framework of Education in Jamaica	56
Table A9:	Levels of Decision Making at the School and Responsible Agents	57
Box A7:	Improving Leadership at Jamaican Schools	58
Table A10:	Teachers Employed in Public Sector Schools by Type of Schools and Qualification, 2009	59
Table A11:	Comparison of Pupils to One Teacher at the Primary Level, 2009	59
Graph A17:	Performance in GSAT Language Arts by Private and Public Primary Schools, 2000-2010	60
Graph A18:	Public Spending on Education as a Percentage of GNP, 2008	60

MISSION:



At the end of the 1990's, the Partnership for Educational Revitalization in the Americas (PREAL) convened two international Task Forces—one for Latin America and one for Central America—to discuss grave deficiencies in the education being offered to children throughout Latin America and the Caribbean. The commission's reports—**The Future at Stake** and **Tomorrow is Too Late**—outlined the principal challenges and proposed four steps to make schools better:

- 1) Set standards for education systems and measure progress toward meeting them;
- 2) Give schools and local communities more control over—and responsibility for—education;
- 3) Strengthen the teaching profession by raising salaries, reforming training, and making teachers more accountable to the communities they serve; and
- 4) Invest more money per student in preschool, primary and secondary education.

As a follow-up to these recommendations, PREAL publishes periodic reports on educational progress—“education report cards”—so that leaders both inside and outside the education sector have independent, reliable information on how their schools are doing compared to other regions or countries. To date, PREAL's report card program has produced over 30 reports on education progress at the regional, Central American, national, and departmental level (published report cards are available online at www.preal.org).

Inspired by the report cards students receive in school, education report cards have become important accountability tools. They track changes in student learning (usually through standardized test scores) along with changes in education inputs (e.g. finance, teacher qualifications, enrollments) in order to understand how system structures help or hinder better education. They show at a glance how a particular school, district, state, country, or group of countries is performing with regards to similar entities, global/national/state/district/school averages, and against its own previous performance. By grading, or ranking, that performance using a “school-style” grading system, report cards allow parents and other members of civil society to recognize quickly both exemplary performance and areas that need improvement. Armed with this information they can lobby for appropriate change.

PREAL's report cards offer the best information available about key aspects of education—access, quality and equity—that are essential for improving learning. They also promote accountability by documenting current conditions and evaluating the progress of reforms underway. They are based on the belief that regular and sustained monitoring of key education outcomes is crucial to improving education quality and that parents, students, and employers have a right to know how schools are organized, how much they cost, what they produce, and who is responsible for the outcomes. PREAL's national report cards are designed to feed into its regional reports while at the same time taking into account country contexts and supporting national reform efforts.

ACKNOWLEDGEMENTS:



The 2012 Jamaica Education Report Card is the result of a comprehensive study of the current status of education in Jamaica. It was carried out by the Caribbean Policy Research Institution (CaPRI), in cooperation with the Partnership for Educational Revitalization in the Americas (PREAL), a joint project of the Inter- American Dialogue, in Washington D.C., and the Corporation for Development Research (CINDE), in Santiago, Chile. PREAL's activities are made possible by the generous support of the American people through the United States Agency for International Development (USAID), by the Inter- American Development Bank (IDB), the GE Foundation, the International Association for the Evaluation of Educational Achievement (IEA), and the World Bank, among others. However, the contents of this report are the sole responsibility of PREAL and its partner organizations and do not necessarily reflect the views of any of its donors.

The report card would not have been possible without stakeholder cooperation and the hard work and kind assistance of many individuals. We would particularly like to recognise our local partners, particularly the University of the West Indies (UWI), Mona, Jamaica National Building Society (JNBS), Gore Developments, the ICD Group, the Spanish Court Hotel, and the Insurance Company of the West Indies (ICWI). We gratefully acknowledge all those who contributed to this work, especially the Lead Researcher, Dawn Sewell-Lawson, the Research Assistant, Grace-Camille Munroe and the team of readers who provided feedback on the report - Carol Watson-Williams, Steven Kerr, Esther Tyson, Winsome Gordon and Hector Stephenson, and the Ministry of Education, Planning Institute of Jamaica (PIOJ), the local Caribbean Secondary Education Certificate (CSEC) office, the National Education Inspectorate, the Jamaica Teachers' Association (JTA) and the National Council on Education (NCE).

EXECUTIVE SUMMARY:

A REPORT CARD ON EDUCATION IN JAMAICA, 2012



Jamaicans have long been concerned about investment in and the equity of the education sector. Yet, contrary to popular belief, the problem is not solely about money. Between 2005 and 2010, public investment in education as a percent of GDP increased from 5.3 to 6.1 percent, more than the average for developed countries (5.2%). Most of Jamaica's children attend school at least through lower secondary, and the country has a robust assessment system, which incorporates both national and school-based assessment.

However, low test scores at all levels of the Jamaican education system suggest that there are gaps in the system that negatively impact the learning outcomes of many students. Poor children are particularly ill-served. Children in prep schools—privately run primary level institutions usually attended by children from upper socio-economic groups—outperform their counterparts in the public school system in all five Grade Six Achievement Test (GSAT) subjects, sometimes by as much as 30 percentage points. Approximately 90% of the poorest persons have no secondary or post-secondary certification compared with only 56% of the wealthiest.

Varying resources among schools remains a challenge. It is not uncommon to find better performing schools with more than one computer lab, wi-fi, and furnished school libraries co-existing with schools with a bare minimum number of computers, no library and severe overcrowding.

High levels of per pupil spending on tertiary primarily benefit students from wealthier households since few students from poorer households reach this level.

New systems for assessing school performance currently being implemented should help identify pressing needs and target resources to where they are most needed while ensuring accountability. Mechanisms for annual monitoring at the school level, including a more structured use of data from national tests and curriculum guidelines, will be critical to this process. However, it remains to be seen how well these systems will work in practice. Teachers' education levels have improved, but making sure skills learned in training are applied in the classroom also remains a challenge.

The following table offers a summary of nine critical dimensions of education in Jamaica. For each of these topics, the table presents the current status (grade) and the prospects for progress (trend arrow). The evaluation, although necessarily subjective, is based on the best data available and is intended as a starting point for a shared conversation on needed improvements. All players, including the Ministry, parents, students, administrators, teachers, employers and community leaders have a part to play in ensuring students learn. Setting and enforcing standards that clearly lay out the resources and mechanisms needed to guarantee learning would go a long way toward providing Jamaican children with the education they need and deserve. The possibilities exist for us to build on the strong foundation we have laid over the years to provide all Jamaican children with a world-class education and unearth our nation's potential. Success depends on us accepting that "we all can act and we all must act". When we do, the possibilities are endless.

A REPORT CARD ON EDUCATION IN JAMAICA - 2012

SUBJECT	GRADE	TREND	COMMENTS
Enrollment	B	↑	Jamaica has consistently had high enrollment at the pre-primary and primary levels; however, high enrollment at the secondary and tertiary levels remains a challenge.
Staying In School	C	↔	Younger Jamaicans are staying in school longer but the overall certification of those in the 25-29 year old bracket continues to be low.
Test Score	D	↑	Performance in all areas of assessment is improving.
Equity	D	↓	No clear path to address the underperformance of boys in the school system and wide disparities in educational outcomes by socio-economic groups exist.
Standards	C	↑	Jamaica, through its National Education Inspectorate, is taking steps to improve performance standards and to create increased opportunities for learning.
Assessment System	B	↔	The country is not benefiting as it should from the availability of data from the various national and regional assessments.
Management and Accountability	C	↑	Greater efforts are being made to improve accountability at the school level.
Teaching Profession	C	↑	Legislated teaching standards will contribute to protecting the profession.
Expenditure	B	↑	Jamaica continues to allocate a high percentage of gross domestic product (GDP) to education and has made improvements in reducing the disparity in spending per pupil at the basic and tertiary levels.

GRADE

A- EXCELLENT
 B- GOOD
 C- AVERAGE
 D- UNSATISFACTORY
 F- VERY POOR

TREND

↑ IMPROVING
 ↔ NO OBSERVABLE CHANGE
 ↓ DECLINING

I. ENROLLMENT

MOST YOUNG PEOPLE ATTEND SCHOOL UNTIL THEY ARE 16, BUT ENROLLMENT DROPS SHARPLY BEYOND THAT **B** ↑



The Jamaican educational system is divided into four levels: (i) Early Childhood (3-5 year-olds); (ii) Primary (6-11 year-olds); (iii) Lower and Upper Secondary (12-16 year-olds), with provisions for “postsecondary” education (17-18 year-olds) offered in sixth form (grades 12-13) or pre-university programmes; and (iv) Tertiary (19-24 year-olds).¹ Officially, Jamaican students are required to attend school from ages 6-16, about the same number of years of mandatory schooling as in other Latin American and other Caribbean countries (GED 2011). However, since 1998, Jamaica has placed a renewed emphasis on ensuring that children 3-5 years old have access to pre-school, and for this reason the report card will focus primarily on the 3-18 age range.

Jamaican enrollment data vary widely among sources

National and international data disagree on the percentage of Jamaican young people enrolled in school at any given level. This chapter is based primarily on national sources, which generally provide more recent data than international sources. Where there are differences in national sources, we have favored household survey data from the Jamaica Survey of Living Conditions (JSLC), which includes information on

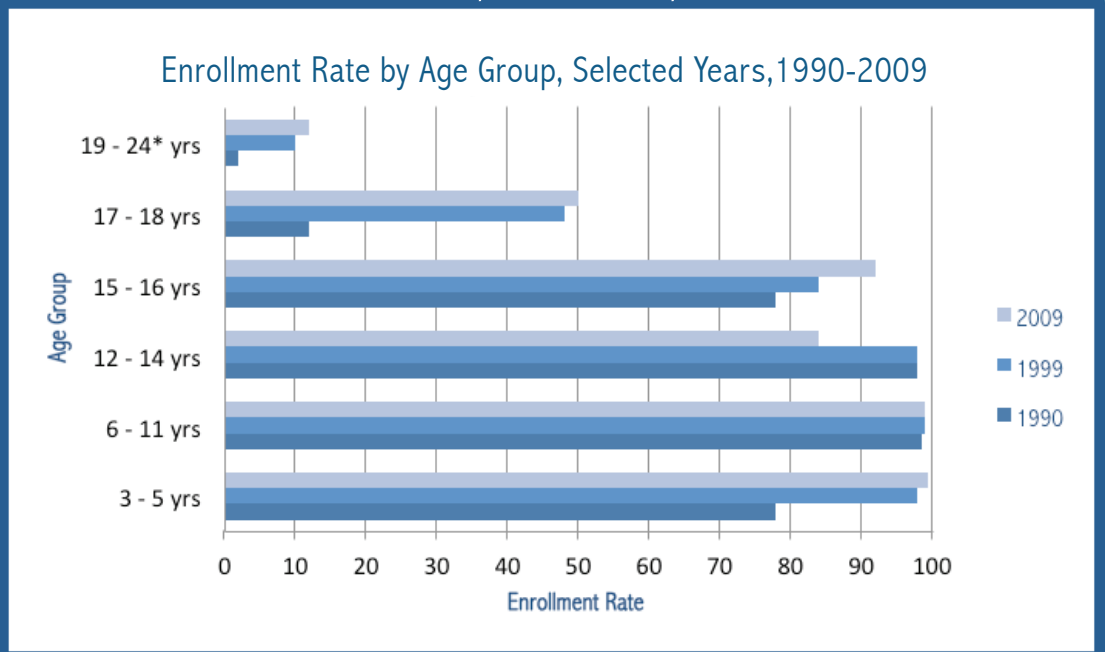
children enrolled in both public and private education, over that from the Ministry of Education, which includes only public education. However, we have tried to make a note of where large discrepancies exist and how they might affect the analysis.

Moving forward, Jamaica should work to triangulate the official sources of data on education to reduce discrepancies and improve accuracy in the reporting and monitoring of basic education indicators.

Most Jamaicans 3-16 years old are enrolled in an educational institution

According to the 2009 Jamaica Survey of Living Conditions (JSLC), approximately 98% of children 3-16 years old were enrolled in an educational institution. This is an improvement over the already high 90% enrollment rate in 1990, with participation at the pre-primary (3-5 years) and secondary level (12-16 years) increasing most dramatically over the last decade (**Graph 1**). To the country's credit there has been universal enrolment among this age group for more than a decade.²

GRAPH 1: ENROLLMENT RATE BY AGE GROUP, SELECTED YEARS, 1990-2009



Note for Graph 1: For the 19-24 age group, 1990 data is actually 1995, the closest year available, and is for the 20-24 age group, reflecting the definition of tertiary age range at that time.

Source: PIOJ-JSLC 1990, 1999 and 2009

¹ Tertiary defined as ages 17-24 years old since 2011.

² UNESCO defines universal enrolment as being over 90% (UNESCO- Education for All- Global Monitoring Report- 2010- Reaching the Marginalized).

Early childhood enrollment compares favorably with other Caribbean, and even some developed countries

Although early childhood education is not mandatory, Jamaica has exceptionally high levels of enrollment among 3-5 year-olds. Household survey data show that 99% of children in this age range were enrolled in 2009 (**Graph 1**). International data show much lower rates: 80% and 74% for 1999 and 2009 respectively according to UNESCO's 2011 Global Education Digest. However, even using the lower international rates of 80% and 74%, Jamaica has higher enrollment rates than even some developed countries, including the United States and Finland (**Graph 2**). This is not surprising given extensive interventions and expansion in the EC sector, which has raised awareness among parents and stakeholders alike.

Most children attend primary school

At the primary level disparities between local and international statistics tell different stories. The good news is that all sources show that more than eight in every ten children at the primary level are enrolled. According to national household survey data (JSLC, 2009), net enrollment at the primary level, is at 98%, putting Jamaica squarely alongside developed and developing countries that have achieved near-universal coverage at this level. However, UNESCO's 2011 Global Education Digest reports that primary net enrollment rates in Jamaica have declined from around 90% in 1999 to 81% in 2009, giving it one of the lowest rates in the region.

Data from the Ministry of Education, which only reports on students in the public sector, puts primary enrollment at 86% in 2009, down from 92.5% in 1999. The reasons behind these data differences are unclear, although at least part of the decline reported by the Ministry may be from parents moving their children into private prep schools. Moving forward, Jamaican authorities will want to monitor this issue more closely so as to ensure congruity between data sources, since most international data are generated locally.

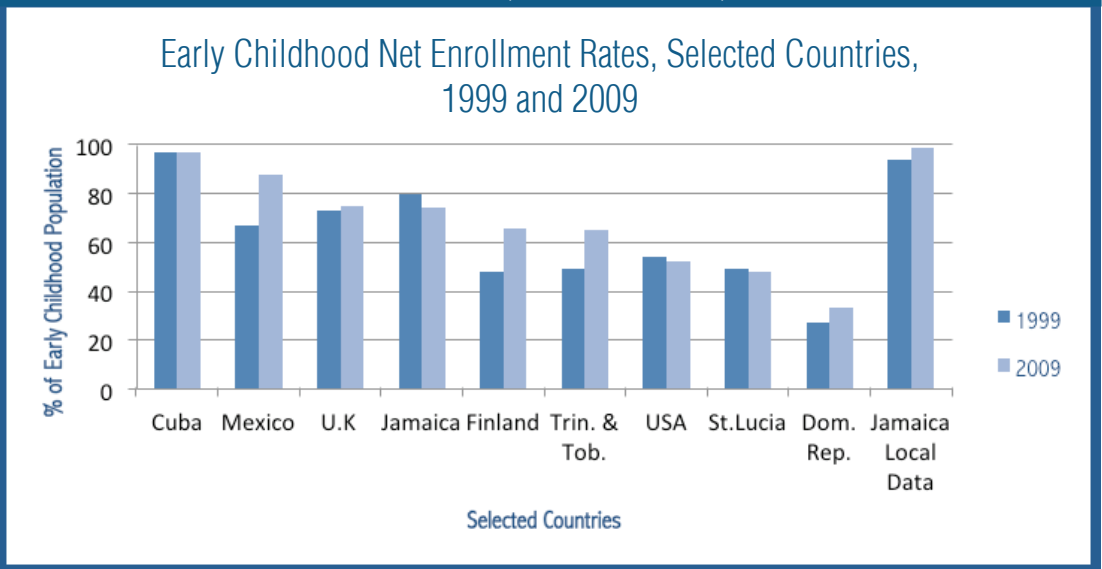
Enrollment in upper secondary school is increasing

While net enrolment at the lower secondary level (12-14 years) has always been high; in 1990 the rate was 94% and 99% in 2009 according to data from national household survey, this is not the case at the upper secondary level. Net enrollment at the upper secondary level (15-16 year-olds) in 1990 was just under 80%, leaving one in five young people in this age range out of school. By 2009, the rate was over 90% (**Graph 1**). This may be the result of several interventions, including the creation of a significant number of secondary places in new and upgraded high schools in conjunction with the policy that all children should be given a place in the secondary school system. As at the primary level enrollment data from international sources and the Ministry of Education differ from those from household surveys. However, the trend is still one of rapidly increasing enrollment at the upper secondary level, from 69% in 1999 to 77% in 2009 according to Ministry of Education data.

Note for Graph 2: Graph includes as many Caribbean countries as had data given their similar history, economies, and education systems. The United States, UK and Canada are included as Jamaica's main trading partners, while Finland is included as a benchmark of a top-performing education system. Some Latin American countries are also included for reference. This selection criteria applies to all international comparisons in the document, unless otherwise notes and subject to data availability.

Source: UNESCO-Global Education Digest- 2011 (Table 1). Jamaica Local from Jamaica Survey of Living Conditions Report, 2009

GRAPH 2: EARLY CHILDHOOD NET ENROLLMENT RATES, SELECTED COUNTRIES, 1999 AND 2009



Enrollment among 17-18 year olds more than tripled since 1990

There has also been marked improvement in enrolment among 17-18 year-olds. In 1990, the JSLC reported a mere 13% of youth this age enrolled, but by 2009 this had risen to 48% (Graph 1). However, despite improvements, more than half of young people this age remain outside the system and numbers have leveled off since 2000. Post-secondary education in Jamaica corresponds to the last year of high school in many countries and is a key transition point for entry into tertiary studies. That so few are enrolled at this age raises serious concerns about Jamaica's ability to prepare young people for the ever-increasing knowledge demands of modern society.

Jamaica needs to continue to expand opportunities for older students

While enrollment among 15-18 year-olds is improving, international data shows that Jamaica still trails the United States, the UK and most other Caribbean countries in net secondary enrollment (Graph A1 in Appendix). Improving enrollment of 17-18 year-old students will require moral suasion and engagement of the youths, since the compulsory secondary school system ends at 16 years old and many

students, particularly those from poorer households, tend to exit the school system at this level. Aware of the challenges to making access to secondary (including post-secondary grades 12-13) universal, the government has initiated a number of programs to help expand opportunities at this level (Box 1). With the proposed change in age limit for secondary education from 16 to 18, Jamaica will have the highest required schooling age in the Caribbean, and if the trend observed in the OECD countries that have also increased mandatory school ages in recent years holds true in Jamaica, this measure should help bring up enrollments among 17-18 year-olds (OECD, Education at a Glance 2009, p. 298).

Jamaica is on track to achieve 2015 target for tertiary gross enrollment.

Gross tertiary enrolment is an important indicator for the country, it is has implications for the quality of the workforce and the competitiveness of the country. The country's target is to have at least 35% of its population enrolled in tertiary institutions by 2015 (Vision 2030, 2009). In 2009 gross tertiary enrolment was 32.8%, a minimal increase over the 31.5% in 2007 (ESSJ, 2009) nevertheless, if the country maintains this pace it will reach the 2015 target.

BOX 1. RECENT PROGRAMS TO EXPAND SECONDARY ENROLLMENT

The Jamaican government has implemented several initiatives over the last several years designed to improve access to secondary schooling. These include:

The Reform of Secondary Education (Phase II-2001-2008) improved school infrastructure, initiated home visits to deal with absenteeism and dropouts, and facilitated enrollment of public sector students at private secondary schools when public spaces were not available.

The Secondary School Enhancement Programme was introduced in 2001 to redress the issues of equity and access at the secondary level. It provides funds for infrastructure improvement for new schools and for reclassified and upgraded high schools (schools that were not originally built as high schools, but were later given this status).

Improving access for persons with disability is also a key strategy for improving overall enrollment. Starting at the primary level, the Government, through the Jamaica Social Investment Fund (JSIF) and in collaboration with the Centre for Disability Studies – MICO Care Centre, has partnered to retrofit one primary school in each parish to provide full physical access.

The Government also plans to increase the mandatory school age limit from 16 to 18 years old. To facilitate this, two additional grades, grades 12-13, will be added at all high schools.

In keeping with the Compulsory Education Policy,³ the Career Advancement Programme (CAP) was introduced in 2009 to provide increased opportunities for students (ages 16-18) to free education and training and to prepare them for post-secondary studies or the world of work. CAP students benefit from a mix of: i) academic and vocational skills; ii) career counseling and mentorship; iii) training in life skills, entrepreneurship and personal development. The programme is currently under-going interim evaluation.

Source: ESSJ 2010, Pg. 22.17

³ The Compulsory Education Policy will ensure that all children ages 3-18 are assigned to, and attending, structured education and training programmes appropriate to their age and development (CAP Brochure).

II. STAYING IN SCHOOL

MOST STUDENTS COMPLETE AT LEAST SOME SECONDARY SCHOOLING, BUT A SIGNIFICANT NUMBER OF JAMAICANS HAVE NO CERTIFICATION



In Jamaica, certification requires passing at least one subject in an exit examination at the secondary or higher levels, such as Caribbean Secondary Examination Certificate (CSEC). In addition, persons may be certified by earning a diploma, certificate or a degree at the post-secondary or tertiary level. In 2008, almost three quarters of persons ages 25-59⁴ had no certification—almost the same as in 2000 (Graph 3). Of those, nearly 40% (37%) never completed secondary school and only one in four of those who did complete high school achieved some form of certification (Graph A2 in Appendix).

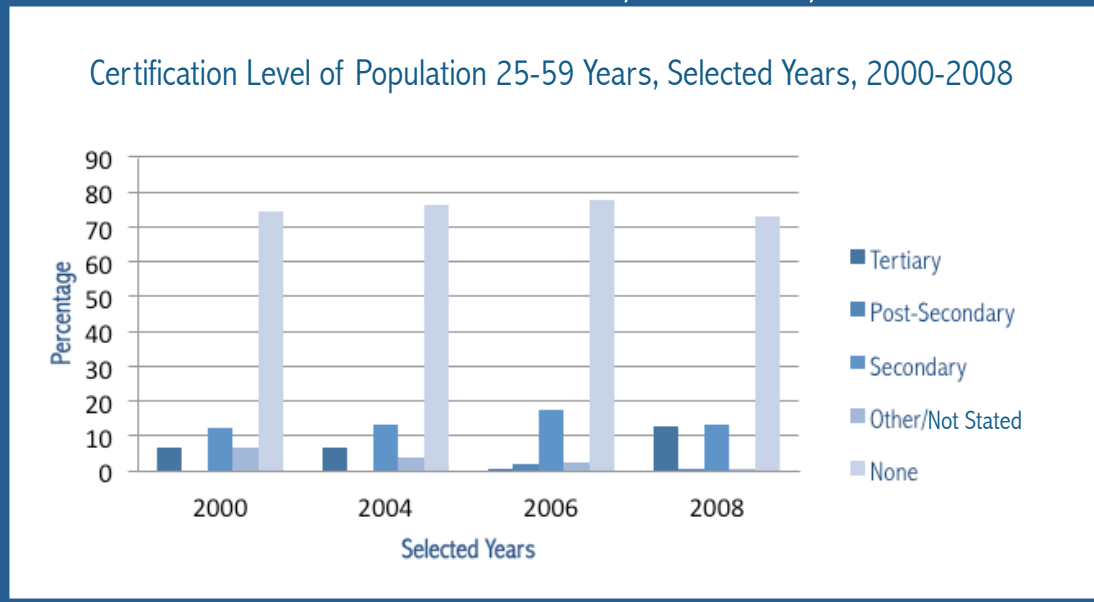
On the positive side, the percentage of those receiving certification at the tertiary level nearly doubled between 2000 and 2008, although this seems to largely reflect shifts from other forms of certification (Graph 3). It is also a good sign that the 19-24 year olds are showing much higher levels of education (Graph A3 in Appendix). These levels of certification are far too low to sustain a knowledge-based society.

The country has and continues to take steps to extend opportunities for students to earn some form of certification, as a means of improving the quality of future workforce (Box 1). However, education planners, policymakers and practitioners must focus their attention on addressing issues of both access and quality that continue to negatively impact student outcomes.

Approximately 1 in 10 students drop out of secondary school

Although dropout rates are substantially lower than in the late 1990's, data from 2000-2010 reveal that among those who enroll in secondary school, the proportion who leave before completing their studies has changed little (Graph 4). In addition, students who complete All-Age and Junior High schools that end at grade 9, often do not to continue their education. The planned phasing out of All-Age and Junior High schools is expected to reduce the probability of students exiting the secondary system prematurely.

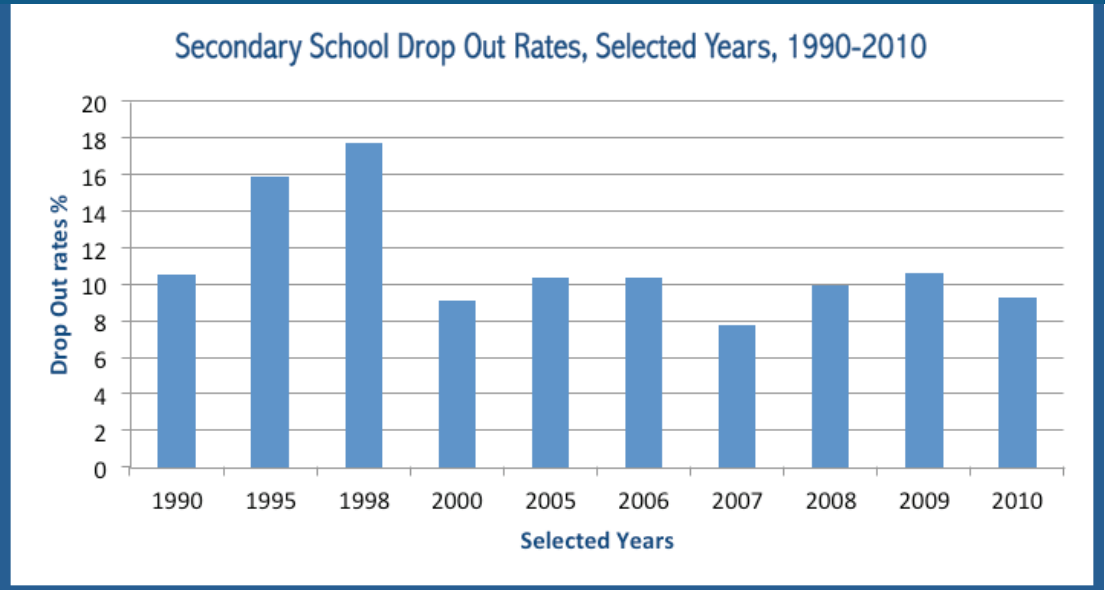
GRAPH 3: CERTIFICATION LEVEL OF POPULATION 25-59 YEARS, SELECTED YEARS, 2000-2008



Source: PIOJ- Jamaica Survey of Living Conditions, 2000-2008

⁴ This differs from the labour force which refers to the population 15-64 years old. One of the advantages of 25-59 age definition is that it does not overlap with the school age population, which ends at age 24, nor with the official age limit for the elderly, which is 60 years.

GRAPH 4: SECONDARY SCHOOL DROP OUT RATES, SELECTED YEARS, 1990-2010



Source: The Statistical Unit of the Ministry of Education (MOE), Jamaica

The proportion of out of school population doubled between 2008 and 2009

The Planning Institute currently defines the “out of school population” as the proportion of 15-16 year-olds not enrolled in school. (From 2000-2007 the age range was 12-16 years so it is not possible to compare rates before 2008.) In 2009, only 7% of 15-16 year-olds were not enrolled in an educational institution. Although this is a relatively small percentage, it is important to note that the rate more than doubled (from 3.1%) when compared to 2008. In spite of this data from the Ministry of Education show that between 2005 and 2009 completion rate at the primary and secondary levels were 97% and 87% respectively.⁵ This puts Jamaica in the category of having met international goals of universal primary education and at a completion rate of at least 75% at the secondary level.⁶

The large proportion of “out of school” youth who indicated that they are not in school because they are “not interested” (30% according to JSLC-2009) is also worrisome and may indicate a need for increasing relevance of what is being taught as well as re-positioning education as a personal goal. CAP (Box 1) should also help reduce the number of out of school youths.

The country also needs to watch carefully the proportion (33%) of out of school youths who exited at the primary level as this raises grave concern for basic literacy and numeracy.

Children at the primary level attend on average 85% of school days during the year; secondary students attend less

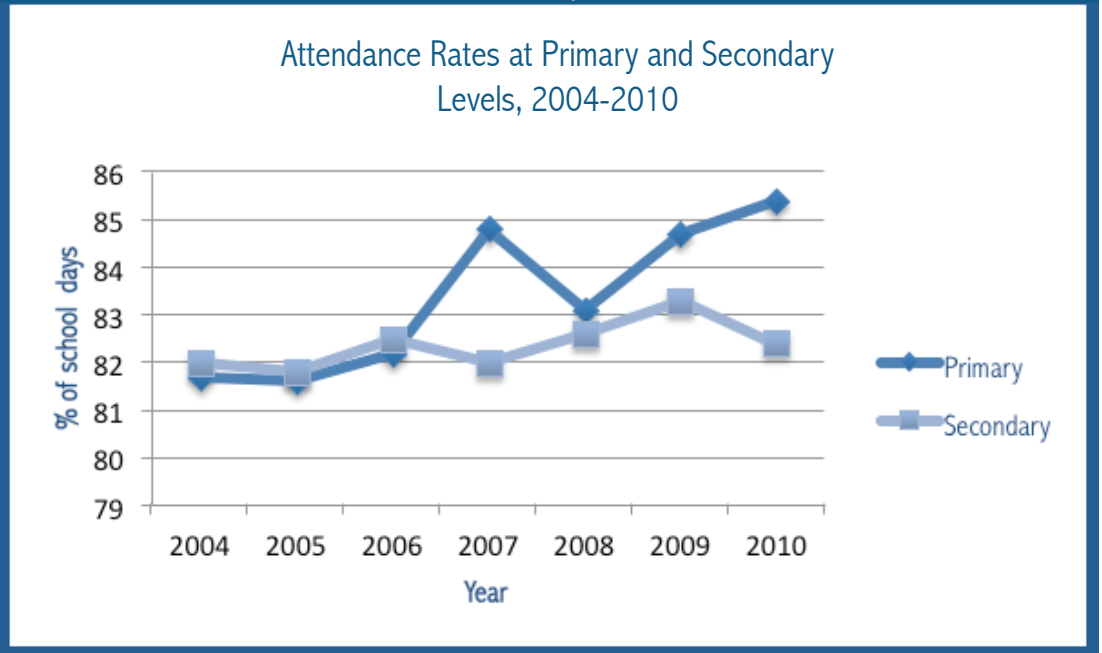
Although the length of the school year in Jamaica is comparable to that in other countries (Graph A4 in the Appendix), students who are enrolled in school don't always attend. This can have a negative effect on learning. The Ministry's target is for students to attend at least 161 days of the 190-day school year (85%). Towards this end, the government has implemented a number of strategies. One strategy is to require school-age children be in attendance for at least 85% of the school year in order for families to receive school lunches and cash assistance under the Programme for Advancement through Education and Health (PATH).⁷ As shown in Graph 5, the country has reached its target at the primary level. However, since 2004, rates at the secondary level have hovered around 82-83%. The 85% benchmark may also warrant review, since a child that misses six weeks of instruction during the school year may face a strong disadvantage in terms of learning outcomes.

⁵ These data are for public schools.

⁶ 2000 Millennium Development Goals (Dakar) and Inferred from the 2nd Summit of the Americas which proposed access to secondary education for at least 75% of relevant school age children

⁷ PATH was established in 2002. It currently provides for 119,000 beneficiaries at a cost of 938 million dollars. Over the years, there has been a significant increase in the per capita payments from \$3,868.17 to \$7,888.00.

GRAPH 5: ATTENDANCE RATES AT PRIMARY AND SECONDARY LEVELS, 2004-2010



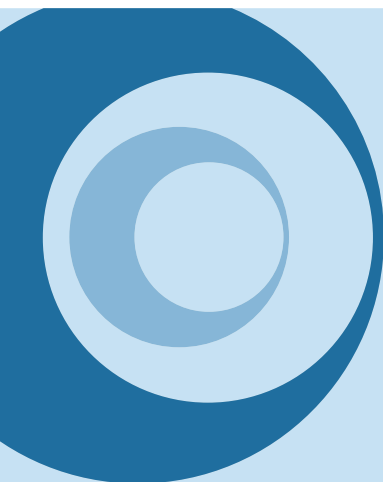
Source: The Statistical Unit of the Ministry of Education (MOE), Jamaica- (Data only for public schools)

The Jamaica Survey of Living Conditions (JSLC) shows money problems and illnesses are the two main reasons given for students missing school. In 2009, nearly half of all students missing school were absent due to financial difficulties; while nearly a quarter of those who were also absent were ill (Table A1 in the Appendix). As might be expected, children

from poorer households were primarily absent from school due to money problems (69%), compared with 12% from those in other households. Clearly, ensuring that children regularly attend school once they are enrolled will require programs that address families' socio-economic and health constraints.

III. TEST SCORES

JAMAICAN STUDENTS ARE NOT LEARNING WHAT THEY NEED TO SUCCEED



It is generally accepted that a good education (learning) contributes strongly to individuals' and societies' well-being. While test scores certainly do not capture all the elements of learning, they are one objective measure of what students know and can do and of their readiness for higher learning and/or the work force. Unfortunately, in Jamaica, low test scores suggest students are not adequately equipped to take advantage of the opportunities and challenges that will face them as adults. Since 1979, Jamaica has participated in the Caribbean Secondary School Examination (CSEC), an exit examination administered by the Caribbean Examination Council (CXC) to final year secondary students.

Although Jamaican students may also take other end-of-secondary exams,⁸ the CSEC has the greatest currency and is often used to assess and measure overall student learning in the Jamaican education system. Note that, with the exception of cross-country comparisons, most analyses focus on students in the public secondary school system.⁹

Overall pass rates and the quality of passes in CSEC have improved

The data reveals that 72% of exams sat in 2010 received grades 1, 2 or 3—the grades CSEC considers sufficient for admission to tertiary programmes.¹⁰ In 2005, only 64% received such grades. The data also show improvement in the quality of the passes. In 2010, 14.4% percentage of successful exams received a grade of 1 (the highest) almost 5% more than those receiving the same grade in 2005 (**Graph A5 in Appendix**).¹¹

Performance in core subjects is also improving, with over 70% of secondary school candidates who sat the English and Information Technology exams in 2010 receiving a passing grade. However, half of those who sat the CSEC math exam still didn't pass, and these figures do not take into account the large numbers of students who still do not sit the exams (**Graph A7 in Appendix**). Overall, more than a quarter of all entries still do not receive a passing grade.

Few 11th graders meet the basic requirement for tertiary admission

Most universities in Jamaica require students to pass at least five CSEC subjects, including Mathematics and English Language, in order to matriculate, although some colleges will accept four passes. Data for 2005-2010, however, reveal that on average only 53% of 11th graders sat 4 or more CSEC subjects, much less passed them.¹² And, roughly one in every five students left secondary school without having sat even one CSEC exam in 2010 (**Graph A7 in Appendix**).

The proportion of 11th graders that sit the core subjects of Mathematics and English Language remains woefully inadequate. Even though Mathematics and English Language are compulsory for all students, and though the Ministry pays for all students to take these exams, the data show that for 2010, only approximately 59% of 11th graders sat English Language, and 51% sat Mathematics (**ESSJ, 2010**).¹³

When we look beyond those who sit, to how many pass, the picture is more concerning. In 2010, just about 38% of 11th grade students passed 4 or more subjects, and about a third passed five or more (**Graph 6**). These figures are about 11 percentage points higher than in 2005 and suggest that things are getting better. However, that more than half of all 11th grade students fail to meet the basic tertiary entry requirements suggests substantial gaps in students' learning and achievement.¹⁴

If current trends continue, the country will have to wait until 2036 before every 11th Grader has at least enough passes to matriculate in the least competitive tertiary programs (those requiring four CSEC); and until 2042 for every student to be able to enroll in more competitive tertiary programmes (passing at least 5 subjects).

⁸ These may include the US-based SAT, the Caribbean Advanced Proficiency Examinations (CAPE) the Caribbean Certification in Secondary Level Competence (CCSLC) for students deemed unready to sit the CSEC examination, and the Cambridge International General certificate of Secondary Education (GCE)

⁹ A significant number of entries each year are from students who enter as "private" candidates; the majority of these persons are of post-secondary school age and some are even mature adults. The pass rate among this larger group is usually lower than among students in the secondary school system alone.

¹⁰ CSEC considers a grade of 1, 2, 3 or 4 to be indicative of readiness for entry level employment (<http://cxc.org/examinations/exams/csec/grading-scheme-csec>).

¹¹ Data missing for 2006

¹² Given that some of the students sitting the exam are from Grades 10 and 12, the % of the Grade 11 cohort not sitting at least one subject may actually be higher. Note that not all students are selected by teachers to sit the CSEC.

¹³ Students are selected by teachers to sit the examinations based on their performance in classwork and a mock examination given in Grade 10. The student can choose to enter privately, but that entry would not be considered in the aggregate analysis of secondary school candidates.

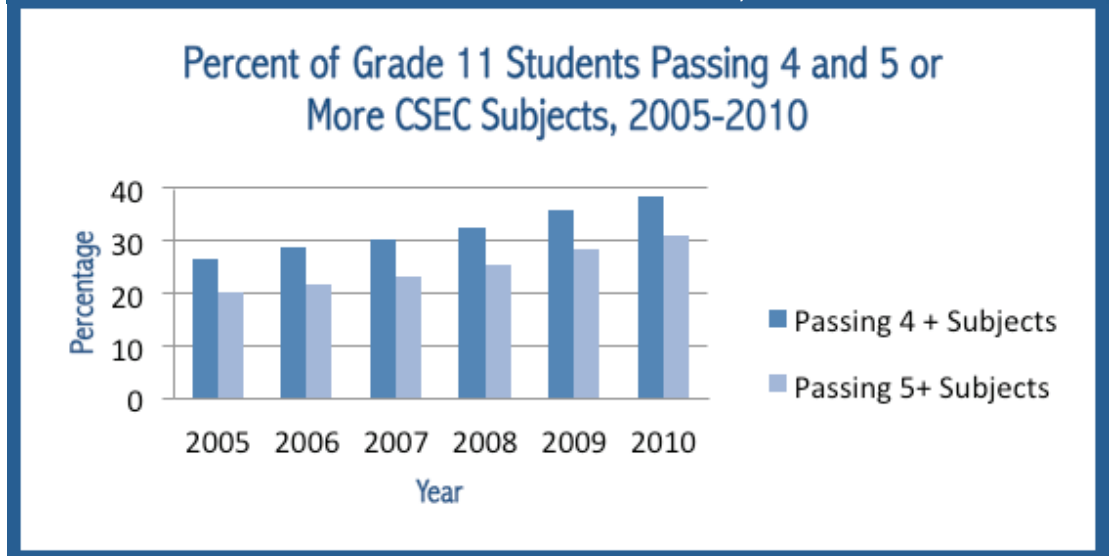
¹⁴ Students that have not passed at least four CSEC at the end of secondary school may choose to re-sit the exams, work, gain skills training or pursue other options.

Jamaican students are not yet on par with peers from other Caribbean countries in CSEC

When comparing the performance of all candidates, including those outside the secondary school system, Jamaica's overall performance in the CSEC has improved over time (**Graph A8 in Appendix**). However, the country continues to trail its main Caribbean counterparts in the percentage of students who pass the Mathematics and English Language exams. When compared with Barbados, Trinidad and Tobago, St. Lucia and Guyana, the country ranks fourth in both subjects, surpassing only Guyana (**Graph 7**). In Math, Jamaica, at a 36% pass rate in 2009, trails Barbados by 15 percentage points, Trinidad & Tobago by 10 and St Lucia by 5. The gap between Barbados and Jamaica has narrowed slightly, down from the 17 percentage points reported in 2005; but Jamaica's overall low pass rates suggest that the output from the education system is not competitive regionally. Performance in English Language shows a similar trend.

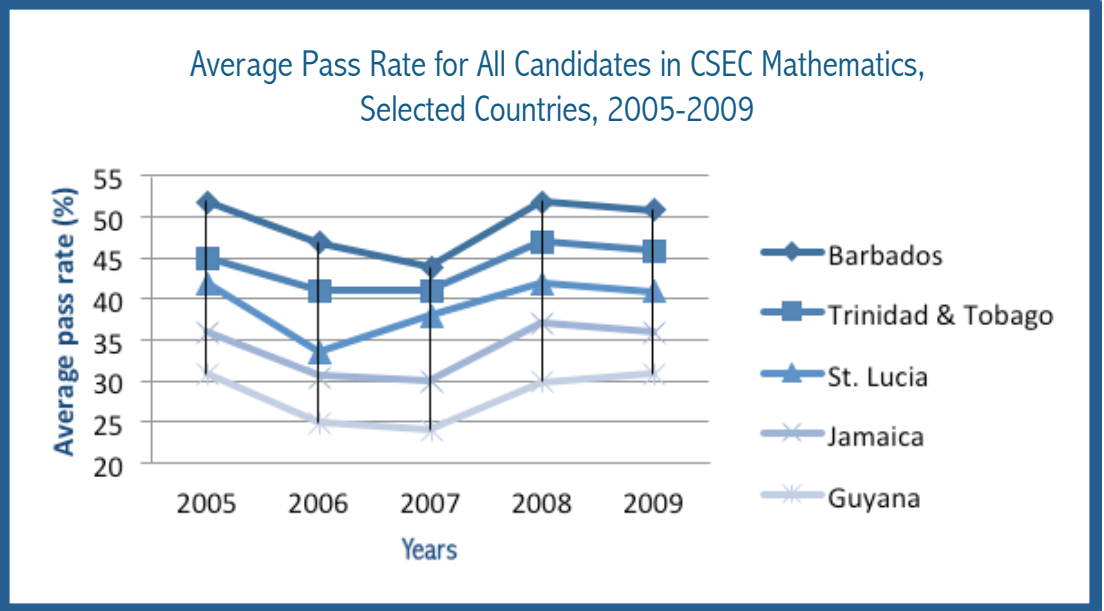
Deficits in learning are not limited to the high school level. The Jamaican education system, through the National Assessment Programme, monitors the developing competencies of primary students. While the results of Grades 1 and 3 diagnostic assessments are not available to the public on a regular basis, the results of other assessments suggest that learning at the primary level is less than satisfactory. For example, results from the Grade 6 Assessment show that, in 2011, students on average scored only a 60% on mathematics, language arts, social studies and science tests (**Graph 8 and Table A2 in Appendix**). On the bright side, average scores in all subjects, were higher in 2011 when compared to 2005 (**Table A2 in Appendix**).

GRAPH 6: PERCENT OF GRADE 11 STUDENTS PASSING 4 AND 5 OR MORE CSEC SUBJECTS, 2005-2010



Source: Ministry of Education- Policy Analysis and Research Unit, 2010

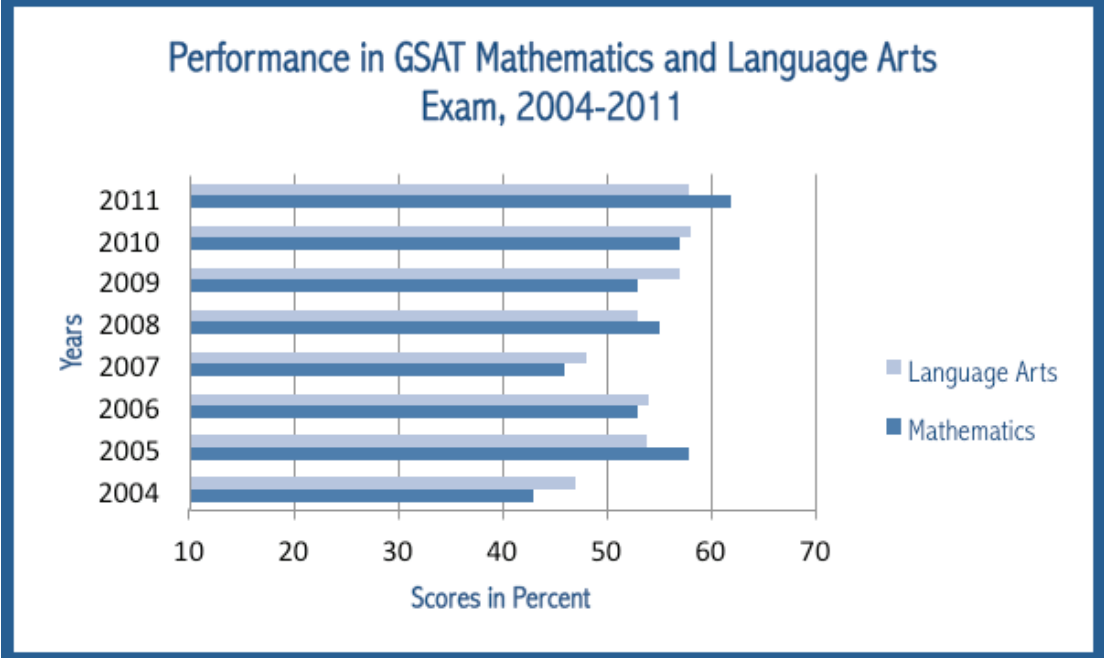
GRAPH 7: AVERAGE PASS RATE FOR ALL CANDIDATES IN CSEC MATHEMATIC, SELECTED COUNTRY, 2005-2009



Note for Graph 7: Data includes school and other private candidates. The pass rates for just school candidates are higher, but for cross country comparison the all candidates pass rates are used.

Source: CXC Statistical Bulletin, 2005-2009. CSEC Statistical Bulletin for 2010 not available.

GRAPH 8: PERFORMANCE IN GSAT MATHEMATICS AND LANGUAGE ARTS EXAM, 2004-2011



Notes for Graph 8: Scores measure percentage of correct answers on a scale of 0-100% and there is no absolute passing score.

Source: Ministry of Education-Planning and Policy Division-2011

More than a quarter of students do not acquire adequate literacy skills by Grade 4. Since 1999, Jamaica has given all 4th grade students a literacy assessment which tests skills in word recognition, reading comprehension, and writing. In 2011, only 71% of students showed mastery of the tested skills (**Table A3 in Appendix**). This is an improvement over the 64% reported in 2005. However, under current trends, it will take until about 2036 for 100% of students to demonstrate mastery on this assessment (**Graph A9 in Appendix**).¹⁵

Evidence suggests that skills in math are even weaker. In 2009, Jamaica conducted its first national numeracy assessment of fourth graders. Data show that less than half (45%) of the students mastered the skills set, which includes “number representation and number operations; decimals and fractions; measurement; geometry; algebra; statistics and probability.” Performance improved slightly in 2011, moving to 49% (**Table A3 in Appendix**), but is still far from satisfactory. Some educators argue that the deficiency in the education system starts at the early childhood level. This is substantiated by the data which show that less than 50% (47%) of children entering primary school were ready (ESSJ, 2007).

Moving forward, the challenge will be to address learning deficiencies at the first point of the formal education system, while addressing the issues that already exist at the other levels. The Government of Jamaica with the assistance of USAID has been taking several steps to improve early literacy and numeracy in schools (**Box 2**). By strengthening basic skills in the early grades, they hope to set a stronger foundation for learning as children move through school and through life.

It is hard to judge how Jamaican students' learning outcomes compare outside the Caribbean

Jamaica does not participate in any global assessment of student learning, such as the Programme for International Student Assessment (PISA) or the Trends in International Mathematics and Science Study (TIMSS) which test students, at specific grades, in skills in key areas such as reading, math, and science. Consequently, we do not know how well Jamaican students do compared to their peers in countries outside the Caribbean, making it difficult to gauge the future competitiveness of the labour force in an increasingly global context.

BOX 2: SELECTED STRATEGIES TO IMPROVE LITERACY AND NUMERACY, 2010

In 2010, the Jamaican government's Basic Education Project provided training and leadership strategies for numeracy and literacy for 600 participants from all six regions of the country. This included teachers, ministry staff, and administrative personnel. The program established literacy and mathematics advisory boards, created reading and literacy standards for Grades 1-3, and conducted workshops for teacher trainers in reading standards and mathematics. In addition, the project provided training for 366 teachers. It also developed two new instruments, namely the Early Reading Assessment Instrument (ERAI) and the Early Mathematics Assessment Instrument (EMAI) with supporting training materials. The instruments were piloted in 25 schools at Grades 1 and 2. The data from this pilot was used to provide baseline data on student performance levels and to identify areas of weakness in instruction. This will allow the Ministry of Education to better gauge its programmes in teacher development to better facilitate the learning of mathematics.

The GOJ/USAID Expanding Educational Horizon Project (EEH) (2006-2010) geared at improving literacy and numeracy at the primary level was introduced in 71 schools. The project planned and executed teacher workshops, provided resource materials, and introduced the GAIN (General Achievement in Numeracy) diagnostic tool used to plan teaching. The project also conducted activities designed to improve the performance of boys in mathematics and language arts.

Source: Economic and Social Survey Jamaica, 2010, p 22.11

¹⁵ Assumes the average improvement of 1.2 percentage points per year continues, starting from a base of 65% of students showing mastery in 2005.

IV. EQUITY

YOUNG MEN AND THE POOR ARE UNDERSERVED BY THE JAMAICAN EDUCATION SYSTEM **D** ↓



Jamaica is one of 22 Latin American and Caribbean (LAC) countries to have achieved gender parity in enrollment at the primary level (**GED, 2010, Table 1 Pg. 22**). It is close to gender parity at the secondary level and is doing better than the Latin American average.¹⁶ At the tertiary level, however, female participation more than doubles that of males. Between 2000 and 2008 gender inequity has been increasing at the tertiary level, and the country's performance is worse than the average for countries in LAC (**Graph 9**). Part of the reason may be that fewer boys meet the basic requirements for matriculating at the tertiary level. Data from 2009 showed that girls accounted for approximately 63% of those students meeting basic tertiary entry requirements (National Council on Education-Performance in CSEC-2009).

Girls outperform boys at all levels of the education system

While girls and boys attend school at close to the same rate in primary and secondary schools, differences in performance appear to be systemic, manifesting as early as the start of formal schooling. The Grade One Individual Learning Profile, which is administered at the beginning of first grade to assess children's readiness to learn, showed that on average 51% of girls, compared to 38% of boys, mastered all four cognitive skills in 2006/07. In fourth grade, 77% of girls showed mastery of all three areas on the Grade Four Literacy Test in 2009 while only 56% of boys did so. Girls also outperformed boys on the Grade Four Numeracy Test for the same academic year (**Graph 10**).

The Grade Six Achievement Test (GSAT) that determines student placement at the secondary level also shows a similar pattern. In 2009/2010, girls outperformed boys in all five subjects. Unfortunately the gender achievement gap is slowly widening; when 2003/2004 school year is compared with 2009/2010 the gap between performance for females and males in GSAT Mathematics moved from 6 to 8 percentage points, and Language Arts moved from 8 and 10 percentage points (**Table A4 in Appendix**). The disparity between the performance of boys and girls is also evident in the results of the end of secondary exams, the CSEC.

Data for 2008 show that a higher proportion of girls actually sat the CSEC examinations in both English and math, and of those sitting the exam, girls had higher pass rates in English (**Graph 11**). (Boys had a slightly higher pass rate in mathematics among those who sat.) Girls are also more likely to meet the minimum requirements for tertiary matriculation that is passing four CSEC subjects, including Mathematics and English language (**Graph A10 in Appendix**).¹⁷

In 2010, only 37% of the students that met this basic requirement were males, even though male and female enrollment in secondary school is roughly comparable. It is therefore not surprising that students enrolled at the tertiary level were distributed in favour of females. This has been the trend over the last decade (**Graph A11**).

While individual schools and projects are attempting to address the issue of teaching boys (**Box A1 in Appendix**), to date the Ministry of Education has not developed a policy or program to address this deficit. Unless the matter of boys underperforming is addressed urgently, the education system will be a channel of inequality which disenfranchises young men.

There is a strong push to increase access to education for persons with disabilities

The Jamaica government is committed to providing for children with special needs either in special or regular schools, with a preference for regular schools wherever possible (Ministry of Education- The Way Forward). A number of new initiatives have been designed to increase educational opportunities for these children. These include: i) offering the Grade Six Achievement Test (GSAT) for children who are visually impaired in Braille; ii) a commitment to ensure that at least one primary school in each parish provides full physical access; iii) requiring that all new schools should allow for full physical access; iv) equipping some public libraries with software to allow access for physically challenged individuals; and v) providing special buses for children with disability. The special schools that are currently in operation for persons with disability of any kind are encouraged to use the same curriculum as the regular schools. At the secondary level, many students are provided with training in technical areas.

The wealthiest are 8 times more likely to have tertiary education than the poor

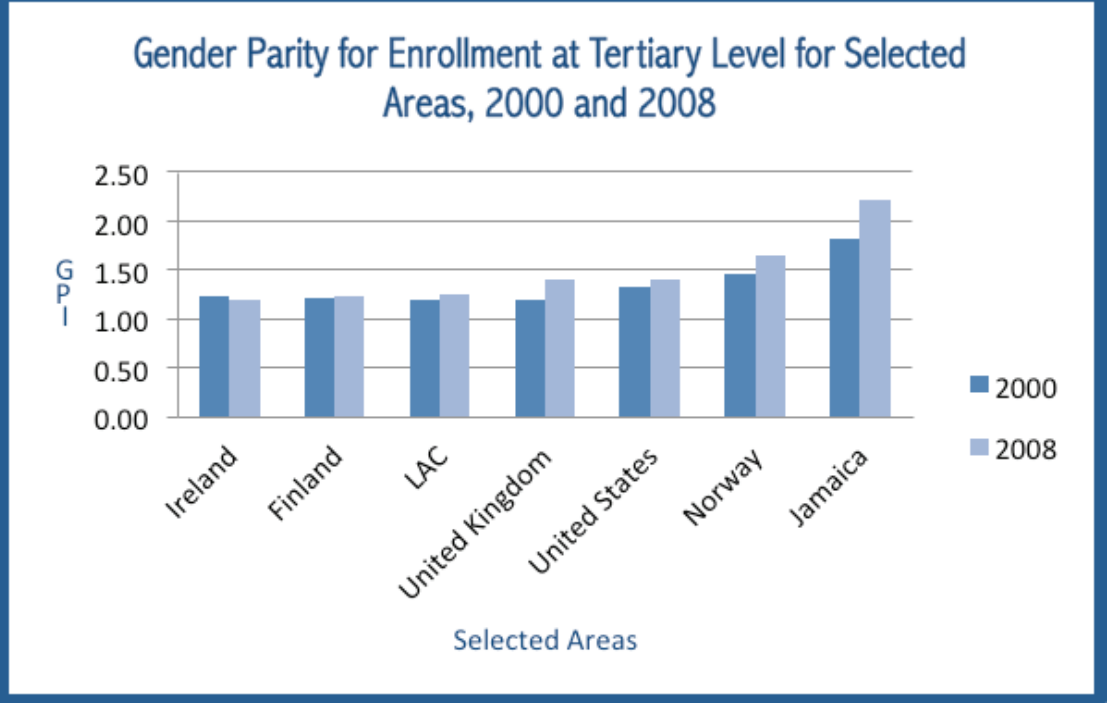
In Jamaica, persons from the poorest 40% of the population are almost 8 times less likely than those in the wealthiest 20% to have tertiary level education.¹⁸

¹⁶ UNESCO projection was done for the 20 countries that had sufficient data.

¹⁷ Some institutions will accept students w/out mathematics if they take an equivalent mathematics course, but in general the standard is that students should have passed at least four subjects including these two core ones.

¹⁸ Economic status is determined by the consumption group within which an individual falls. These are defined as five quintiles, with 1 being the poorest and 5 the least poor. Quintiles 1-2 are often those below the poverty line, but this is not always so.

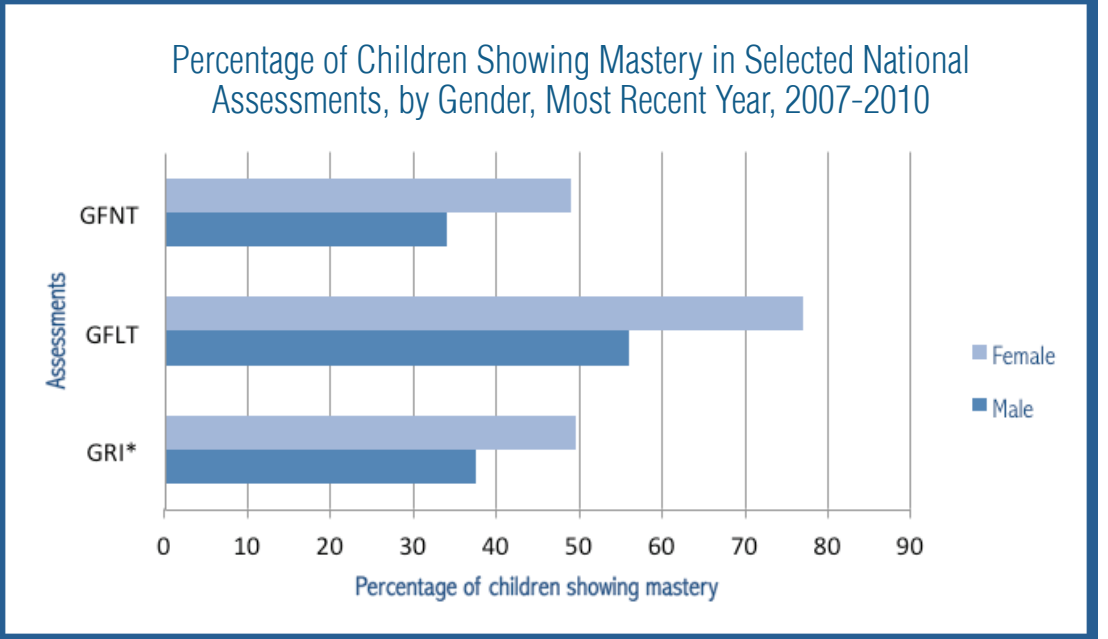
GRAPH 9: GENDER PARITY FOR ENROLLMENT AT TERTIARY LEVEL, SELECTED AREAS, 2000 AND 2008



Note for Graph 9: Gender parity is reached when the index is between 0.97 and 1.03

Source: UNESCO- Institute for Statistics- Global Education Digest, 2010-Comparing Education Statistics around the world

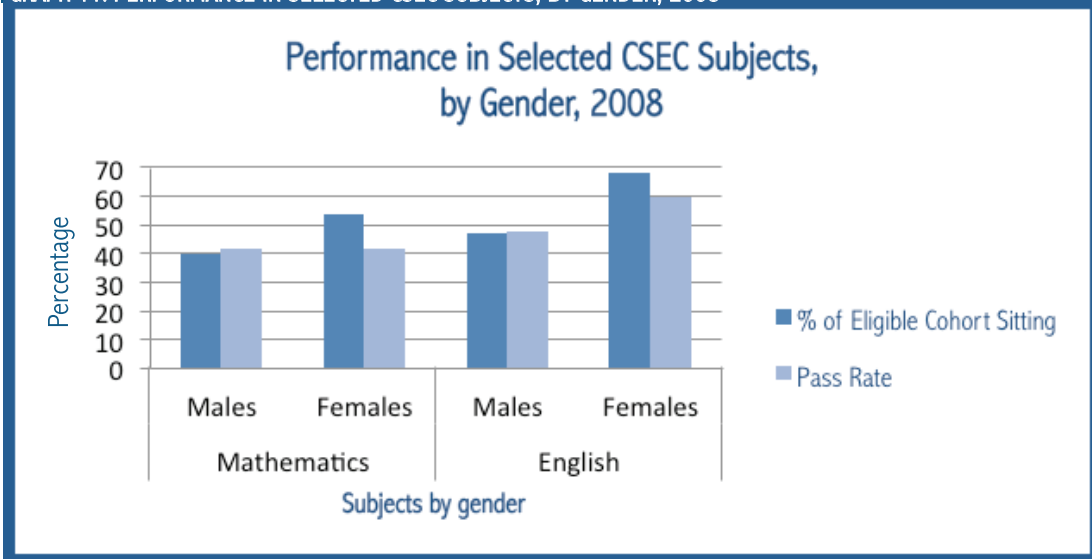
GRAPH 10: PERCENTAGE OF CHILDREN SHOWING MASTERY IN SELECTED NATIONAL ASSESSMENTS, BY GENDER, MOST RECENT YEAR, 2007-2010



Note for Graph 10: GRI- refers to the Grade 1 Individual Learning Profile (2007/2008 Data). GFNT refers to the Grade 4 Numeracy Assessment, and GFLT refers to the Grade 4 Literacy Assessment for 2009/2010.

Source: ESSJ 2007 (Pg 22.10) & ESSJ 2010 (pg. 22.7)

GRAPH 11: PERFORMANCE IN SELECTED CSEC SUBJECTS, BY GENDER, 2008



Source: Ministry of Education-
CSEC Gender Analysis-2008
(Most recent data)

In 2008, the Jamaica Survey of Living Conditions reported that approximately 1% of persons in the poorest quintile (lowest consumption group) had tertiary level education, compared with almost 24% from the highest. Given that so few low-income students reach this level, government spending on tertiary level is skewed in favor of the wealthy. In 2008, the two wealthiest consumption groups together received 67% of government spending at this level, compared to 20% for the poorest 40% of the population. This is, however, an improvement over 1998,¹⁹ when the two wealthiest quintiles received 74% of government's spending on tertiary education, compared to the 13% received by the two poorest groups (Graph A12).

Approximately 90% of the poorest persons have no certification (meaning they have not passed any examination at or post secondary level), compared with 56% of the wealthiest (Graph 12). It is important to consider certification and not just completion of secondary school, since students may be promoted to higher grades even if their performance is poor. The end of secondary CSEC exams, along with other certification exams, are thus a better indication of students' readiness for the demands of adulthood than the more traditional measure of highest grade completed.

In rural areas, over eighty percent of the population have no formal certification

Persons residing in rural communities are less likely to have earned some form of certification than those in other parts of the country. In 2008, the Jamaica Survey of Living

Conditions reported that 81% of rural residents, fourteen years and older, who were not enrolled in an educational institution had not passed any examination at or after the secondary level, compared to the national average of 75%. In Kingston and the Metropolitan Areas (KMA) and Other Towns the proportion of those without certification was much lower (Graph A13 in Appendix). Regretably, there has not been much improvement. In 2000, the JSLC reported that 85% of rural residents had no certification (JSLC-2000).

The good news is that illiteracy rates, which are on the decline throughout Jamaica, show the biggest reduction in rural areas. In 1999, Jamaica reported that one in five adults (20%) was illiterate, but by 2008 only approximately 8% were. Illiteracy in rural areas moved from 27% to 11% over the same time period, a reduction of 16 percentage points (Graph 13).

A child's educational outcome is impacted by the type of school they attend

At the secondary level schools are classified as secondary, upgraded and technical. The secondary category includes traditional high schools; these were mainly established during Jamaica's early colonial history, have a strong reputation and are generally the preferred schools of choice. It also includes newly built high schools. Upgraded schools are schools that were given high school status at some point during their existence. The country's 14 technical high schools are primarily focused on vocational and technical subjects.

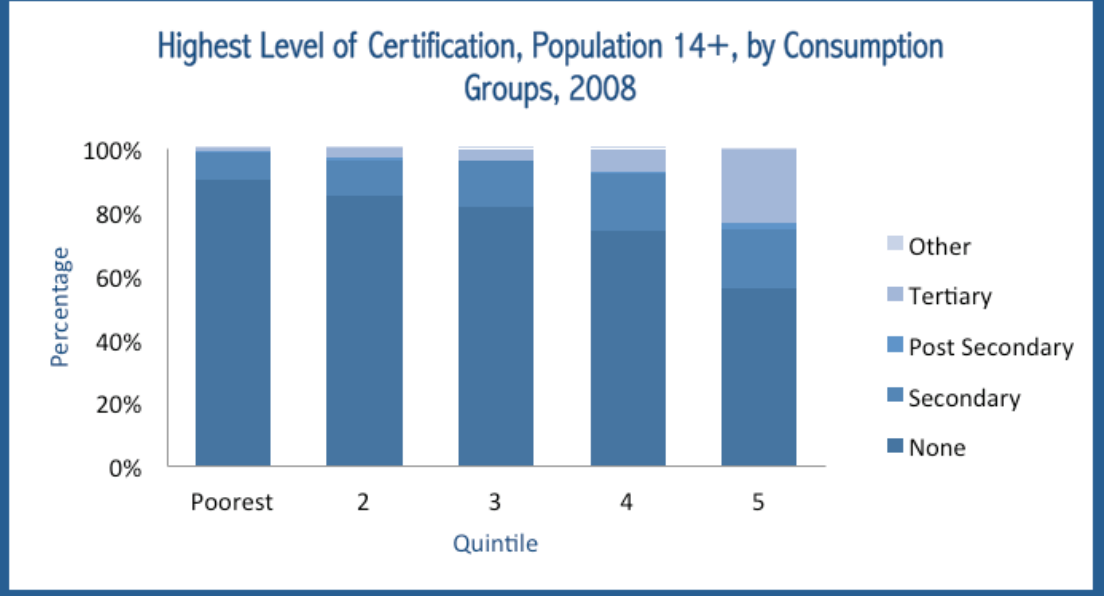
¹⁹ Used this year to benefit from the large sample size.

Data show that children in upgraded high schools consistently perform below their counterparts in traditional high schools in core subjects like Mathematics and English (Graphs A14 and A15 in Appendix). Technical schools also perform below traditional high schools, but better than upgraded schools.

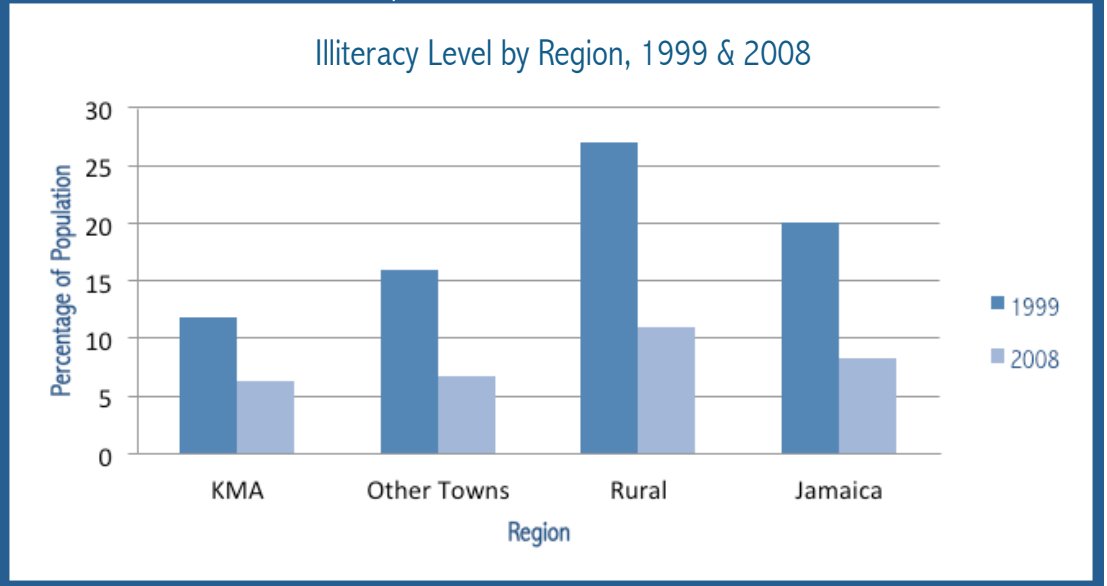
socio-economic groups—also outperform their counterparts in the public school system in all five Grade Six Achievement Test (GSAT) subjects.²⁰ Differences in results can be as high as 30 percentage points (Graph 14). The gap has not changed much since 2000 (Graphs A16 & A17 in Appendix) and feeds into performance inequalities at the secondary level.

At the primary level, children in prep schools—privately run primary institutions often attended by children from upper

GRAPH 12: HIGHEST LEVEL OF CERTIFICATION, POPULATION 14+, BY CONSUMPTION GROUPS, 2008



GRAPH 13: ILLITERACY LEVEL BY REGION, 1999 & 2008



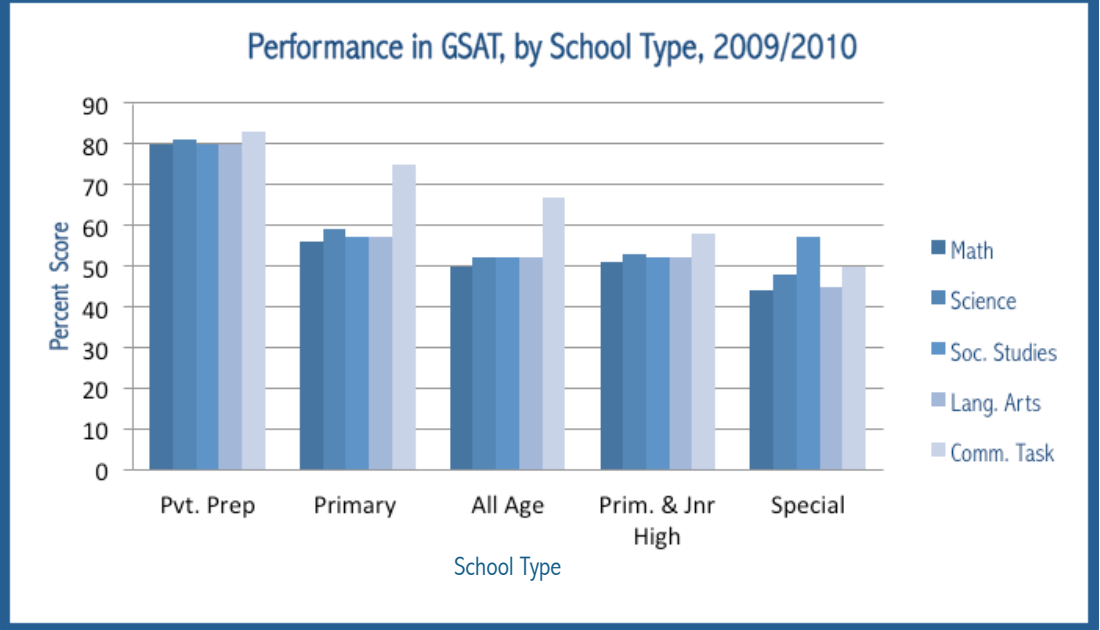
Note for Graph 12: Secondary certification means an individual has passed at least one CSEC exam. Post Secondary certifications are those earned after completing Grade 11 but that do not qualify as tertiary level.

Source: PIOJ- Jamaica Survey of Living Conditions- 2008- Table E10

Source: PIOJ, JSLC- 2008- Table 8.2

²⁰ The Planning Institute of Jamaica estimates that approximately six percent of the primary age cohort attends a prep school.

GRAPH 14: PERFORMANCE IN GSAT, BY SCHOOL TYPE, 2009/2010



Source: Economic and Social Survey, 2010 Figure 22Cx

Despite the numerous reasons offered for disparity in educational outcomes (lack of resources in schools with children who have greater needs, inadequate parental involvement, weak school management systems, shift schools, social promotion), one thing is clear: the government must act to ensure that all children receive

equally high quality education that provides them with the skills and knowledge they need in life. Presently, most secondary schools are given the same budget with no consideration for the fact that schools that cater to poorer communities have less access to supplementary funding and often have greater financial needs.

V. STANDARDS:

THE COUNTRY IS ON TARGET TO HAVE SUFFICIENT STANDARDS TO GUIDE THE SECTOR, BUT ENFORCING AND MAINTAINING THEM HAS TO BE A PRIORITY **C** ↑



Ministry performance targets and public perception shape what constitutes acceptable learning

The concentration of high stakes testing in Jamaica provides parents, students and the general public with a general sense of what learning performance are acceptable. Even for tests such as the Grade Six Achievement Test (GSAT) where there is no set “failing grade,” parents and students understand that scores below certain levels will be insufficient to get their child into the highest-performing high schools. The Taskforce Report on Education Reform (2004), enunciated national performance targets in key areas, these were later revised in the National Education Strategic Plan (2011).

More effort needed to establish performance standards outside of those implicit in test scores

One of the main challenges of the Jamaican education system is that, outside of national student achievement tests, schools seldom use data from classroom-based assessment and other school activities to improve student outcomes. The Ministry has not established a widely accepted system for monitoring students’ yearly progress, although school improvement plans and other evaluations of schools are steps in the right direction.

The Ministry is currently embarking on a system-wide effort to promote school improvement planning through the National Education Inspectorate (NEI) which will draw heavily on the use of data to inform school evaluation and guide the development of school improvement plans (NEI Handbook, 2010, Pg. 2). The NEI conducted its first round of school inspections in 2009. Other supporters of the education system, such as the Mutual Building Societies Foundation Centres of Excellence Project, have also designed and implemented strategies to set and monitor progress toward clear learning goals (**Box A2 in Appendix**). The need for clear performance evaluation is more pronounced. For example; at the secondary level the only assessment that receives attention is the end-of-secondary CSEC, which comes too late for sitting students or their teachers to address problems. School-based assessments to determine students’ eligibility for sitting CSEC examinations vary widely. Emphasis on the results of the Grades 1- 6 assessments overshadow the diagnostic roles that they are designed to have.

The Ministry of Education has established clear content standards at EC and primary levels, but not at the secondary level

The Ministry is solely responsible for developing and implementing curricula in schools. Its “Core Curriculum Unit” is charged with researching, developing, implementing, and monitoring the use of all curricula in schools, from primary to secondary levels (**Box A3 in Appendix**). This unit has the mandate to ensure that schools have clear outlines as to what to teach, what learning outcomes should be and to provide ideas for how to teach. It is also charged with monitoring the extent to which guidelines are put into practice in schools, although little has been done in this area.

The 2006 early childhood (EC) curriculum guide for children 0-3 years and a revamped “Readiness Curriculum” for 4-5 year olds focuses on four development domains; cognitive, affective, creative and psychomotor, each associated with specific learning outcomes (Davies, 2008).

The EC Commission has aligned training for early childhood practitioners to the EC syllabi to ensure that all teachers know how to effectively deliver instruction in the four domains.

At the primary level, teaching content is guided by the Revised Primary Curriculum (RPC), which from Grades 1-3 focuses on an integrated approach to support literacy and numeracy development. Students transition to a focus on discrete disciplines in Grades 4-6. The RPC also highlights “attainment targets” or “learning expectations” for each grade level.

Though the RPC curricula were generally lauded and well accepted, the government soon recognized that teachers were neither delivering common contents nor using similar teaching assessment methods. Subsequently, the government, in collaboration with the University of the West Indies, established guidelines to accompany the curricula. These guidelines provide a detailed “how-to” for the curriculum, so teachers deliver similar contents and assess learning in similar format. Currently, there is no national curriculum at the secondary level. According to the Core Curriculum Unit, secondary schools should be using the Reform of Secondary Education (ROSE) curriculum; however, it is not mandatory.

As a consequence, there is a disconnect between the curricula at the transition grades (primary and high school). In response, the Ministry of Education, through the Education System Transformation Programme, has embarked on establishing a standard national curriculum at the secondary level.

The Ministry also provides schools with books, teaching and learning materials aligned with the curriculum. While schools can and do add books to their list of recommended texts, the Ministry has the right to vet and approve all teaching materials within the school system.

Schools have widely varying resources, affecting students opportunity to learn

One of the major points of contention among educators is the varying resources of Jamaican schools. Despite the fact that there are explicit standards for school plants, given budgetary constraints, the Ministry and schools have not been able to properly maintain schools. It is not uncommon to find better performing schools with more than one computer lab, wi-fi, and furnished school libraries co-existing with schools with a bare minimum number of computers, no library and severe overcrowding.

Enforcing opportunity-to-learn standards, which clearly lay out the resources and mechanisms needed to guarantee all students reach learning goals, would go a long way toward helping to address such differences. Towards this end, the National Education Inspectorate has included physical assessment as a part of its standard school assessment process and will report to the appropriate authorities if a school is in dire need of assistance. In addition, the Ministry of Education, in partnership with the Ministry of Industry, Technology, Energy and Commerce, have collaborated through the E-learning project (2005-2010) to provide schools with hardware and software, train teachers and other school personnel, and develop teaching materials to improve the use of information technology as a tool to help improve CSEC passes. To date, E-learning has installed computer hardware and software and audio-visual equipment in 162 schools island-wide. They have also trained 11,000 teachers, of which 7,500 are certified.

VI. ASSESSMENT SYSTEM:

JAMAICA'S RICH ARRAY OF TESTS ARE OFTEN NOT USED TO IMPROVE LEARNING

B



Jamaica has developed and maintained technically sound assessments

Jamaica has invested substantial resources in the development and maintenance of a national assessment programme spanning early childhood to the secondary level. Part of this investment is the Student Assessment Unit (SAU) created solely to develop and administer “a technically sound system of measurements and assessment for the primary and secondary levels of the school system” (MOE, SAU 2007). The SAU provides the Ministry with data and information it can use to improve programmes and thus student educational outcomes.

The country's assessment system currently includes the National Assessment Programme (NAP)²¹—which covers five assessments at the primary level; the Grade One Individual Learning Profile, the Grade Three Diagnostic, The Grade Four Literacy and Numeracy Tests, the Grade Six Achievement Test, and the Grade Nine Achievement Test (GNAT) at the secondary level (**Table A5 in Appendix**). The other assessment is the Caribbean Secondary Examination Certificate (CSEC), a regional examination administered by the Caribbean Examination Council (CXC). The Caribbean Advanced Proficiency Examination, (CAPE) is also administered by CXC and is done post-secondary at grades 12-13.

Jamaica uses its primary level assessments for a variety of purposes

Jamaica's current primary level assessment system has been in place since 1998. With the exception of GSAT, which is also intended to help place children in specific schools as they transition into the secondary level, these assessments are designed primarily to monitor students' learning and competency at different levels of the primary system. In 2009, as a part of several strategies designed to combat

students' persistent poor performance in mathematics, the Grade Four Numeracy Test (GFNT) was added to the grade four assessment. The assessments help identify weak areas so educators and parents can help students address them. Some are also used to help place children appropriately in the next grade level. They are administered yearly, and are comparable across time, giving Jamaica a rich base of information on what its students know and can do at key points in the primary education cycle.

In addition to designing standardized tests to be used by all schools, the NAP also provides teacher training for at least one teacher in each institution who serves as the school-based assessment coordinator. This coordinator is expected to help teachers use a variety of methods to assess student's skills, keep better records, report to parents on student performance and interpret and use the results of all tests and assessments to improve learning. However, despite the system's strengths, data from the Grade 1 and Grade 3 diagnostic assessments are not always reported, and are seldom used to inform school-wide or Ministry-level efforts to improve student and school readiness. The potential for school or system level lessons are lost, and it is not possible to accurately identify areas of opportunity in the system.

By contrast, the Grade 4 Literacy Test (GFLT) has become a standardized tool for benchmarking literacy at the primary level. It determines whether students are promoted to fifth grade and their eligibility to sit the Grade Six Achievement Test (GSAT) (Ministry of Education- ASTEP, March 2011). Children have four opportunities to sit the GFLT and receive remedial help to master skills. Children who are still unsuccessful after exhausting their four chances are not allowed to sit the GSAT. Instead, they transition to secondary level education through the Alternative Secondary Transitional Education Programme (ASTEP) (**Box 3**).

BOX 3: THE ALTERNATIVE SECONDARY TRANSITIONAL EDUCATION PROGRAMME (ASTEP)

Jamaican authorities estimate that approximately 20-25% of sixth graders in any given year will not have attained sufficient levels of literacy on the Grade 4 Literacy test after four tries to transition to secondary schools through the GSAT. To meet the needs of this subgroup of learners, The Ministry of Education has developed The Alternative Secondary Education Programme (ASTEP). This initiative is a two year transitional programme designed to provide a safety net for the approximately 9,000 children annually who require special support at the end of the primary level. Students spend the first year in dedicated ASTEP Centres located in selected Primary, All Age and Primary and Junior High Schools. Centres are provided with training and resources to serve a minimum of one to a maximum of two groups of 20 to 25 students each.

During the second year of the program, students transition to select secondary schools via a special placement mechanism to be determined by the Minister. Under this arrangement students will technically repeat Grade 7. High schools may volunteer or be pre-selected to participate in the programme.

Source: Ministry of Education, March 2012. The Alternative Secondary Transitional Education Programme (ASTEP)-Conceptual Framework.

²¹ See Table A5 in the Appendix for an overview of the individual tests offered and their characteristics.

The external administration and grading of the GFLT, overseen by the Ministry of Education, helps ensure comparability across schools and protect against cheating. The GFLT—has also become a standard for rating primary schools in the eyes of parents and the public (Garrison and Ehringhaus, 2010). Moreover, the Ministry of Education, in an effort to meet its universal literacy goal by 2015, has used GFLT results to develop a national accountability matrix that sets out the annual growth rate to be achieved by the respective schools so that they can meet the 2015 target.

The Ministry of Education also administers the GSAT. This highly-publicized, high-stakes exam tests students' mastery of the Grade 4-6 curriculum and students are given only one opportunity to sit the exam. According to the Ministry of Education, GSAT is not a pass or fail examination; all students who sit the examination are placed in a secondary school based on their composite score as well as their school of choice. In spite of this, parents, students and the general public use the school in which the child is placed as an indication of the child's performance and some schools are seen as being the reservoir for "failing" students. Students know that scores below a certain level will not earn them a place in the traditional high schools – which are typically better performing. Although aggregated and disaggregated results are widely available, the emphasis is focused almost exclusively on grade and school placement and not on using data to inform school improvement.

Secondary and post-secondary assessments are focused on placing students

The three assessments at the secondary and post-secondary levels—Grade Nine Achievement Test-GNAT, CSEC and CAPE—are used to determine students' placement for the next stage of their education. Results from the tests, particularly the CSEC, are also often used as an indirect measure of school quality. However, there is no structured or coordinated system that analyzes data and provides guidance to schools on how to use results data to guide instruction and improve education outcomes.

The GNAT is used to place students from All-Age Primary and Junior High schools into secondary schools, where the students repeat Grade 9. The results of GNAT are available publicly each year but do not generate much discussion. Nor are they reported in the Economic and Social Survey Report (ESSJ), the Jamaican Planning Institute's annual report on all productive and social sector activities. This suggests that results have very little impact beyond the individual student.

The CSEC, however, has strong social currency and is used to measure the quality of education being offered in the country, as well as for student placement in tertiary programs. CSEC results allow comparisons across schools and school types, gender and public and private categories, and with students in neighboring countries.²² CSEC results are widely publicized and analyzed by scholars, policy makers, and private analysts, and both schools and the ministry come under intense scrutiny based on the quantity and quality of passes of their students. However, beyond the public accountability function, there is little evidence that teachers or administrators are using CSEC results to improve classroom instruction, strengthen school performance, or design programs targeting areas of weakness, even though a profile of performance is provided (**Table A6 in Appendix**).

Moreover, despite the expectation that all Jamaican students should take the CSEC, usually at the end of Grade 11, there is no formal mechanism requiring them to do so. Schools and teachers are reluctant to enter students whose performance puts them at risk of failing the exam since this will impact the overall pass rate of the school. (Students may take the exams privately, but if they do, their scores are not counted toward the school average.) Leaving out potential low performers skews scores upward, suggesting that performance may be lower than existing scores indicate.

The government has begun to pay attention to the percentage of the Grade 11 cohort that sits CSEC especially for Mathematics and English Language. In collaboration with private organizations, it also pays the examination fees for four subjects per student—Mathematics, English Language, a science subject and Information Technology.²³ Other partners also support CSEC by paying fees for subjects of interest (**See Box A4 in Appendix** for one such example). It is not clear if the subsidy has helped to increase the percentage of students sitting CSEC.

The CAPE certifies the academic, vocational and technical achievement of Caribbean students who wish to continue their studies after having completed a minimum of five years of secondary education. Students who choose to take the CAPE usually do so in Grades 12 and 13 in preparation for entry to tertiary education. As with CSEC, the results are presented with profile analyses showing students' strengths and weaknesses on topics within a particular subject area. However, as with CSEC not many secondary institutions use these results to inform or improve instruction.

²² CSEC is currently administered in 15 Caribbean countries, and students may sit exams in any of 35 different subject areas. Tests are usually administered at the end of the school year, but individual candidates not sponsored by secondary schools may choose to sit the test in January.

²³ Support now exist as a subsidy but plans are afoot to make it an incentive, so only students who have maintained a set standard of performance will access same.

Assessment results are not systematically used to improve educational outcomes of students

Jamaica is not using its wealth of test information to the fullest potential. The Taskforce Report on Education Reform noted in 2004 that though the system of “national and regional assessment has the potential to track and evaluate students’ learning from Grade 1 through to Grade 13, the results seem to be used mainly for placement” (p. 13). Schools have no systematic approach for using this data to modify teaching and learning, nor does the Ministry provide guidance for its use. Schools are unable to track value-added to students and there are no annual improvement standards that schools strive towards.

That is not to say that no school, teacher or Education Officer is working to incorporate test results into planning and school improvement, but there is no structured and coordinated approach by which the Ministry implements and guides the process.

Jamaica’s high stakes testing carries both risks and benefits

Jamaica’s current assessment system features high stakes tests at Grades 4, 6, 9 and 11. Debates over the value of high stakes testing, both in Jamaica and in other countries, are often heated. Proponents argue that such tests foster accountability by setting clear targets for learning and forcing teachers and administrators to direct attention and resources to ensuring that students master core skills. Students and parents also have a clearer idea of what is expected and are more likely to push for improvement. Moreover, proponents note, education across the country is more consistent when all children are measured against the common benchmarks implicit in a standardized test.

In Jamaica, a recent study showed that attention to literacy skills increased when the GFLT became a national standardized exam (Lewis, 2010). As a high stakes test, the scores are reported more frequently and in more detail than results from purely diagnostic tests like the Grade One Individual Learning Profile and Grade Three Diagnostic Assessments, leading parents to ask how schools in their communities are doing, in order to select schools for their children. Used responsibly, proponents argue, high stakes tests tell you whether key goals are being achieved and make sure that students, teachers, and system administrators are focused on achieving them.

Even so, opponents are quick to point out that results from other high stakes tests, like the CSEC, have changed little. This is despite the high levels of attention, and the labeling of schools based on test scores. There are also greater incentives to “cheat” for example by only testing the best students. High stakes tests also cause parents and students to become stressed over their “one chance” to gain a spot in their school of choice, critics say. Plus, tests are imperfect measures, they argue, and results can be affected by any number of outside factors, such as limited resources and the socioeconomic context in which many schools work. Attaching high stakes to tests under these circumstances is unfair and negatively affects students, educators and the system as a whole, opponents argue.

Both sides raise valid points, and the Ministry will need to monitor testing systems carefully for unintended consequence and to ensure student learning is monitored appropriately and contributes to evidence-based interventions.

Jamaica does not participate in any global assessments

Jamaica has never participated in a global assessment of student achievement such as the OECD’s Programme for International Student Achievement (PISA)—which tests 15 year olds in reading, math and science²⁴—or the Trends in International Mathematics and Science Study (TIMSS) which tests 4th and 8th grade students in math and science. Cognizant of the value of such comparisons for improving their schools and maintaining a competitive workforce, more than 11 Latin American and Caribbean education systems participated in the 2009 PISA test. However, with the exception of Trinidad and Tobago, which also participated in the world-wide 2006 and 2011 Progress in International Reading Literacy Study (PIRLS) of 4th grade reading, the Caribbean for the most part, has stayed away from global assessment and remains “overly focused on their own specificities with little exposure to the outside world” (DiGropello, 2003, page 18). While it is undoubtedly important to understand how Jamaica compares to neighbors that share similar historical and cultural roots, expanding the country’s capacity to evaluate its own educational performance in the broader global context has the potential to foster improvements for international competitiveness which would benefit all Jamaicans. Consequently the country should consider adding a global study to its already rich list of assessment endeavors.

²⁴ PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of assessment and who have completed at least 6 years of formal schooling, regardless of the type of institution in which they are enrolled and of whether they are in full-time or part time education, whether they attend academic or vocational programmes, and whether they attend public or private schools or foreign schools within the country (OECD, 2009).

VII. MANAGEMENT AND ACCOUNTABILITY:

JAMAICA IS DEVELOPING A MONITORING AND MANAGEMENT SYSTEM THAT HOLDS EDUCATION PROVIDERS ACCOUNTABLE **C** 



The Ministry of Education oversees the Jamaican education system through its central office and six geographic administrative regions.²⁵ Seven major acts provide the legislative framework governing the education sector. Starting with the establishment of a national education system under the 1965 Education Act and continuing through Early Childhood Commission Act in 2003, these laws prescribe the rules managing the education system from early childhood through university (**See Box A5 in Appendix**). In addition, in keeping with its mission to provide strategic leadership and policy direction for the sector, the Ministry of Education has developed the National Education Strategic Plan (NESP (2011-2020)), which provides a management and accountability framework for the entire system. Specific legislation and policy initiatives underway are detailed in **Box A6 in Appendix**.

Within the Ministry, management responsibilities are divided among 10 statutory bodies, regional education offices, school boards and principals. (The roles and functions of each of these actors in the management framework are laid out in **Table A8 in Appendix**).

Most major management decisions are made centrally

Although the current system is more decentralized than 1991, when all system support and oversight originated out of the Ministry's one location, most key education decisions are still made at the Ministry level (**Table A8 in Appendix**). Among the many challenges that exist with this arrangement is that, while schools are held accountable for students' outcomes, in most instances, the principal is not sufficiently empowered with the required skills and authority to lead and manage their schools. As a consequence, there is a high degree of dependency on the Central Ministry. Nevertheless, there are exceptions, where school principals with the support of their respective boards are successfully managing their schools.

Principals do not have the autonomy to staff based on needs

Teachers are contracted by the Ministry of Education, through a selection process administered by individual school boards. These boards are nominated by the National Education Council (NCE) and responsible to the Minister of Education (**Table A9 in Appendix**). The chairperson of the board is often a political appointee, except in the case of trust or church schools. The Board appoints all teachers, in consultation with the principal, and confirms final appointments with the Minister of Education (Education Act 1980- Section 43).

Boards' (and thus schools') staffing options are also constrained by the overall teacher-pupil ratios established by the Ministry of Education.

These constraints make it difficult for schools to obtain teachers in subject areas where they are facing a critical shortage. This is particularly true in non-traditional schools which need to employ a wider variety of teachers in order to accommodate vocational and technical subjects. Although some schools are able to contract additional teachers with funding from parents, alumni and the community, not all schools can afford to do this.

Moreover, although principals are expected to manage teaching resources in their schools in order to maximize learning, they do not always have the option to re-deploy staff, in some cases, due to inadequate staffing. It is not unusual, for example, to find teachers who are employed as department heads in an area in which they have little or no expertise, simply because other staff members are not available.

Schools cannot mandate student attendance

Student attendance at school is a critical first step in providing the opportunity for learning. However, in Jamaica, while school non-attendance has been identified as one of the factors negatively impacting student learning, there is no policy mandating student attendance. As a consequence, a school cannot require parents or students to maintain a minimum attendance rate or take actions against those who fail to do so. Schools do attempt to intervene by visiting the homes/parents of children with high truancy rates. And, some of the more prominent secondary schools have developed and maintain mandatory student attendance agreements and require parent participation at parent-teacher (PTA) meetings as a condition of enrolment. As parents tend not to object to these agreements, they are usually enforced with no intervention from the ministry. This is one of the areas that require attention as schools need guidelines and some flexibility to mandate this.

Some financial management resides at the school level, but lacks adequate supervision

Public education institutions are financially supported by the Ministry of Education (MOE). The principal is responsible to the Ministry and donors for the proper management of all funds and accounting records, and the school board and principal are expected to spend within the parameters of the approved school budget.

²⁵ See **Table A7 in the Appendix** for details on the parishes included in each region.

Schools must obtain express approval from the Ministry to re-allocate funds outside the approved budget. While delegating budget responsibility to schools is desirable, it comes with challenges, one of which is the lack of financial expertise and supervisory capacity. The Education Task Force on Educational Reform (2004) noted that for schools with a bursar, the person occupying the post “may be inadequately trained and over extended”. In early childhood, primary and all-age schools where there is no bursar; the principal carries out the function, often with little or no training. Very few schools provide the ministry with audited financial reports as required by regulations, and there are no systems in place to ensure that this is done. In 2003, the Education Task Force reported that less than 10% of schools submitted their audited financial statements.²⁶

Other accountability mechanisms are weak

Accountability mechanisms for teachers and administrators are weak. Teachers automatically benefit from salary increases regardless of their performance. The proposed teaching standards which are expected to be legislated in 2012 will help provide a framework for holding teachers accountable, monitoring performance and applying rewards and sanctions. (For more on evaluating teacher performance see the chapter on the teaching profession.)

School boards are responsible to the Minister for the hiring and firing of the principal, but there is no system for monitoring the performance of principals. The Parents Teachers’ Association (PTA) is the main mechanism for involving communities in the management of their schools. Unfortunately some involved parents do not reside in the school community and many parents neglect to be involved in this association. Beyond the PTA, when communities do get involved it is usually through demonstrations and school lock out, rather than positive involvement in schools. Clearly there is a need for more structured, effective ways through which the community can participate in the management of their schools and monitor their performance.

The country is moving towards strengthening the management capacity of principals

There is an increasing awareness that strong school leadership plays a critical role in improving student learning. Unfortunately, principals at many Jamaican schools often lack the leadership and management skills necessary to address the issues they face. This is partly due to the practice of promoting senior teachers and acting principals to the role

of principals without preparing them for the new responsibilities that come with the post.²⁷

According to a 1998 KPMG Peat Marwick report cited in the Task Force Report on Education (2004), principals also tended to rely too much on ministry education officers (EOs) to identify, articulate and solve school related issues, even though EO visits are infrequent. Although no more recent audits of this type have been conducted, there is little to suggest that the situation has changed much in recent years.

A variety of recent projects and activities have aimed to improve the leadership and management skills of principals, while at the same time maintaining their role as instructional leaders. Several private foundations and training institutions have begun to provide leadership and management training for school leaders (**Box A7 in Appendix**). In addition, the government is moving toward “instituting a national college for educational leadership”, which all aspiring principals will be required to attend (Holness, 2011). This was a component of the original plan for the Transformation in Education and needs to be fast tracked.

Several groups are also working to improve school boards’ management capacity

Given the complexity of issues that Jamaican school boards have to deal with and the impact that their decision have on the functioning of schools, in 2008 the Private Sector Organization of Jamaica (PSOJ), the Commonwealth of Learning (COL) and the National Council on Education (NCE) agreed to collaborate to provide management training for school board members. The program was designed to focus on the areas of moral leadership and professional ethics, managing relationships in the school community and strengthening management and governance. The PSOJ also helped the NCE identify prospective school board candidates from amongst its membership over 240 companies, business associations and individuals (Simpson, 2011). Unfortunately, the NCE/PSOJ training was never implemented.

Nevertheless, the NCE continues to undertake other initiatives aimed at identifying problems facing school boards and implementing activities to remediate the issues identified. In this regard, the NCE has or is pursuing: i) A baseline survey on the effectiveness of governance practices in public education institutions in Jamaica. This survey was completed in 2012; ii) A handbook on effective school governance and practices; iii) An on-line modular training programme; and iv) “Face to Face” training programme.

²⁶ There are no current data on this.

²⁷ While lamenting the poor level of management demonstrated by many principals, then Minister of Education Andrew Holness noted that many of them are appointed to head schools without being trained. Sunday Gleaner, August 28, 2011.

The government is moving to improve accountability through school inspections

In Jamaica, schools do not report publicly how students are doing outside of high stakes tests, and their use of testing information to inform school improvement efforts tends to be limited and reactive. To help address this problem, using school inspections, the newly formed National Education Inspectorate (NEI) plans to evaluate not just national and or regional test performance but to also assess “students’ progress in relations to their starting point” and other factors related to school success (NEI, 2010).

School inspections began in 2010 and are being conducted in rounds with a specific number of schools targeted. To date, four rounds of inspections have been completed. A total of 370 or 38% of public education institutions have been inspected across the island. Presently, there are no rewards and consequences for schools based on performance. This is changing as the Ministry seeks to identify schools that have limited capacity to deliver quality education to students according to the inspection framework. The plan is, if a school is designated as “failing” the Ministry

will directly intervene to provide support to the school’s management through the Regional Education Offices, and where this support does not result in the school’s improvement within 2-3 years, the management team of the school including the principal may be replaced.

The JTA has argued that negative interventions, like labelling schools as failing or removing management, are counter-productive and that schools and communities will be stigmatized. It is certainly true that high performing schools are held in high regard by parents, students and communities, and that parents are reluctant to have their children attend neighbourhood schools if they are under-performing. However, the Ministry argues that because schools provide a public service to children and their families “the operations of schools are not the private businesses of principals and boards. As long as they receive public funds, they must subject themselves to public scrutiny” (Holness, 2011). Parents and tax payers have a right to know how well schools are performing and demand changes (from government, schools, teachers, students, parents and communities) when they are not meeting students’ needs.

VIII. THE TEACHING PROFESSION:

GOVERNMENT IS TAKING STEPS TO SAFEGUARD THE TEACHING PROFESSION THROUGH STANDARDS AND PROFESSIONAL DEVELOPMENT **C** ↑



Jamaica has a stable teacher education system

In order to become a trained teacher in Jamaica, an individual must complete a three or four year programme at a recognized teacher training institution. Persons with appropriate CSEC or CAPE passes, or with tertiary degrees in subjects other than teaching, are sometimes employed as pre-trained teachers in areas where it is difficult to find qualified teachers. But these individuals are paid less and not allowed to remain in the system for long without formalizing their training. In keeping with its goal to have all teachers trained by 2015, the Jamaican government has committed \$1500 million dollars to training efforts.

Currently, there are 10 accredited colleges and 3 university departments that focus on teacher education (ESSI, 2010 pg. 22.31).²⁸ Candidates must complete 1,890 hours of instruction and may specialize in one of four areas: early childhood, primary, special and secondary education. In addition to course work, prospective teachers must complete classroom practice, research papers, and personal development which focuses on teacher attributes through in-class activities. All public institutions that offer teacher training are accredited by the Joint Board of Teacher Education, while private ones must be accredited by the University Council of Jamaica (Spence-Jarrett, 2012).

In 2009, approximately 9,000 students were enrolled in teacher training institutions (up from 7,435 in 2005) and the size of the teaching force has expanded by 11% despite downsizing in many other industries.

Jamaica is on track to have legislated teaching standards by 2012

The Jamaica Teaching Council (JTC)²⁹ was formed in 2008 and mandated with “the enhancement and maintenance of professional standards in teaching and the professional status of teachers. Two of its principal functions are the development of registration and licensing standards and the accreditation of teacher certification institutions” (Ministry of Education, 2007). The Council distributed the country’s first standard policies for the teaching profession in 2011 for discussion by stakeholders. These standards are expected to be in full effect by September 2012 (Gordon, 2011- JTC).

Unfortunately, the effort to develop teacher standards has been seen by some as a punitive measure for teachers, rather than a platform for monitoring and supporting teachers as professionals and improving the education system as a whole. This may be because the government started developing the standards at the same time it was adjusting teachers’ salaries and civil society actors were calling for pay increases to be commensurate with improved performance.

In spite of this perception, the development of teaching standards that clearly define teaching excellence is a major step towards protecting the status of the profession, advancing the professional development of teachers and ensuring that the needs of children and parents are served.

Professional development for teachers is well supported

The Professional Development Unit (PDU) of the Ministry of Education actively promotes in-service capacity-building for all persons employed to the Ministry. The services of the PDU extend to teachers, principals, clerical and ancillary personnel, as well as education officers and managers. The PDU partners with accredited teacher training institutions to develop and execute workshops and other in-service training, including training related to information and communication technology (ICT). For example, in 2010, about 1,000 educators were trained and certified in ICT skills through the Human Employment And Resource Training/ National Training Agency (HEART/NTA). In addition, the MICO Foundation trained over 800 teachers in using technology to support instruction.

In addition, the PDU identifies and disseminates information on opportunities for fellowships and scholarships as a means of expanding teachers’ access to advanced study. The Ministry also has collaborated with the Joint Board of Teacher Education (JBTE) to provide scholarships for teacher trainers to pursue advanced degrees (ESSI, 2010). The Ministry further supports professional development of teachers by: i) granting day release to attend workshops; ii) giving paid study leave for up to two years; and iii) refunding 50% tuition fee, if study leave is not taken. However, teachers are not required to participate in professional development and there is no systematic follow-up to help ensure what is learned in training is applied in the classroom.

²⁸ Bethlehem Moravian College; Church’s Teachers College; Edna Manley School for the Visual Arts; GC Foster of Physical Education and Sports; Mico University College; Moneague College; Shortwood Teachers College; College of Agriculture, Science and Education; Sam Sharpe Teachers College and St. Josephs Teachers College. Department of Education at The University of the West Indies; Northern Caribbean University and University of Technology.

²⁹ Not yet formalized into law, to be legislated through the Jamaica Teaching Council Act, 2012.

There has been tremendous improvement in the educational status of teachers

In 2009, 85% of the entire teaching cadre were trained professionals, meaning they had received a teaching diploma either from a teacher training college or from a university (**Table A10 in Appendix**). And 45% of these same teachers had a university degree, a substantial increase over the 9% in 1990. At the primary level, the percentage of teachers with a university level teaching degree increased almost 20-fold during the same time period. In 1990 just about 2% of teachers had a university degree, but in 2009, that figure had improved to 36% (**Graph 15**). The increase in the percentage of early childhood teachers trained at a university showed similar growth (ESSI, 1990 pg. 18.12 and ESSI, 2010 pg. 22.11). At the secondary level the percentage of teachers with university degrees rose from 13% to 41%, although the overall percentage of trained teachers (those with a teaching diploma from a teacher training college or university) declined suggesting that there may be a shortage of trained specialist,³⁰ teachers at this level (ESSI, 2010).

The debate about the educational level of teachers in Jamaica has often been heated, with some emphasizing that teachers need to be trained in the “how” of teaching (pedagogical training via teaching diploma) and others arguing that a university degree provides subject knowledge equipping the teacher with the “what” to teach. Both are equally important, so it is commendable that Jamaica has managed to improve those with a university degree while maintaining a high proportion of trained teachers. At the same time, others argue that some institutions accept teachers with less qualification than the established 5+ subjects including mathematics and English, and that is a pre-cursor for poor performance by teachers. High levels of subject matter preparation across disciplines are especially important at the primary level where a teacher is responsible for teaching all subjects.

Many highly trained teachers leave Jamaica

A 2006 study noted that 55% of Jamaican teachers expressed an interest in leaving the country to teach, while 33% indicated that they had specific intentions to do so. The study also reported that about 7% of Jamaican teachers were employed out of the country (Appleton, Morgan & Sives, 2006). A former President of the JTA posited that better salaries, institutions with more resources, and lower levels of violence in schools were among the issues luring many teachers to migrate (Jamaica Gleaner, March 24, 2008).

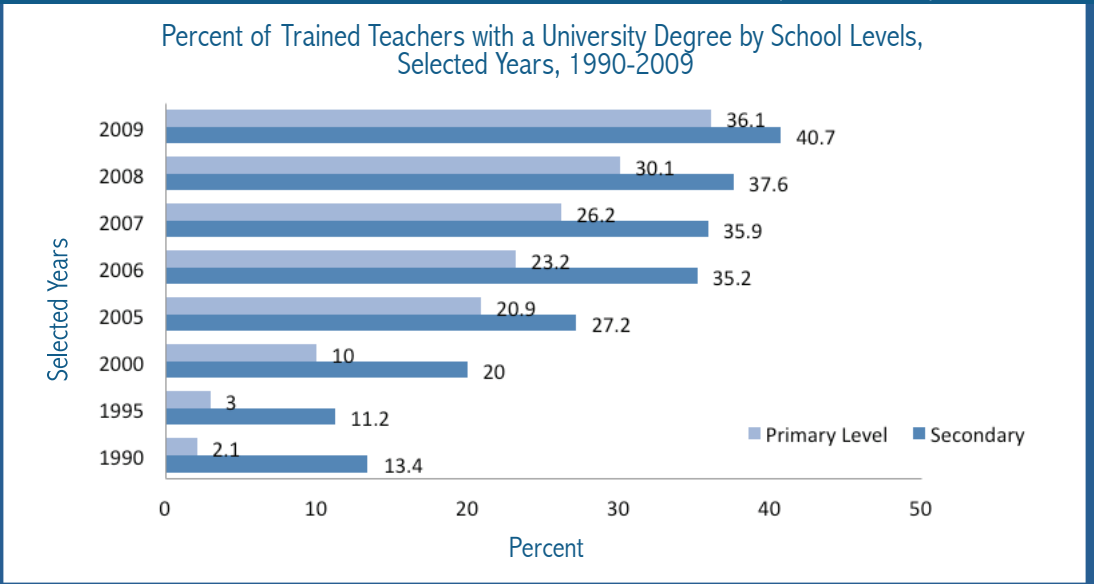
Often, the teachers who migrate are those skilled in specialized areas such as Special Education, Early Childhood Education, Biology, and Mathematics, forcing schools to employ teachers to teach outside of their areas of skill or increase class size to cover these subjects (Appleton, Morgan & Sives, 2006). The same study found that many of the teachers replacing those who migrate were “less effective”, placing further pressure on the education system. The government has tried a number of strategies to curb migration, including moral appeals, cooperation with bi-lateral and multilateral organizations, and tuition subsidies of close to two thirds to teacher education candidates who agree to enter a bond to teach in Jamaica for specified periods. However, this last initiative has met with only limited success, since most experienced teachers have met their tuition obligations.

Primary and secondary teacher salaries are lower than in developed countries, but on par with other countries in the region

Jamaica’s salary range for teachers, controlling for the cost of living, is less than half that of developed countries such as the United Kingdom and the United States, where many Jamaican teachers choose to migrate (**Graph 16**). However, starting salaries and those after 15 years are on par or better when compared to other Latin American nations with data. The more contentious aspect of the Jamaican debate, though, is not about making salaries comparable to other countries, it is about linking pay with performance. In particular, educators worry about how the Ministry will determine teacher performance. They argue that using high stakes student achievement tests would ignore other important factors such as the starting point of the students. Despite efforts by the Ministry of Education to develop a teacher evaluation policy and procedural handbook in 2004, and a complementary teacher evaluation handbook in 2005, the practice is not yet entrenched in the system. In addition to systematically implementing the teacher evaluation policies already developed, the country should consider a transparent monitoring mechanism that considers “value added” contributions to student learning, along with other measures of teacher effectiveness to help make performance based incentives more equitable.

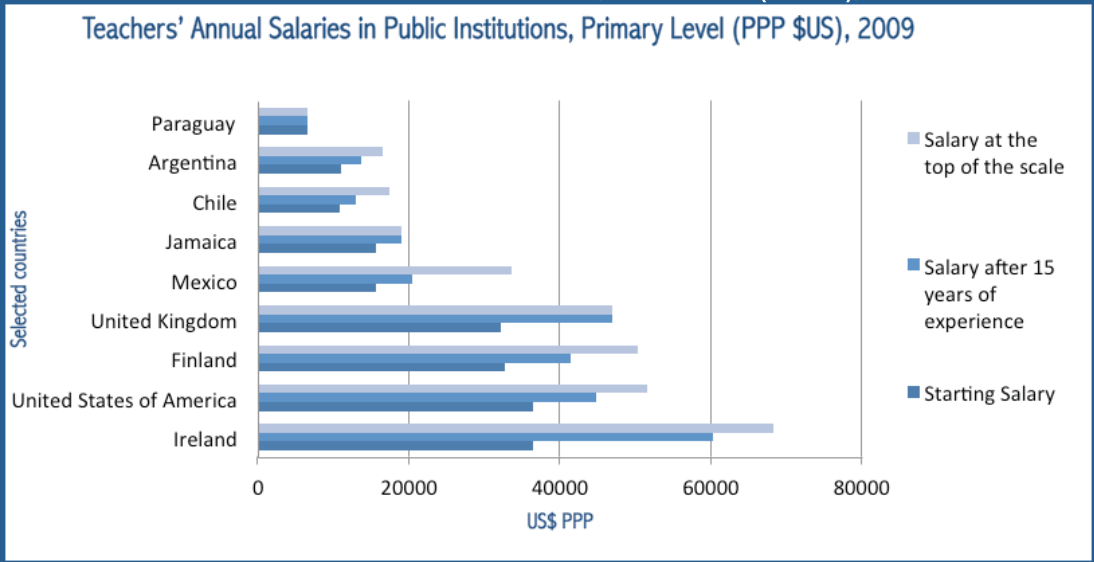
³⁰ Shortage in areas such as mathematics and the sciences usually allows for university graduates in these disciplines to be employed as pre-trained teachers.

GRAPH 15: PERCENT OF TRAINED TEACHERS WITH A UNIVERSITY DEGREE BY SCHOOL LEVELS, SELECTED YEARS, 1990-2009



Source: PIOJ-ESSJ 1990-2010

GRAPH 16: TEACHERS' ANNUAL SALARIES IN PUBLIC INSTITUTIONS, PRIMARY LEVEL (PPP \$US), 2009



Note for Graph 16: Salaries are expressed as gross salaries without additional bonuses. Data for Argentina and Chile are for 2007 and Uruguay is for 2008. Graph includes all LAC countries with data available.

Source: Global Education Digest 2011, Table 26, p. 284.

Pupil-teacher ratios have improved, but mask the reality of large class sizes

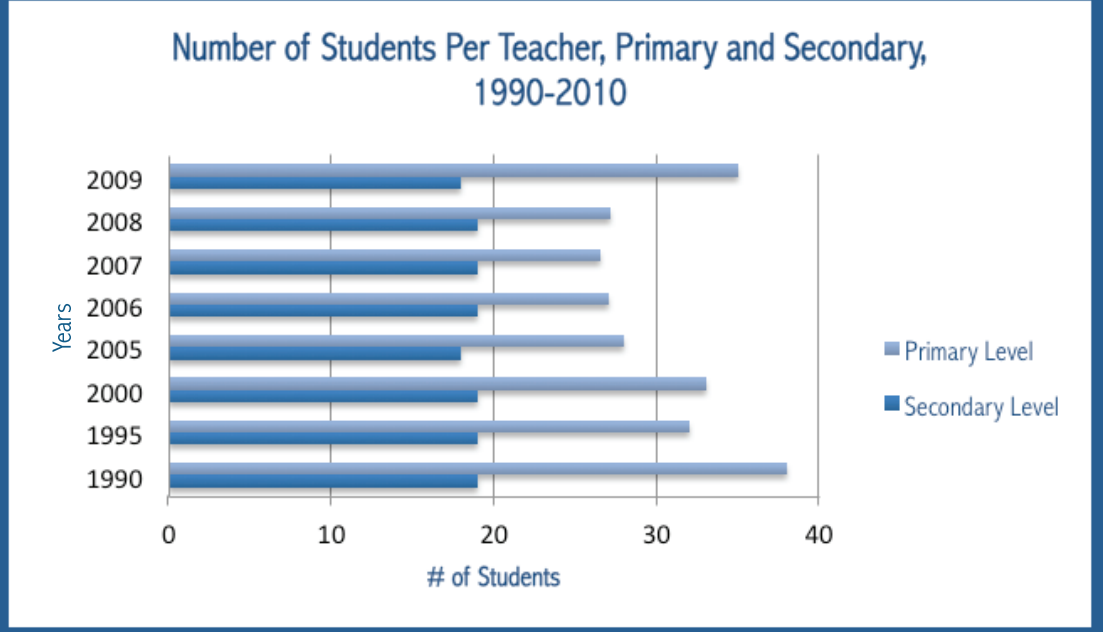
In 2004, the Jamaican Education Task Force recommended reducing pupil teacher ratios at the primary level as one of several strategies to help the country achieve a world-class education system. Although the Task Force initially recommended a target ratio of between 25:1 and 30:1, the Ministry of Education in considering the overall intervention strategies and the required budgetary constraints set a target of 35:1. Data show that between 1990 and 2007 the pupil teacher ratio improved from 38:1 to 27:1 (Graph 17).

By 2009, the ratio had increased to 35:1, but was still within the target set by the Ministry of Education. International data shows a lower pupil teacher ratio of 24:1 for Jamaica. However, whichever data source is referenced, many countries in the region have a lower number of students per teacher, which makes dealing with the individual needs of students, particularly in the early grades, easier (Table A11 in Appendix). Researchers have posited that at the secondary level pupil:teacher ratio has little impact on student outcomes (OECD, 2009).

Even so, teachers maintain that the average number of students to teachers masks the true number of students that a teacher of core subjects such as Mathematics, English Language and Information Technology serves. This is because total number of teachers includes those who provide vocational instruction, physical education and teach

other specialized subjects that serve a more restricted population. So while the ratio of 18:1 at the secondary level (average since 1990) may seem reasonable, educators argue the size of classes for core subjects is actually larger and remains too large for any one teacher to effectively manage.

GRAPH 17: NUMBER OF STUDENTS PER TEACHER, PRIMARY AND SECONDARY, 1990-2010



Source: ESSJ 1990-2009, Selected Years

IX. EXPENDITURE:

SPENDING ON EDUCATION REMAINS HIGH, BUT DISPARITY AT DIFFERENT EDUCATION LEVELS NEEDS TO BE ADDRESSED **B** 

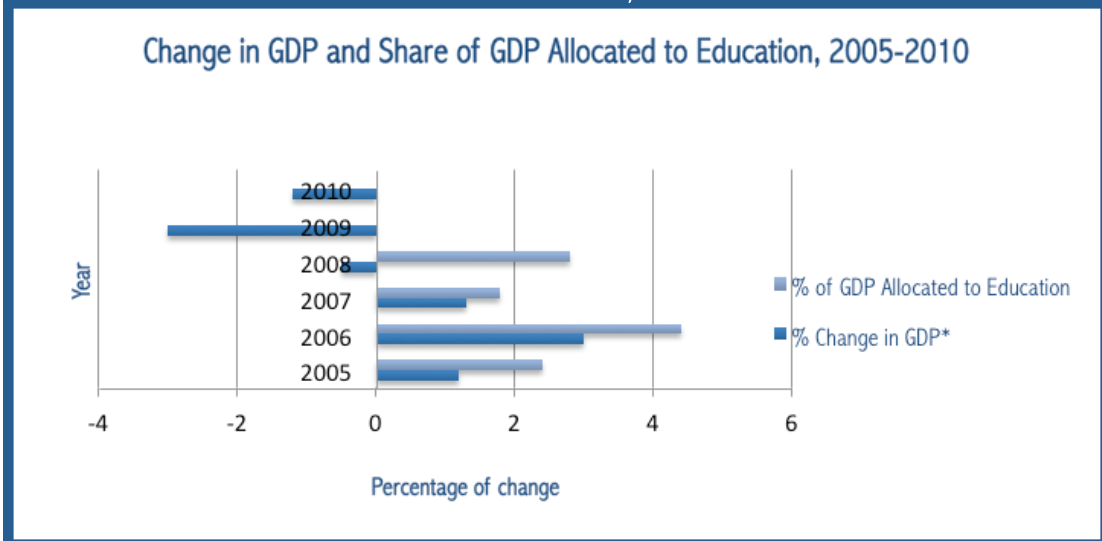


Jamaica is strongly committed to funding education

Although government, households, community and faith based organizations and the private sector all help to finance Jamaican education, government by far remains the largest spender. In 2010, the Jamaican government allocated 13% of the national budget and 6.1% of its gross domestic product (GDP) to education. As a share of GDP, Jamaica invests more than the average for Latin America and the Caribbean (5%) or the average for Caribbean countries alone (5.6%) (UNESCO- EFA, 2010). Indeed, Jamaica invests a greater share of its national wealth in education than the average for developed countries (5.2%), even outspending countries such as the United Kingdom and the USA by this measure (Graph A.18 in Appendix).

Moreover, the government has maintained a high level of investment in education, despite reductions in national income since 2008. Between 2005 and 2010, public investment in education as a percent of GDP increased from 5.3 to 6.1 percent, averaging roughly 6% for the five year period (Graph 18). Jamaica's education tax, which earmarks a portion of income taxes for education, is a further testament to the priority Jamaicans place on education. The tax, introduced in 1983, mandates that all employed persons and employers contribute directly to the sector (employees contribute two percent of their earnings, employers contribute three percent).³¹

GRAPH 18 : CHANGE IN GDP AND SHARE OF GDP ALLOCATED TO EDUCATION, 2005-2010



Note for Graph 18: Percentage change in GDP is measured as year over year change at 2003 base prices.

Source: PIOJ- ESSJ 2010; Page 5.2-5.3

Private entities, mainly churches and large foundations, also contribute substantial amounts to the education sector through projects that enhance infrastructure, resources and technical capacity of the teaching staff. For example, in 2009, three organizations, National Commercial Bank Foundation, Digicel Foundation and Scotiabank Jamaica Foundation, reported a combined contribution to education of J\$M119.8, while another, the Mutual Building Societies Foundation, committed J\$M100 over a five year period (ESSJ, 2010, p. 22.5). In addition, international development partners also contribute through country assistance programmes and households pay tuition and school-related expenses such as lunch, uniforms, and books. These additional contributions are particularly important for covering capital improvement and other special projects, since as of 2011, 96% of the public education budget goes to on-going operating costs including personnel.

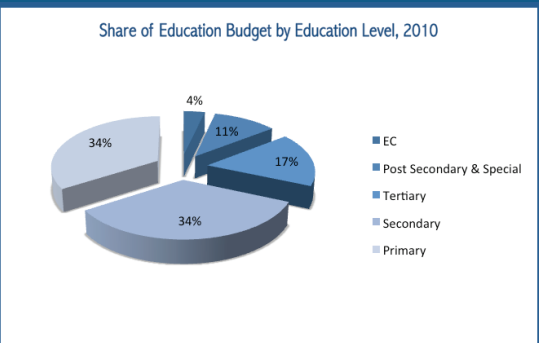
Government spending on basic education does not match enrolment distribution of students

Close to 38% of Jamaica's public education budget goes to the Early Childhood (EC) and primary levels combined, even though 51% of students are enrolled at this level. The disparity is primarily due to the fact that the early childhood sector receives only 3.6% of the budget even though approximately 17% of the enrolled students are at this level (Graphs 19 and 20). It should however be noted that, Early Childhood receives substantial budgetary support from other government agencies, in particular the Jamaica Social Investment Fund (JSIF), the Culture, Health, Arts, Sports and Education Fund (CHASE) as well as the Poverty Reduction Programme II. Funding for EC remains a challenge, but tremendous progress has been made in the sector, in part as a result of increased investment (Box 4).

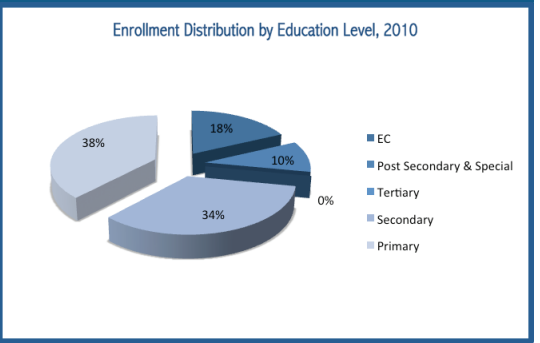
³¹ It is important to note that although funds from the tax are earmarked for education, they were not directly remitted to the sector until 2003. Instead the amount was included in the "consolidated budget" for general expenditure in the social sector.

Source: ESSJ, 2010

GRAPH 19: SHARE OF EDUCATION BUDGET BY EDUCATION LEVEL, 2010



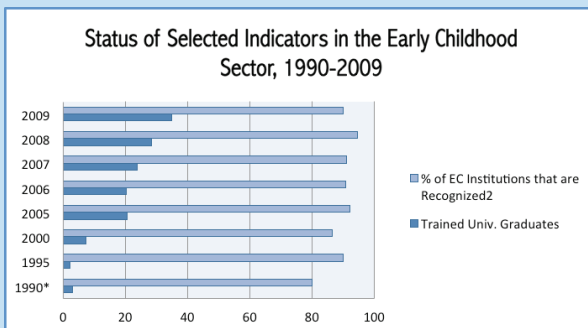
GRAPH 20: ENROLLMENT DISTRIBUTION BY EDUCATION LEVEL, 2010



BOX 4: INVESTING IN EARLY CHILDHOOD EDUCATION

Jamaica is the first Caribbean country to have established an Early Childhood Commission dedicated to ensuring that “all children have access to quality early childhood development services enabling the realization of their full potential” (EC, Commission, 2008). In 1994, the Jamaican government launched the “Evaluation and Revitalization of the Early Childhood Programme” in recognition of the critical role this level of education plays in national development. Prior to that point, the sector had few standards for teaching and learning, few trained staff, and many institutions were not registered with the Ministry of Education, making it difficult for government to assist or supervise. Since that time, significant resources have been invested to build and repair early childhood centers, increase registration of schools, and provide training and certification for teachers.

Improvements are evident. In 1990, while only about 3% of early childhood teachers had a university degree, by 2010, approximately 35% did. And close to 90% of centers are recognized by government, indicating that they have met basic requirements in terms of facilities and personnel (See Graph below). Other improvements include parenting training, a National Strategic Plan for the sector, increased public awareness about the importance of early childhood development and alliances between providers and private companies and foundations.



Source: ESSJ, 1990-2009 Selected Years

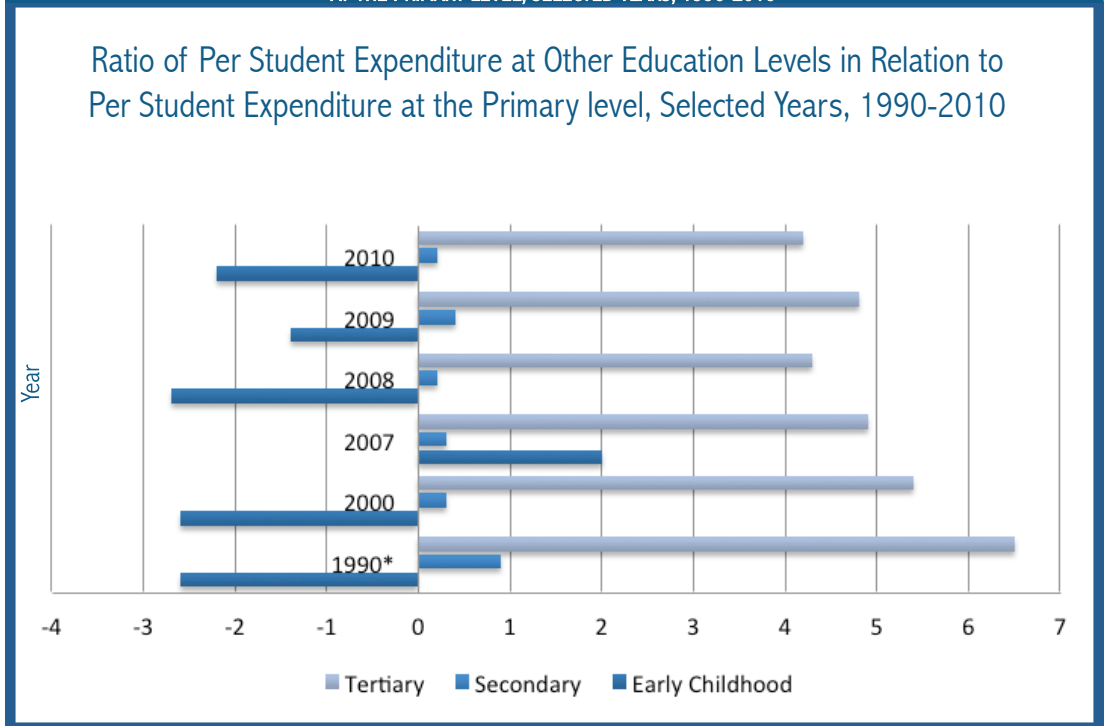
There is a wide disparity between per student expenditure at tertiary level and the other levels

Per student expenditure at the tertiary level is significantly higher than at all other levels of the education system.³² In 2010, per pupil expenditure for tertiary students was J\$331,469, compared with J\$20,931 per pupil for early childhood education, J\$83,179 per pupil for primary and J\$99,417 per pupil at the secondary level (ESSJ, 2010). There is no prescribed number or formula for how much to invest at any given level, and the inputs for tertiary education may be more expensive than for other levels. However, higher levels of public spending on tertiary do raise important equity questions, especially considering that students from the wealthiest quintile are eight times more likely to access tertiary education than those from the poorest household (JSLC- 2009, Table 4.2).

Since tertiary spending disproportionately favors wealthier students, such financing has the potential to reinforce socio-economic inequities within the population. Studies have also shown that investing in primary and secondary levels eventually leads to greater demand for and enrolment in tertiary education, while the generosity of tertiary education subsidies themselves do not appear to have any significant impact on enrollment (Bergh & Fink, 2004, p.1).

The country has reduced the disparity in per student spending between tertiary and primary level over the last twenty years from a ratio of close to 7:1 in 1990 to a little over 4:1 in 2010 (Graph 21). Nonetheless the ratio is still higher than in most developed countries. On average, OECD countries spend around twice as much per student at the tertiary level as at the primary level (OECD, Education at a Glance 2009 p.188).

GRAPH 21: RATIO OF PER STUDENT EXPENDITURE AT OTHER EDUCATION LEVELS IN RELATION TO PER STUDENT EXPENDITURE AT THE PRIMARY LEVEL, SELECTED YEARS, 1990-2010



Note Graph 21: Primary Expenditure is marked by the line at point 0. So, in 1990 primary education had an allocation that was almost three times more than that of EC level. Tertiary data for 1990 excludes University of the West Indies.

Source: Ministry of Education- P10J- ESSJ 1990, 2000

³² The Ministry of Education has not indicated if Research and Development has been excluded from the tertiary level education expenditure. If it has not, real per student expenditure may be less than indicated by reported figures.

Budgetary support for schools is not on a needs basis

Assessing the equitable distribution of financial support to schools is difficult. While schools differ in terms of population, resources and ability to raise funds, budgets are uniform based on education level. Schools with strong alumni associations and a wealthy parent body benefit from the wealth and status of parents, boards and past students, who contribute additional resources to the school. At the same time, schools that serve lower income populations don't have access to these same resources and often have more children who need specialized, and often more costly, interventions.

Because government support tends to be similar across schools, this kind of funding can exacerbate inequalities in society rather than help overcome them.

Jamaica also lacks reliable data to assess spending on schools' physical infrastructure and their access to learning and teaching resources. The recently established National Education Inspectorate has incorporated the assessment of school campuses as part of its inspection, so these data may become available in the future.

RECOMMENDATIONS



Jamaica has set a good foundation for educating its young people—making sure most children are in school until they are 16, monitoring learning through regular tests, and investing in schools. However, the country can and should do more to make sure that the education children receive meets international standards of excellence, prepares students for the needs of a demanding global economy, and ensure that all children, regardless of their household incomes, have access to excellent instruction. In order to meet these challenges, all Jamaicans, from Government, to business and non-profit organizations to churches, teachers, schools parents, community members and students themselves need to do their part. The following recommendations are just a few ways to build on the foundation and help Jamaican children realize their full potential.

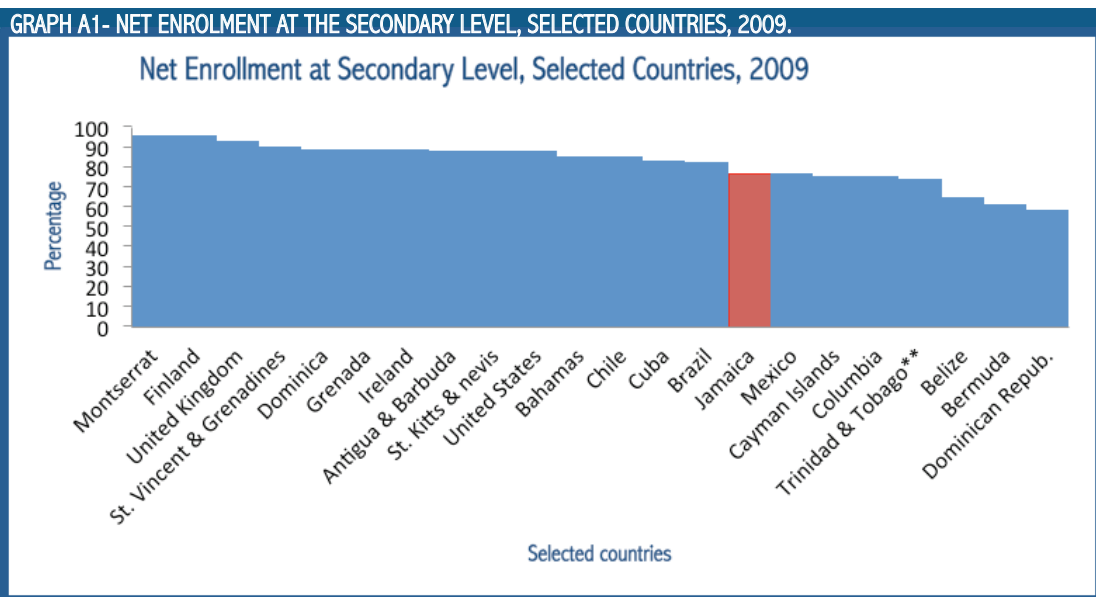
- The Government should continue plans to phase out all age and junior high schools that end at Grade 9, given that the data shows that students are less likely to re-enroll at the secondary level after having completed these types of schools.
- Civil society can support the Government's effort to enroll older teens in school, including extending the mandatory school age and implementing the Career Advancement Programme (CAP), and offering internship and apprenticeship opportunities to students in Grades 12-13.
- For Jamaica to fully benefit from the global knowledge economy, we need to increase the number of adults who are certified with secondary or post-secondary skills. All partners need to ensure that students are sitting the required number of Caribbean Secondary Education Certificate (CSEC) subjects at the end of the secondary cycle along with devising and implementing other strategies to improve certification among those already out of school.
- The target for attendance should be revised to encourage higher participation in school. Presently, students are missing about six (6) weeks of school on average.
- The Government should ensure that the country participates in at least one (1) global test of student achievement, such as the Trends in International Mathematics and Science Study (TIMSS), Progress in International Reading Literacy Study (PIRLS) or Programme for International Student Assessment (PISA), to better understand how Jamaican students compare in the global economy.
- Improve opportunities for students to learn. This includes continuing to experiment with gender-based teaching and learning techniques that address the specific needs of boys,

improving school plans and ensuring that each school has a minimum "basket" of instructional and learning resources.

- The system needs to develop mechanisms beyond annual tests for identifying and addressing learning challenges among students early and often, particularly since learning deficiencies start and persist from early childhood throughout later learning.
- Ensure that teachers are equipped to handle the challenges of the education system by offering focused, professional development and entrenching a mentorship period in the profession. This should have rewards opportunities for teachers.
- Train all school administrators in strategic and operations management; this is an area of opportunity for corporate Jamaica and other civic bodies such as service clubs.
- Give schools more autonomy in the day-to-day operations of the school such as staffing and student attendance in exchange for greater responsibility for results.
- Establish annual performance targets at the secondary level that charts a path towards success in the CSEC examinations and measure yearly progress.
- The country should ensure that its secondary level curriculum is mapped and sequenced to the CSEC syllabi from as early as Grade 7.
- Implement differentiated instructional methods in classrooms to engender a more inclusive learning atmosphere so children with different learning styles, those at different levels of learning and of different gender are catered to.
- The budgeting process needs to reflect the needs of the school rather than the allocation solely by education level that is now used.

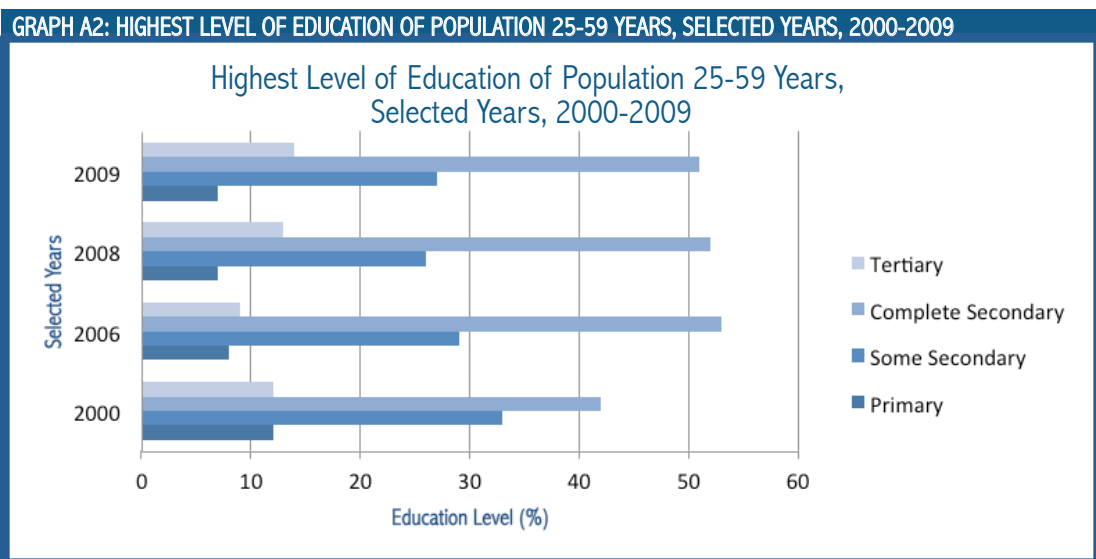
The possibilities exist for us to build on the strong foundation we have laid over the years to provide all Jamaican children with a world-class education and unearth our nation's potential. Working together, we can help ensure that our education system is just, fair, allows for creativity and innovation among teachers and students, and prepares our people to competitively meet the demands of an ever-changing global environment. We all can ACT; we all must ACT. When we do the possibilities are endless.

APPENDIX



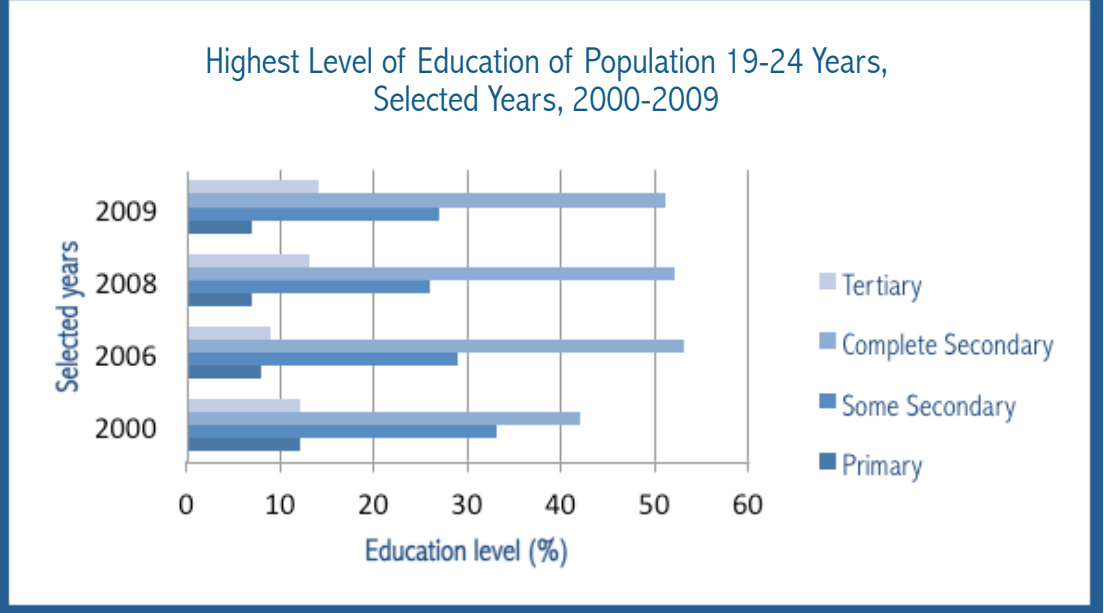
Note for Graph A1: Rates correspond to ISCED 2-3 on UNESCO's International Standard Classification of Education (ISCED 1997). Rates reported in international sources are lower than those from household surveys, in part because they include 17-18 year olds (who are considered "post-secondary" students in Jamaica). Graph includes as many Caribbean countries as had data given their similar history, economies, and education systems. The United States, UK and Canada are included as Jamaica's main trading partners, while Finland is included as a benchmark of a top-performing education system. Some Latin American countries are also included for reference. This selection criteria applies to all international comparisons in the document, unless otherwise noted and subject to data availability.

Source: UNESCO- Global Education Digest 2011. **Trinidad and Tobago and Saint Lucia are from GED 2010



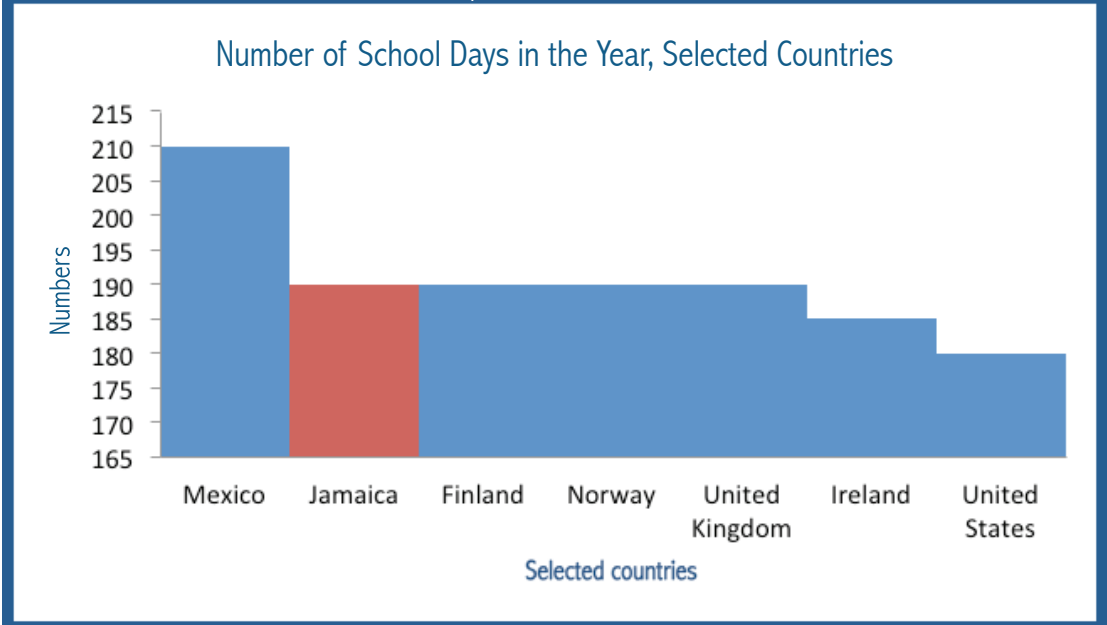
Source: Jamaica Survey of Living Conditions Report

GRAPH A3: HIGHEST LEVEL OF EDUCATION OF POPULATION 19-24 YEARS, SELECTED YEARS, 2000-2009



Source: Jamaica Survey of Living Conditions Report

GRAPH A4: NUMBER OF SCHOOL DAYS IN THE YEAR, SELECTED COUNTRIES



Source: Global Education Digest, 2011, Table 24 (Data not available for many of the comparative countries used previously)

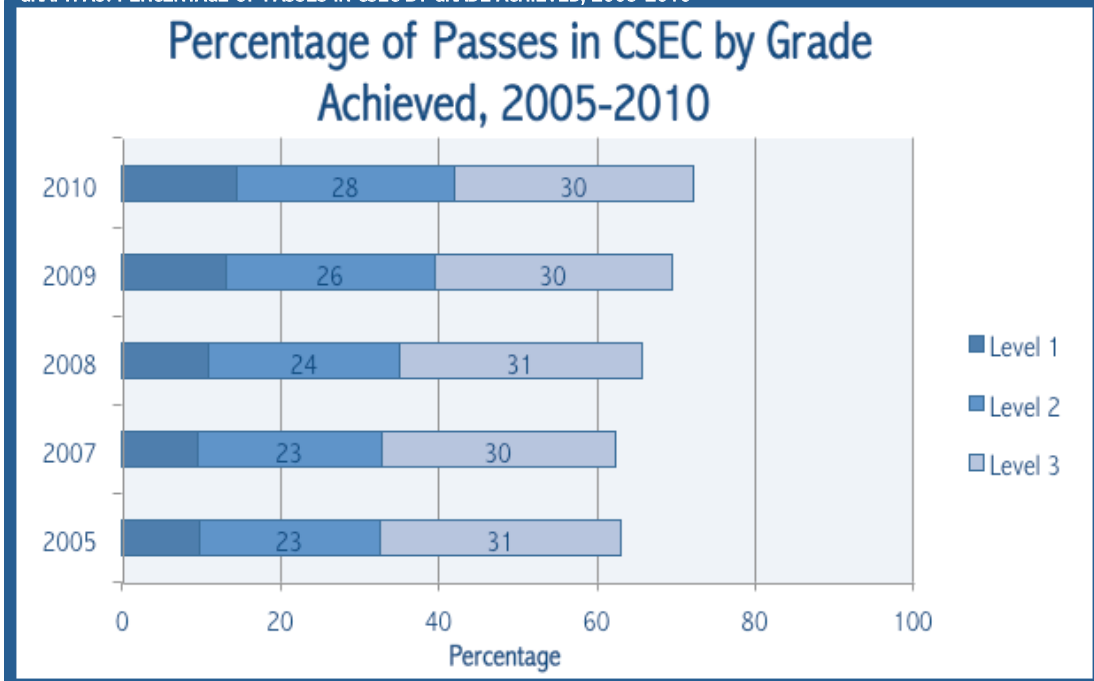
TABLE A:1 TWO MAIN REASONS GIVEN BY PARENTS FOR NOT SENDING CHILDREN TO SCHOOL, SELECTED YEARS, 2000 - 2009

Year	Main Reasons	% of Parents Citing This
2000	School Closed*	64
	Money problems	20
2002	Money Problems	48
	Rain	30
2004	Money Problems	62
	Illness	21
2006	Running Errands	40
	Illness	30
2008	Money Problems	49
	Illness	25
2009	Money Problems	45
	Illness	35

Note: Finding with asterisk is due to the timing of the survey which was conducted during one of the holiday breaks from schools. This has been corrected in subsequent surveys.

Source: Jamaica Survey of Living Conditions report 2000-2009 (Selected Years)

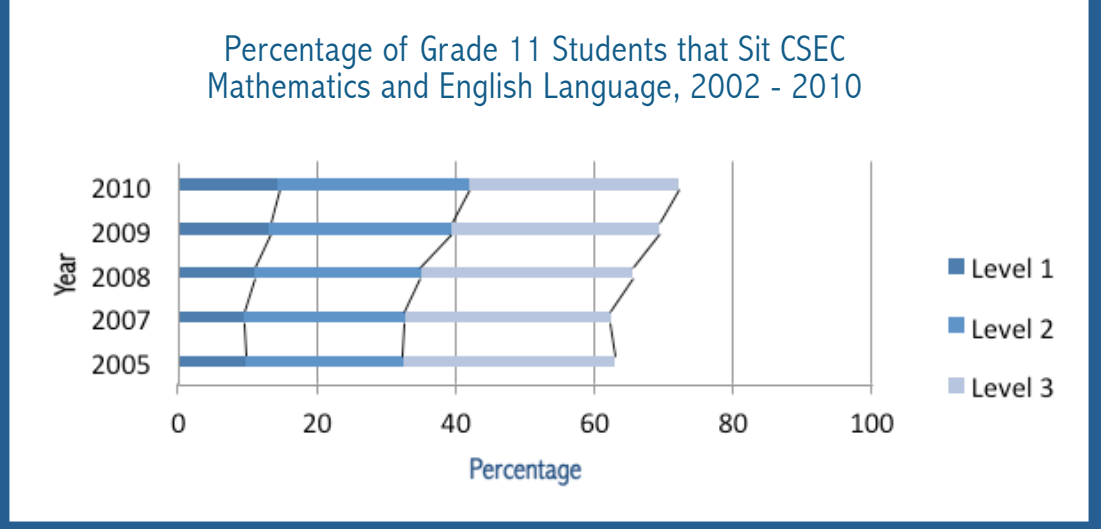
GRAPH A5: PERCENTAGE OF PASSES IN CSEC BY GRADE ACHIEVED, 2005-2010



Note: A passing Grade is a score of 1, 2 or 3, with 1 being the best. Data in this format are not available for 2006.

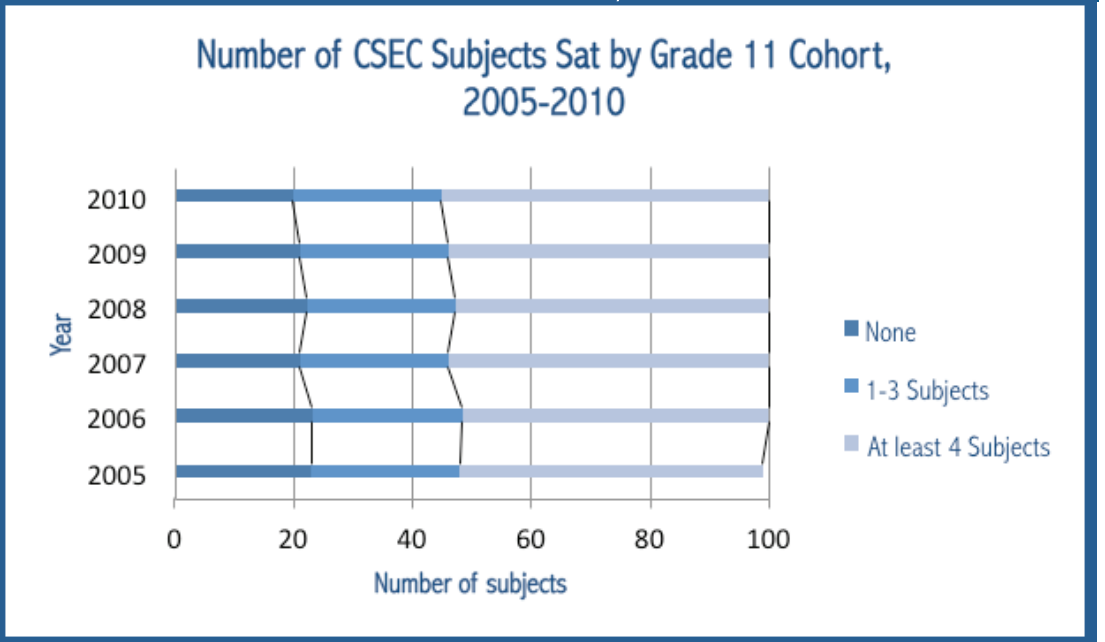
Source: Ministry of Education. An Analysis of the Performance of Jamaica Candidates in CSEC, 2005-2010

GRAPH A6: PERCENTAGE OF GRADE 11 STUDENTS THAT SIT CSEC MATHEMATICS AND ENGLISH LANGUAGE, 2002-2010



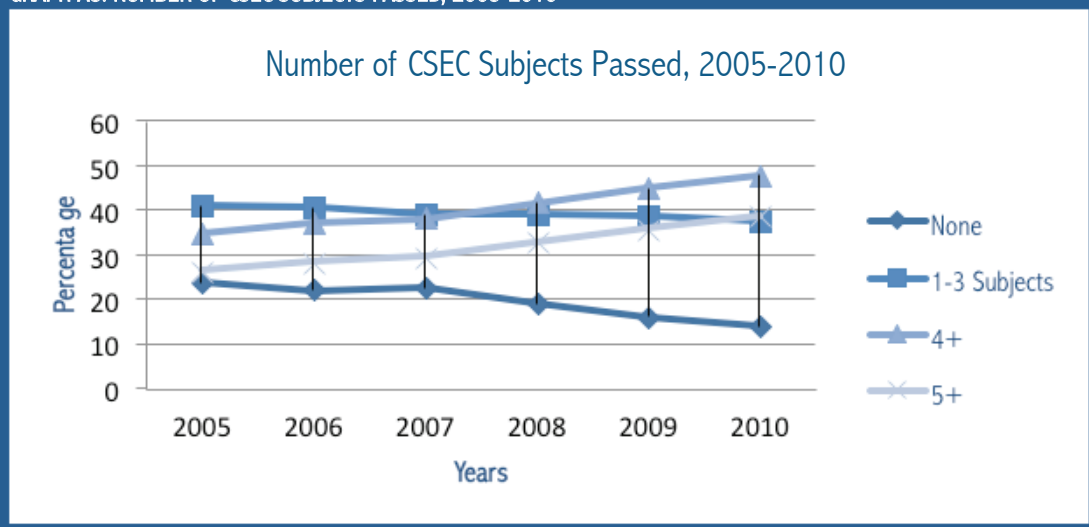
Note: These years refer to the end of the academic school year. So, 2010 is for school year 2009/2010, etc.
Source: Ministry of Education "An Analysis of Jamaican Candidates Performance in CSEC (2005-2010)" & ESSJ 2002-2004
Source: Jamaica Survey of Living Conditions Report

GRAPH A7: NUMBER OF CSEC SUBJECTS SAT BY GRADE 11 COHORT, 2005-2010



Source: Ministry of Education. An Analysis of the Performance of Jamaica Candidates in CSEC, 2005-2010

GRAPH A8: NUMBER OF CSEC SUBJECTS PASSED, 2005-2010



Source: Ministry of Education- Policy Development Unit 2011

TABLE A2: AVERAGE SCORES IN GSAT EXAMINATIONS, BY SUBJECT, 2005-2011

GSAT Exam	2005	2006	2007	2008	2009	2010	2011
Mathematics	58	53	46	55	53	57	62
Lang. Arts	54	54	48	53	57	58	58
Social Studies	57	51	51	56	53	58	58
Science	52	55	52	52	53	60	63
Com. Task	40	50	67	58	58	67	70

Note: Scores measure percentage of correct answers on a scale of 0-100% and there is no absolute passing score.

Source: Ministry of Education- Planning and Policy Division-2011

Note: Some institutions will accept students without mathematics if they take an equivalent mathematics course, but the general standard is that students should have passed at least four subjects including math and English to qualify for tertiary.

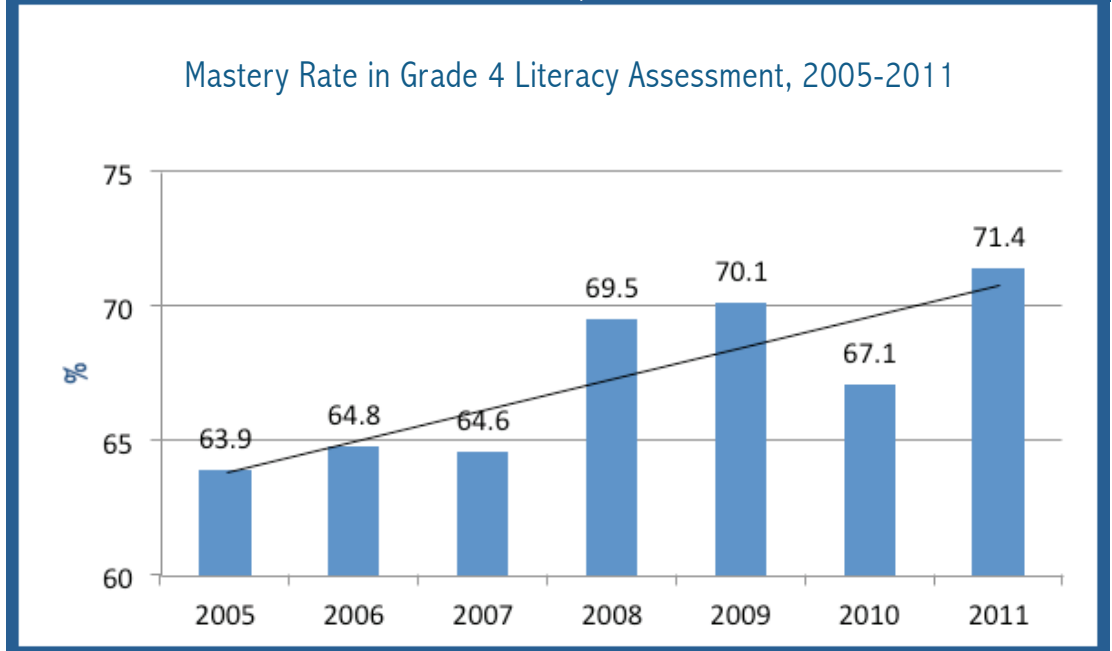
Source: Ministry of Education- Statistical Unit-2010

TABLE A3: GRADE 4 LITERACY AND NUMERACY SCORES, 2005-2010

Year	Literacy	Numeracy
2005	63.5	N/A
2006	64.8	N/A
2007	64.6	N/A
2008	69	N/A
2009	70.1	45.4
2010	67.1	41.6
2011	71.4	49

Note: Numeracy Assessment was nationally administered in 2009 after the pilot in 2008
Source: PJOJ-ESSJ 2005-2010

GRAPH A9: MASTERY RATE IN GRADE 4 LITERACY ASSESSMENT, 2005-2011



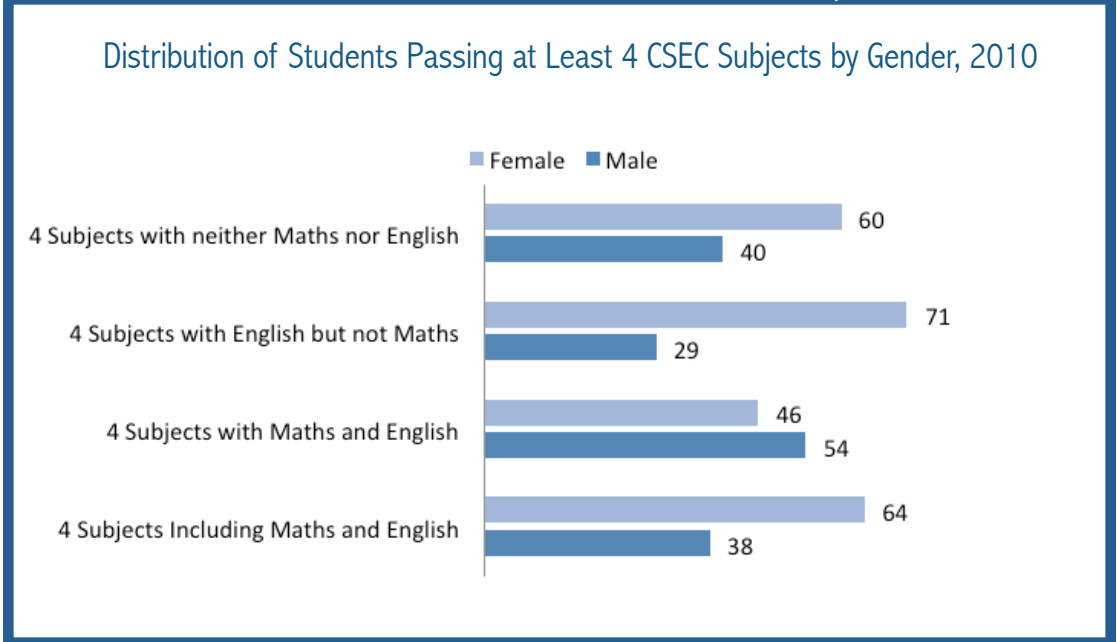
Source: PJOJ-ESSJ, 2005-2010 & Ministry of Education (Stats Div.) for 2011

TABLE A4: PERFORMANCE IN GSAT BY GENDER, 2009/2010

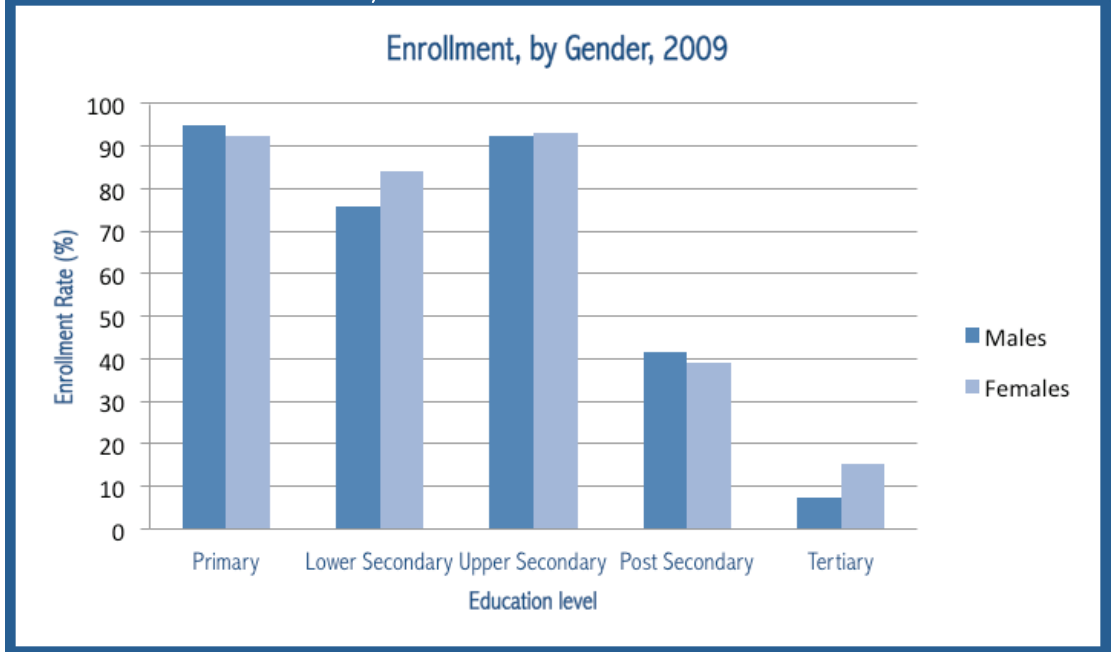
	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010
MATHEMATICS	44	58	53	46	55	53	57
FEMALE	47	62	57	49	59	57	61
MALE	41	53	49	42	50	49	53
SCIENCE	46	52	55	52	52	53	60
FEMALE	49	55	59	55	55	56	63
MALE	44	48	51	49	49	50	56
SOCIAL STUDIES	50	57	51	51	56	53	58
FEMALE	53	62	54	54	60	56	62
MALE	47	52	47	48	51	50	54
LANGUAGE ARTS	48	54	54	48	53	57	58
FEMALE	52	59	59	53	58	62	63
MALE	44	48	49	44	48	51	53
COMPOSITION	50	42	50	67	58	58	67
FEMALE	58	50	58	75	67	67	75
MALE	50	33	42	58	50	58	58

Source: Ministry of Education – Planning Division, 2010

GRAPH A10: DISTRIBUTION OF STUDENTS PASSING AT LEAST 4 CSEC SUBJECTS BY GENDER, 2010

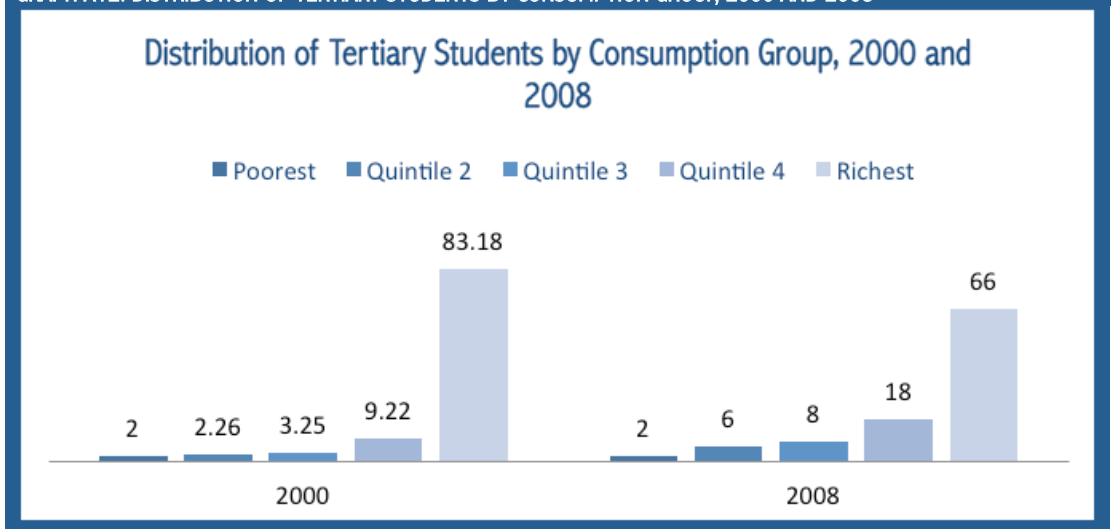


GRAPH A11: ENROLLMENT BY GENDER, 2009



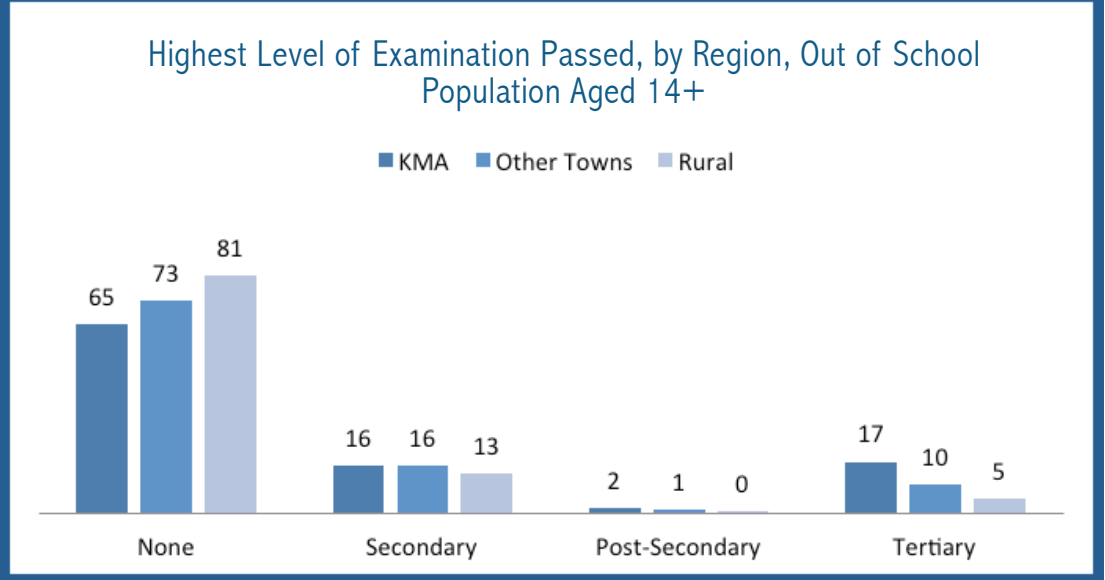
Source: Jamaica Survey of Living Conditions, 2009

GRAPH A12: DISTRIBUTION OF TERTIARY STUDENTS BY CONSUMPTION GROUP, 2000 AND 2008



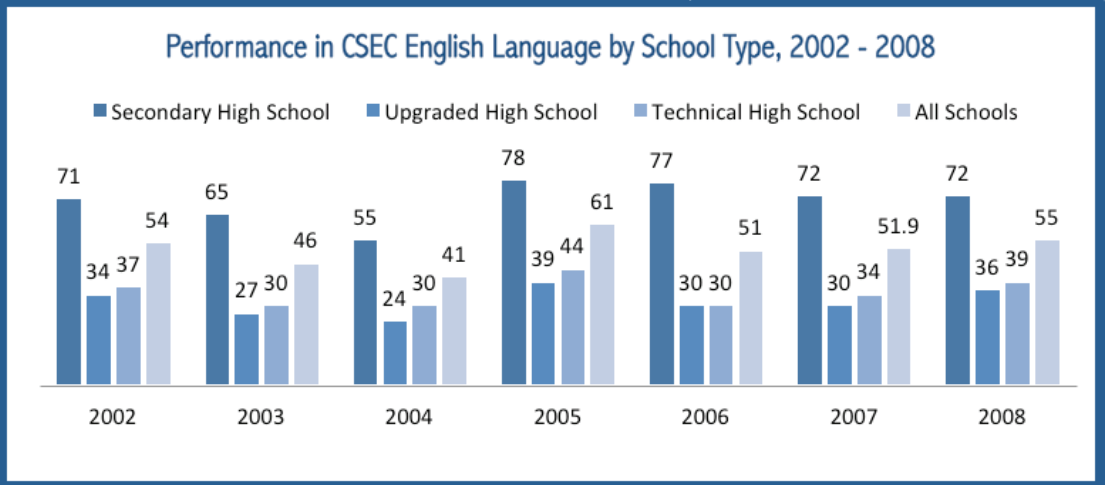
Source: Calculated from PIOJ- JSLC 1998, Table E3 and PIOJ-JSLC 2008, Table E2

GRAPH A13: HIGHEST LEVEL OF EXAMINATION PASSED, BY REGION, OUT-OF-SCHOOL POPULATION, AGED 14+, 2008



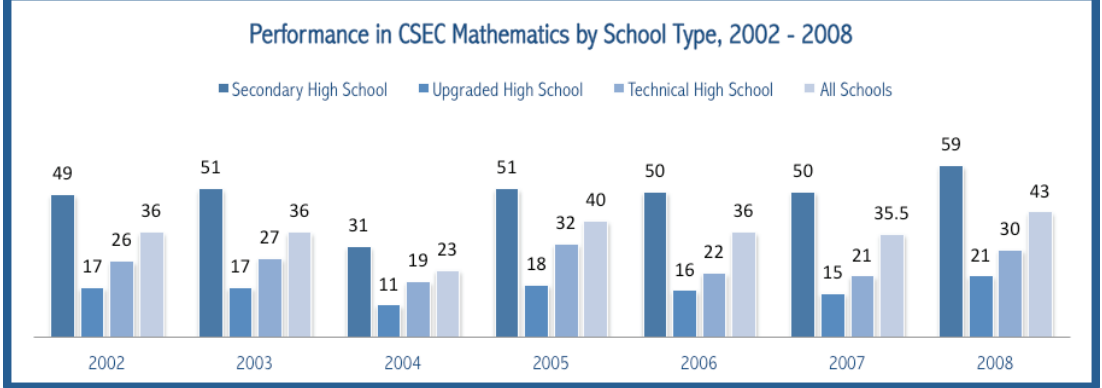
Source: Jamaica Survey of Living Conditions, 2008

GRAPH A14: PERFORMANCE IN CSEC ENGLISH LANGUAGE BY SCHOOL TYPE, 2002 - 2008



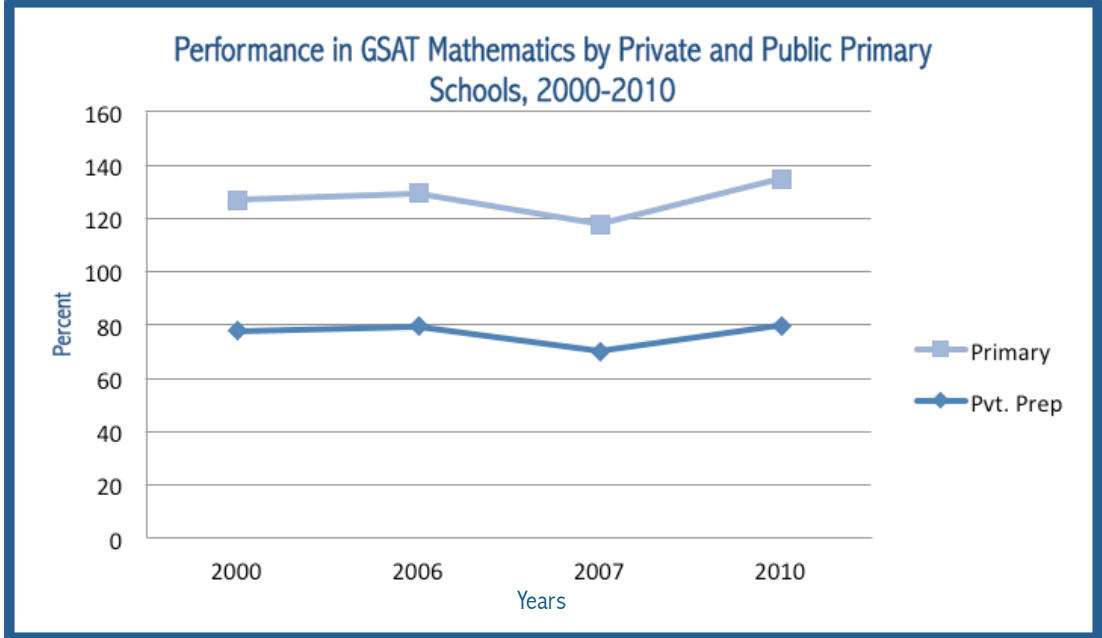
Source: PIOJ - Economic and Social Survey (2002-2008)- Table 22.7

GRAPH A15: PERFORMANCE IN CSEC MATHEMATICS BY SCHOOL TYPE, 2002 - 2008



Source: PIOJ- ESSJ 2002- 2008 Table 22.7

GRAPH A16: PERFORMANCE IN GSAT MATHEMATICS BY PRIVATE AND PUBLIC PRIMARY SCHOOLS, 2000-2010



Source: ESSJ 2000 (22.11); 2006, 2007 & 2009 (Figure22c)

BOX A1. STRATEGIES FOR IMPROVING BOYS PERFORMANCE IN SCHOOL- MUTUAL BUILDING SOCIETIES FOUNDATION- CENTRES FOR EXCELLENCE PROJECT

Increasingly concerned about the gap between boys and girls performance in school, Jamaicans are experimenting with new ways to reach boys. Smaller scale initiatives, such as the ones below, may offer insights for how to improve boys participation and learning on a more systemic level.

Gender-focused teaching in primary school

Some primary schools have adopted gender-centric approaches to teaching in order narrow the gap between boys and girls scores on the Grade Six Achievement Test (GSAT). These approaches include separating boys and girls into different classes for particular grades or subjects (creating a more comfortable environment for boys to participate in class), holding father and son days at school, forming fathers' PTA groups, as well as encouraging boys to participate in competitions such as the one sponsored by the Jamaica Cultural Development Commission. Initial results at some schools show the gap between boys and girls is slowly narrowing.

Workshops on how to better teach boys

The Mutual Building Societies Foundation organized a workshop for schools participating in its Centres of Excellence project, geared towards transforming education delivery in six non-traditional rural high schools across the island. According to keynote speaker and professor of educational leadership at Temple University in Philadelphia, James Earl Davis, many boys are underperforming because they do not respond to traditional methods of teaching. Instead, boys need to have their own interests integrated into lessons, for example, through more opportunities for tactile learning, allowing them to take risks, and/or engaging in competitions. Educators attending the workshop responded positively to the strategies noting that they would adjust their lesson plans and assignments to incorporate boys' specific interests and develop strategies to suit the way boys learn.

Sources:<http://jamaica-gleaner.com/gleaner/20110228/lead/lead3.html>;
<http://www.centresofexcellencejamaica.com/teach-one-boy-at-a-time>

BOX A2: TRACKING PROGRESS TOWARD LEARNING GOALS: THE MUTUAL BUILDING SOCIETIES FOUNDATION CENTRES OF EXCELLENCE

The Centers of Excellence initiative are an effort to improve student achievement, teacher quality, organizational effectiveness and to strengthen school-home-community involvement in rural non-traditional high schools. The school leaders and teachers in schools selected for this program receive training in resource management, learning approaches, and instructional technology. Through diagnostic testing, students can receive remedial education and may qualify for mentorship programs and income generating activities, among others. School facilities are injected with resources to improve the overall environment including computer and science labs, and home-school-community relations are developed.

Leaders in Centre of Excellence schools know the value of setting clear goals for student learning and measuring progress toward them. “Teachers regularly keep track of students’ learning and share their progress with them. By using a School Management System to track patterns in students’ performance, teachers can tailor their instruction to meet students’ needs. Students also monitor their own progress using a Student Personal Development Plan. Assessments throughout the year help hold students, teachers and principals accountable for learning results, identifying problems while there is still time to fix them. Monitoring boards allow students to see on a term by term basis how well they perform in comparison to the rest of the class; how well a class is performing in comparison to other classes and how the school is performing in comparison to others in the region or nationally.”

Source: Adapted from Article published at: <http://www.centresofexcellencejamaica.com/about/core-values>

BOX A3: KEY FUNCTIONS OF THE CURRICULUM DEVELOPMENT UNIT

The Curriculum Development Unit of the Ministry of Education is tasked with:

- Research, design, develop and review curricula and support materials for grades one to eleven (grades 1 - 11), in the education system, as well as monitor the curriculum implementation in the system.
- Audit the training needs of teachers of grades 1 - 13 in the system, then develop and execute relevant training programmes to assist these teachers, in collaboration with the Professional Development Unit (PDU), project personnel, MOE consultants, supervisory education officers, and other relevant staff.
- Evaluate and monitor the delivery of curricula at grades 1 - 13, and develop and execute appropriate intervention strategies to enable effective delivery of subject programmes, in collaboration with supervisory education officers, project personnel and other relevant staff.

Source: Ministry of Education, Core Curriculum Unit.

TABLE A5- OVERVIEW OF ASSESSMENTS INCLUDED IN JAMAICA'S NATIONAL ASSESSMENT PROGRAM

ASSESSMENT: Date started Purpose Grade Level	DESCRIPTION	SUBJECTS & SUB-TESTS	FREQUENCY	CHALLENGE
Grade 1 Individual Learning Profile Since 1999 Assess readiness of Grade 1 students to access primary level curriculum. 6yrs old	Classroom based assessment Administered and graded at school level	-Visual motor coordination -Visual perception -Auditory perception -Number and letter knowledge	Annually Just before entering primary school	The aggregate result of the assessment is not always available from the Student Assessment Unit as schools don't submit same to the Ministry. No formal structure for using the results to guide teaching and learning.
Grade 3 Diagnostic Assessment Since 1999 To determine students' learning mid-primary level Grade 3 8 yrs old	Administered and graded at school level	Language Arts -Phonics -Structure & mechanism -Vocabulary -Study Skills -Reading and listening Mathematics - Numbers -Estimation & measurement -Geometry -Algebra -Statistics	Annually 1/year	Data not always available as schools don't always compile and submit to Ministry. No mechanism for using data to inform school improvement strategies.
Grade 4 Literacy and Numeracy Test Since 1999 and 2009, respectively Assessing students' literacy and numeracy status for that grade level in preparation for the GSAT 10 yrs old	Administered by Ministry and all grading are done by the Ministry of Education. Student has up to 4 attempts. Only successful students can progress to GSAT	Literacy: -Word Recognition -Reading and Comprehension - Writing Numeracy Consists of 2 sections: Section 1- multiple choice Section 2- Three open ended questions	Annually 2/year: June and December Child takes until successful up to 4 attempts over 2 year period.	National standardized test since 2009. Data are always available but no mechanism for using the results to inform school improvement strategies.
Grade Six Achievement Test Since 1999 To place students in secondary schools 11 yrs old	National standardized test administered by the Ministry of Education. Key criteria for high school placement.	- Language Arts - Mathematics - Social Studies - Science - Communication	1/year- In March almost at the end of the primary cycle. Child gets only one chance to take the test.	Aggregate data are always published. Disaggregated data by region, gender, public/private and schools available. Emphases are disproportionately focused on placement and not on using data to inform school improvement. No clear mechanism or mandate exist for the use of the data.
Grade Nine Achievement Test Since the early 1970s To place children who did not sit Primary level exit test (now GSAT) in Secondary schools 14 yrs old	Grade 9 at primary and Junior High and All Age	Mathematics English Language	1/year at Grade 9	Data are compiled by Ministry but not even reported in national ESSJ Report Exam has low social currency. No mechanism for using test result in planning school strategies

TABLE A6: COMPONENTS OF CSEC PROFILE FOR SELECTED SUBJECTS

Subjects	Dimensions
Mathematics	1- Knowledge, b) Comprehension, c) Reasoning
English Language (A)	1- Understanding, b) Expression
Information Technology	• Theory, b) Productivity Tools, c) Problem Solving and Programming
Social Studies	1. Knowledge, b) Interpretation, c) Application

Source: www.cxc.org

BOX A4- PRIVATE SECTOR HELPS STUDENTS COVER CSEC FEES IN BUSINESS TOPICS

NCB pays CSEC fees in full

Published: Friday | November 4, 2011 2 Comments

Students island-wide sitting their Caribbean Secondary Education Certificate (CSEC) principles of accounts and principles of business subjects in June 2012 will have their examination fees paid for in full by the National Commercial Bank (NCB) Foundation.

This is a continuation of the NCB Foundation's Caribbean Examinations Council (CXC)/ CSEC Fee Sponsorship programme established in 2003 to support the Ministry of Education's National Development Plan by assisting students at the secondary level to meet the minimum qualification requirement for entry to a tertiary institution.

Each year under the programme, more than 4,000 applications are paid for by the NCB Foundation for students sitting CXC/CSEC principles of accounts and principles of business.

Since the programme began, NCB Foundation has donated more than \$67 million which has funded more than 66,000 student entries.

Last year, the foundation paid out \$8.8 million to subsidise exam fees for 4,516 student entries. Over the years, both schools and students have continued to make use of the programme which continues to provide financial support to high school students across Jamaica.

Applications are submitted by the schools and, to qualify for sponsorship, schools are expected to have a 90 per cent sit rate in the respective subject areas. Students' averages in both subject areas must be 70 per cent and higher.

Source: <http://jamaica-gleaner.com/gleaner/20111104/lead/lead92.html>

BOX A5: KEY PIECES OF LEGISLATION GOVERNING THE JAMAICA SYSTEM OF EDUCATION

- 1- The Education Act (1965) is the predecessor of the Education Act (1980). It contains the comprehensive regulatory framework for national education procedures, schools operations, teaching and management.
- 2- The Education Regulations, 1980 (commonly called the Education Code), an extension of the Act, prescribe the details of administration. Regulations are regularly reviewed (since 1989).
- 3- The National Council on Education Act, 1993, establishing the National Council on Education (NCE), has among its functions, the nomination, orientation and training of Board Members; advising the Minister on policy matters; and managing of the Education Trust Fund.
- 4- The Financial Management Regulations, 1996 prescribe the rules for the management of Government funds and are an extension of the Financial Administration and Audit Act (FAAA) and Instructions 1977.
- 5- The University Council of Jamaica Act 1987 gives the UCI the power to confer degrees, diplomas, certification and other academic awards to and on persons who have pursued approved courses of study.
- 6- The Human Employment and Resource Training (HEART) Act, 1982, subsequently amended in 1994, established the Human Employment and Resource Training Trust (HEART) and the National Council on Technical and Vocational Training (NCTVET).
- 7- The Early Childhood Commission Act, 2003 and its Regulations (2005) established the legal framework and standards which govern the operations of Early Childhood Institutions so as to ensure equity and the delivery of quality early childhood programmes to all children.

Source: Task Force on Education Report - 2004, pg. 60 and the World Data on Education, Volume ii, 2010

TABLE A7: EDUCATION REGIONS WITH PARISHES

Regions	Parishes
Region 1	Kingston, St. Andrew, and Western St. Thomas
Region 2	Eastern St. Thomas, Portland, and St. Mary
Region 3	St. Ann and Trelawny
Region 4	St. James, Hanover, Westmoreland
Region 5	St. Elizabeth, Manchester
Region 6	Clarendon, St. Catherine

Source: Ministry of Education website

BOX A6: NATIONAL EDUCATION STRATEGIC PLAN (2011-2020): LEGISLATIVE AND POLICY AGENDA

In support of the National Education Strategic Plan, the Ministry of Education has recognized the need for the development of key pieces of legislation and policy. This process had begun; and in some instance, policies are in an advance stage of readiness. Among other things these include:

- National Parenting Support Commission Act
- The Jamaica Teaching Council Act
- Centres of Excellence Scheme of Management
- School Improvement Act
- Apprenticeship Act (Repeal); HEART Trust Act (Amendment)
- National Examination and Assessment Act
- Jamaica Tertiary Education Commission Act and Council of Community Colleges Act (Amended)
- School Infrastructure and Donations Policies
- Citizenship Act
- Gender and Culture in Education

Several policies currently in development that support the NESP are described below.

Competency-Based Transition Policy (2009). Under the Policy, only those students certified as literate at the Grade 4 level will be eligible to sit the Grade Six Achievement Test (GSAT). Competency-based transition will focus on 'readiness', ensuring that all students who leave primary are 'ready' to access the secondary curriculum.

Security and Safety Policy Guidelines (2008). The Guidelines provide education managers with minimum standards and guidelines for security and safety matters

Compulsory Education Policy (CEP). The CEP will require young people to be enrolled in and regularly attend structured education and training programmes, from ages 3 to 18. The CEP will address issues such as: i) mandatory attendance; ii) regulation of programmes; iii) raising of students' performance levels to international standards, iv) involvement and responsibilities of parents in their children's learning, and v) preparation of students for the world of work. Elements of the CEP are also covered under the Early Childhood policy.

Early Childhood Education (ECE) Policy. The ECE policy is a deliberate strategy to establish the foundation required for future levels of education. The ECE Policy will address i) free access and space provision; ii) teacher qualifications (numbers); iii) standardised curriculum; iv) provision of appropriate resources; v) regulatory framework, and vi) registration and compliance of all basic schools.

National Curriculum Policy. The Policy will create clear and specific guidelines for developing curricula of the highest quality, and will specify the necessary provisions for their efficient implementation. This policy is already drafted and is in the approval phases of development process.

National ICT in Education Policy. The policy will provide set a framework to provide all students with access to current technologies while equipping all teachers with ICT skills to develop and deliver curriculum. This policy complements the National Curriculum Policy; however, it is being developed separately.

Safe Schools Policy. In the early stages of development, this policy expands on the Security and Safety Guidelines (2008), focusing on creating quality learning.

Special Education Policy. This policy will ensure adequate and appropriate provisions for access and equity in the planning and delivery of special education services.

National Lifelong Learning Policy. The policy is designed to foster a climate of continuous knowledge and skills acquisition throughout a person's lifetime, leading to enhanced personal and national productivity as well as active citizenship, strong families, a healthy population and personal fulfilment.

National Health and Family Life Education (HFLE) Policy. This policy will establish a framework which assures the systematic development and implementation of HFLE in the formal and non-formal sectors

Source: National Education Strategic Plan (2011-2020), Pg. 31

TABLE A8: DISTRIBUTION OF FUNCTIONS IN THE INSTITUTIONAL FRAMEWORK OF EDUCATION IN JAMAICA

Function /Services	Schools	MoE	Other Institutions
1- Accreditation of Programmes ³³			University Council of Jamaica (UCJ) National Council of Technical Vocational Education and Training (NCTVET) Joint Board of Teacher Education (JBTE)
2- Student Assessment	√	√	National Education Inspectorate
3- Co-Curricular Activities	√		
4- Curriculum Development		√	
5- Material and Equipment		√	National Education Inspectorate
6- Early Childhood Oversight		√	Early Childhood Commission
7- Guidance and Counselling	√	√	
8- Health Services	√	√	Ministry of Health
9- Human Resources Management	√	√	
10- Professional Representation			Jamaica Teachers' Association
11- Quality Assurance for Teachers' Colleges			Joint Board of Teacher Education
12- Leadership & Governance	√	√	
13- Library Services	√		Jamaica Library Services
14- Management of Teaching	√	√	Jamaica Teaching Council
15- Nomination of Boards			National Education Council
16- Nutrition			Nutrition Products
17- Physical Plant & Environment	√	√	National Education Inspectorate
18- Policy Advice to the Minister			National Council on Education
19- Policy Development		√	
20- Professional Development		√	Tertiary Institutions
21- Analysis and Publication of National Test Results		√	National Council on Education
22- Quality Assurance		√	University Council of Jamaica
23- Safety & Security	√		
24- School Audits		√	
25- School Monitoring		√	National Education Inspectorate
26- Standards Development		√	National Education Inspectorate Jamaica Teaching Council
27- Appointment of Principals;			Teachers' Services Commission
28- Teaching	√		
29- Tertiary Oversight		√	
30- Transportation	√		

TABLE A9: LEVELS OF DECISION - MAKING AT THE SCHOOL LEVEL AND RESPONSIBLE AGENTS

Duties	Level of Decisions		Comments
	Ministry of Education (MOE)	School Board	
1- Employment and Separation of Principal, Vice-Principal and Teacher with Special Responsibility:	√	√	The procedures for the engagement of services as provided in Schedule B of the Act is followed and appointment made by the School Board. In the case of the Vice Principal and Teacher with Special Responsibility, a similar process is followed which gives special consideration to the provisions for those appointments (Schedule B.4). Where separation is deemed necessary, the process as outlined in the Education R is adhered to.
2- Teacher Promotion		√	In accordance with the established classification for teachers in the system and the provisions based on student population, the Board, on the advice of the principal, recommends for appointment/promotion
3- Salaries	√		Salary scales for teachers are determined within the public sector system for professionals. This process is finalized in consultation with the Jamaica Teachers' Association
4- Budgets and Use of Funds	√	√	School Income is mainly provided through the Ministry of Education and supplemented by the Ministry of Labour and Social Security, and revenue earned by and contributed to the school. The use of funds is based on an approved budget. It should, however, be noted that salaries are either paid directly by the MOE or partly by the MOE and school
5- Maintenance	√	√	Major maintenance is done by the MOE through its capital budget. A small grant is occasionally provided to schools for minor repairs. Most traditional schools raise their own funds to do this
6- Choice of textbooks, etc	√		The MOE approves main texts and schools are allowed to add supplementary texts and other educational supplies
7- Purchase of textbooks, etc	√	√	The MOE, through its textbook programme, purchases the requisite textbooks. Schools are expected through their textbook administrator to submit the required quantity for the subject areas.
8- Organization of the classroom and hours	√	√	The MOE defines that the school year is divided in three terms, with 190 contact days for the years and 45 minutes per session The MOE also defines the teacher/student ratio allowed in each establishment The Principals determines the deployment of teachers
9- Curriculum	√	√	The Ministry of Education, through the Core Curriculum Unit, develops and implements the national curriculum. Schools are expected to adapt the curriculum guides to their particular school environment.

Source: Government of Jamaica (1980). The Education Act. The Education Regulation (1980): Arrangement of Regulations. Jamaica Printing Services. Kingston: Jamaica.

UNESCO-IBE (2010). World Data on Education (Jamaica). 7th edition, 2010/11. Retrieved April, 2010 from <http://www.ibe.unesco.org>

BOX A7: IMPROVING LEADERSHIP AT JAMAICAN SCHOOLS

There is growing acceptance that quality and effective school leadership leads to improvement in students' learning and achievement. According to the recent inspection reports from the National Education Inspectorate, inadequate school leadership has contributed to underperformance in several schools across the island. As a consequence, the Ministry will be focusing greater attention on building the capacity of prospective and existing principals. This will be achieved through the establishment of National Educational College for Educational Leadership and current training of principals by the Jamaica Teaching Council.

Source: <http://jamaica-gleaner.com/gleaner/20110828/lead/lead2.html>

Six rural high-school principals selected for training overseas

In 2011, six principals from rural high schools participated in a two-week "Champion Leaders" study tour designed to strengthen their leadership and management skills. In addition to training seminars, participants in the program, hosted by the University of Reading in the United Kingdom and the University of the West Indies, also observed senior leadership teams at British schools over a three-day period and completed research projects linked to leadership and management upon their return to Jamaica.

The six principals in the Champion Leadership Development programme were all from institutions participating in the Centres of Excellence programme established by the Mutual Building Societies Foundation of Jamaica (MBSF) (see Box A.ST1 in the chapter on standards). The program was designed to develop strong school leaders able to improve teaching and learning in their schools in keeping with the Vision 2030 Jamaica National Development plan.

Source: <http://jamaica-gleaner.com/gleaner/20110606/lead/lead81.html>

Mico readies to train school principals

MICO University College has also developed a school leadership training program designed to help principals develop critical management skills, such as financial management; use of information, communication and technology; speech and proposal writing; and personnel management, including succession planning. The courses are structured to allow current principals to earn their qualifications over time and to reach new principals before they are appointed. Ultimately, the Education Transformation Unit at the Ministry of Education would like to work with programs such as Mico's to develop a system where all aspiring principals must be accredited, not only in education related skills, but in the more general skills of successful leadership. Several multilateral lending agencies had shown interest in the plan.

Source: Jamaica Observer, May 2008, available at

http://www.jamaicaobserver.com/news/135559_Mico-readies-to-train-school-principals#ixzz1qHqH9WTQ.

Accessed March 2012

TABLE A10 TEACHERS EMPLOYED IN PUBLIC SECTOR SCHOOLS BY TYPE OF SCHOOLS AND QUALIFICATION, 2009

School Type	Trained Graduates	Trained teacher/ Instructor	Pre-trained Graduates	Pre-trained tertiary level Graduates	Untrained Teachers	Total
Infant School/Dept.	197	428	9	6	50	690
Grades 1-6	3232	6531	169	126	676	10734
Grades 7-9	5116	5828	1150	629	866	13589
Total	8545	12787	1328	761	1592	25013

Notes: Trained Graduates- University trained teachers with teaching diploma; trained teacher/instructor- College trained teacher/instructor; University graduates with no teaching diploma; pre-trained tertiary level graduates- tertiary level (not university) with no teaching diploma; Untrained- Teacher with secondary level certification without teaching diploma.

Source: Economic and Social Survey, 2009- Table 22.5

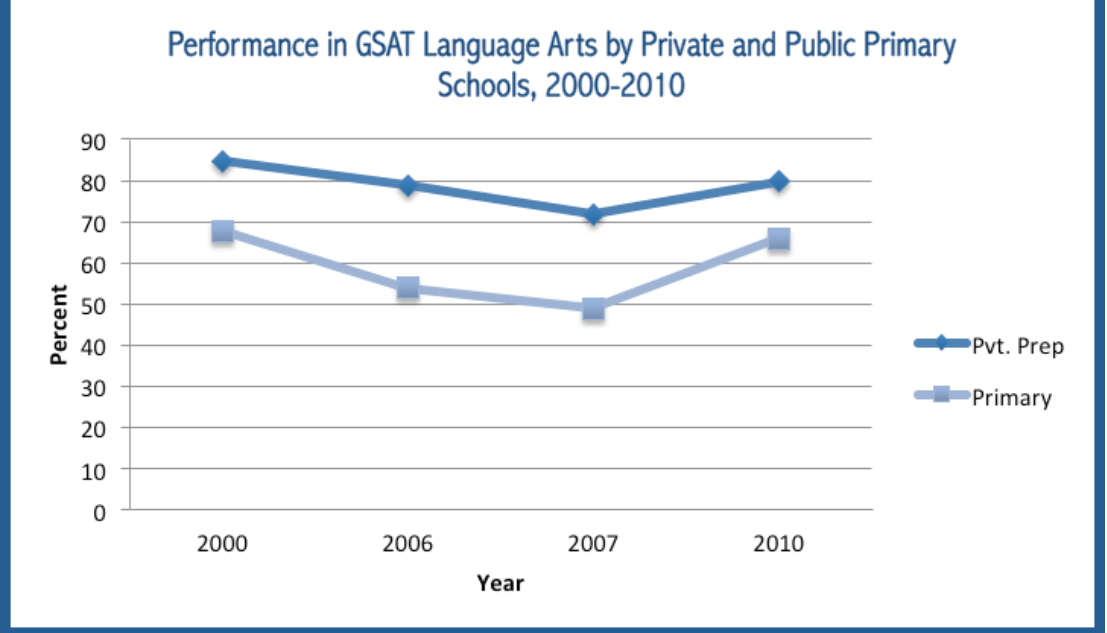
TABLE A11. COMPARISON OF PUPILS TO ONE TEACHER AT THE PRIMARY LEVEL, 2009

COUNTRIES	PUPILS TO ONE TEACHER
St. Vincent & The Grenadines	8
Barbados	17
St. Lucia	11
Jamaica	24
Guyana	15
Finland*	11
Belize	16
United Kingdom*	21
USA	15
Brazil	18
Costa Rica	14
Dominica	14
Mexico	26
Venezuela	15

Note: Data for countries marked with a * is for 2008

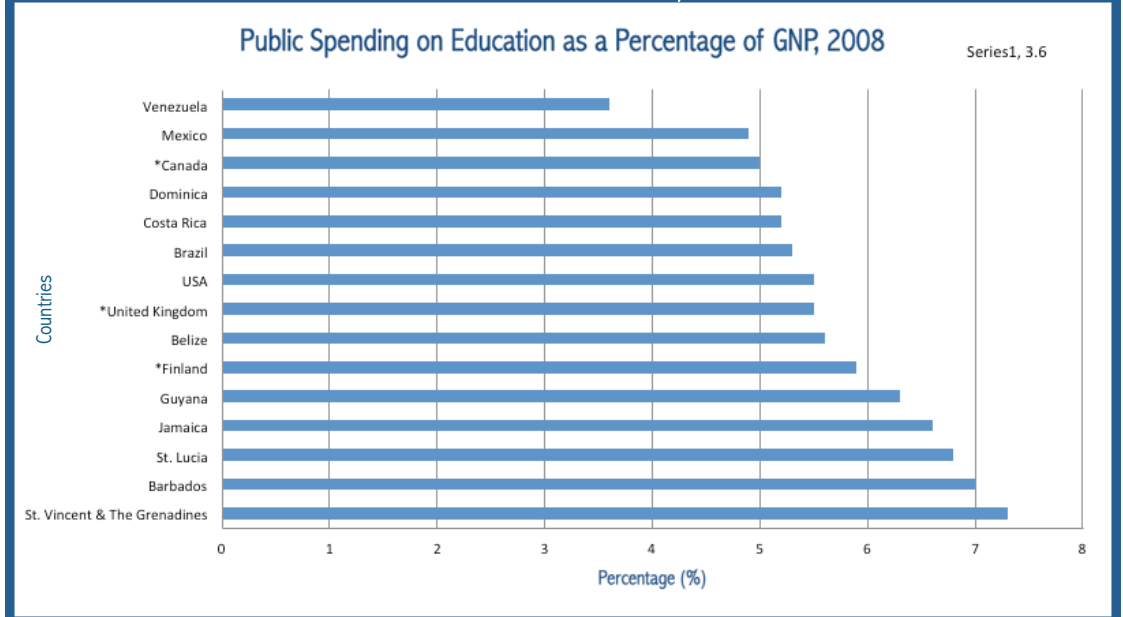
Source: UNESCO Global Education Digest, 2011-Table 1.

GRAPH A17: PERFORMANCE IN GSAT LANGUAGE ARTS BY PRIVATE AND PUBLIC PRIMARY SCHOOLS, 2000-2010



Source: ESSJ 2000 (22.11); 2006, 2007 & 2009 (Figure22c)

GRAPH A18 PUBLIC SPENDING ON EDUCATION AS A PERCENTAGE OF GNP, 2008



Note: All data for most recent year within one year of date listed.
Source: Education For All Global Monitoring Report 2011, Table 9

BIBLIOGRAPHY

- Appleton, Simon, Morgan, W. John and Amanda Simes (2006). "Should teachers stay at home? The impact of international teacher mobility". *Journal of International Development*, Volume 18, Issue #6. P771-786. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/jid.1313/abstract>
- Caribbean Examination Council. Statistical Bulletin, 2005-2009. CSEC Statistical Bulletin
- DiGropello, Emanuela. Monitoring Educational Performance in the Caribbean. World Bank Working paper #6. Washington DC. 2003
- Jamaica Gleaner (2011). Tension Over Teacher Standards - Professional Standards Coming 2012. Retrieved from <http://jamaica-gleaner.com/gleaner/20110828/lead/leadS.html> on September 28, 2011.
- Lewis, Yewande. Literacy in elementary school in Jamaica: the case of the grade four literacy test. University of Iowa, Iowa, 2010.
- Ministry of Education-, Core Curriculum Unit. Key functions of the Curriculum Development Unit. 2011
- An Analysis of the Performance of Jamaican Candidates in CSEC, 2005-2010. Kingston, Jamaica.
- Ministry of Education- CSEC Gender Analysis. Kingston, Jamaica, 2008.
- Ministry of Education (MOE). Jamaica, Planning and Policy Division. Jamaica education Statistics, 2000-2009. Annual statistical review of the education sector. Kingston, Jamaica.
- Ministry of Education. National Assessment Program. Kingston, Jamaica 2009.
- Ministry of Education. Task force on educational reform Jamaica a transformed education system. Chairman Dr. R. Davis. Kingston, Jamaica Report- Sept. 2004
- Ministry of Education. The Alternative Secondary Transitional. Education Programme (ASTEP)- Conceptual Framework. Paper dated March 2012.
- National Education Inspectorate (NEI). School Assessment instruments. Kingston, Jamaica, 2011.
- OECD. Education at a Glance 2010: OECD Indicators, OECD Publishing, 2010.
- OECD. Education at a Glance 2009: OECD Indicators, OECD Publishing, 2009.
- OECD. Education at a Glance 2008: OECD Indicators, OECD Publishing, 2008.
- Planning & Statistical Institutes of Jamaica. Jamaica Survey of Living Conditions Report. Kingston, Jamaica, 2000-2009.
- Planning & Statistical Institutes of Jamaica. Economic and Social Survey Jamaica. Kingston, Jamaica, 2000-2010.
- Planning & Statistical Institutes of Jamaica. Vision 2030 Jamaica national Development Plan- Education Sector Plan. Kingston, Jamaica, June 2009.
- Simpson, Georgia (2008). Research on Strengthening School Boards in Jamaica. Kingston: Private Sector Organisation of Jamaica/ Commonwealth of Learning.
- TARAS, M. To feedback or not to feedback in student self assessment. *Assessment and Evaluation in Higher Education*. v. 28, n. 5, p. 549-565. 2003.
- TARAS, M. Assessment – Summative and Formative– some theoretical reflections. *British Journal of Educational Studies*, v. 53, n. 3, p. 466-478, 2005.
- UNESCO- Education for All-Global Monitoring Report- Overcoming inequality: why governance matters. University of Oxford, United Kingdom, 2009.
- UNESCO- Education for All-Global Monitoring Report- Reaching The Marginalized. University of Oxford, United Kingdom, 2010.
- UNESCO- Education for All-Global Monitoring Report -The hidden crisis: Armed conflict and education. University of Oxford,

Internet References

CXC- <http://cxc.org/examinations/exams/csec/grading-scheme-csec>

Jamaica Gleaner.<http://jamaica-gleaner.com/gleaner/20110228/lead/lead3.html>;Strategies for Improving Boys Performance in School- Mutual Building Societies Foundation- Centres for Excellence Project

Jamaica Gleaner <http://jamaica-gleaner.com/gleaner/20111104/lead/lead92.html>.NCB pays CSEC fees in full. Accessed October, 2012.

Jamaica Gleaner.<http://jamaica-gleaner.com/gleaner/20110606/lead/lead81.html>. Six rural high-school principals selected for training overseas. Last accessed October, 2012

Jamaica Gleaner.<http://jamaica-gleaner.com/gleaner/20100405/news/news2.html>. Teach one boy at a time. Last accessed October, 2012.

The Mutual Building Societies Foundation Centres of Excellence.<http://www.centresofexcellencejamaica.com/about/core-values>. Tracking Progress Toward Learning Goals:

Caribbean Examination Council.www.cxc.org. CSEC Profile

Jamaica Gleaner.<http://jamaica-gleaner.com/gleaner/20110828/lead/lead2.html>. Blame the principals - Poor leadership at the root of some underperforming school. Last accessed October, 2012

Jamaica Observer.http://m.jamaicaobserver.com/news/135559_Mico-readies-to-train-school-principals. MICO readies o train school principals. Last accessed October, 2012.

http://www.uis.unesco.org/Library/Documents/GED_2010_EN.pdf

INSTITUTIONAL DESCRIPTIONS



Programa de Promoción de la Reforma Educativa en América Latina y el Caribe
Partnership for Educational Revitalization in the Americas

PREAL

PREAL was established by the Inter-American Dialogue in Washington, D.C., and the Corporation for Development Research (CINDE) in Santiago, Chile, in 1995 as a multiyear initiative to build a broad and active constituency for education reform in many countries. It has become a leading nongovernmental voice on education in Latin America and a strong advocate for involving leaders from civil society in education reform. Most of PREAL's activities are implemented by a region-wide network of expert public policy and research centers working to promote education reform.

PREAL seeks to improve the quality and equity of education by helping public and private sector organizations throughout the hemisphere promote informed debate on education policy, identify and disseminate best practices, and monitor progress toward improvement. PREAL's activities are made possible through the generous support of the American people through the United States Agency for International Development (USAID) and by the Inter-American Development Bank (IDB), the GE Foundation, the International Association for the Evaluation of Educational Achievement (IEA), the World Bank, and others.



CAPRI

The Caribbean Policy Research Institute (CaPRI) is a Caribbean think tank that promotes evidence-based policymaking in the region. CaPRI aims to bridge the gap between researchers and policymakers; in order to do so, while at the same time introducing new and innovative ideas, we utilize a methodology built on multi-disciplinary theories and approaches, team work and the incorporation of the human and intellectual capital of the Caribbean diaspora. This has been our mission from our conception as the Jamaica Economy Since Independence Project (JEP), and was manifested in our very first report, *Taking Responsibility*, which was the first independent, comprehensive review of Jamaica's post-independence economic performance.



INTER-AMERICAN DIALOGUE

The Inter-American Dialogue is the leading U.S. center for policy analysis, exchange, and communication on issues in Western Hemisphere affairs. The Dialogue brings together public and private leaders from across the Americas to address hemispheric problems and opportunities. Together they seek to build cooperation among Western Hemisphere nations and advance a regional agenda of democratic governance, social equity, and economic growth.

The Dialogue's select membership of 100 distinguished citizens from throughout the Americas includes political, business, academic, media, and other nongovernmental leaders. Fourteen Dialogue members served as presidents of their countries and more than two dozen have served at the cabinet level.

Dialogue activities are directed to generating new policy ideas and practical proposals for action, and getting these ideas and proposals to government and private decision makers. The Dialogue also offers diverse Latin American and Caribbean voices access to U.S. policy debates and discussions. Based in Washington, the Dialogue conducts its work throughout the hemisphere. A majority of our Board of Directors are from Latin American and Caribbean nations, as are more than half of the Dialogue's members and participants in our other leadership networks and task forces.

Since 1982—through successive Republican and Democratic administrations and many changes of leadership elsewhere in the hemisphere—the Dialogue has helped shape the agenda of issues and choices in inter-American relations.



CINDE

The Corporation for Development Research (CINDE) is a private, nonprofit institution based in Santiago, Chile. Founded in 1968, CINDE provides a nonpartisan academic environment for interdisciplinary research on national and international development issues. CINDE is a decentralized organization supported by a broad network of outside contributors. It sponsors research projects, seminars, workshops, and working groups whose findings may be freely published. CINDE provides a forum for professionals and specialists from various countries and cultural and professional backgrounds to meet, exchange information, and debate.

The Partnership for Educational Revitalization in the Americas (PREAL) is a joint project of the Inter-American Dialogue in Washington, D.C., and the Corporation for Development Research (CINDE) in Santiago, Chile. PREAL's activities are made possible by the generous support of the American people through the United States Agency for International Development (USAID), and by the Inter-American Development Bank (IDB), GE Foundation, the International Association for the Evaluation of Educational Achievement (IEA), the World Bank, and others. However, the contents of this report are the sole responsibility of PREAL and its partner organizations and do not necessarily reflect the views of any of its donors.



Partnership for Educational Revitalization in the Americas
Email: infopreal@preal.org
Internet: www.preal.org



Caribbean Policy Research Institute (CaPRI)
Room 212, Block H, Alister McIntyre Building, UWI, Mona, Kingston 7, Jamaica W.I.
UWI Intra-Campus Extension: 3794
Tel: (876) 970-3447, (876) 970-2910
Fax: (876) 970-4544
www.capricaribbean.org



Inter-American Dialogue
1211 Connecticut Ave., NW, Suite 510
Washington, D.C. 20036 USA
Tel: (202) 822-9002
Fax: (202) 822-9553
Email: iad@thedialogue.org
Internet: www.thedialogue.org



Corporación de Investigaciones para el Desarrollo
Santa Magdalena 75, Piso 10,
Oficina 1002 Santiago, Chile
Tel: (56-2) 334-4302
Fax: (56-2) 334-4303
Email: infopreal@preal.org
Internet: www.preal.org

