THE JAMAICA EDUCATION
TRANSFORMATION COMMISSION



THE REFORM OF EDUCATION in Jamaica, 2021

REPORT

Presented to
Prime Minister the Most Honourable Andrew Holness, ON, PC, MP
by Professor the Honourable Orlando Patterson, OM, Chairman

SEPTEMBER 2021



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PREFACE

The nation now faces two crises, one long in the making and partly within our control, the other an act of God and nature that threatens mankind globally. The first is our long struggle to overcome economic stagnation and social instability. As the Most Honourable Prime Minister, Andrew Holness, recently noted in his Emancipation Day speech, this crisis is deeply rooted in our violent and exploitative colonial past. There is now general agreement that the key to overcoming it is a well-functioning system of education. It is the primary engine of social and economic growth. For individuals it generates the increased income that promotes social mobility and wellbeing; it produces the skills, knowledge, and modes of thinking our economy, polity and social institutions need; and it promotes the values that nourish our national culture, civil society and stability. We have known this from the first day of our independence, and successive governments have, with admirable bipartisanship, devoted increasing attention and resources to its development. There is no better indication of how highly we prioritize education than the fact that, today, Jamaica is among the top 20 percent of nations in the share of its national income and annual government budget devoted to this sector.

There have been successes. Jamaica claims to have one of the highest enrolments of pre-primary children in the world. Access to education is now available to all children of primary school age and to the great majority of adolescents. Our top secondary schools compare with the best in the world, and the lead university of our tertiary sector has produced women and men of the highest calibre. And it is thanks to our schools that our small nation now amazes the world with the prowess of our athletes. The institution of CHAMPS, the complete creation of our schools, is our greatest national event, the ingathering of our disparate people as a single nation, the theatre of our civic pride, and the cathartic, if temporary, healing of our many self-inflicted wounds. But there have been failures, partly emphasized by these very successes. The high performance of our top 10 percent of schools, in demonstrating what might be possible, highlights the inadequacies and inequities of the system. The global success of our young athletes exposes in bold relief the large number of our youth who are unattached from employment, school, security and hope. But our greatest failure lies in the very success of placing the great majority of our children in schools where, sadly, the hopes of over a half are dashed by the end of their primary education from which they emerge illiterate and innumerate.

The Prime Minister's terms of reference to our Commission can be summed up in this single charge: recommend the guidelines to correct this chronic failure in the institution to which we have devoted so much of our national resources and energy. In doing so, however, we were immediately faced with another crisis: the global Covid-19 pandemic. As all the commission members have noted, CoVID has magnified the many shortcomings and inequities in the system. However, the timing of the commission made it difficult to thoroughly study its impact: a full accounting is still to be known, and the data to measure its damage yet to be collected. Nonetheless, to the degree possible the Commission has tracked its influence and has recognized that, behind the devastation, there are silver linings such as the rapid learning of online teaching and the provision of internet resources. The Teaching and Curriculum committee, in particular,

has also found that the crisis has led to a greater awareness and appreciation of the role of teachers and of the importance of parents, the local community and out-of-school factors for the efficient running of our schools. These unexpected gains have informed many of our recommendations, which indicate the ways in which what was learned, of necessity, can be maintained and better built when life returns to normalcy.

Among our terms of reference is an assessment of the outcomes of the many admirable recommendations of the 2004 Task Force on Education. Our assessments are given at length in the reports of the various sub-committees of the Commission, especially those of Governance and of Teaching and Curriculum. In broad terms, while the 2004 task force made many valuable recommendations toward improvement of the teaching profession and classroom procedure directly relating to student performance, in the implementation process these were largely neglected or failed to make much of an impact. Instead, the emphasis during implementation was on the building of institutional capacity, which was effectively executed by the Education System Transformation Program. These upstream changes are yet to have any meaningful effects on the academic performance of our students, the majority of whom continue to perform at well below the goals and standards set by the Task Force itself as well as later national plans such as the 2009 Vision 2030 Jamaica National Development Plan of the Planning Institute of Jamaica, and the 2012 National Education Strategic Plan of the MOEYI. The 2004 Task Force also strongly recommended institutional changes in the MOEYI, hardly any of which were implemented, as noted by the report of our Governance committee. Mindful of these implementation deficiencies, the Commission has placed major emphasis on teaching and curriculum reform, the longest section of our report, and on the foundational early childhood development sector, which was not considered in the 2004 Task Force report. This commission also differs from that of 2004 in its consideration of the tertiary sector which it concludes needs major reform.

The members of the Commission were honoured to have been given this extremely important task and all worked diligently to fulfil its mandate. The fact that we were forced by the pandemic to meet online turned out to be an advantage, since it allowed for far more meetings and a more efficient use of time in our deliberations. It also meant that we were able to hear the views of a larger than usual number of stakeholders. I am happy to report that all members of the Jamaican community we called upon were willing to share their views and expertise with us and clearly saw it as the fulfilment of their civic duty. A substantial number of persons went further, agreeing to be co-opted by the sub-committees and collaborating on a regular basis for the entire course of our work. We also benefited from the advice and work of several members of international organizations related to Jamaica, chief among whom were Ms. Cynthia Hobbs, Lead Education Specialist and Dr. Diether Beuermann Mendoza, Lead Economist, both of the Inter-American Development Bank; Ms. Rebecca Tortello, Education Specialist of UNICEF Jamaica; and Mr. Shawn Powers, Economist of the World Bank Group's Latin American and Caribbean Unit. Of special value was UNICEF's survey of the nation's students on behalf of the Commission, which provided us with a detailed account of what students think and feel about their education and the changes they would like to see implemented, changes we are happy to report, comported well with our own findings and recommendations.

The Commission was provided invaluable assistance by its secretariat, ably directed by Ms. Trudy Deans, Senior Advisor to the Prime Minister. Two other senior members of the Prime Minister's office, Mr. Alok Jain, Consultant, and Ms. Merle Donaldson, Chief of Staff, also gave us critical advice throughout the year. Our work would not have been possible without the full cooperation of the officers of the Ministry of Education and Youth who, at all levels of the system, provided us with the answers and data that we sought. The Honourable Minister of Education, Ms. Fayval Williams, has enthusiastically supported the aims and work of the Commission, not only meeting on several occasions with the group as a whole, but engaging in long conversations with me from which I greatly benefited.

Speaking personally, I would like to thank the Most Honourable Prime Minister for the confidence he has shown in me in my appointment as Chair of the Commission. I am deeply honoured to have been given this opportunity to serve my country in such a critical endeavour. Nearly fifty years ago, in 1972, I was appointed by the then recently elected Prime Minister, the Honourable Michael Manley, to serve as his Special Advisor for Social Policy and Development. Prime Minister Holness, at our first meeting, reminded me that 1972 was the year of his birth. The fact that I have been able to serve two Prime Ministers so far apart in age and political philosophy reflects one of our greatest assets as a nation: the steadfast vibrancy and continuity of our democratic system of governance. Our system of education has also greatly benefited from this continuity, in the unusual degree of bipartisanship shown by our political leaders in regard to supporting and reforming the institution over the course of our history as an independent nation. In spite of this bipartisan effort, however, the performance of the system has been a mixed one that fails too many of our nation's children. It is our ardent hope that the successful implementation of our recommendations will justify, finally, this sustained effort by our leaders to achieve the ideal expressed in the Vision 2030 National Development Plan which is modified as follows: 'equitable access to modern education and successful training appropriate to the needs of each person and the nation'.

Professor the Honourable Orlando Patterson, O.M.
Chair, Jamaica Education Transformation Commission: 2021. Office of the Prime Minister, Jamaica
John Cowles Professor of Sociology, Harvard University

Members of the Jamaica Education Transformation Commission

- Prof. Orlando Patterson – Chair, Jamaica Education Transformation Commission, 2020
  John Cowles Professor of Sociology Harvard University

Committee Chairs

- Dr. Dana Morris Dixon, Chair of the Governance Committee, and Chair of the Tertiary Committee
  Assistant General Manager/Chief Marketing and Business Development Officer, Jamaica National Group Limited

- Dr. Jeffrey Hall, Co-Chair Finance Committee
  Chief Executive Officer, Jamaica Producers Group Limited

- Ms. Floretta Plummer, Chair, Technical and Vocational Training Committee
  Former Principal, Naggo Head Primary School

- Ms. Erica Simmons, Chair, Infrastructure and Technology Committee
  Executive Director, Centre for Digital Innovation and Advanced Manufacturing, Caribbean Maritime University

- Prof. Michael Taylor, Chair, Teaching and Curriculum Committee
  Dean of the Faculty of Science and Technology, UWI Mona

- Prof. David Tennant, Co-Chair, Finance Committee
  Professor of Development Finance and Dean of the Faculty of Social Sciences, UWI Mona

Members of the Commission

- Dr. Garth Anderson, Principal, Churches Teachers College

- Prof. Eleanor Brown
  Professor of Law and International Affairs Pennsylvania State University

- Prof. Colin Gyles, Acting President University of Technology

- Most Rev. Donald Reece
  Archbishop Emeritus of Kingston and Chairman, Ecumenical Education Committee

- Prof. Maureen Samms-Vaughn
  Professor of Child Health, Child Development and Behaviour University of the West Indies

- Mr. Gordon Swaby, Chief Executive Officer, EduFocal Limited

- Mrs. Esther Tyson, Former Principal, Ardenne High School

- Ms. Trudy Deans, Senior Advisor to the Prime Minister

VISION

Transforming our Education System to Enable All Jamaicans to Fulfil Their Potential and Contribute to Jamaica's Development in the 21st Century.

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Coopted Members – Subcommittees

Tertiary Sub-Committee
- Mrs. Maxine Henry Wilson, Former Minister of Education
- Mr. Damion Brown, Group Chief Investments Officer, JMMB
- Dr. Adian McFarlane, Assistant Professor of Economics, King's University College at Western University

Governance, Administration, Leadership and Legislation
- Mrs. Lisa Soares, Founder/CEO Great People Solutions (G.P.S.) Limited

Teaching, Curriculum and Teacher Training
- Mr. Carlyle Thompson, Principal, Southborough Primary
- Dr. Steven G Kerr, Board Member, Sam Sharpe Teachers' College
- Ms. Sian Williams, Specialist, Early Childhood Development
- Dr. Renee Rattray, Education Consultant
- Dr. Carmel Roofe, Deputy Dean Graduate Studies and Research, Faculty of Humanities and Education, UWI, Mona, Curriculum and Instruction Specialist
- Dr. Marcia Rainford, Director, School of Education, Faculty of Humanities and Education, UWI, Mona
- Dr. Rebecca Tortello, Education Specialist UNICEF Jamaica
- Dr. Marsha Smalling, Principal, Glenmuir High School
- Ms. Kelly Magnus

Finance
- Mrs. Sheryl Brown-Wray, Director, Budgets, MoEYI
- Mr Rohan Purcell, Regional Financial Controller, Region 2, MoEYI

Technical and Vocational
- Mr. George Lewis, Principal, Rodger Clarke High School
- Dr. Kethurah Williams-Howell, STEM and Education Consultant
- Professor Halden Morris, Retired Professor, UWI / Electrical Engineer
- Ms. Priscilla Deans, Monitoring & Evaluation Manager
- Dr. Carolyn Hayle, Former Executive Director HEART/Former Chairman UCJ
- Ms. Andria Givans, Principal Naggo Head Primary School

Infrastructure and Technology
- Mrs. Maureen Wong, Principal, St. Richards Primary/Acting Education Officer, MoEYI
- Professor David McBean, Executive Director, Mona School of Business and Management
- Mr. Junior Bennett, Lecturer, Industrial Engineering Department - University of Technology

Secretariat:
- Mrs. Dillette Hope-Webb — Director, School Feeding, ZBB Project, MoEY
- Ms. Stephanie Sewell — Senior Consulting Officer, JETC
- Ms. Christal Parris-Campbell — Jamaica House Fellow, OPM

Interns/Research Assistants
- Ms. Alexia Craig
- Ms. Erica Harris
- Mr. Travis Barrett
- Mr. Lance Scott
- Mr. Kenneil Jackson

STAKEHOLDER'S CONSULTATIONS

How the Report was Produced—The Consultation and Collaborative Process

The report was produced through the engagement of a wide range of stakeholder's consultations both at the local and international levels. These include key stakeholders across the education system to include the Ministry of Education Youth and Information, agencies and departments of the ministry, schools, universities and colleges, the Opposition Spokesperson on Education, The Jamaica Teachers' Association, The Private Sector Organisation of Jamaica and other key international players.

A total of thirty-one (31) meetings were held by the general Commission using the virtual platform. Additionally, over fifty (50) meetings were held with other stakeholders by the six (6) subcommittees.

The main objectives of the meetings were to determine the various challenges/issues, gaps and weaknesses affecting the education system and to identify ways to improve exisiting systems, introduce new measures, or to fully remove those that no longer served the industry.

The Commission took a keen interest in the 2004 Taskforce Report on Education and also the agencies implemented following the recommendations of the 2004 report.

REPRESENTATIVES FROM THE VARIOUS SECTORS

Prime Minister of Jamaica

- The Most Honourable Andew Holness

Ministry of Education, Youth and Information

1. The Honourable Fayval Williams, MP. Minister of Education
2. The Honourable Robert Nesta Morgan, State Minister of Education
3. Dr. Grace McLean, Permanent Secretary (Acting)
4. Dr. Kasan Troupe, Chief Education Officer (Acting)
5. Mrs. Winnie Berry, Assistant Chief Education Officer, Core Curriculum and Support Services
6. Dr. Clover Flowers, Assistant Chief Education Officer, Core Curriculum and Support Services
7. Mr. Sandpha Bennett, Senior Education Officer
8. Mrs. Shereen Davy Stubbs, Senior Education Officer
9. Dr. Tamika Benjamin, National Mathematics Coordinator
10. Dr. Andre Hill, National Literacy Coordinator
11. Mrs. Terry-Ann Thomas Gayle, ACEO, Assessment and Administration
12. Ms. Barbara Allen, Chief Technical Director
13. Dr. Phylicia Marshall, Assistant Chief Officer - Tertiary Unit

Former Ministers of Education

- Rev. Ronald Thwaites, Former Minister of Education, Youth & Information
- The Honourable Karl Samuda, Former Minister of Education
- Mr. Alando Terrelonge, Former Minister of State in the Ministry of Education, Youth and Information

AGENCIES OF THE MINISTRY OF EDUCATION, YOUTH AND INFORMATION

National Education Inspectorate (NEI)
- Mrs. Maureen Dwyer, Chief Executive Officer

Jamaica Teaching Council (JTC)
- Dr. Winsome Gordon, Chief Executive Officer

National Parenting Support Commission (NPSC)
- Ms. Kaysia Kerr, Chief Executive Officer

National College for Educational Leadership (NCEL)
- Dr. Taneisha Ingleton, Principal/Director , National College of Educational Leadership

National Education Trust (NET)
- Ms. Marcia Phillips-Dawkins, Chief Executive Officer
- Ms. Latoya Harris, Director, Donor & Partnership Management

Jamaica Tertiary Education Commission (JTEC)
- Dr. Dameon Black, Chief Executive Director

Opposition Spokesperson on Education & Team
- Dr. Angela Brown-Burke and other representatives, Opposition Spokesman on Education
- Mrs. Elaine Foster-Allen, Former Permanent Secretary - Ministry of Education Youth and Information
- Dr. Canute Thompson
- Mrs. Yvonne McCalla Sobers
- Mrs. Rasheen Roper Robinson
- Ms. Latania Thomas

Jamaica Teachers' Association
- Mr. Jasford Gabriel, President

Jamaica Association of Principals for Secondary Schools
- Mr. Linvern Wright, President

TERTIARY SECTOR

The Mico University College
- Dr. Asburn Pinnock, President

Moneague Teachers' College
- Mr. Howard Isaacs, Principal

Shortwood Teachers' College
- Dr. George Dawkins, Principal

The College of Agriculture Science and Education (C.A.S.E)
- Dr. Derrick Deslandes, President

University of the West Indies (UWI)
- Professor Dale Webber, President
- Dr. Marcia Rainford, Director, School of Education
- Ms. Zoya Kinkaed-Clarke, Head of the Early Childhood Section of the School of Education

Joint Board of Teacher Education (JBTE)
- Dr. Joan Ernandez, Director

HEART/NSTA Trust
- Dr. Janet Dyer, Managing Director
- Mr. Edward Gabbidon, Chairman of the Board of Directors
- Mrs. Kenesha Campbell, Director, Strategic Partnership, Research and Innovation
- Ms. Christine Gittens, Senior Strategic Planning Director

Jamaica Union of Tertiary Students (JUTS)
- Mr. Everton Rattray, President
- Ms. Christina Williams, Vice President

Church and Trust Schools
- Anglican Schools: Most Rev. Howard Gregory, Archbishop of the West Indies
- United Church of Jamaica: Rev. Dr. Gordon Cowans, Moderator of United Church of Jamaica & the Cayman Islands
- Methodist Church Schools – Bishop Christine Benguche, Head of the Methodist Church - Jamaica Methodist District
- Trust Schools: Dr. Brian Morgan, Leader of Trust Schools in Jamaica

University Council of Jamaica (UCJ)
- Professor Errol Morrison, Chairman
- Mrs Althea Heron, Executive Director

Student Loan Bureau (SLB)
- Mr. Nicholas Scott, Chairman
- Mrs. Charmaine Rose Anderson, Deputy Executive Director

Northern Caribbean University (NCU)
- Dr. Lincoln Edwards, President

Jamaica Union of Tertiary Students (JUTS)
- Mr. Everton Rattray, President

UWI Guild President
- Ms. Christina Williams, Former Vice President

The Caribbean Maritime University
- Professor Gordon Shirley, Chairman
- Professor Evan Duggan, Interim President

National Secondary Students Council
- Mr. Cheslan Douglas (President)
- Mr. Jadon Hewitt (General Secretary)
- Ms. Ree-Anna Robinson (PRO) Immaculate Conception High School
- Mr. Jamaul Hall, Munro College
- Mr. Ajae Clacken, Munro College
- Mr. Nichardo James, Spanish Town High School
- Mr. Orane Hanson, Manchester High School,

Jamaica Prefects' Association:
- Mr. Michael Forbes, Outgoing President
- Mr. Shemar Grant, Outgoing Region 6 Vice President

Inter-American Development Bank (IDB)
- Ms. Cynthia Hobbs, Lead Education Specialist
- Dr. Diether Mendoza Beuermann, Lead Economist, Caribbean Country Department
- Ms. Sabine Rieble-Aubourg, Lead Education Specialist
- Ms. Augustina Thailinger, Economist
- Ms. Adrianna Viteri, Education economist
- Mr. Gregory Elacqua, Principal Education Economist
- Ms. Carolina Mendez, Education Specialist

Early Childhood Commission
- Mrs. Trisha Williams-Singh, Chairman
- Mrs. Karlene Degrasse-Deslandes, Chief Executive Officer

United Nations Children's Emergency Fund
- Ms. Mariko Kagoshima, Head of UNICEF
- Dr. Rebecca Tortello, Education Specialist, UNICEF

Private Sector Organisation of Jamaica
- Mr. Keith Duncan - President, PSOJ
- Ms. Jacqueline Sharp - Vice President, PSOJ
- Mr. David Wan - President, JEF
- Mr. Richard Pandohie - President, JMEA
- Ms. Gloria Henry - President, BPIAJ
- Mr. Clifton Reader - President, JHTA
- Mrs. Greta Bogues - CEO, PSOJ
- Ms. Eva Lewis - Honorary Secretary, PSOJ
- Ms. Lois Walters - President, HRMAJ
- Mrs. Mariame McIntosh Robinson - Vice President, PSOJ
- Ms. Melanie Subrati - Vice President, JCC

Independent Schools Association

- Dr. Faithlyn Wilson, President
  The World Bank
- Mr. Shawn Powers, Economist, World Bank Education Global Practice
- Ms. Ingrid Bjerke, Co-led the Early Childhood Development Project

Tufts University

- Professor Marina Bers, Chair, Eliot-Pearson Department of Child Study and Human Development, Tufts University
- Eliot-Pearson, Chair, Department of Child Study and Human Development

Other Stakeholders

- Ms. Jean Hastings, Former Executive Director, Education System Transformation Programm
- Mr. Chris Treadwell Former Assistant Deputy Minister, Province of New Brunswick, Canada
- Mr. Gunther Neubert, Managing Director, German Chamber of Commerce Abroad
- Dr. Herbert Gayle, Youth, Violence Specialist.

LIST OF ACRONYMS

AI	-	Artificial Intelligence
APSE	-	Alternative Pathways to Secondary Education
ASAJ	-	Aquatic Sports Association of Jamaica
BBC	-	Brain Builder Centre
CAP	-	Career Advancement Programme
CAPE	-	Caribbean Advanced Proficiency Examination
CAP-YES	-	Career Advancement Programme - Youth Empowerment Solutions
CARICOM	-	Caribbean Community
CCCJ	-	Council of Community Colleges of Jamaica
CCT	-	Conditional Cash Transfer
CDA	-	Child Development Agency
CHAMPS	-	ISSA/GraceKennedy Boys' and Girls' Athletics Championships
CIT	-	Curriculum Implementation Teams
CMT	-	Curriculum Monitoring Teams
COT	-	Classroom Observation Tool
COVID	-	Coronavirus
CPFSA	-	Child Protection and Family Services Agency
CSEC	-	Caribbean Secondary Education Certificate
CTI	-	Community Training Intervention
CVQ	-	Caribbean Vocational Qualification
CWD		Children with Disabilities
CXC	-	Caribbean Examination Council
DELECA	-	Developing Leadership Capacity for Data-informed School Improvement
DSS	-	Decision Support System
EC	-	Early Childhood
ECA	-	Extra-Curricular Activities
ECC	-	Early Childhood Commission
ECD	-	Early Childhood Development
ECE	-	Early Childhood Education
ECI	-	Early Childhood Institutions
ECP	-	Early Childhood Period
EDUFI	-	Finnish National Agency for Education
EMIS	-	Education Management and Information System
EO	-	Education Officer
ESTP	-	Education System Transformation Program
ETC	-	Education Transformation Commission
ETP	-	External Training Provider
GDP	-	Gross Domestic Product
GNAT	-	Grade Nine Achievement Test
GOJ	-	Government of Jamaica
GSAT	-	Grade Six Achievement Test
HEART	-	Human Employment and Resource Training Trust

HEI	-	Higher Education Institution
IADB/IDB	-	Inter-American Development Bank
ICT	-	Information Communication Technology
ILO	-	International Labour Organization
IOM	-	International Organization for Migration
IQ	-	Intelligence Quotient
IT	-	Information Technology
ITP	-	Initial Teacher Practice
JBTE	-	Joint Board of Teacher Education
JCDC	-	Jamaica Cultural Development Commission
JCPD	-	Jamaica Council for Persons with Disabilities
JCTEP AC	-	Joint Community for Tertiary Education Programmes Absorptive Capacity
JDFCSJP	-	Jamaica Defence Force and Citizen's Security and Justice Programme
JEF	-	Jamaica Employers Federation
JMD	-	Jamaican Dollar
JTA	-	Jamaica Teachers' Association
JTC	-	Jamaica Teaching Council
JETC	-	Jamaica Education Transformation Commission
J-TEC	-	Jamaica Tertiary Education Commission
KPMG	-	Klynveld Peat Marwick Goerdeler
LAC	-	Latin America and the Caribbean
LMS	-	Learning Management System
LSS	-	Leadership for Safer Schools
M&E	-	Monitoring and Evaluation
MOEYI	-	Ministry of Education, Youth and Information
MOHW	-	Ministry of Health and Wellness
MOOCs	-	Massive Open Online Courses
MOU	-	Memorandum of Understanding
NCE	-	National Council on Education
NCEL	-	National College of Educational Leadership
NCR	-	National Children's Registry
NCSAMT	-	National Committee for Selection & Appointment of Master Teachers
NEI	-	National Education Inspectorate
NER	-	Net Enrolment Rate
NESP	-	National Education Strategic Plan
NET	-	National Education Trust
NGOs	-	Non-Governmental Organizations
NPSC	-	National Parenting Support Commission
NQAA	-	National Quality Assurance Agency
NQF	-	National Qualifications Framework
NSC	-	National Standards Curriculum
NSLC	-	National School Leaving Certificate
NSP	-	National Strategic Plan
NSTA	-	National Service Training Agency
NTA	-	National Training Agency
NUYP	-	National Unattached Youth Programme
NVQ-J	-	National Vocational Qualification of Jamaica

OCA	-	Office of the Children's Advocate
OECD	-	Organization for Economic Co-operation and Development
OPC	-	Office of the Parliamentary Counsel
PATH	-	Programme of Advancement Through Health and Education
PEP	-	Primary Exit Profile
PER	-	Public Expenditure Review
PIOJ	-	Planning Institute of Jamaica
PISA	-	Programme for International Student Assessment
PLC	-	Professional Learning Community
PMEU	-	Programme Monitoring and Evaluation Unit
PPRJC	-	Piloting Protocols for the Revised Jamaican Curriculum
PWD	-	Persons with Disabilities
QEC	-	Quality Education Circle
REA	-	Regional Education Agencies
ROI	-	Return on Investment
SABER	-	Systems Approach for Better Education Results
SAU	-	Student Assessment Unit
SDA	-	School Development and Accountability
SDG	-	Sustainable Development Goal
SEL	-	Social and Emotional Learning
SIP	-	School Improvement Plan
SLB	-	Students' Loan Bureau
STEAM	-	Science, Technology, Engineering, the Arts and Mathematics
STEM	-	Science, Technology, Engineering and Mathematics
SUNY	-	State University of New York
TALIS	-	Teaching and Learning International Survey
TCJ	-	Teachers' Colleges of Jamaica
TEMIS	-	Tertiary Education Management Information System
TOR	-	Terms of Reference
TRCN	-	Teachers Registration Council of Nigeria
TTI	-	Teacher Training Institution
TVET	-	Technical and Vocational Education and Training
UCJ	-	University Council of Jamaica
UK	-	United Kingdom
UMIC	-	Upper Middle-Income Countries
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
UNICEF	-	United Nations International Children's Emergency Fund
US	-	United States
USAID	-	United States Agency for International Development
UTECH	-	University of Technology
UWI	-	University of the West Indies

INTRODUCTION: Guiding Principles

Access to education has long been enshrined as a fundamental human right, its provision by most countries hailed as one of the great achievements of the late 20th century. However, there is growing awareness of the fact that access to schooling does not amount to learning and that in many parts of the developing world children at the end of primary education remain illiterate. This learning crisis is costly both in terms of human and economic development, UNESCO estimating that it costs governments some $129 Billion dollars per year.[1] Jamaica, unfortunately, is typical of the learning crisis. We therefore follow UNESCO in its declaration that: ***"Children do not only have the right to be in school, but also to learn while there, and to emerge with the skills they need to find secure, well-paid work."*** The pursuit of this fundamental right animates the work and recommendations of this report.

Although Jamaica has a good record in providing near universal access to primary school, it has failed to educate at the most basic level a substantial proportion of its children. Exam results in 2019 indicated that at the end of 6 years of primary schooling 59 percent were failing mathematics, and 45 percent were failing in language arts. Jamaica's tepid economic performance over the past half century, not to mention its related chronic social problems, can in good part be attributed to its learning crisis.

Five fundamental principles motivate our objectives and recommendations for the reform of Jamaica's education system: organizational coherence in the governance of education, internal and external systemic alignment in its functioning, a pedagogic transformation focused on the instructional core of learning as a collaborative process, a revision of the curriculum grounded in the complementary learning of STEAM (Science, Technology, Engineering, the ARTS, and Mathematics) and SEL (Social and Emotional Learning) disciplines, and the vigorous pursuit of equity.

A. Organizational Coherence

Organizational coherence exists when all parts of the education system work toward successful learning outcomes. Jamaica has a chronic coherence problem, in which different parts of the system work at cross purposes with each other, in the process neglecting or undermining the ultimate goal of learning. These organizational problems were clearly recognized by the 2004 Task Force and recommendations made to correct them. Nonetheless, there has been a failure to deliver improved outcomes in student performance, in spite of considerable capital investment, very high prioritization of education in the nation's budget, and a great deal of capacity building over the past two decades. Two experts on the problem of coherence have indicated what needs to be done to fix this problem: "There is only one way to achieve greater coherence, and that is through purposeful action and interaction, working on capacity, clarity, precision of practice, transparency, monitoring of progress, and continuous correction. All of this requires the right mixture of "pressure and support": the press for progress within supportive and focused cultures"[2] The Commission hopes to achieve such coherence in the organization of education in Jamaica.

[1] UNESCO: Teaching and Learning: Achieving Quality for All. EFA Global Monitoring Report 2014.
[2] M. Fullan and J. Quinn, 2015. *Coherence: The Right Drivers in Action for Schools, Districts, and Systems*.p.2

B. Systemic Alignment

Alignment is the interdependent functioning of the different levels of the education system with each other, and of the system with its economic and social environment. Internal alignment is the efficient coordination of the different levels of the education system. We may think of the entire education system as a learning stream in which value is added at each level, depending in part on the degree and quality of the input from the previous level. Jamaica's globally competitive school athletic program is a stellar case of successful alignment. It's underfunding of the foundational pre-primary level is an unfortunate example of misalignment, being the cause of the learning crisis appearing in its primary and secondary levels.

External alignment is the collaborative process of orchestrating the educational system with the demands of the private sector and broader societal needs. It is a strategic approach to educational planning and programming in which leaders at all levels of the education system "strategizes, aligns, collaborates and implements with the private sector for greater scale, sustainability, and effectiveness in achieving development or humanitarian outcomes across all sectors."[3] Jamaica's education has long failed to provide the nation with a badly needed skilled labour force, the Vision 2030 National Development Plan noting that nearly 70 percent of the workforce had received no formal training and that its tertiary sector is "not sufficiently responsive to the demands of the labour market." The alignment is a two-way process and there are encouraging recent signs that the Jamaican private sector is ready to engage in such educational co-leadership and co-investments such as the National Baking Company Foundation's support of scholarships in science, the NCB Foundation's sponsorship of digital training in schools and the Amber group's recent digital straining school. The Commission strongly recommends the advancement of such educational co-investments modelled on the practice of long-established apprenticeship countries such as Germany, Denmark, Switzerland and Korea.

C. Collaborative learning focused on an interactive instructional Core

The Commission finds that Jamaica's teaching profession is too committed to a traditional, teacher-centred method of instruction aimed at passive students, which discourages learning. We advocate a radical shift toward an interactional pedagogical method in which the instructional core is a collaborative interaction between flexible teachers, engaged students and a dynamically relevant curriculum. Research shows that teachers' instructional capacity varies with their interaction with students and how they use the materials; and the experience, prior knowledge, modes of thinking, disposition and relations with other students are as critical to what and how students learn as what the teachers impart of the curriculum being taught: "Improved capacity depends on affecting the ways in which teachers, students and materials understand, make sense of, and influence one another."[4] To the degree possible, this interaction should include the supportive role of parents and other care-givers. This approach has important implications for how teachers are trained as well as their later development, for both periods of which the classroom should be central. It entails a substantial makeover of teaching colleges and the re-training of trainers at these institutions. Such reform asks much of teachers, which is why we

[3]Lisa Blonder, 2020. "What does Private Sector Engagement Mean in Education." USAID. https://www.edu-links.org/learning/what-does-private-sector-engagement-mean-education

[4]David Cohen and Deborah Ball, "Instruction, Capacity and Improvement", Penn Grad School of Educ, Consortium for Policy Research and Improvement, 1999

affirm UNESCO's recommendation that "governments must provide teachers with the right mix of incentives to encourage them to remain in the profession and to make sure all children are learning, regardless of their circumstances." We applaud the fact that the MOEYI's New Standard Curriculum embraces elements of this approach, but we regret its failure to properly prepare and train teachers and students for it. We strongly urge the Ministry to start over, and recommend measures to get it right. The commissioners were greatly encouraged by the findings of a UNICEF survey, prepared for the Commission, that Jamaica's schoolchildren all share these views on learning, and appeal for more teacher-student collaboration, active engagement, more parent and teacher motivation, and blended learning.



D. An Appropriate Curriculum

The Jamaica education systems faces two major challenges: the need to train students to function in a technologically based economy; and the need to help solve its catastrophic problem of crime, including unusual levels of violence toward females, children and persons with non-traditional sexual and gender orientations. Hence, the curriculum requires as much attention to social and emotional learning as to STEAM so as to engender respect for human life and a sense of responsibility and civility in human relations.

Our move toward a more technologically driven and knowledge-based system requires the incorporation of a STEAM curriculum at all levels of the education system. However, this equally necessitates a shift toward a SEL curriculum. Emotionally unstable, disrespectful, educationally

disengaged children cannot learn STEAM. However, the good news from a wealth of educational research, is that the teaching and learning of STEAM education and SEL are complementary and mutually reinforced.[5] The collaborative classroom built around the respectful interaction of teacher, student and relevant content required by STEAM is precisely the kind of pedagogy that cultivates the mutual respect, self and social awareness, relationship skills, and responsible decision making that are the goals of social and emotional learning. The work of Professor Marina Bers, who addressed our Commission, and has agreed to work with us, has compellingly demonstrated this interaction in her studies and policy work with pre-schoolers.[6]

In the reform of the curriculum, it is important to pay full attention to our history. Few societies bear the stamp of its past more than Jamaica and its history should be one cornerstone of learning at all levels. The 'A' in STEAM must stand as much for "Annals' as for Arts.

E. Equity

UNESCO has noted that: 'Equity is at the core of the Sustainable Development Goals (SDGs).' Educational disparity is chronic in the island, considerably worsened by the pandemic. There are, two extremely different school systems in the country, one that is world-class and serves mainly the 'Haves,' the other, pertaining to the vast majority, that serves the 'Have-Nots' and that is largely failing. Jamaica also has a gender problem, but unlike most of the rest of the world, it is boys who are at a disadvantage. This peculiar gender problem is directly related to the crisis of unattached youth, gangs, and violence. This, we hasten to add, is not the result of positively favouring girls, but of the special social circumstances faced by boys, their often-abusive upbringing, and the cultural norms of masculinity from the compelling popular culture that too often disincentivizes education. Indeed, Jamaican girls and women pay a high price for this male failure, reflected in unusually high rates of sexual abuse by men from an early age, and the fact that they experience the highest rate of femicide (homicide, nearly all by men) in the world!

There is also a poorly addressed problem of disability in the country, with woefully inadequate resources made available to students with special needs. We strongly endorse the UNICEF's inclusive education benchmark norms that requires the inclusion of CWDs in regular schools wherever possible, and the removal of all physical and instructional barriers to them.

International studies by PISA show definitively that the vigorous pursuit of equity is not a drag on high educational performance, that, to the contrary, "fairness in resource allocation is not only important for equity in education, but it is also related to the performance of the education system as a whole school systems with high student performance in mathematics tend to allocate resources more equitably between advantaged and disadvantaged schools." We are mindful that equity and the provision or equal resources are not the same, that indeed, the latter may exacerbate the former. The Commission therefore strongly endorses the International Commission

[5]Peterson, A., Gaskill, M. & Cordova, J. (2018). Connecting STEM with Social Emotional Learning (SEL) Curriculum in Elementary Education. In E. Langran & J. Borup (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference (pp. 1212-1219)

[6]Strawhacker, Amanda; Bers, Marina Umaschi, 2018. "Promoting Positive Technological Development in a Kindergarten Makerspace: A Qualitative Case Study," European Journal of STEM Education, v3 n3 Article 9

on Education's policy of "progressive universalism," which advocates "expanding provision of quality education for everyone while prioritizing the needs of the poor and disadvantaged."[7]

Conclusion

The best laid plans are only as good as their implementation. We recognize that there is a serious implementation deficiency in Jamaica. To ensure success we urge the government to heed the advice of those who have studied the problems of implementation. First and foremost, that the ownership and commitment to the changes we recommend are assumed by both the Minister and other top leaders of the Ministry of Education and, following their example, at all levels of the organization down to school administrators and teachers. Above all, top leadership must buy into our plan and not simply announce and applaud it then return to business as usual, which is the sure recipe for failure. Secondly, that there is an unwavering commitment to accountability on the part of those enjoined with the implementation of our recommendations throughout the implementation period. Thirdly, that managers in the MOEY are all clear about the nature and prioritization of our recommendations, and that they are thoroughly communicated and understood. Fourthly, that there is constant monitoring and review of how our recommendations play out in practice, with unhesitating action to correct what does not work, to be replaced with what does achieve the recommended goal, in a continuous process of improvement. And finally, that the necessary resources and management capabilities are assigned to the implementation of our plan, with changes in allocation as realities on the ground dictate during the implementation process.

We are all fully committed to Jamaica's noble motto, that "Every child can learn, every child must learn." However, this ideal will never be attained until we overcome our chronic pattern of implementation deficiency. The Jamaica Education Transformation Commission hopes to change this pattern and do well by our children, the disadvantaged among whom have waited far too long for change.

[7]The International Commission on Financing Global Education Opportunity, 2016. The Learning Generation: Investing in Education for a Changing World, pp. 87-88 .

EXECUTIVE SUMMARY

The Jamaica Education Transformation Commission was launched in July 2020 by the Most Honourable Prime Minister, Mr. Andrew Holness, charged with conducting a 'comprehensive review of the public education system, covering all sectors of education, namely, early childhood, primary, secondary, vocational, and higher education.' On the basis of this review, it should recommend an action plan for change setting out 'specific legislative, policy, structural or other changes necessary to create a world-class educational system, geared to enabling Jamaicans to fulfil their potential and develop the skill base and human capital required for Jamaica to compete successfully in the 21st Century Global Economy.' Over the course of the past eleven months, the fourteen members of the Commission, with the valuable assistance of several co-opted members and a dedicated secretariat, produced this document. This section summarizes our findings and recommendations.

The Commission's work focused on eight (8) areas of the education system: An Analysis of the Present State of Education in Jamaica; Governance; Early Childhood Education; Teaching, Curriculum and Teacher Training; the Tertiary Sector, Technical and Vocational Education and Training; Infrastructure and Technology; and Finance. In addition, we summarize in an addendum the results of a survey of Jamaican students' views on the education system and their recommendations for change which was generously produced on our behalf by UNICEF Jamaica in 2021.

1. The State of Education in Jamaica

The education system is one of the largest institutions in Jamaica. The Ministry of Education, with its eleven agencies and 7 regional offices, employs over 25,000 teachers who educate nearly 580,000 students in over a thousand educational centers. Jamaica provides access to education to nearly all children of pre-primary and primary ages and to the majority of those in the secondary school cohorts 18 and under.

At the pre-primary level Jamaica claims one of the highest rates of enrolment in the world: 93.4% of 3-5 year old children, the great majority in private institutions that are not effectively monitored, with most providing unsatisfactory care. At the primary level some 232,000 students are registered. Although the country claims to offer universal access , UNESCO reports a gross enrolment rate of 85 percent and a net rate of 79% which is well below those of countries at Jamaica's level of development and of the other small Caribbean states. Furthermore, over 17% of primary age children are not in school, due mainly to economic factors (lunch money and transportation fare) and boredom.

Some 211,800 students attend secondary schools. Jamaica's officially stated secondary enrolment rates are also problematic. Contrary to the 98 percent rate recently reported to the World Bank, the lower and upper secondary rate (ages 12-16) is 87%, and for age groups 17 and 18 (grades 12 & 13) it is 28.7%. Most students leave secondary school without a certificate--70 percent of the 18-year old cohort in 2018. As of 2018, there were 51,684 students in the tertiary level, attending 18 institutions, of which 3 are universities. The island's tertiary rate of enrolment is 27% well below that of countries at its level of development.

Although the great majority of its children have access to primary and secondary schooling, Jamaica has a severe learning crisis, in that a majority of students at the end of primary school remain illiterate and innumerate and most leave secondary school with no marketable skills. In 2017, over 85% of students achieved "mastery" of their Grade 4 literacy test, and 66% in their test of numeracy. Although there were indications of improvement between 2002 and 2018 in a the GSAT and GNAT primary school-leaving exams, the recently introduced PEP(Primary Exist Profile) exam, which shifted away from memorized learning to the testing of analytic thinking, revealed major deficiencies in the level of learning achieved by students: only 41% passed in mathematics, 49% in science, and 55% in language arts. A breakdown of the language arts results indicated that a third of students at the end of primary school could not read, 56%could not write, and 57% could not identify information in a simple sentence.

Performance at the end of secondary schooling was not much better. In 2019 some 32,617 students sat the CSEC exams (54% females/45% males), of which only 42.5% passed 5 or more subjects including English and/or mathematics. Overall, only 28% passed 5 or more subjects with English and Mathematics. In the CAPE exams, pass rates are low and have been declining: only 45% passed the Diploma certificate at an acceptable level, and less than 40% of those who took the exam gained Associate degrees.

In all examinations, starting with the Grade 4 tests, girls substantially out-perform boys. The gap appeared to decline somewhat between 2005 and 2018 in the primary and secondary school tests but increased sharply with the new PEP exams in 2019, in which girls outperformed boys by 15 points in Mathematics, by 13 points in science, by 20 points in Language arts, and by 13 points in social studies. Jamaica is one of the few countries where girls outperform boys in math and science. The gender disparity widens at each level of the system. At the tertiary level, 69 percent of enrolled students are females, vs 31 percent males. Women also graduate from this level at three times the rate of men.

Schools cannot be blamed entirely for the unsatisfactory performance of the nation's students, but they bear a good deal of responsibility for it. Jamaica now has two ways of evaluating the performance of schools. One is by the National Education Inspectorate, instituted in 2009, which uses traditional means of evaluation—observations, tests, self-evaluations and the like. The other was introduced in 2021 by this Commission, applying only to secondary schools: a value-added mode of evaluation, on the basis of which a novel composite ranking system was constructed. In 2015, its most recent nation-wide evaluation, the National Education Inspectorate evaluated 55% of schools as 'ineffective,' with 45% of school leaders judged "unsatisfactory" and only 55% of teachers assessed as "satisfactory or above." Since then there has been dramatic, though inexplicable, improvements in the NEI's evaluation indicators. However, no nationwide evaluations similar to the baseline of 2015 have since been done.

Value-added estimates measure how much of students' examination performance can be attributed to the school itself as distinct from the attributes of the students and their background. Jamaican secondary schools were ranked, not solely on the basis of their exam results, or only on the value added metrics, but also with a new composite index, created by the Commission, that combined the average of rankings on both exam results and value added results.

Stakeholders still have the option to continue using only exam results to assess schools should they so choose. In view of the extreme inequality of schools in Jamaica, the Commission decided to divide the secondary schools into two groups: a traditional, more privileged, group of 42 schools and a non-traditional group of 211 schools. Unfortunately, it was not possible to conduct the value added procedure on 100 of the secondary schools because of either missing data or the fact that their exam results were at zero percent pass rate which confounds modeling.

Tables 8 & 9 below (see pp.70-72) show the rankings for the 42 traditional, and top 42 non-traditional high schools. The complete list of all schools, including the 100 which were not included in the value-added model, but with CSEC and CAPE results attached, can be found in Appendix 2 at the end of the report. The results substantially alter the traditional evaluation of the nation's secondary schools. The nation's top three traditional secondary schools, measured in terms of the composite ranking index, are Glenmuir High School, in May Pen, Wolmer's High School for Girls in Kingston, and St. Jago High school in Spanish Town. The three top non-traditional high schools are Dinthill Technical in Linstead, Denbigh High in May Pen, and Edwin Allen High in Frankfield. Merl Grove High school and Campion High are the best performing traditional high schools measured solely in terms of the value they add based, respectively, on the CSEC and CAPE exams. St. Mary's College and Bluefields High/Belmont Academy are the best non-traditional performers in value added based, respectively, on the CSEC and CAPE results.

Glenmuir emerges as the nation's preeminent secondary school. It clearly demonstrates that schools can perform at the highest level while admitting students from more modest backgrounds, or those who may not have been as well prepared academically during their primary school years. Recomendations on the value-added and composite index approaches are on pp. 68-69

2. Governance

Good governance is a key element in the ability to steer an education system as complex and young as Jamaica's, with multiple actors each playing varied roles. Decisions regarding the use of funds in the sector, channels of accountability, and agenda setting, all related to governance, will impact the overall effectiveness of an education system. Ensuring quality education is therefore dependent on the existence of good governance and relies on the five principles of:

- legitimacy and voice
- performance
- fairness
- accountability; and
- direction.[8]

While there is evidence locally of efforts to engage stakeholders in processes of setting priorities for the system, balances between local and central direction and clear distribution of responsibilities (such as between the central ministry and regional offices) have fallen flat or have been hindered by several challenges. Improved governance and new mechanisms to pursue effective governance are required as the country seeks to address these challenges and create a more effective education system.

[8]Graham J, Amos B and Plumptre T (2003) Principles for Good Governance in the 21st Century. Ottawa, Canada: Institute on Governance in Hutton, Disraeli M. "Governance, management and accountability: The experience of the school system in the English-speaking Caribbean countries." Policy Futures in Education 13, no. 4 (2015): 500-517.



- In the area of Governance, the Committee focused its work on a review of the overall governance framework for the education system. The key elements of review included the Ministry's structure and the effectiveness of the strategic framework of the Ministry, school boards, and the various agencies tasked with supporting the work of the MOEYI.
- In the area of Accountability, the Committee focused on recommendations relating to developing an improved framework for achieving accountability at all levels of the education system.
- The key recommendations of the committee are grouped under three (3) broad headings: ***Governance, Accountability, and Legislative Changes.***
- The Committee has important recommendations regarding governance as it was clear that there are key deficiencies in the governance of the education system. Recommendations include, inter alia:
  - The reform of the board selection process to improve the selection of effective boards
  - Increased training for school boards
  - Enhanced training of principals especially in relation to change management and financial management
  - Adjustment of the funding model for schools to facilitate greater flexibility in the allocation of resources to schools. The MOEYI must implement a funding model that re-calibrates the allocation based on the needs of the school in order to ensure equitable treatment.

See the recommendations table in ***Section 6*** of this report.

- The Government of Jamaica (GOJ) is committing significant resources to education, but the returns are well below what is acceptable. This disconnect between spend and results is due in large part to the lack of accountability across the system as well as issues in the administration of the education system. Key recommendations to address this deficiency include, inter alia:
  - Special performance appraisal system for senior staff at the Ministry to be closely aligned to overall outcomes (e.g., literacy and numeracy rates) as well as the strategic plan of the Ministry.
  - The provision of more data to the public on the performance and funding of all schools; this could be done through the development of school dashboards that are available online.
  - Optimization review of the ministry to better allocate resources and to identify the cultural barriers to the effective operation of the central Ministry.
  - The education sector reforms should be designated as an area of national priority, and a structure like the EPOC should be considered. The proposed Education Progress Commission (formal name to be determined) should be responsible for monitoring the implementation of Jamaica's education reform measures.

- There are many legislative gaps across the education system. The requisite legislative changes can be grouped into two categories: **(i)** the finalization of regulations relating to key entities and **(ii)** amendments to the existing **Education Act** and **Education Regulations**.
  - The two primary entities that urgently need legal standing are the **Jamaica Teaching Council** (JTC) and the **Jamaica Tertiary Education Commission** (J-TEC).

In relation to the ***Education Code***, there have been years of discussion regarding amendments, but there has been little progress in passing these amendments. The Committee recommends a complete re-write of the ***Education Code*** in the medium term, but given the GOJ's less than stellar performance in relation to legislative matters, the Committee concluded that at a minimum, the ***Education Code*** should be amended with focus on the priority areas for amendment as outlined in **Section 5** of this report. The key areas of amendment to the Regulations were grouped into six (6) heads:

- Accountability
- Teacher Performance
- Technology
- Health & Safety
- Early Childhood Provisions
- Elimination of Discriminatory Policies

- All recommendations of the committee were developed through an examination of the local context as well as a review of global best practice.

3. Early Childhood Education

Research has shown that the experiences of young children predict their academic and social success in later childhood and in adulthood. Children at risk who had a high quality early childhood development (ECD) programme have better short and long term academic and social outcomes than their peers who did not have this exposure. In childhood there are better school readiness, academic achievement, and high school graduation; in adulthood, there are higher annual earnings and employment and reduced criminality. The economic returns on investment in early childhood are also very high, most of which accrues to the public in returns such as lower crime rates and increased funds from taxes on higher earnings.

Jamaica has a long tradition of concern for its pre-school population, beginning in the 1940s. The Early Childhood Commission (ECC), incorporated in 2003, reports to the Minister of Education, its main roles being to develop, monitor and evaluate the implementation of the plans and programmes relating to early childhood, to act as a coordinating agency to ensure effective streamlining of all activities relating to early childhood development, to supervise and regulate early childhood institutions, and to convene consultations with relevant stakeholders as appropriate.

Jamaica presently has one of the world's highest rates of enrolment in early childhood institutions (ECIs): in 2019, some 12.0% of the 0-2 year population and 93.4% of the 3-5 year old. Most are in privately operated institutions. Of the 2,676 ECIs that have applied for registration, the ECC reports that 408 (15.2%) are identified as public institutions fully funded by the Government of Jamaica in ECIs.

However, while enrolment rates are high, the quality of care and training is unsatisfactory. There is overall inadequate exposure to developmental and educational activities. Only a representative two of all socio-emotional activities evaluated for are included, and only 11% of ECIs were rated as having adequate numbers of play material for the numbers of students present. Between 2017

and 2019 it was found that two-thirds of children had no developmental problems, while a fifth had at least one issue. Early literacy concerns were identified in 18.3% and early numeracy concerns in 20.3%. Boys, children attending infant schools and departments, and children on the PATH programme, were those that had the greatest concerns.

There have been several evaluations of the ECC. The World Bank SABER group compared Jamaica favourably with other countries in its level of development. However, the evaluation of the ECD by the Auditor General in 2015 was very critical, especially of the facts that no ECI had received a full 5-year certificate to operate and that no ECI was then operating with a valid permit, all previous 1-year permits having lapsed. The ECC responded that ECIs operating without permits occurred as a result of limited staff to conduct inspections twice annually as required by the EC Act. Presently, only 280 ECIs are fully certified. Of the remainder, only 37 permits (1.4%) are operating with a valid 1-year permit.

The World Bank in its 2021 PER report on Jamaica's education system, finds that early childhood education is underfinanced and experiences significant pressure through high demand and an inadequate number of qualified teachers. It urged the government to consider reallocating funds from other levels of the education system, especially higher education, to the early childhood sector.

In light of these findings the following eight recommendations are made toward improving this foundational level of Jamaica's education system.

1. **Conduct a thorough review of the Early Childhood Commission in order to:**
   a. Identify and improve the human resources it needs to operate more efficiently
   b. Improve staff remuneration to prevent rapid turnover, a major source of inefficiency
   c. Increase data utilisation data to inform its own practice, and to inform the public
   d. Conduct research to evaluate the impact of ECI Standards, and the performance of the different kinds of ECIs.

2. **Undertake a review of laws guiding the EC sector, especially in regard to frequency of inspections of ECIs and required teacher qualifications**

3. **Rationalise the provision of centre-based ECD services**
   a. Conduct geographic analysis to determine optimum number and location of ECIs relevant to population needs
   b. Accelerate the programme of creating infant departments within primary schools
   c. Identify ECIs within areas of poverty and prioritise these ECIs to meet ECI Standards
   d. Increase service for children 0-2 years, by establishing more Brain Builder Centres

4. **Increase the quality of teaching and learning through provision of trained teachers and resources to ECIs.**
   a. Rationalise training and qualification for the early childhood sector
   b. Provide at least one trained teacher for each ECI with urgency
   c. Improve quality of pre-service and in-service training at all training levels.
   d. Improve teaching and learning resources available at ECIs.

Consider the digital playground pedagogical technique in which pre-primary children learn to code and code to learn, marking the first stage of STEAM education and complementary Social and Emotional learning.

5. **Improve the services available to children with disabilities and their families**
   a. Conduct research to accurately identify the prevalence and types of developmental disabilities at the EC level.

6. **Develop a co-ordinated strategy to engage and support parents of young children**
   Child development and stimulation programme offered at ECIs should be associated with certification that allow training for parents in basic literacy and numeracy and to transition into existing vocational training in ECD, especially early childhood education

7. **Establish an oversight body to co-ordinate and monitor implementation of strategies to improve services to young children.**

8. **Ensure adequate financing of the ECD sector**
   If necessary, reallocate funds from other levels of the education system, as recommended by the World Bank, this being the foundational level of the entire system.

4. Teaching, Curriculum and Teacher Training

Introduction

Education policy analysts all agree that teaching constitutes the most important element of the education system and must be the priority focus of attempts to improve performance outcomes linked to learning. The recommendations in this report are presented across five areas: The Teaching Profession; Teacher Training; Teaching; Curriculum and Assessments; and "Out of School Factors". Section 4 of this section provides these recommendations with one sub-section devoted to each of the five areas. The approaches taken, strategies employed, and interventions made in these five areas are anchored in an overarching National Educational Philosophy.

What about COVID? COVID has magnified many of the inadequacies and inequities in the education system, including Teaching. Unfortunately, the timing of the commission did not allow for a fulsome analysis of the impact of COVID since much of the data required to do so is only just being collected. Notwithstanding, COVID was borne in mind, and is reflected in some recommendations made e.g., those related to the emerging role of ICT in teaching. COVID has also resulted in a greater awareness of the important social roles that teachers and schools play and has forced a re-engagement of community groupings in the delivery of education. In that light several recommendations aimed at doing so are also presented.

Education Philosophy

There is a strong perception that the (under)performance of the system can be linked to an outdated educational philosophy that supports a too teacher-dominant pedagogy, focused on the traditional 3-Rs, that is not capable of delivering the education and training required to meet the cognitive, social, technological and other workforce needs of a transitional society, let alone one with as many social problems as Jamaica's. Our approach emphasizes teaching and learning as a collaborative process around an instructional core that engages teachers, students, and a



dynamic curriculum, supported by out-of-school stakeholders in the local and broader community. Complementing the learning of STEAM disciplines, the A of which includes the determinative history of our nation, is a program of social and emotional learning, without which academic success will not be possible for the majority of our students from underprivileged homes and environments. There are indications that the MOEYI is shifting toward such a 'constructivist' learner-centred, competency-based approach that allows alternative pathways to success and makes connections with the real world - including workplace settings-- but the transition has been problematic.

Pathways to Transformation

Care must be taken not to treat the recommendations of this report in 'silos', since this runs the danger of neglecting the principle of organizational coherence, the fact that the system is highly inter-related and that recommendations made in one area directly or indirectly impact another. The recommendations point to five 'pathways' to be simultaneously pursued to bring about the transformation desired in Teaching and Learning. Pursuing each pathway will involve taking on board recommendations that straddle multiple focus areas as well as recommendations covered in other parts of this larger ETC Report.

Pathway 1: Placing a High Value on the Human Resource. Highly motivated, quality teachers are essential to improving Jamaica's educational outcomes. Arguably, the strong (and necessary) resource-focussed fixes for education in recent years may unintentionally be contributing to the erosion in the perception of teachers as the most critical component of the educational system.

Restoring the centrality of the role of teachers to a successful education system is critical for how they are perceived by the community, but also to their own confidence that they are indeed highly valued by government. Recommendations in this pathway focus on incentivization and the enhanced professionalization of teaching.

Pathway 2: Prioritizing Early Intervention and an Avoided-Cost Approach. A fair amount of the current educational capital is wrapped up in remedial or corrective endeavours. This is not a sustainable approach. Some of the recommendations offered are geared at strategic interventions at the pre-primary and primary levels. Other recommendations emphasize the value of monitoring and robust evaluation of newly implemented strategies before wide-scale rollout, to avoid the need for later fixes. Further, a whole sub-section of recommendations is aimed at strengthened teacher training institutions.

Pathway 3: Ensuring Equity of Access. Achieving equitable access to quality education is the goal for all students, irrespective of school or educational pathway being followed. Steps to achieving this will necessarily involve models for allocating resources, not premised on equal distribution, but rather on matching need. For this reason, some of the recommendations target flexibility at the regional level to re-allocate (for example) teaching competencies where needed. The advent of widespread use of online education modalities is, however, a significant recent development which, If appropriately managed, can go a long way in ensuring equitable access to quality education.

Pathway 4: Partnerships for Total Learning. Schools have long realized the importance of community partnerships not only to fill financial gaps but, now more than ever, to provide non-academic support to the educational process. Jamaica's present-day context makes schools the safe haven for a significant number of our students that are at risk of both hunger and violence. Several of the recommendations get at the role school-community partnerships and initiatives can play in character formation and in improving student and parent well-being. These are complemented by similar recommendations made in other sections of this report, especially in the domain of early childhood education.

Pathway 5: Data Driven Decisions.
Finally, some of the recommendations are premised on comprehensive data collection, an efficient data management system and the eventual mining of the data to support decisions. In addition to recommendations made in the Governance section of this report, it is further suggested that the MOEYI immediately begin to contemplate how AI (artificial Intelligence) and data mining across GOJ ministries (not just the education sector) can be used in ways to enhance Teaching and Learning.

It is the coherent, simultaneous pursuit of all Five Pathways that will eventually bring about the transformation envisioned in Teaching and Learning and the broader education system.

Summary of Recommendations
There are 54 prioritized recommendations, supported by additional sub-recommendations, that are summarized along with their relationship to the Five Pathways, at the end of the report on Teaching and Curriculum.

5. The Tertiary Sector

In his remit to the Commission, the Most Honourable Prime Minister noted that a key goal of the Commission is to develop a path to Jamaica truly becoming a part of the 4th industrial revolution. Any attempt to propel Jamaica forward in this direction must place emphasis on the role of the tertiary sector. The research and innovation necessary to drive that push will invariably emanate from these institutions. In addition, the development of flexible and creative thinking workforce will be impacted by these institutions. Given its importance within a context of constrained budgets, the sector must be a vibrant, efficient sector that is strategic in nature and facilitates access to all Jamaicans irrespective of their socio-economic background.

For the purposes of this report tertiary is defined as the level of education which:

> ***builds on secondary education, providing learning activities in specialised fields of study. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education. There is usually a clear hierarchy between qualifications granted by tertiary education programmes. It comprises ISCED levels 5 (short-cycle tertiary education), 6 (Bachelor's or equivalent level), 7 (Master's or equivalent level) and 8 (doctoral or equivalent level). The content of programmes at the tertiary level is more complex and advanced than in lower ISCED levels.***[9]

Jamaica's investment in tertiary education is considered high when compared with countries at similar stages of development. The key goals of the government's heavy investment in tertiary education are to provide a cadre of graduates equipped to take on managerial jobs and to spur innovation in Jamaica. Tertiary education is also seen as one vehicle through which many individuals and families can successfully move into the middle class in Jamaica.

The GOJ has allocated a significant portion of the total education budget to this segment, but key areas of concern include, inter alia, an overly complex governance framework, the significant migration of graduates, high dropout rates, and many institutions facing substantial financial challenges.

The Committee has conducted extensive consultations across the sector and also commissioned a survey that was focused on garnering a more detailed profile of the sector as well as to assist in determining the return on investment seen in this sector. The committee also dedicated significant time to understanding global trends in tertiary education and best practice seen. The team also examined academic papers on the returns to higher education and efficiency in the delivery of tertiary education.

Based on the consultations done and the review of existing reports, the Committee has developed a series of recommendations contained in Section 4 in Volume 2 of this report. The key recommendations can be grouped into the following thematic areas: the development of a more

[9]UNESCO et al. ISCED 2011 Operational Manual. 2011. https://www.oecd-ilibrary.org/education/isced-2011-operational-manual/tertiary-education_9789264228368-9-en

streamlined governance framework; a new funding methodology for tertiary institutions; alignment of tertiary institutions to the strategic goals of the country; specialization in the sector; technology; and labour market alignment.

Recommendations

- The development of an omnibus Higher Education Policy and Act with a single Higher Education Authority
- Funding to sector allocated in a more transparent manner using the following formula: BASE GRANT + RESEARCH GRANT + Special Alignment Grant
- A small percentage of funds allocated to tertiary institutions should be linked to some performance criteria
- A voluntary saving scheme should be established through a public-private partnership wherein parents (up to a prescribed income level) are allowed tax free saving toward their children's tertiary education
- Development of a functioning Tertiary Education Management Information System (TEMIS)
- Development of a framework for micro-credentialing aligned with the National Qualifications Framework
- The tertiary sector, especially community colleges and some universities, should partner more effectively with private sector entities to provide on the job training in learning hubs in the private organizations
- Steps should be taken to improve the provision of critical information to prospective students on labour market trends, strategic priority areas, and tertiary options available to them
- Eliminate sources of inefficiencies such as under-enrolment and duplication of programmes across tertiary institutions
- A capital investment fund should be created to fund investments in necessary upgrading projects throughout the tertiary sector
- Tracer studies should be done by the Higher Education Authority to determine not just the employment status of graduates, but also to ascertain the alignment of employment to achieved qualifications and the levels of underemployment seen

6. TVET in Jamaica

To many, technical vocational education and training (TVET) is not well understood. According to UNESCO and the International Labor Organization (ILO), TVET refers to "aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life"[10] TVET, the UNESCO_ILO team notes in another document, suffers from a status problem which accounts for a paradox in the difference between its potential and practice: "A high proportion of the population of poor countries remains unskilled, richer countries are struggling to meet the human capital demands of rapidly changing work environments and, almost universally, TVET remains the "poor relative" of education systems both in terms of perception and attention."[11]

[10] UNESCO and ILO 2002. Technical and vocational education and training for the twenty-first century. UNESCO and ILO recommendations.

[11] Joint ILO-UNESCO Committee of Experts, A Global Overview of TVET Teaching and Training: Current Issues, Trends and Recommendations.2018

Jamaica has a great need for TVET education. The country is at an intermediate stage of demographic transition with its youth, 15-29, representing 29 percent of the total population and 42 percent of its working age population. In spite of recent declining unemployment, the youth population still experiences high rates of un- and under-employment. Those youth who are employed are mainly in informal jobs, only a quarter in formal work. At the same time, the economy is greatly in need of skilled labor. This mis-match is a major brake on economic development. One obvious solution is the provision of technical and vocational training. As UNESCO-ILO notes: "The potential of technical and vocational education and training (TVET) to drive progress and transform societies is widely acknowledged. The European Union (EU) refers to it as the, "engine of economic development and international competitiveness."[12]

Jamaica has long been engaged with the problem of technical training of its youth, and exhibits the same prejudices against TVET in comparison with traditional academic subjects. The Human Employment and Resource Training/National Service Training Agency Trust (HEART/NSTA Trust was established in 1982 and is the main institutional support for TVET training. With the recognition that TVET should become an integral part of the traditional school system, there is the need to re-consider further the relationship between HEART and the schools, including the possible re-allocation of resources between the two systems, a re-allocation, it should be noted, that has already begun with HEART's $400 Million funding of the MOEYI's CAP program. Such a review is a major undertaking and the Honorable Prime Minister, Andrew Holness, has announced that, following this Commission, another will be appointed to conduct a thorough institutional appraisal of HEART and make recommendations for its reform, including its relationship with the schools in the provision of TVET. For this reason, we will not be reviewing the HEART program directly in this report, although it will be mentioned in consideration of TVET training that depends on it. We will focus instead on the present provision of TVET education in the schools and what should be done to improve and enhance its stature.

RECOMMENDATIONS

Recommendation #1

TVET should be fully integrated into the secondary school curriculum, recognizing it as the "T" of the highly promoted STEAM education with the option to always move into more academic subjects, or to integrate both.

Recommendation #2

There should be rebranding of TVET through a well-coordinated and aggressive marketing strategy to effectively promote TVET programs as a viable career path for national development.

Recommendation #3

Improving the Quality of Training Delivery

(Retooling and retraining of teachers and instructors)

Highly competent, qualified, motivated, flexible and creative teachers are the backbone of the TVET system. To implement a successful change in vocational education, instructors must be at the heart of the reforms. The UNESCO-ILO report on TVET points out that TVET teachers face special challenges that do not confront other teachers: ".

[12] Ibid

Recommendation #4

Reposition TVET to facilitate and strengthen capacities for entrepreneurial development.

Entrepreneurship education is believed to contribute significantly to economic performance through job creation, which in turn leads to a decrease in unemployment. There is the need for careful planning for entrepreneurship teaching in TVET in order to equip students with the knowledge and skills necessary to plan, start and run businesses in either formal or informal settings.

Recommendation #5

Human and financial resources must be increased for distance learning in TVET.

Jamaica must develop human and financial resources not only to respond to the current pandemic but to create long term impacts in creating effective learning environments for all Jamaicans.

Recommendation #6

Strengthening of the framework for measuring performance in TVET institutions.

Measures of performance play a dual role in educational environments. They are used to assess whether the initiative implemented meet the desired outcomes or used to examine processes and foster an environment of continuous improvement.

In this regard, **we strongly endorse the complete set of recommendations made by the Auditor General in her recent critical appraisal of the HEART Program.**

Recommendation #7

Implementation of formal initiatives for agricultural vocational training especially in rural areas.

Eighteen percent of the active population is employed in agriculture and 46% of the total population lives in rural areas. Agriculture remains at the economic base for the majority of the poor in rural areas. At the same time, the role of agriculture in addressing food security and poverty alleviation, and as the basis for sustainable socio economic growth cannot be over emphasized.

Recommendation #8

Inclusion of students with disabilities in formal vocational education programs.

Individuals with disabilities who can have access to education and vocational training are better poised to progress in all aspects of life. Technical education and training in Jamaica should seek to create codependent and self reliant citizens to contribute to the economic and social development of the country.

Recommendation #9

Establishment of a National Skills Council

- By widening the portfolio of an existing body (eg. the apprenticeship board) to oversee education and training at all levels of technical and vocational education.

- Help entities to achieve greater policy coherence, better overall management and oversight, efficiency, and equity.
- The establishment of such an entity for Jamaica's TVET should involve public, as well as private, providers and other stakeholders such as donor committees and government ministries.

Recommendation #10
Facilitating the collaboration of TVET institutions with business and industry.
Analyzing the labor market to inform the TVET system should be a continuous process to track changes in demand and requirements for qualifications and to make the necessary adjustments.

Recommendation #11
Following on Recommendation #9, TVET training and certifying institutions should seek out and attempt to provide formal certification to informally trained practitioners who demonstrate full mastery of their skill.

Recommendation #12
Above all, TVET should be understood and vigorously promoted as a lifelong learning (LLL)process.
Individuals should be provided with the opportunity to develop, along with other educational programs, the hard and soft skills that will improve their life chances and enhance Jamaica's development.

7. Infrastructure and Technology

Technology
Educational facilities of the future must be built on a strong technological foundation to support asset management, student and teacher engagement and quality internet accessibility for all. The digital transformation of Jamaica's education has been accelerated by the pandemic, with the sector being forced to leapfrog in adjusting to the new realities. Despite this pandemic-induced jump, however, it has been clear from data on attendance, and assessments provided by the MoEYI, that thousands of students have been left behind.

Nevertheless, research done on internet penetration in Jamaica shows that the majority of schools in the public education system have, since the COVID-19 pandemic, been given access to the internet, with the MOEYI reporting that 997 of 1332 publicly funded infant, primary, and high schools have arrangements with at least one of the nation's telecommunications providers.[13] Several schools received upgraded internet services since the start of the pandemic, with some are also benefitting from sponsorships for internet services by private donors. This report points to the continued gaps in the access to internet resources in Jamaica, the relationship between socioeconomic background and internet/device access, and highlights challenges to the effective use of internet and other technology resources in the Jamaican education system.

Several reports and studies, including the 2004 Report from the Task Force on Educational Reform, refer to not only the need to provide access to the internet in schools, but the increasing

[13]Data Provided by the MoEYI, "Internet Connectivity in Schools". 2021.

need to enhance the learning experience through the use of technology, to explore the use of technology for distance learning, and importantly, to ensure students are prepared to enter the world of work, no doubt requiring competencies in ICT. This Commission found that the public education system continues to lag behind its peers in terms of use of technology in the education system, and in the digitization of processes.

Infrastructure

Having a good school environment with quality infrastructure that is conducive to student learning is a critical consideration in budgeting and agenda setting in education policy. There is a relationship between safe and healthy learning spaces and educational outcomes, including through economical upgrades to existing spaces, and through carefully crafted school building designs that take into consideration student needs and comfort.



This report highlights that school buildings are dated, and in varying states of disrepair. Processes for maintaining and repairing damage to school infrastructure are inefficient, leading to lengthy wait times and additional costs for emergency repairs. Furthermore, budget and resources

earmarked for infrastructure upgrades and annual maintenance work are woefully inadequate to fill the needs of the nation's schools. There is also an evident lack of standardized software for back-end services streamlined across the levels of the education system, including for the reporting of infrastructure issues, needs, and in monitoring the disbursement and use of school equipment.

Recommendations

The recommendations highlighted in this report are intended to facilitate more efficient use of time and resources, and produce an overall improvement in the student learning experience. Among the key recommendations are:

- Increase government expenditure on school maintenance and capital projects. Given the age and high use of school buildings and equipment, resources must be updated and maintained, and processes must be streamlined for efficiency.
- Ensure access to quality broadband for education for all schools to enhance the learning experience, and ensure that all students and teachers have access to useful online resources.
- Invest in green building strategy to conserve energy and water resources, given the exorbitant utility costs borne by schools, specifically those in disadvantaged communities.
- Investment in new software and technology infrastructure to be filtered across all levels of the sector, including software to facilitate back-end processes such as payments and human resources.
- Continued strengthening of school security through construction of fences around school plants. Students and teachers rely on having a safe and secure teaching and learning environment for optimal performance.
- Improve and expand school transportation programmes. Transportation represents one of the highest household-borne costs related to education. The school bus programme piloted in some rural areas was found to increase student attendance and should be studied to be rolled out in other areas.
- The Ministry should increase investment in other infrastructure for co-curricular activities, for social development including athletic fields, theatre, arts and musical development to cater to the "whole" student.

8. Finance

Transformation of education in Jamaica requires careful consideration of how this change will be financed. This section of the report of the Jamaica Education Transformation Commission Report (the JETC Report) has two purposes. It sets out the financial principles or frameworks that should guide the prioritisation of the detailed recommendations of the overall JETC Report, wherever those recommendations have material cost or revenue implications. It also sets out recommendations for major changes to the way that Jamaican education is financed.

We propose that all recommendations be assessed with respect to the adequacy, efficiency and importantly the equity of the financing arrangements. In addition, we propose that for each recommendation, there be some consideration as to whether the educational opportunity ought to be provided to a greater or lesser extent as a public good (financed from taxes) or as a private good (financed by households in line with their preferences and ability to pay). Finally, we propose

that recommendations be viewed in a comparative light, and some effort be made to benchmark the proposal against international best practices.

The Framework of Adequacy, Efficiency and Equity

An effective education finance system is based on the fulfilment of three key objectives: adequacy, efficiency and equity. Adequacy and equity dictate the provision of the number of resources for all students to learn, irrespective of their background. Efficiency requires an examination as to whether the funds that are available for education are used to the fullest extent possible. These underlying concepts were used as the basis upon which this review of the financing of education in Jamaica was conducted.

The Public Goods and Private Goods Framework

Alongside adequacy, efficiency and equity is a related framework that also deserves policy attention. At each level of the education system – be it pre-primary, primary, secondary, tertiary or technical and vocational training – a share of the overall education spend can and should be generated from private resources (including student loans) and a share of the overall spend can and should be generated from public resources, including dedicated taxes and the consolidated fund. Naturally, the share of the education spend that comes from private funds will need to have a more direct relationship to informed individual private preferences and the varied resource endowments of different individuals. The share that must be organised and controlled through the power of the state would most naturally be the parts of the education system that have the attributes of a public good and/or represent the delivery of the core educational products that we generally believe are linked to the fundamental rights of all Jamaicans.

The Comparative Framework

Another perspective from which the financing of education should be considered is a comparative framework. Where appropriate, the outcomes in respect of the adequacy, efficiency and equity of our system of financing education are benchmarked against the performance of our geographic and economic peers as well as those countries that have successfully achieved results that accord with our long-term national goals. Similarly, we are able to draw on comparative insights from national peers and role models about which aspects of the education system might benefit from relatively higher contributions from public finance or, conversely, be able to allow for higher reliance on private financing.

Recommendations

This overarching assessment has led to the following conclusions:

i. Relative to its peers, Jamaica makes an adequate financial contribution to education. That is, Jamaica's public contribution to education as a share of its GDP and as a share of its budget is in line with international norms and higher than its regional peers.
ii. Jamaica's public commitment of financing to pre-primary education appears to be inadequate, relative to its peers. Jamaica can benefit from a systematic and programmed re-allocation of public funds from other levels of education to pre-primary education.
iii. Jamaica can improve educational outcomes at the primary education level with more public funding. There are also opportunities for a more efficient application of household and public spending on primary education to emphasize better staffing and staff compensation and possibly to organise school meals and transportation more efficiently.

iv. Jamaica's public contribution to tertiary education exceeds that of its peers, notwithstanding lower enrolment. Jamaica's tertiary education system can be enhanced with an increased focus on attracting private spending which can, in turn be generated from more productive use of the capital allocated to the Students' Loan Bureau. Jamaica's public spending on tertiary education can also be rationalised to support a broader range of institutions more equitably, and this in turn can address issues of enrolment.
v. Jamaica's public financial commitment to Technical and Vocational Education, through direct taxes for HEART/NSTA Trust (HEART) significantly exceeds that of its peers and appears to exceed its capacity to effectively use the funds to certify enrolees. Jamaica could benefit by taking legal measures to re-deploy funds earmarked for HEART to the more formative levels of the education system.
vi. Jamaica's funding commitment to capital expenditure on education appears to be inadequate. It is proposed that a detailed review of the utilisation of educational assets be undertaken with a view to repurposing or divesting under-utilised assets to fund capital investment. In line with increased prioritisation of capital expenditure, traditional multilateral and donor sources should also be tapped.
vii. The system of parental contributions should involve a progressive system of school fees, wherein middle and high-income households are required to contribute to financing the cost of their children's education, while poor households that cannot afford such contributions are exempt (but are the beneficiary of a comparable level of per student state support). The parental contributions will not necessarily be expended on the schools to which their children attend, but rather will be allocated to all schools on a per-student basis. The penalty for non-compliance and the enforcement arrangements for collection of non-payments will never include prohibitions on student enrolment or attendance, but may involve adverse credit reporting, penalty and interest charges and other civil remedies.

Jamaica must accept the reality of educational setbacks due to the COVID 19 pandemic and the reduced school attendance and student engagement that resulted from curfews and quarantines. Proactive one-off budget allocations over the next two years will need to be made to mitigate against these recent challenges to the educational system and aggressively seek to remedy learning loss arising from COVID-19. This initiative should also seek to maintain and lock in some of the technological advances in education (such as national on-line but in school teaching options) that arose, and are now available, because of COVID.

Addendum: How Jamaican Students Re-Imagine their Education

On behalf of the Commission, UNICEF Jamaica conducted a study of Jamaica's students' views and goals for their education. The following is a summary of its findings.

Students were engaged around four grounding questions:

a. Why should we Reimagine Education?
b. What do you think the purpose of school should be?
c. Is the education that you are receiving achieving that purpose and keeping youth engaged? If not, why?
d. Is there anything that is not taught in school that you would like to learn?

Student feedback to the first question overwhelmingly revealed a general feeling that there is a need to reimagine education because the traditional classroom is rapidly changing, especially with the impact of the COVID-19 pandemic. They were all clear that education was vital to their success in the world – and for some, the only way out of poverty. Their feedback to questions two, three and four were aligned across all schools: students imagine a more equitable classroom, enthusiastic and empathetic teachers expanded curriculum and engaging lessons. The students identified priority areas of focus for the future of education which could be grouped into four distinct pillars:

i. Equity and Inclusion

1. Inclusive education catering for diverse learners

ii. Relationships in Learning

2. Teacher-student collaboration
3. Empathy and compassion
4. Parent and teacher motivation

iii. Curriculum Content

5. Real-life experiences
6. Varied curriculum that caters to interests
7. Leadership skill development
8. Physical and co-curricular activity

iv. Teacher Capacity and Lesson Delivery

9. Active engagement
10. Blended learning

Students were highly appreciative of the opportunity to express themselves in a safe, non-judgmental space and felt that their opinions were valued and mattered.





3. THE STATE OF EDUCATION IN JAMAICA

3. The State of Education in Jamaica

3.1 The Size of the School Population

3.2. Jamaica's enrolment rates in comparative terms

3.3. Jamaica's Learning Crisis: Current State Assessment of Performance by the Nation's Schools and Students

3.3. A. The National Education Inspectorate Evaluation of the Nation's Schools

3.3 B. Student Exam performance between 2002 and 2019

- The Grade 4 Literacy test
- The GSAT exam
- The GNAT exam
- The PEP exam
- The CSEC exam
- The CAPE exam

3.3.C. High School Performance and Inequality: The Composite Value-Added Approach to the Evaluation & Ranking of Secondary Schools

3.4 Recommendations on the Evaluation and Ranking of Jamaica's Secondary Schools

3.1. The Size of the School Population

The MoEYI is one of Jamaica's largest public entities, both in terms of employment of persons and in the amount of services provided. Presently, there are eleven (11) agencies, seven (7) Regional Offices, and a central office with approximately 40 units which fall under 5 divisions. These unite to provide the framework for the functioning of over 1,000 public educational institutions that serve approximately 580,000 students and over 25,000 teachers.

The education system in Jamaica is divided into four levels-early childhood, primary level, secondary and tertiary level.

Table 1: Enrolment of Students at the Primary Level

	INSTITUTIONS*	ENROLMENT			
		MALE	FEMALE	TOTAL	PERCENTAGE
EARLY CHILDHOOD					
EARLY CHILDHOOD INSTITUTIONS	1,673	34,910	34,810	69,720	12.1
INFANT SCHOOLS	47	3,535	3,500	7,035	1.2
PRIMARY (INFANT DEPARTMENTS)	264	4,898	4,705	9,603	1.7
ALL AGE (INFANT DEPARTMENTS)	46	745	685	1,430	0.2
PRIMARY & JUNIOR HIGH (INFANT DEPARTMENTS)	34	622	607	1,229	0.2
KINDERGARTEN***	143	3,005	3,032	6,037	1.0
SUB - TOTAL	2,207	47,715	47,339	95,054	16.4
PRIMARY					
PRIMARY (GRADES 1 - 6)	585	82,596	79,393	161,989	28.0
ALL AGE (GRADES 1 - 6)	97	9,280	8,339	17,619	3.0
PRIMARY & JUNIOR HIGH (GRADES 1 - 6)	78	12,559	11,343	23,902	4.1
PREPARATORY***	161	12,099	12,056	24,155	4.2
SUB - TOTAL	921	116,534	111,131	227,665	39.4
SPECIAL SCHOOLS					
GOVERNMENT / GOVERNMENT AIDED***	10	1,568	993	2,561	0.4
SPECIAL EDUCATION UNIT***	13	335	114	449	0.1
INDEPENDENT SPECIAL SCHOOLS***	13	684	432	1,116	0.2
SUB - TOTAL	36	2,587	1,539	4,126	0.7

Source: MOEY, 2019. Education Statistics 2018-2019

Table 2: Enrolment of Students at the Secondary and Tertiary Levels

	INSTITUTIONS*	ENROLMENT			
		MALE	FEMALE	TOTAL	PERCENTAGE
SECONDARY SCHOOLS					
ALL AGE (GRADES 7 - 9)	1	100	25	125	0.0
PRIMARY & JUNIOR HIGH (GRADES 7 - 11)	11	769	487	1,256	0.2
SECONDARY HIGH	154	90,495	93,758	184,253	31.9
TECHNICAL HIGH	15	10,436	9,831	20,267	3.5
AGRICULTURAL HIGH	1	376	406	782	0.1
INDEPENDENT SECONDARY SCHOOLS***	31	3,100	2,000	5,100	0.9
SUB - TOTAL	213	105,276	106,507	211,783	36.6
TERTIARY					
COMMUNITY COLLEGES	5	3,728	6,490	10,218	1.8
TEACHERS' COLLEGES	5	675	2,928	3,603	0.6
MONEAGUE COLLEGE	1	450	1,573	2,023	0.3
BETHLEHEM	1	72	369	441	0.1
EDNA MANLEY COLLEGE OF THE VISUAL & PERFORMING ARTS	1	252	355	607	...
COLLEGE OF AGRICULTURE, SCIENCE & EDUCATION	1	528	885	1,413	0.2
G.C. FOSTER COLLEGE OF PHYSICAL EDUCATION & SPORTS	1	350	291	641	0.1
CARIBBEAN MARITIME UNIVERSITY	1	1,857	1,499	3,356	
UNIVERSITY OF TECHNOLOGY	1			0	...
UNIVERSITY OF THE WEST INDIES**	1	5,367	12,015	17,382	3.0
SUB - TOTAL	18	13,279	26,405	39,684	6.9
GRAND TOTAL	2,908	285,391	292,921	578,312	100.0

* Number of Institutions offering Education at the various levels
** Data are for 2016/2017
*** Data represent institutions that responded to the Annual Schools Census Questionnaire

Source: MOEY, 2019. Education Statistics 2018-2019. Tables 1-2a & 1-2b, pp.13-14

3.2. Jamaica's Enrolment Rates in Comparative Terms

What are Jamaica's enrolment rates at the different levels of the education system, and how do they compare with the other countries? In what follows Jamaica is compared with a selected list of other countries and groups of countries: Barbados, the Caribbean Small States (the twelve West Indian Island States plus Belize, Guyanan and Suiname) the Upper Middle-Income states (to which Jamaica belongs), Finland, Singapore, and the World average. Indicators are derived mainly from UNESCO, the World Bank and MOEYI.

The Pre-Primary Level

- Jamaica's enrolment rate is well above the world average. Indeed, the country claims to have one of the highest rates in the world if children in all early infant institutions are counted. However, this depends on whether one includes children in illegally operating ECIs (See the Early Childhood section of this report)
- Using UNESCO data, it ranks equally with the UMIC average
- But it is behind Barbados and the small Caribbean states
- And well behind Finland

The Primary Level

- Jamaica claims to provide universal access to children of primary school age, but the reality is more complex and it can even be said that it is failing its children at this level
- It's relatively large number of repeaters & Out-of-School children account for relatively low gross and net enrolment rates
- The nation's Net Enrolment Rate of 79% is worse than all comparands
- 17.2 % of primary age children are not in school, over twice the world average and five times the UMIC average
- The situation is getting worse: The NER rate was 95% in 1989
- Children are out of school for a variety of reasons, mainly economic, such as not having lunch money or transportation fare.

The Secondary Level

- There is a problem in the official enrolment rate for secondary schools claimed by the MOEY
- Jamaica's net secondary enrolment rate according to UNESCO is 75%, which is above the world average and similar to the Caribbean average, though well below Barbados'.
- The rate has been declining recently.
- A relatively high 18% of adolescents are not in school
- Recently, the World Bank in its PER report on the education system[14] claimed that the Jamaican authorities reported a secondary enrolment rate of 98%. This is wildly exaggerated. If true, it would be higher than nearly all the other countries of the world, including Finland (85%), the advanced OECD countries (82%) and even Singapore (95%)!
- A careful examination of the available age cohort data and secondary school population indicates that the correct rates are the following:

[14]World Bank. Public Expenditure Review of Jamaica's Education System, 2021, Figure 3, p. 19.

Table 3: Education Rates for Secondary Schools

The Lower Secondary rate (Grades 7,8,9, Age Groups 12-14) is:	89%
The Upper Secondary rate (Grades 10,11, Age Groups 15,16) is:	84%
The Lower and Upper Secondary rate taken together is:	87%
The rate for grades 12 & 13 [Age groups 17 & 18] is:	28.7%
The rate for grades 12 & 13 [including the 19-yearold] is:	20%

The Tertiary Level

The World Bank's recent (2021) estimate of enrolment in all tertiary institutions in Jamaica, based on an annual school census questionnaire is as follows:

Table 4: Jamaican Students' Enrolment in Tertiary Institutions, 2021

Type of Educational Institution	Number of students	Number of institutions	Number of teachers
Community Colleges	10,218	5	436
Teachers' Colleges	3,603	5	293
Moneague College	2,023	1	73
Bethlehem	441	1	57
Edna Manley College of The Visual & Performing Arts	607	1	193
College of Agriculture, Science & Education	1,413	1	73
G.C. Foster College of Physical Education & Sports	641	1	28
Caribbean Maritime University	3,356	1	-
University of Technology*	12,000	1	-
University of The West Indies	17,382	1	804
Total	51,684	18	1,957

Source. World Bank. Public Expenditure Review of Jamaica's Education System, 2021

In comparative terms:

- Jamaica's gross enrolment rate of 27% is well below UMIC and world averages
- It is far below Barbados', which, however, is an outlier
- There is a huge gender gap in tertiary enrolment: 69% females vs 31% males
- There is also a huge gender disparity in graduation rates for Jamaica: 3 times as many females as males graduate with tertiary degrees

3.3. Jamaica's Learning Crisis: Current State Assessment of Performance by the Nation's Schools and Students

Following the 2004 Task Force on education, considerable resources were spent on improvements to the education system, discussed at length in the Governance section of this

report. Under the direction of the Education System Transformation Program, six major institutions were instituted at a cost of well over US$ 75 million dollars. They include: The National Education Inspectorate; the Jamaica Teaching Council; the National College for Education Leadership; the National Education Trust; the Jamaica Tertiary Education Commission; and the National Parenting Support Commission. Considerable sums were also spent on reform of the Education Ministry in the hope of making it more efficient in delivering on its goal of improving teaching and learning of the nation's students. In addition, some $US 26 million were spent on the development of the Early Childhood Commission for its work in the early childhood sector, discussed in the Early Childhood Education section of the report.

The ultimate aim of all this capacity building was, of course, to improve the very poor educational performance of Jamaica's school children which at the turn of the century was extremely unsatisfactory. It is therefore appropriate to ask just what has been achieved as a result of these seventeen years of educational effort between the report of the 2004 Task Force and our own in terms of school performance and individual student achievement measured by their examination scores.



This section reports the results of three kinds of evaluations of the system's performance. First, we examine the findings of the National Inspectorate over the past 12 years of its existence on the performance of both the nation's schools and their students. Next, we report our analysis of the performance of the nation's primary and secondary students in national examinations over the past 18 years. Finally, we report on a new procedure for the evaluation of the nation's secondary schools—the value-added approach, which we combine with performance in the two

major secondary school leaving exams, CSEC and CAPE to produce a novel composite index for the ranking of schools.

3.3. A. The National Education Inspectorate Evaluation of the Nation's Schools

Following the recommendation of the 2004 National Task Force on Education Reform to establish a National Quality Assurance Authority, the National Education Inspectorate was established in 2008 by the Education System Transformation Program, (ESTP) charged with making annual reports on the performance and progress of all (or samples thereof) the nation's primary and secondary schools. Toward this end it carries out "whole-school, thematic and subject inspections, evaluate national and local initiatives, and assess the impact of the policies of the Ministry of Education on student attainment."

It developed eight indicators of educational performance, four evaluating inputs to the schools, the other four evaluating performance outputs as follows:

Input Indicators: leadership and management; teaching in support of students' learning; curriculum enhancement programmes; and human and material resources
Output Indicators: student performance in national or regional tests and assessments; students' progress; students' personal and social development; and safety, security, health and wellbeing.

In addition, there was a ninth indicator that evaluates the overall performance of each school.

Between 2010 and 2015 it inspected all 953 of the nation's primary and secondary schools, which were then educating some 500,000 students, a sample of whom were assessed in surveys. Parents' views as well as community contexts were also appraised. The first report was published in 2015 and constituted a baseline of findings against which progress in subsequent years were, and are being, assessed.

The NEI's baseline report was very critical of performance by the nation's schools and students.

55 percent of the nation's schools were evaluaed as ineffective
Accountability was found to be a "buzz word" not properly understood
45% of school leaders were evaluated as 'unsatisfactory', with wide disparity in performance Only 55% of teachers were evaluated as 'satisfactory or above'
The education system was found to be "essentially teacher-centered" with little effort made at stimulating creativity, critical thinking and the building of confidence."
This was contrasted with the 'eagerness' of the students to learn and their good attitude toward their lessons.

However, in its annual report the following year (2016) the NEI reported quite remarkable improvements.

There was a puzzling leap in performance on nearly all indicators
In 2016: 63% schools were evaluated as 'effective overall'
Leadership and management leapt from 59% to 76% 'satisfactory'
Teaching in support of learning moved from 59% to 71%
Student progress was up from 47% satisfactory to 62%

No good explanation for the sudden improvement between 2015 and 2016 was given, except that only 170 schoolS were inspected in 2016, compared with the cumulative baseline report of 953 schools. Hence apparent improvements may have been due to sampling issues. This meant that these 170 schools were far above the national average reported in 2015. It is therefore odd that, in spite of these exceptional improvements on the school level indicators, the Math and English scores of students declined over the year. This was to continue throughout the years: between 2015 and 2019, using its own system of measuring student individual performance, the NEI found only modest improvement in overall scores but slight decline in Math and English.

Regression analyses were conducted on the NEI data. Bearing in mind that a report taking all schools into account similar to that of the baseline year of 2015 has not yet been done, and assuming that the schools inspected in 2019 constitute a proxy for a sample of all schools, the takeaway conclusions from the analysis of the NEI inspections over the past 12 years are as follows:

Main takeaways from the regression analysis of the NEI data for 2015-2018

- Teaching was the most important factor in explaining school effectiveness followed, to a substantially lesser degree, by school leadership
- Teaching had the strongest association with student progress
- Performance in Math & English was not well explained. There was only a weak relationship to teaching, which declined between 2015 and 2019
- Provision for safety, security, health, and wellbeing were moderately important factors explaining student social and personal development

- There were important variations between types of schools:
  - There were higher means of effectiveness for technical high schools
  - There were higher Math & English means in secondary & technical high schools
  - There were substantially higher means in personal/social development in technical schools
  - There were substantial declines in Math & English scores in primary schools which explain most of the overall declines in scores for these two subjects

3.3B. Student Exam performance between 2002 and 2019

We turn now to an examination of the performance of the nation's students on six national exams taken between 2002 and 2019, the first for such an extended period. They are:

- the Grade 4 Literacy test;
- the GSAT exam;
- the GNAT exam;
- the PEP exam;
- the CSEC exam;
- the CAPE exam.

THE GRADE-4 LITERACY & NUMERACY EXAMS

First administered in 1998, the tables below show that students performed well on these tests, with performance increasing over time.

- The gender gap begins from early. Boys, however, have narrowed the gap in literacy from 17 to 12 percent points.
- Although boys have improved in Math by 10 points, there has been no narrowing of the gender gap
- The large gap between private and public schools is widest in Math: 24 points

Figure 1: Mastery in Grade 4 Literacy & Numeracy Tests, 2005 - 2018

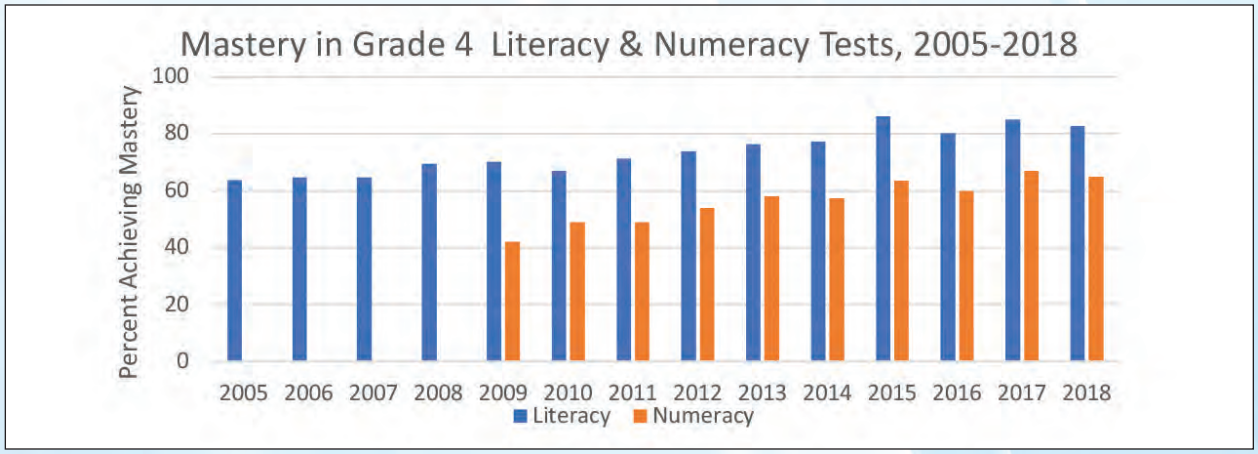


Table 5 Mastery in Grade 4 Literacy Tests by Gender, 2012 - 2018

	2018	2017	2016	2015	2014	2013	2012
Females	17, 157 (90.3%)	17, 258 (91.1%)	16,445 (88.2%)	18,528 (92.5%)	17,598 (86.3%)	17,939 (85.2%)	17,968 (83.2%)
Males	14,582 (75.5%)	15,082 (79.0%)	13,358 (72.3%)	15,661 (79.9%)	14,190 (68.3%)	14,671 (67.9%)	14,574 (64.7%)

Table 6: Mastery in Grade 4 Numeracy Test by Gender, 2014 - 2018

Mastery in Grade 4 Numeracy Tests by Gender, 2014-2018

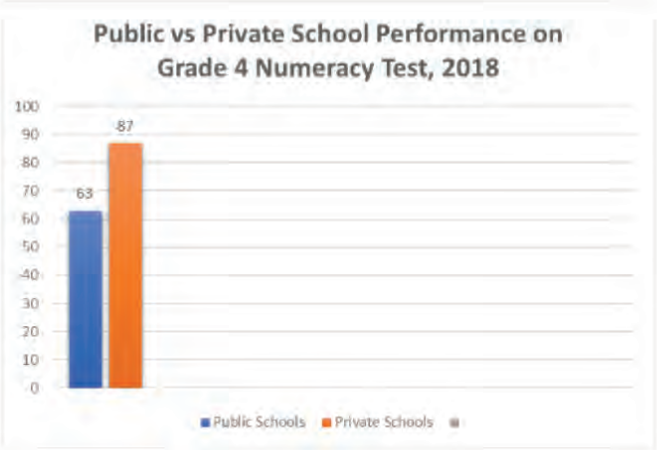
The gender-gap, however, has not narrowed in Math. Nonetheless, there was a 10-point improvement among boys between 2014 & 2018

Year	National (%)	Male (%)	Female (%)
2014	57.5	50.2	65
2015	63.6	56.2	70.8
2016	59.8	53.1	66.5
2017	66.9	61.1	72.8
2018	65.6	58.9	72.5

- MOEY, Planning & Development Division,2019. "2018 General Achievement in Numeracy (Grade Four Numeracy Test) Results by School."

Figure 2: Public vs Private School Performance on Grade 4 Numeracy Test, 2018

- The Gap between public and private schools is much wider in Math: 24 points in 2018
- 758 Public Schools with a sitting population of 33,837 students sat the numeracy test in 2018
- 239 Private Schools with a sitting population of 4,5089 students sat the numeracy test that year



THE GSAT EXAMINATION

GSAT replaced the UK's Common Entrance Exam in 1999

Five subjects were examined: Math, Science, Language, Social Studies, and Composition

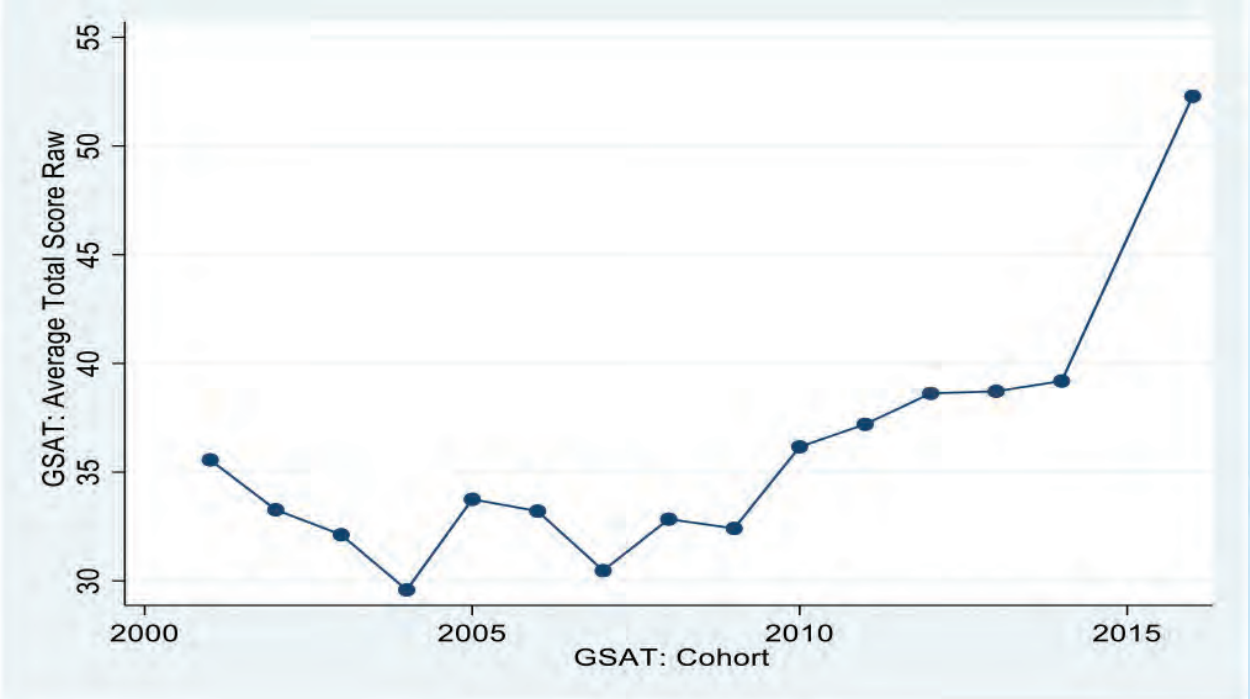
Up to 2014 the score ranges were 80 for math/language/social studies, 60 for science, and 12 for composition

However, in 2015-2016, all the score ranges, except composition, changed to 100

To make the scores comparable we used weighted averages and transformed all to percentages

GSAT was replaced by the PEP in academic year 2018-2019

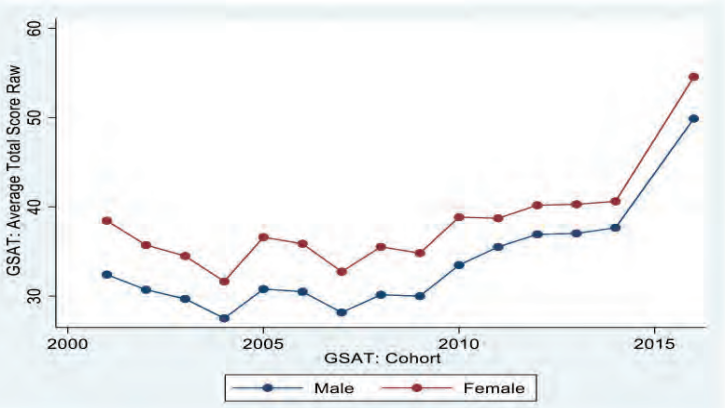
Figure 3. GSAT: Average Total Score Raw



There was significant improvement in the scores between the very low point of 2004, when the mean score was only 15, and 2015.

Figure 4: GSAT Average Score by Year

GSAT Average Score by Year



Girls outperformed boys in all subjects throughout the history of the tests although the gap narrowed over the years, reaching its lowest point in 2014.

Figure 5: GSAT Mean Total Score by Region

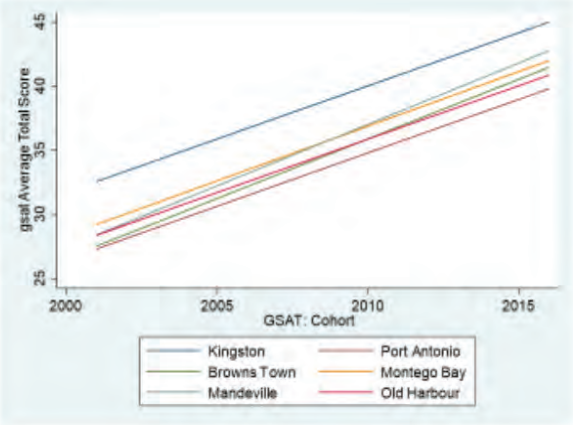
GSAT Mean Total Score by Region

The improvement in mean scores occurred in all regions

However, the Kingston region showed the greatest improvement

The Mandeville region overtook Montego Bay from 2010

Port Antonio was the poorest performer throughout the period

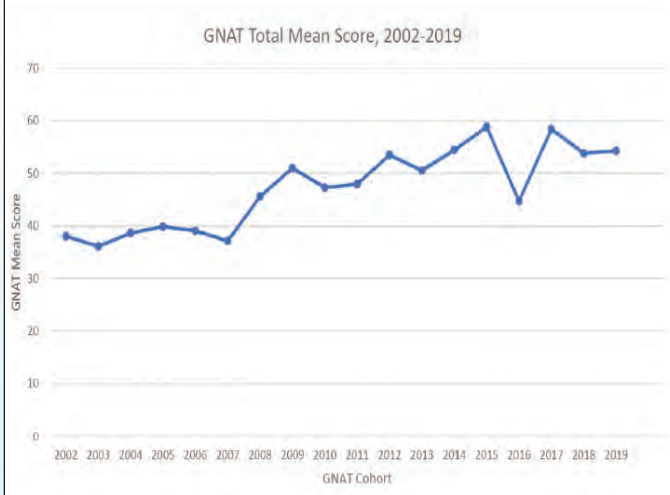


THE GNAT EXAMS

Offered to students at the end of grade 9 at All Age and Primary, and Junior High Schools for placement in Secondary schools

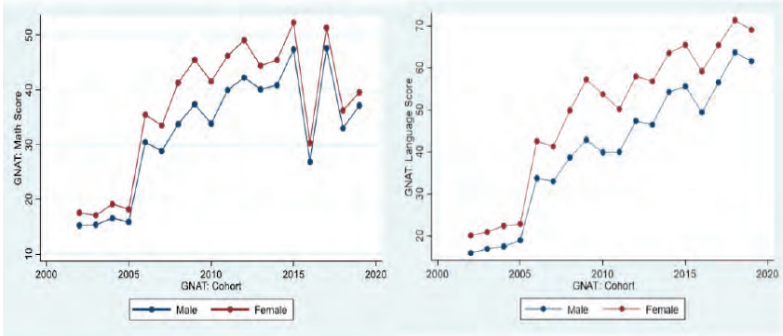
The Test was cancelled (NOT terminated) in 2021

Figure 6: GNAT Total Mean Score, 2002 - 2009



- Improvements in GNAT scores were less impressive than those for GSAT
- Recall that these testers were usually students attending the weaker non-traditional schools, often from less advantaged homes
- The mean score at its best was a bit under 60% in 2015, but declined to 55% in 2019

Figure 7: GNAT Math and Language Scores by Gender



The GNAT Math scores improved from abysmal to poor over the period, up from under 20 in 2002, but still under 40 for both gender

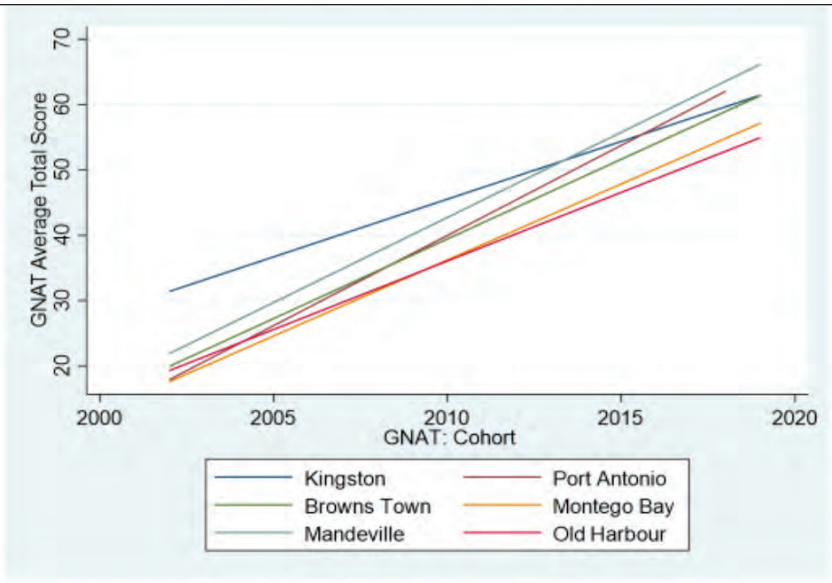
The performance improvement in Language was much better

The gender gap-- narrower than for GSAT—widened, then narrowed, for both subjects

Figure 8: GNAT by Region

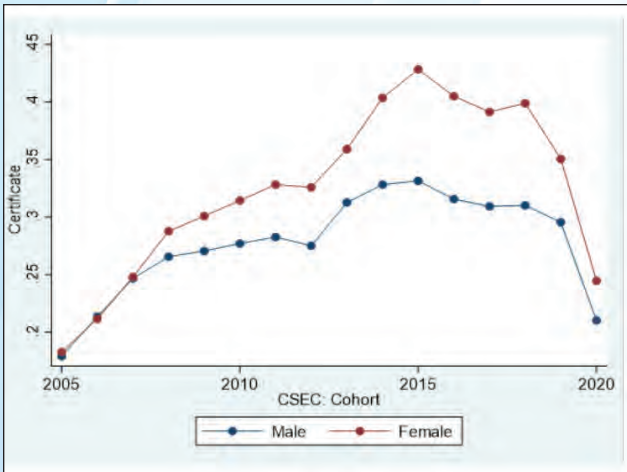
GNAT by Region

- Mandeville and, surprisingly, Old Harbour, students have out-performed those from Kingston in the GNAT, since 2014



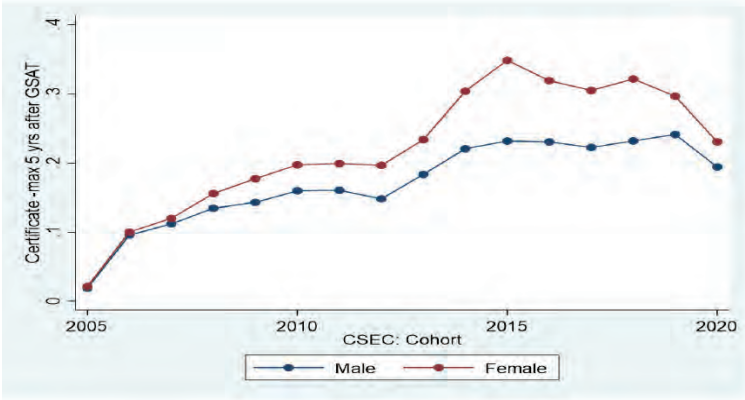
THE CSEC EXAMS

Figure 9: CSEC Performance by Gender, 2005 - 2020



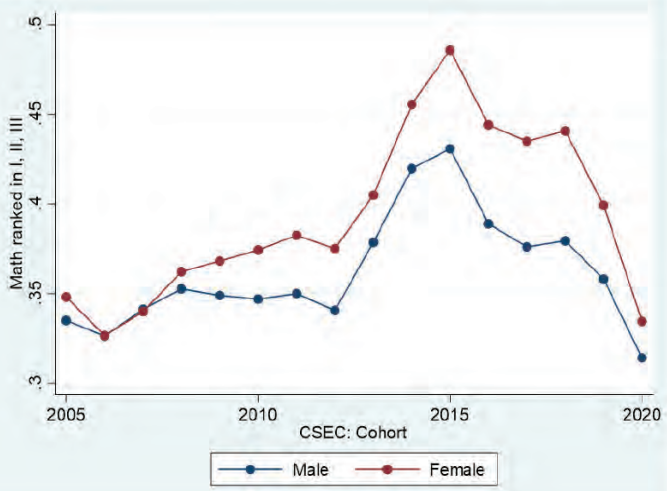
- The CSEC Performance begins from an extremely low baseline of less than 10% in 2005 receiving certificates
- Improvements have been substantial, but the rate never exceeded 43%, gained in 2015
- However, after 2015 the rate plunged to under 30% in 2019
- The gender gap grew from 2007 to 2015 when it reaches 10 points, but has narrowed since to 5 points

Figure 10: CSEC Taken Less than 5-Years after GSAT, by Gender



- Even worse is the Certificate rate within 5-years after taking the GSAT
- It was 2% in 2005, Improved to 35% among girls and 22% among boys in 2015
- Since 2015 the rate among girls declined, while that of boys improved slightly

Figure 11: CSEC Math ranked I,II,III



- Jamaica is the rare country where girls outperform boys in Math
- Both boys and girls perform at under 50% in Math ranked I,II,III
- Performance in Language is much better, girls reaching 70% in 2015, when the gender gap was 15 points
- Since 2015 the overall rates have declined, and the gap narrowed

CSEC Performance in 2019: A Closer Look

33,639 registered to sit exams:(18,627 Females, 15012 Males)---55%/44% ratio

32,617 actually sat exams: (18,202 females, 14, 415 males)--- 55/44% ratio

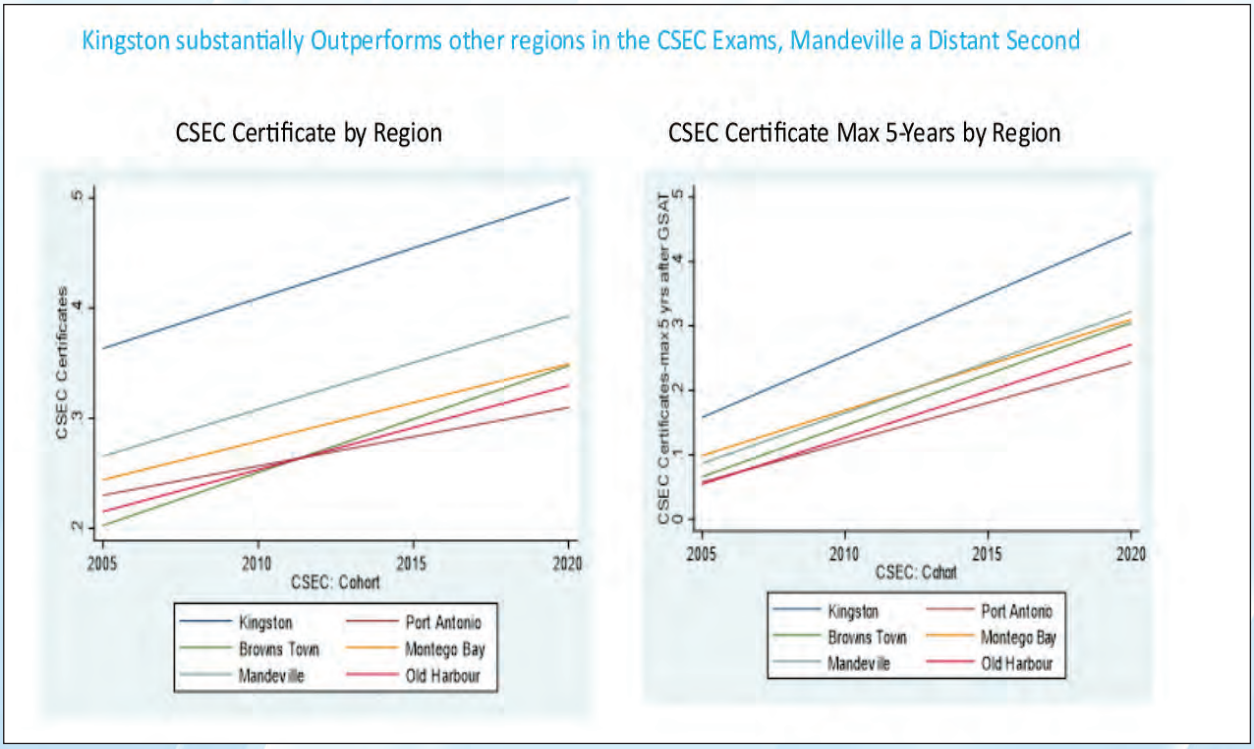
13, 861 passed 5 or more (with English & and or math) ---42.5% overall

- 47% of Girls; 34% Boys

9,234 passed 5 or more (with English & Math)—28% overall

- 31% Girls; 23% Boys

Figure 12: CSEC by Region



THE CAPE EXAMS

Figure 13: CAPE Exam Results, Diploma and Associate: 2005-2020

- There were declining CAPE Pass Rates at both the Diploma & Associate levels
- The Diploma pass rate has declined since 2008, and the Associate rate since 2013
- Both are now under 50%, the Diploma at 45%, the Associate at a bit under 40%

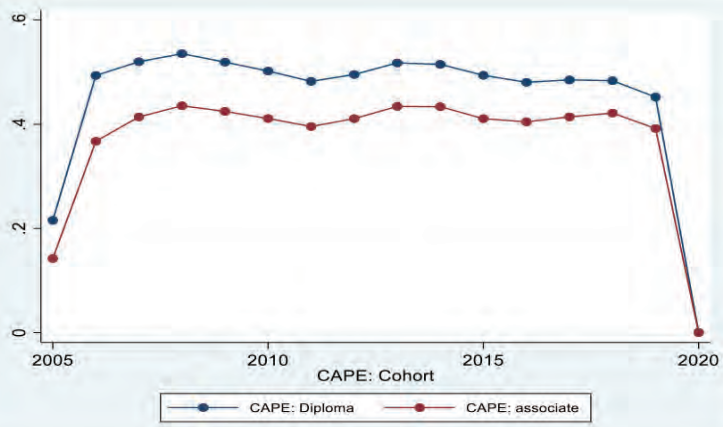


Figure 14: CAPE Pass Rate & Certificate Type, by Gender

The Gender Gap has narrowed slightly, as both genders show a decline in performance to under 50%

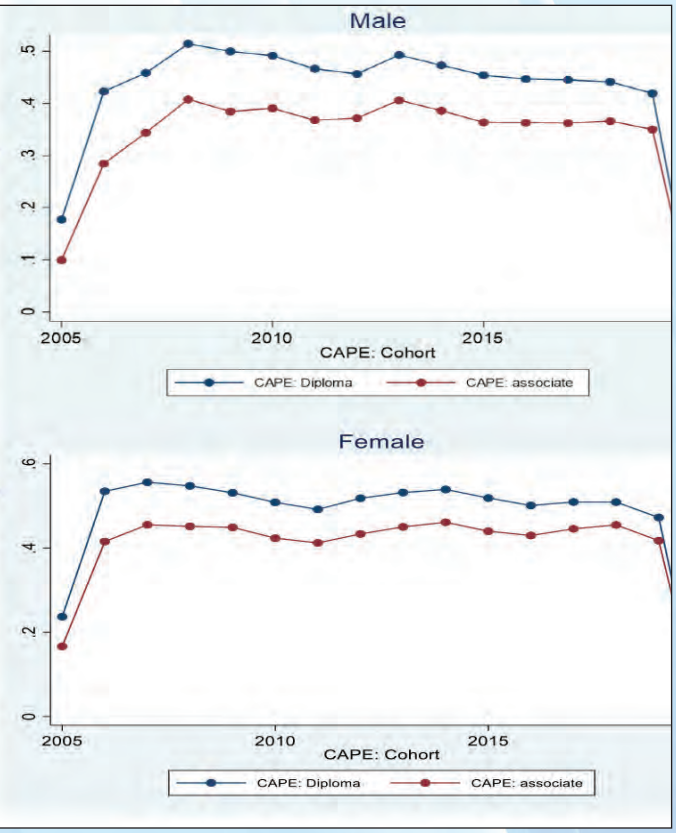


Figure 15: CAPE by Number of Units Taken, Rank & Completion

- The number of CAPE units taken has declined moderately
- Then number of units ranked I has been low, close to zero
- Those ranked I in subjects completed, even lower

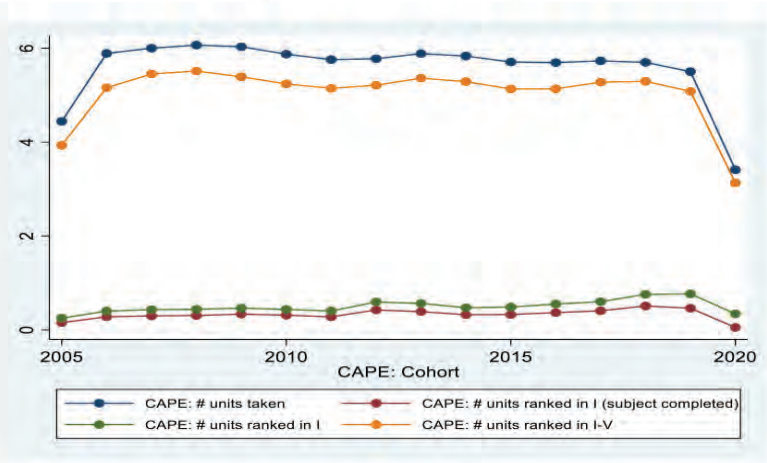
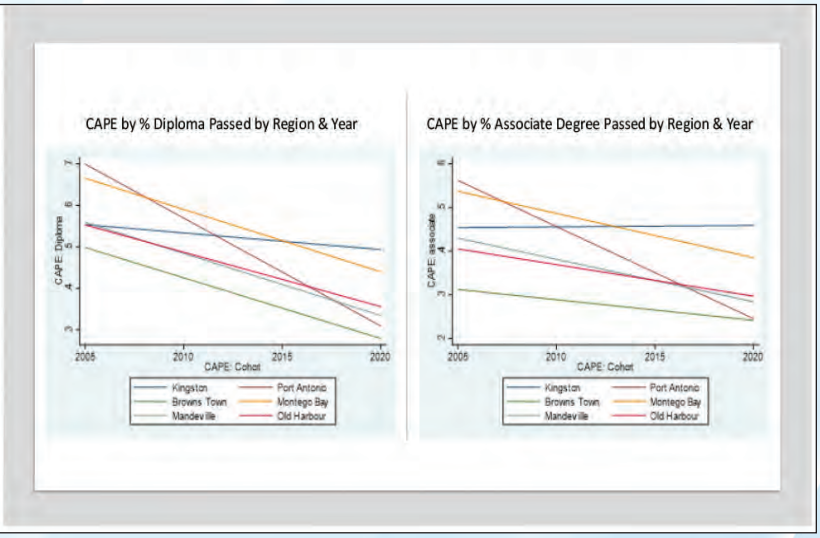


Figure 16: CAPE by Region, 2005-2019

There has been a disappointing downward trend in the percent of Diplomas, as well as Associate Degrees awarded in all regions, but strikingly so in Port Antonio and Browns Town Regions



THE PRIMARY EXIT PROFILE RESULTS, 2019



What the PEP Revealed

PEP was a new start in testing in Jamaica, a shift away from memorized learning to analytic and creative thinking

It revealed major deficiencies in the level and kind of learning achieved by our students

In spite of improvements in exam performance over the previous 17 years, the PEP revealed extremely troubling levels of inadequacy in both literacy and numeracy

Table 7: Primary Exit Profile (PEP) Performance in 2019

Primary Exit Profile (PEP) Performance in 2019

41 % PASSED IN MATHEMATICS
49% PASSED IN SCIENCE
55% PASSED IN LANGUAGE

SUBJECT	PERCENT BEGINNING	PERCENT DEVELOPING	PERCENT PROFICIENT	PERCENT HIGHLY PROFICEINT	PASS/FAIL RATIO
MATHS	7	52	35	6	41/59
SCIENCE	7	44	42	7	49/51
SOCIAL STUDIES	3	34	50	13	63/37
LANGUAGE ARTS	9	36	46	9	55/45

PEP Indicated that Most Students Were Barely Literate!
The mean language score in the GSAT in 2018 was 65. While the 2 exams are not strictly comparable, the GSAT score did indicate at least acceptable levels of literacy. But PEP showed that:



READING: 33% CANNOT READ OR CAN BARELY DO SO



WRITING: 56% CANNOT WRITE OR BARELY



RESEARCH: 58 % CANNOT FIND INFO ON A TOPIC OR BARELY

Is the Gender Problem Getting Worse?

MATHEMATICS: 66% MALES FAILING/
51% FEMALES

SCIENCE: 57% MALES FAILING/
44% FEMALES

LANGUAGE ARTS: 55% MALES FAILING /
35% FEMALES

SOCIAL STUDIES: 50% MALES FAILING/
37% FEMALES

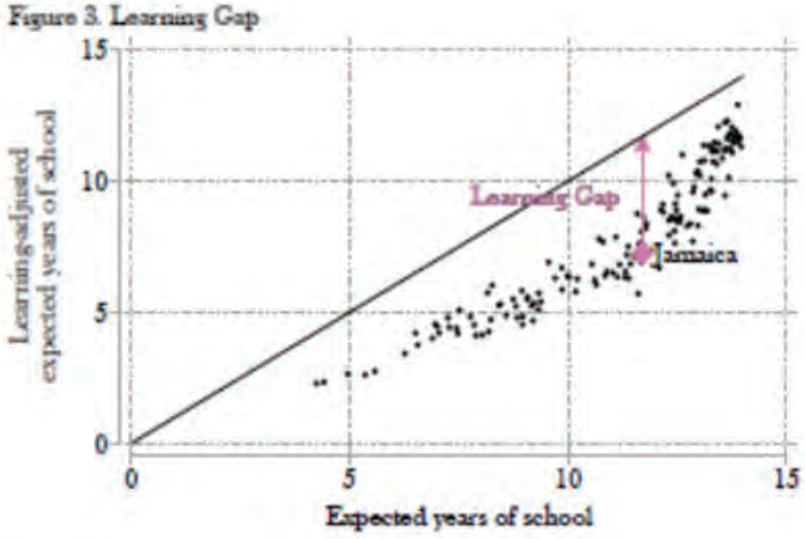


The gender disparity widens even more at the tertiary level. In addition to the 69/31 percent female/male ratio in enrolment, Jamaican women graduate at three times the male rate from tertiary institutions.

Figure 17: Learning Gap

The Failure Rate in PEP Supports the World Bank's Recent Verdict on Jamaica's Education

- That there is a learning crisis of high enrollment and poor performance
- That children in Jamaica can expect to complete 11.7 years of pre-primary, primary and secondary school by age 18.
- That, however, when years of schooling are adjusted for quality of learning, this is only equivalent to 7.2 years, a learning gap of 4.5 years



Source: World Bank: *Human Capital Project, 2018*

3.3.C. High School Performance and Inequality:

The Composite Value-Added Approach to the Evaluation & Ranking of Secondary Schools

The previous section examined the performance of Jamaica's education system at the level of individual student exam results. In this section the performance of the system at the level of its secondary schools is examined, using a new approach: the value-added method, which we combine with exam ranking to produce a new composite index. How do the different high schools of Jamaica compare with each other? This is a question of great importance to educators and parents, especially the latter, in deciding where to send their children to school. The traditional method of evaluating high schools is simply on the basis of the percentage of students who pass, at different levels, the CSEC and CAPE Exams. It is now generally accepted that this method, taken alone, is both misleading and unfair. How students perform in the CSEC and CAPE exams is only partly attributable to the schools they attend. Of equal or even more importance are the inputs students bring to the school: their individual qualities, their socio-economic background, the amount of tutoring they receive outside of school, the region in which they live, and so on. For these reasons, one can usually fairly accurately predict how a student will perform on the CSEC and CAPE exams largely on the basis of their performance on their baseline GSAT exam before they have had any exposure to their high schools. Schools do make a difference, but the difference they make may not be accurately reflected in the percentage of passes in the final CSEC and CAPE exams. If a high school gets mainly students from disadvantaged homes and poor performing primary schools but ends up with only 40 percent of them passing their CSEC exams, it may well be a better performer than a school that gets very advantaged and well-prepared students that end up with a pass rate of 75 percent in the CSEC and CAPE exams.

The value-added approach was developed to get around this problem and to provide a better means of evaluating the relative performance of schools. The term "Value Added" refers to the value that a school, or teacher, adds or contributes to the achievement growth and academic performance of their students, over and above what the students themselves and their background characteristics bring to the school. The basic question asked is, how much of the performance of the student can be attributed to the school when compared with the average, statistically similar, students in other schools? A value-added analysis of Jamaica's high school was conducted for the Commission by expert statisticians and economists at the IADB and the results are reported in this section. The approach is explained at greater length in the Annexes. However, pass rates remain important and educators and parents should take account of them in their evaluations. For this reason, we have developed a composite ranking index that combines the relative performance of schools on both the value added and pass rate in the terminal high school exams.

Jamaica is a very unequal society, and this is strongly reflected in the inequality of our schools. We, in fact, have two school systems, especially at the high school level. One, which is sometimes called the traditional schools, mainly serves the students of the middle and upper classes. They are high performing institutions that can compete with the best schools anywhere in the world. Indeed, their graduates matriculate in some of the greatest universities of the U.K and U.S., in addition to the UWI. Students entering these institutions are often coming from high quality prep schools. On the other hand, there are the non-traditional secondary schools, which the children of the rest of the nation attend (apart from unusually bright ones who win scholarships to the



traditional elite schools). These schools receive children from working class as well as impoverished homes, which lack the most basic resources to help their children, not to mention the fact that many of the parents or these pupils are functionally illiterate or just plain illiterate. These children are also nearly all coming from government primary schools, many of which are not well served. Given this realization, the decision was taken to separate the results of the value-added modelling into two groups of schools, traditional (or elite as they are sometimes called) and non-traditional, and rank them separately. One, of many, advantage of providing two sets of rankings is that it brings to attention the many high performing schools in the non-traditional group that usually go unnoticed because their CSEC results are much lower than those of nearly all the traditional schools even though they are working educational wonders with the disadvantaged and poorly prepared students that they recruit. Another advantage of separating the schools into traditional and non-traditional is that the former ends up competing for rank only with their fellow privileged schools with equal proportions of well-endowed baseline recruits. Hence, formerly top schools that find themselves no longer at the top cannot complain that they had only limited room to demonstrate added value, since other equally well-endowed schools show that it is still possible to add to the already well-prepared incoming cohort of students, not to mention being better at taking in more students from less fortunate homes and bringing them up to the standards of the majority of privileged, initially far better prepared students.

Results for the Traditional Schools are in Table 8, and for the Non-Traditional in Table 9

In addition to the two main groups of schools, there is a third category which had to be dropped from the value-added procedure due to missing information, technical issues and the fact that too many had zero exam results which destabilizes the value-added model. Some 30 percent

had zero CSEC, and over 60 percent zero CAPE, results. Although these schools were dropped from the value-added procedure, their exam performances are nonetheless provided, since this will still allow the MOEYI experts to make evaluations of where things stand with them, and to distinguish the degree to which they need urgent attention. These results are presented in Table 27 of Appendix 2.

The Value-added method is an extremely useful measure in educational planning and reform, now widely used in America, England (where it has been used by the Department of Education since 2002) and elsewhere. Still, there are issues of internal validity, causal inference and consistency over time which critics have persistently raised that are too technical to get into here. Of more relevance are issues relating to external validity--the degree to which results can be generalized across different institutions in real world situations. Such questions can be raised of all social scientific studies, especially those using very complex statistical models that make all kinds of assumptions about the real world. One important way of dealing with the problem of external validity is to supplement the value-added results with those of other methods of evaluating school performance. This is now routine in England and the U.S. Jamaica is fortunate, especially for a country of our level of development, to have at least one other such national method of evaluation, namely, the annual results of the National Educational Inspectorate discussed above. The results of the value-added procedure were compared with those of the National Education Inspectorate's by its Inspector who reported that the two sets of results comported with each other. This is very good news since it suggests a high level of external validity for both procedures and hence increases our confidence in the accuracy of their results.

As indicated earlier, we have also introduced a new, composite index that combines the ranking of schools on both the value added and exam pass rates of schools. Although our focus is on the value-added performance, rankings on the traditional measures such as percent passes in the CSEC and CAPE exams are also presented for the convenience of educators and parents who may wish to use these evaluations for their own purposes.

Table 8 tabulates the results for the 42 traditional schools, **Table 9** for the 211 non-traditional schools. **Table 27** in Appendix 2 are results for the 100 schools dropped from the value-added procedure because of data related and technical reasons.

Here is a brief description of each column, starting with column (3) and ending with the Column (2). The third column is titled, **'Ranking based on Average Result (% CSEC Certificate)**.' This is the average ranking of the schools on the basis of their performance in the CSEC exams over the 18 years from 2001 to 2018. Note that this not only brings the ranking up to date but shows the schools performance over a substantially longer period than the previous model results. Needless to say, such longitudinal averages are much better than one-shot, single year results. Column (4) is **'Ranking based on Added Value (% CSEC Certified).'** This reports the ranking of the value-added scores relating to the CSEC results. These VA scores were estimated separately from those relating to the CAPE results. There were good reasons for doing this, mainly because the population of students taking the CAPE exams differ in substantial, and statistically significant, ways from those sitting the CSEC exams, as I elaborate on below. Column 5, **'Ranking based on Average Result (VA CSEC and % CSEC Certificate)'** is a composite rank. It averages the

ranks on CSEC Certificate performance and the CSEC value added. Column 6, **'Ranking based on Average Result (% CAPE Diploma)'** reports results based on the CAPE exams. This, and the next two columns, repeat estimates similar to those for the CSEC exams: Column 7, 'Ranking based on Added Value (% CAPE Diploma),' and Column (8), 'Ranking based on Average Result (VA CAPE + %CAPE Diploma). The final columns (8) and (9), simply present the averages for the CSEC and CAPE pass percentages. These are the results, on the basis of which schools were (and still are) ranked by others. this brings me to the final, most important ranking, reported in column (2), the **'Overall Ranking based on the Average of All other Rankings**. Our view is that it does a better job of assessing the performance of our schools and in attributing merit where it is most deserved. It is also the fairest approach. Unlike school systems that rely solely on final exam results without regard to background or baseline student characteristics, it takes account of such factors by means of the value-added scores; at the same time, unlike school systems that have become over-reliant on value-added scores, such as the British Education System since 2002, which has been subject to mounting criticism from statisticians and education experts, it takes account of schools' exam results.

Our new system of ranking yields results quite different from the traditional ranking system based solely on pass rates on the CSEC and CAPE exams. The nation's top 3 traditional secondary schools, based on the composite ranking system that averages performance on all the tests, are: Glenmuir High School, Wolmers Girls High School, and St. Jago High School. The top three non-traditional high schools are: Dinthill Technical High School, Denbigh High and Edwin Allen High School. Focusing only on the value-added results, among traditional schools, Merl Grove emerges as the school that offers the greatest value added to its incoming students based on the CSEC results, while Campion performs best in value added based on its CAPE pass rate. Among non-traditional schools, St. Mary's High contribute the highest value added based on the CSEC exams, while Bluefields High/Belmont Academy had the best value added based on the CAPE results. Based solely on the traditional method of exam pass rate in the CSEC and Cape exams, Campion remains the best performing school on both exams among traditional schools. Among non-traditional schools, Herbert Morrison performed best in the CSEC pass rate, while Bluefields High/Belmont academy had the highest pass rate in the CAPE exams.

The rankings of all 42 traditional secondary schools and of the top 42 non-traditional schools is presented in tables 25-26 in Appendix 2. The rankings of all the schools evaluated in the value-added model as well as the remaining 100 schools that could not be modeled are also given in Appendix 2 of this report.

3.4. Recommendations on the Evaluation and Ranking of Jamaica's Secondary Schools

1. **It is recommended that in future years all secondary schools should be evaluated and ranked using the value-added procedure**
2. **The value-added procedure should be based on, and separately reported for, the CSEC and CAPE exams**
3. **The value-added rankings should be combined with the rankings on the regular CSEC and CAPE exams to produce the composite rank for all schools in the manner indicated above**

4. **MOEY should distinguish between Traditional and Non-Traditional schools in its annual reports on the performance of secondary schools**
5. **MOEY should pay special attention to schools that perform best in adding value to the educational achievement of the students they recruit. The performance of such schools should be publicly acknowledged and rewarded**
6. **The evaluation of schools using the value added and composite measures should be carefully compared with the evaluations of the NEI to ascertain the external validity of both approaches.**
7. **The annual evaluations of the nation's secondary schools using both the NEI and value-added approaches should be widely distributed and broadcast for the benefit of all educators and policy makers, as well as that of parents for whom they will be of value when making critical decisions about the schools to which they should send their children.**
8. **Every effort should be made to ensure that all schools are in a position to provide the appropriate data needed to conduct the value-added procedure**

Table 8: Rankings of Average & Value-Added Scores for CSEC & CAPE Exams + Base % Average Results (Traditional Schools 2001-2018)

Secondary School Name	OVERALL RANKING Based on Average of All Other Rankings	Ranking based on Average Result (%CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (%CAPE Diploma)	Ranking based on Added Value (%CAPE Diploma)	Ranking based on Average Result (VA CAPE and CAPE Diploma)	Average CSEC % Certificate	Average CAPE % Diploma
GLENMUIR HIGH SCHOOL	1	3	16	1	4	3	4	72.04%	46.55%
WOLMERS HIGH SCHOOL FOR GIRLS	2	6	24	9	3	2	2	69.86%	52.01%
ST JAGO HIGH SCHOOL	3	15	12	7	8	5	7	62.13%	38.87%
ST ANDREW HIGH SCHOOL FOR GIRLS	4	5	17	3	11	15	12	71.42%	34.32%
IMMACULATE CONCEPTION	4	2	35	16	2	4	3	72.89%	54.26%
CAMPION COLLEGE	6	1	41	22	1	1	1	73.64%	64.15%
WOLMERS BOYS HIGH	7	8	30	17	6	7	7	68.81%	43.43%
CONVENT OF MERCY	8	22	11	13	12	9	9	58.69%	31.26%
HAMPTON HIGH	9	4	37	30	5	6	5	71.50%	45.86%
QUEENS HIGH SCHOOL	10	28	8	15	15	8	10	52.76%	28.90%
ST HUGHS HIGH SCHOOL	11	23	5	8	20	14	16	57.21%	27.47%
ARDENNE HIGH SCHOOL	12	7	33	19	7	13	8	69.17%	39.66%
CLARENDON COLLEGE	13	32	3	14	23	11	16	48.02%	26.88%
MEADOWBROOK HIGH	14	25	6	10	21	19	19	56.30%	27.14%
KINGSTON COLLEGE	15	19	14	13	19	20	18	61.32%	27.78%
HOLY CHILDHOOD HIGH	16	17	9	6	26	23	26	61.88%	26.12%
WESTWOOD HIGH	17	10	22	11	13	31	22	68.22%	30.88%
ST HILDAS DIOCEAN	18	13	13	6	26	23	26	63.63%	26.15%
KNOX COLLEGE	19	18	4	3	29	29	31	61.47%	24.00%
DECARTERET	20	16	29	25	17	16	14	61.89%	28.66%
ST MARY HIGH SCHOOL	21	31	19	32	16	10	12	51.79%	28.71%
MERL GROVE HIGH SCHOOL	22	24	1	4	32	27	32	56.37%	21.02%
MANNINGS SCHOOL	23	11	36	30	14	25	18	64.56%	30.57%
ST CATHERINE HIGH SCHOOL	24	38	7	25	31	12	21	40.97%	21.27%
MUNRO COLLEGE	25	20	39	36	9	18	13	61.22%	36.23%
MORANT BAY HIGH SCHOOL	26	27	15	21.5	28	21	26	53.49%	24.96%
MONTEGO BAY HIGH SCHOOL	27	9	38	30	10	32	20	68.62%	34.73%
MOUNT ALVERNIA HIGH SCHOOL	28	12	27	18	22	34	29	63.74%	27.05%
ST GEORGES COLLEGE	29	26	20	27.5	24	22	23	56.08%	26.19%
CHARLEMONT HIGH SCHOOL	30	41	2	23	37	17	28	31.87%	17.12%
BISHOP GIBSON HIGH SCHOOL	31	21	26	30	18	30	24	59.27%	27.95%
MARYMOUNT HIGH SCHOOL	32	35	10	25	35	26	33	44.07%	18.01%
MANCHESTER HIGH SCHOOL	33	14	32	27.5	27	35	34	63.05%	25.49%
TITCHFIELD HIGH SCHOOL	34	33	21	33.5	33	24	30	46.88%	18.96%
CAMPERDOWN HIGH SCHOOL	35	36	18	33.5	39	33	36	43.59%	16.64%
YORK CASTLE HIGH SCHOOL	36	30	25	35	36	37	38	52.09%	17.47%
CORNWALL COLLEGE	37	29	40	41	30	41	35	52.56%	21.50%
JAMAICA COLLEGE	38	34	34	39.5	34	39	38	45.16%	18.28%
EXCELSIOR HIGH SCHOOL	39	39	28	38	41	36	40	38.11%	13.38%
CALABAR HIGH SCHOOL	40	37	31	39.5	38	38	39	42.57%	16.87%
FERNCOURT HIGH SCHOOL	41	42	23	37	42	42	42	30.43%	7.26%
RUSEAS HIGH SCHOOL	42	40	42	42	40	40	41	33.95%	13.42%

Table 9: Rankings of Average and Value-Added Scores for CSEC & CAPE + Base % Average Results

Secondary School Name	OVERALL RANKING Based on Average of All Other Rankings	Ranking based on Average Result (%CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (%CAPE Diploma)	Ranking based on Added Value (%CAPE Diploma)	Ranking based on Average Result (VA CAPE and CAPE Diploma)	Average CSEC % Certificate	Average CAPE % Diploma
DINTHILL TECHNICAL SCHOOL	1	7	4	1.5	4	3	2	31.90%	13.16%
DENBIGH HIGH SCHOOL	2	2	9	1.5	3	16	5	41.10%	14.71%
EDWIN ALLEN HIGH SCHOOL	3	9	11	5	5	12	4	27.40%	11.74%
ST MARYS COLLEGE	4	15	1	4	11	11	6	23.64%	9.02%
OLD HARBOUR HIGH SCHOOL	5	13	2	3	15	19	9	25.36%	8.01%
THE CEDAR GROVE ACADEMY	6	12	15	7				25.54%	
HOLMWOOD TECHNICAL HIGH SCHOOL	7	27	6	10	25	6	8	18.83%	4.51%
JONATHAN GRANT HIGH	8	11	18	8	13	24	10	26.31%	8.19%
JOSE MARTI TECHNICAL SCHOOL	9	28	27	20	9	4	3	18.60%	10.13%
MACGRATH HIGH SCHOOL	10	40	5	13.5	18	10	7	13.24%	6.26%
OBERLIN HIGH SCHOOL	11	16	16	9	14	28	12	23.55%	8.05%
GUYS HILL HIGH SCHOOL	12	33	12	13.5	21	17	11	15.63%	5.68%
VERE TECHNICAL HIGH SCHOOL	13	20	3	6	20	51	14	21.56%	5.75%
GARVEY MACEO HIGH SCHOOL	14	17	17	11	12	75	18	23.28%	8.64%
HOLLAND HIGH SCHOOL	15	18	31	17	17	59	16	22.75%	7.49%
MICO PRACTISING PRIMARY AND JUNIOR HIGH	16	51	10	23	43	30	15	10.43%	2.47%
CENTRAL HIGH SCHOOL	17	42	23	26	32	46	17	12.54%	3.54%
SPALDINGS HIGH SCHOOL	18	19	20	12	22	94	26	21.99%	5.17%
BLUEFIELDS HIGH / BELMONT ACADEMY	19	14	144	69	1	1	1	24.48%	16.34%
BOG WALK HIGH SCHOOL	20	75	42	40	31	31	13	6.41%	3.64%
WINDWARD ROAD PRIMARY AND JUNIOR HIGH	21	64	8	28	69	42	23.5	7.91%	1.04%
ST MARY TECHNICAL HIGH	22	25	37	24.5	24	101	28	19.30%	4.70%
BRIDGEPORT HIGH SCHOOL	23	21	41	24.5	16	119	34.5	21.29%	7.62%
MAY DAY HIGH SCHOOL	24	10	36	15	19	137	48.5	26.67%	5.83%
SYDNEY PAGON AGRICULTURAL HIGH SCHOOL	25	90	7	36				4.68%	
ANNOTTO BAY HIGH SCHOOL	26	32	19	18	44	113	50	16.09%	2.23%
MILE GULLY HIGH SCHOOL	27	35	54	33	30	99	30	14.42%	3.73%
LENNON HIGH SCHOOL	28	45	26	27	36	109	40	11.52%	2.97%
NEW DAY PRIMARY AND JUNIOR HIGH	29	113	14	45	105	2	21	2.83%	0.48%
CLAUDE MCKAY HIGH SCHOOL	30	56	38	34	38	102	37	9.56%	2.69%
ST THOMAS TECHNICAL HIGH SCHOOL	31	29	24	19	26	155	69	18.22%	4.47%

Table 9 cont'd

Secondary School Name	OVERALL RANKING Based on Average of All Other Rankings	Ranking based on Average Result (%CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (%CAPE Diploma)	Ranking based on Added Value (%CAPE Diploma)	Ranking based on Average Result (VA CAPE and CAPE Diploma)	Average CSEC % Certificate	Average CAPE % Diploma
CONSTANT SPRING PRIMARY AND JUNIOR HIGH	32	114	30	56.5	97	7	20	2.77%	0.57%
IONA HIGH SCHOOL	33	26	48	29	28	138	56	19.25%	4.16%
TIVOLI GARDENS HIGH SCHOOL	34	77	61	50.5	57	60	27	5.95%	1.56%
MAVIS BANK VOCATIONAL SCHOOL	35	95	28	44	90	45	34.5	4.35%	0.66%
AABUTHNOTT GALLIMORE HIGH SCHOOL	36	37	49	31	48	118	56	13.80%	1.98%
BUFF BAY HIGH SCHOOL	37	50	59	37	52	98	44	10.54%	1.76%
HOLY TRINITY HIGH SCHOOL	38	100	52	63	77	33	22	4.14%	0.83%
TACKY HIGH SCHOOL	39	66	64	47	65	73	36	7.76%	1.21%
ST ANDREW TECHNICAL HIGH SCHOOL	40	38	117	65.5	27	84	23.5	13.60%	4.30%
WATERFORD HIGH SCHOOL	41	92	46	50.5	72	62	33	4.62%	0.95%
PORT ANTONIO HIGH SCHOOL	42	36	45	30	49	132	69	13.82%	1.95%


amaican
Folk Customs
& Beliefs

4. DIAGNOSIS AND RECOMMENDATIONS

1. Governance, Administration, Leadership and Legislation
2. Early Childhood Education: The Early Childhood Commission and its work
3. Teaching and Curriculum
4. Tertiary
5. Technical & Vocational
6. Infrastructure and Technology
7. Finance

Addendum: How Students Re-Imagine Education in Jamaica

GOVERNANCE, ADMINISTRATION, LEADERSHIP AND LEGISLATION

1. Introduction

Generally, governance refers to the way decisions are made, including the actors involved in that process. Within the sphere of education, governance refers to the "institutions and dynamics through which education systems allocate roles and responsibilities, determine priorities and designs, and carry out education policies and programmes."[15] Education governance can be viewed from global, national, and local or community perspectives with changing responsibilities at each level. Relationships between countries and power dynamics have impacts on available resources and practices within national education sectors, while national prioritisation, decision and policymaking take place to address the issues and needs of those at the community level who wield the power of the vote to create change.[16]

The concept of governance includes the assumption that there is a transparent, inclusive, and participative approach in the management of public affairs. As one of the largest employers of citizens in Jamaica, having one of the largest budgets, and of paramount importance to productivity and national development, the education sector in Jamaica is obligated to adhere to these principles of good governance.

With the expansion of the citizenry, the diversification of students' needs and greater access to information, expectations of education stakeholders have transformed and have resulted in calls by citizens for greater governance. This has been observed locally through public responses to

[15]OECD - Education governance: Policy priorities and trends, 2008-19 URL: https://www.oecd-ilibrary.org/sites/ 4581cb4d-en/index.html?itemId=/content/component/4581cb4d-en

[16] UNESCO (2008) Overcoming Inequality: Why Governance Matters. Oxford: Oxford University Press. Wolff L and de Moura Castro C (2000) Secondary education in Latin America and the Caribbean: The challenge of growth and reform. Working paper no. EDU-111

exam performance, concerns regarding teacher and school quality, and in comparing local practice to best practices internationally. This expansion has been referred to as "complexity", where there has been an increase in intersecting trends, because of the aforementioned observations.[17]

In Jamaica, stemming from this "complexity" and the resulting demand for improved governance and accountability, new entities have emerged; including institutions intended to assure the quality of education being provided, institutions to monitor and regulate the main actors participating in the sector, and decentralised entities responsible for overseeing the day-to-day activities of the sector. These developments have directed the education system into an era of multilevel governance, where levels of decision making are diversified, and are decentralised from solely a central authority to other levels of the system. In theory, this system should hold multiple actors accountable for making decisions relative to their specific needs, but also achieving targets relative to their level. When these mechanisms fail, the effects are felt by the entire system in the short and long term, through student quality and performance and the underdevelopment of human capital.

Good governance is a key element in the ability to steer an education system as complex and young as Jamaica's, with multiple actors each playing varied roles. Decisions regarding the use of funds in the sector, channels of accountability, and agenda setting, all related to governance, will impact the overall effectiveness of an education system. Ensuring quality education is therefore dependent on the existence of good governance and relies on the five principles of:

- legitimacy and voice
- performance
- fairness
- accountability; and
- direction.[18]

The OECD argues that this requires a that governments set "clear distribution of roles and responsibilities and find the right balance between central and local direction, set concrete objectives and policy priorities for their education system, and engage stakeholders in the process."[19]

While there is evidence locally of efforts to engage stakeholders in processes of setting priorities for the system, balances between local and central direction and clear distribution of responsibilities (such as between the central ministry and regional offices) have fallen flat or have been hindered by several challenges. Improved governance and new mechanisms to pursue effective governance are required as the country seeks to address these challenges and create

[17]OECD, 2019. Governing Education in a Complex World. URL: https://read.oecd-ilibrary.org/education/governing-education-in-a-complex-world_9789264255364-en#page21
[18]Graham J, Amos B and Plumptre T (2003) Principles for Good Governance in the 21st Century. Ottawa, Canada: Institute on Governance in Hutton, Disraeli M. "Governance, management and accountability: The experience of the school system in the English-speaking Caribbean countries." Policy Futures in Education 13, no. 4 (2015): 500-517.
[19]https://www.oecd-ilibrary.org/sites/4581cb4den/index.html?itemId=/content/component/4581cb4d-en

a more effective education system. Among the mechanisms employed by some of the leading education systems in improving governance are achieving a clear and balanced division of responsibility between national and local authorities and schools; defining national education priorities and goals; engaging stakeholders in decision-making; and putting in place quality assurance mechanisms.[20]

Accountability in education is understood to be, "the process by which the education system holds itself answerable for delivering the appropriate services and meeting its goals for educating students" (DeCoster et al 2015).

It is therefore the "state of being accountable to the stakeholders in education and accountable for the resources [allocated] in education" (Usman 2016). Where accountability is lacking, it would be expected that generally agreed outcomes have little chance of becoming a reality and belies the importance of the responsibility to the wider public. In addition, efficiency and service delivery are threatened in the absence of strong accountability frameworks.

Education is a critical element of the development of any country; and the areas of Governance and Accountability are therefore critical to the functioning of any education system. The GOJ has dedicated significant resources to the development of a corporate governance framework for public bodies and this framework has been implemented across most Ministries, Departments and Agencies. The GOJ's corporate governance framework is predicated on the premise that better governance leads to better outcomes, more efficient spend and enhanced strategic focus. The Committee is of the view that the education system should adopt these corporate governance norms that emphasize accountability and transparency, and which ultimately facilitate key values of inclusivity and equity in education.

The Governance and Accountability Committee has spent significant time reviewing the governance and accountability framework underpinning Jamaica's education system through a mix of interviews with relevant stakeholders in the education system, the review of global best practice, and the review of reports and data from the MOEYI.

The key recommendations are contained in this report and have been agreed by the Committee members.

2. The Committee

The Governance and Accountability Committee of the Jamaica Education Transformation Commission, 2020 was established to provide critical analysis and recommendations to the Commission specifically in the areas of governance, accountability, administration, leadership, and legislation. The key deliverables agreed by the Committee were to:

i. review the structure of the Ministry and its attendant agencies and to assess the extent to which the structure was fit for purpose
ii. review the ***Education Act*** and ***Education Code*** and recommend changes where necessary

[20]OECD. Education Policy Outlook 2019. Chapter 4: Education governance: Policy priorities and trends, 2008-19

iii. review the appointment and operation of school boards
iv. review the extent to which decentralization was working
v. assess the existing accountability framework in Jamaica and develop recommendations to improve accountability in the education system.

Meetings and Consultations

The committee held numerous meetings and consultations between October 2020 and July 2021. The committee held bi-monthly meetings with key stakeholders or with the committee members to discuss key areas related to the governance and accountability framework of our education sector. The committee met 25 times since its formation. ***Appendix 1*** provides a list of the key meetings held during the consultative period.

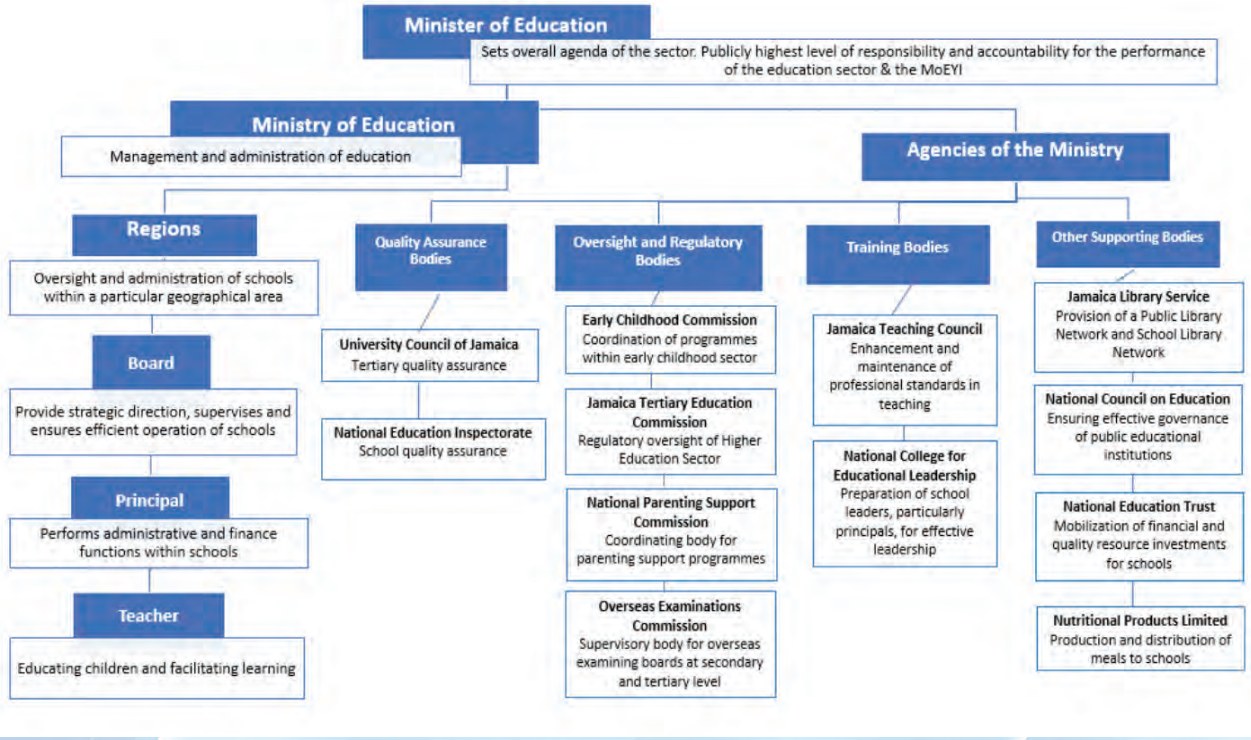
3. The Governance Framework in Jamaica

If a country is to attain its education objectives, it must have an effective governance framework underpinning the entire system. The current governance structure of the education sector is provided in **Diagram 1** below.

As seen in the diagram, the governance framework is quite complex and involves many institutions and actors. In a system this complex, it is important that there is effective co-ordination so that all components are working towards the same end.

Layers of Governance Within the Education Sector

Figure 18: Layers of Governance within the Education Sector



4.1 The Ministry

4.1.1 The Minister

The Ministry of Education, Youth and Information is directed by the Minister of Education. Pursuant to **S.3** of the **Education Act**, the Minister has the power to:

- promote education to the Jamaican people
- frame the educational policy that is designed to provide a varied and comprehensive educational service
- secure the effective execution of the educational policy of the government of Jamaica
- establish a co-ordinated educational system organized in accordance with the provision of the Act
- contribute towards the spiritual, moral, mental and physical development of the community by ensuring that efficient education shall be available to meet the needs of the Island

While these powers seem extensive, there are significant deficiencies in the Minister's ability to intervene in relation to underperforming schools. This limitation is addressed in the section detailing the recommended changes to the **Education Code**. In addition, the Minister must rely on the technocrats in the Ministry of Education to provide policy advice and to steer the general education apparatus. The Ministry and the staff therein are therefore critical to any attempt to reform the education system in Jamaica.

K 4.1.2 The Ministry Team

The Minister is assisted by various technocrats that include, but are not limited to the:

- Permanent Secretary
- Chief Education Officer

The Permanent Secretary assists and reports directly to the Minister of Education and is the accountable officer with responsibility for the daily operations of the Ministry in carrying out its mandate. In the same breath, the Chief Education Officer supports the Permanent Secretary. The Chief Education Officer also heads the Educational Services Unit which provides educational support to all educational institutions to ensure the proper management and administration of Jamaica's education system.

Structure of the Ministry

The central office of the Ministry of Education, Youth and Information (MoEYI) is divided into seven divisions spanning 33 departments with a total of 837 posts. It must be noted that of this total number of posts, only 673 (81%) are filled. Within the central office, technical posts account for 57% of the total staffing structure while clerical and administrative posts make up 32% of the total. There are also miscellaneous posts which account for 11% of the total number (855 posts).

As seen in the structure diagram, the ministry is very complex and has several unfilled posts. The number of staffs is, however, quite large and is deployed around the key areas that would be expected. Based on the data made available to the Committee from the Ministry, it appears that most funds allocated to the central ministry relate to compensation with smaller amounts available for programmatic activities.

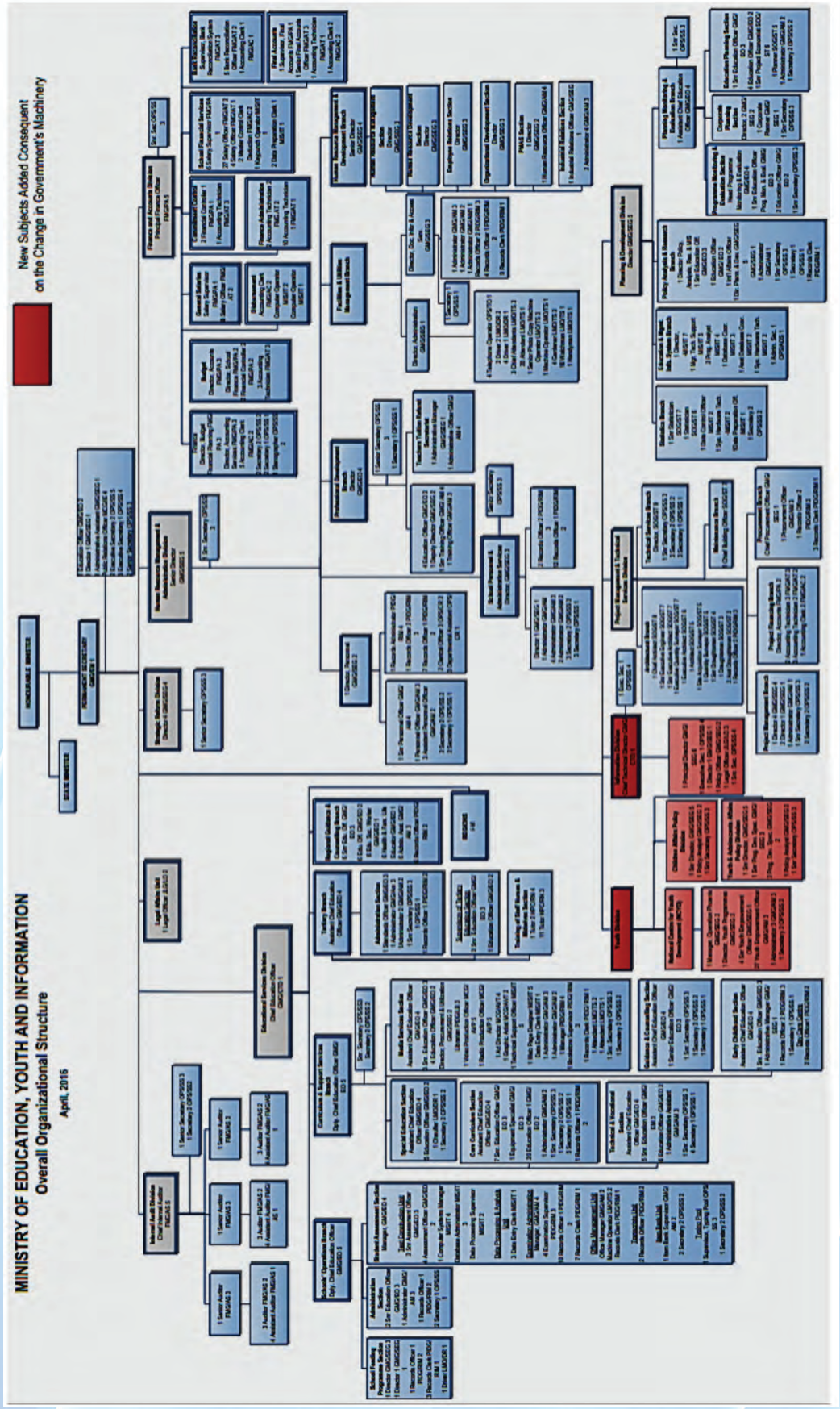


Figure 19: Layers of Governance within the Education Sector

4.1.3 The Lack of Strategy

As one of the largest and most critical public employers and service providers, it is important for the Ministry of Education to have and routinely monitor a coherent strategic plan. Furthermore, that strategic plan must be linked to the performance of the Ministry's management team, with mechanisms in place to measure achievements against expected outcomes.

Following the report of the 2004 Task Force for Education Reform, the Government of Jamaica designed a National Education Sector Plan (2011-2020) (NESP) which outlined targets for the Ministry of Education and actors within the education system to meet through to 2020, based on the recommendations of the 2004 Report. The targets related to strategic objectives and included strategies and a corresponding medium-term measure/target to meet each. The eight (8) strategic objectives were:

1. Teaching and learning systems of international standard
2. Competent educators to match needs of the system by education level, number, geographical distribution and specialisation are attracted and retained
3. School places in well-equipped schools available to meet demand for all students at early childhood education (ECE), primary, secondary, post-secondary and tertiary levels
4. System of research and data gathering to inform policymaking and drive school performance
5. Quality assurance and accountability systems implemented to support educational system
6. Inclusive education promoted and supported
7. Stakeholders kept informed of developments in the education system
8. Safe and secure learning environment (physical environment; psychosocial and emotional climate) available to support teaching and learning in schools

The NESP further breaks down its strategic objectives to identify more specific strategies and additional targets for each. Though the targets outlined in the plan are time-bound (ranging from goals to be achieved from 2015 to 2020), the plan lacked specific details on the short-term targets to be implemented, or variables used to measure the achievement of outlined targets, leaving clear doubts on the Ministry's capacity to monitor its progress in achieving these targets.

The NESP listed the relevant pieces of existing legislation and the additional legislative and policy changes that would be required to meet the strategic objectives set. Of that list of twenty-two (22) necessary changes prescribed in 2011, as at July 2021, only three (3) have been passed (see legislations in bold below), with some policies underway. The list included:

National Parenting Support Commission Act

- Centres of Excellence Scheme of Management
- School Improvement Policy

Apprenticeship Act (repealed and replaced with the HEART Trust (Amendment) Act)

- Various amendments to the Education Regulations
- National Examination and Assessment Act
- Approval for governance arrangements for regional operations
- Jamaica Tertiary Education Commission Act

Council of Community Colleges Act (Amendment)

- ICT in Education Policy
- School Infrastructure Policy
- Citizenship Act
- Safe Schools Policy
- Special Education Policy
- Gender in Education Guidelines
- Culture in Education Guidelines
- National Curriculum Policy
- Donations Policy (to facilitate financing of capital investments)
- Volunteerism Guidelines
- Amendments to Early Childhood Commission Act (2003)
- Amendments to Early Childhood Act (2005)
- Amendments to Early Childhood Regulations (2005)

A separate list of strategic objectives was identified in the Ministry's most recent: Operational Plan, Performance Evaluation Report, and in the Permanent Secretary's Budget Memorandum. According to the 2020-2021 Performance Report of the 230 targets pulled from the Operational Plan, 25 targets were exceeded, 146 were "on track", 51 were listed as "displaying progress toward intended result" and 8 were recorded as not achieved, or behind schedule. The report also stated that some activities that took place during the period were related to targets not aligned to the benchmark position, though highlighted as part of the performance report.

At the mid-point of 2021, the MOEYI indicated that the review of the achievement of the targets of the NESP was underway, and that a new plan would be developed pending the results of this review, suggesting deficiencies in the Plan's monitoring process. As observed in the Annual Performance Reports, in some cases, the target listed did not match the corresponding outcome or achievement. For some, there was no measure defined for the specific target. Based on these deficiencies, it is evident that is no consistent monitoring or articulation of progress being made on targets set for Vision 2030 in the NESP, or annually in the strategic plan, given that:

i. there exists a plethora of targets and strategies that are misaligned and overlapping;
ii. the strategies and annual targets to be met are not publicly communicated; and
iii. the progress made by relevant actors for all targets is not consistently measured.

4.1.4 The Need for an Organisation Review

Given the vast budget allocated to the sector and the performance challenges it is important that an organizational review be conducted of the central ministry and the regions art a minimum. During both official and informal interviews, the committee also unearthed concerns regarding the cultural dynamics in the Ministry as well as the accountability structures of the Ministry.

The committee was not, however, equipped to do a full organisation review of the ministry, but the committee believes strongly that it is important to do one at this point given the underlying issues seen throughout the consultations. Details regarding this proposal can be found in Section 6 of this report.

4.1.5 The MOEYI Structure

The committee did an initial review of the Ministry's structure and concluded that there were some elements of rationalization necessary. The idea of rationalization is not a new phenomenon as a Public Sector Master Rationalization Plan was proposed in 2012 by the Public Sector Transformation Unit. It contains recommendations for the restructuring of ministries, departments and agencies within the public sector and has been under review since its inception.[21]

The major benefit of rationalization is that it allows for greater efficiency in carrying out a prescribed mandate. This will be more evident upon the completion of the recommended organizational review. There are, however, a few areas within the Ministry of Education, Youth and Information (MoEYI) where enhancements would allow for increased efficiency and therefore the following recommendations are made:

- **Creation of a Data Analytics Unit**

Data Analytics is not a new phenomenon but has gained predominance considering the COVID-19 pandemic as a result of remote learning. It allows for increased operational efficiency and is an indispensable source for making decisions, formulating diagnoses about strengths and weaknesses of institutions, and assessing the effects of initiatives and policies (Agasisti and Bowers, 2017).[22]

There have been initiatives and organizations geared towards data utilization as a means of improving schools such as the Education for the Future within the United States of America and DELECA – Developing Leadership Capacity for data-informed school improvement project. There has also been increasing commitment to data utilization due to the observance that "the use of data can make an enormous difference in school reform efforts by helping schools see how to improve school processes and student learning" (Bernhardt, 2004; p. 3).[23]

Additionally, it will allow for more evidence-based educational policies such as through the utilization of high-quality data about results per se, which could be used to transform education (Agasisti and Bowers, 2017). The MOEYI has not been a participant in this data revolution, but if we want to improve outcomes the creation of a data analytics unit is imperative as it will allow for increased operational efficiency in the MOEYI. It will also allow the MOEYI to make better assessments of its institutions and in turn formulate more evidence-based educational policies.

- **Develop a Better Functioning Monitoring and Evaluation Unit**

The United Nations Educational Scientific and Cultural Organization (2021) purports that "monitoring based on robust systems and tools, together with the release of periodic monitoring

[21]The Gleaner (2018). Gov't reviewing public sector rationalization agenda. Retrieved from https://jamaica-gleaner.com/article/news/20180411/govt-reviewing-public-sector-rationalisation-agenda
[22]Agasisti, T. and Bowers, A. (2017). Data analytics and decision-making in education: Towards the educational data scientist as a key factor in schools and higher education institutions. Retrieved from https://www.academiccommons.columbia.edu/doi/10.7916/D8K374FG/download&ved=2ahUKEwja7SPnNXxAhUpneAKHefPBJQQFjAaegQIExAC&usg=AOvVaw0X2b1mlQUs-EBG3bOQYhM
[23]Bernhardt, V. (2004). Data analysis for continuous school improvement (2 ed.). Eye on Education.

and evaluation reports are essential for the achievement of the educational goals of the 2030 Agenda".[24]

The Programme Monitoring and Evaluation Unit (PMEU) of the MoEYI was established in the Planning and Development Division of the MoEYI to monitor and evaluate programmes and projects introduced and/or being utilized by the Ministry. [25]

The Unit's responsibilities include providing feedback on how resources are used to implement these activities as well as inform the relevant stakeholders on the progress thereof and indicate ways in which the programmes can be improved. The work of the Unit in terms of evaluation is lacking in the evaluation of student outcomes as seen by its evaluation of the National Standards Curriculum (NSC).



Instead, the evaluation was centred on teacher reception, adaptability to new roles of teachers, school leadership, the available resources and new processes required. The report noted that "the NSC was being implemented with fidelity at the classroom level to a "small extent". However, despite this unfavourable report, the Ministry still implemented the NSC and changed the national assessment before the new curricula were circulated.

[24]United Nations Educational, Scientific and Cultural Organization (2021). Education monitoring and planning. Retrieved from https://en.unesco.org/monitoring-planning
[25]Ministry of Education, Youth and Information (2021). Programme Monitoring and Evaluation Unit. Retrieved from https://www.moey.gov.jm/node/58

The narrative therefore outlines the need for a more improved, robust Monitoring and Evaluation Unit which will aid in setting performance goals, selecting useful performance indicators and targets, reporting on results, and informing the implementation of programs. There also needs to be greater planning so that gaps can be observed between the planned and achieved results.

The key to this is a revamp of the framework of the PMEU for the monitoring and evaluation of programmes including the procedure for consultation in the implementation of new projects. Efforts need to be made to eradicate cases of unplanned requests sent with inadequate notice as this severely impacts the ability to plan and respond to such cases. A better functioning monitoring and evaluation unit will equate to better policy formulation and more effective programmes and resource allocations.

- **Collapse the Tertiary Unit of the Ministry of Education, Youth and Information into the Jamaica Tertiary Education Commission**

One of the recommendations proposed under the Public Sector Master Rationalization Plan included merging public entities where they perform key functions to achieve more effective delivery of service.[26] In keeping with this recommendation, an observation was made regarding the Tertiary Unit of the Ministry of Education, Youth and Information and the Jamaica Tertiary Education Commission (J-TEC) which are both tasked with the same mandate. The Tertiary Unit is responsible for the supervision of the tertiary education institutions ensuring that education is offered in an efficient manner so that the country's manpower needs are met. The Unit also provides guidance, scholarships and boarding grants to individuals who would like to access tertiary education. It also manages the budget for all public tertiary institutions and helps to appoint staff within them.[27]

Similarly, the Jamaica Tertiary Education Commission was established to monitor labour force needs and ensure that resources are allocated based on the demand. The Commission is also responsible for the oversight and regulation of the sector. It therefore intersects with the responsibilities of the Tertiary Unit of the MoEYI and lacks legal standing to establish and enforce standards to be met and adhered to by tertiary institutions, and to routinely collect data from all operating institutions on their operations.

While it maintains a register of institutions in the sector, its regulatory functions are impeded by the lack of legislation upholding the institution and defining the roles of the other players in the sector. Against this background, it is recommended that the Tertiary Unit of the MoEYI be collapsed into the J-TEC to allow for a more efficient service delivery within the tertiary sector.

[26]The Gleaner (2018). Gov't reviewing public sector rationalization agenda. Retrieved from https://jamaica-gleaner.com/article/news/20180411/govt-reviewing-public-sector-rationalisation-agenda
[27]Ministry of Education, Youth and Information (2021). Tertiary Unit. Retrieved from https://www.moey.gov.jm/node/64

4.2 Lack of Education Management System (EMIS)

An Education Management and Information System (EMIS) is a "set of educational management processes that design, record, exploit and generate strategic information online in a comprehensive manner, framed by specific legal, institutional and technological infrastructure" (Chapelet, 2019).[28] It is a network for gathering, integrating, processing, maintaining, and disseminating data and information to facilitate decision-making, policy analysis and formulation, planning, monitoring, and management at all levels of an educational system.[29]

An EMIS provides education leaders, decision-makers, and managers at all levels with a comprehensive, integrated set of relevant, reliable, unambiguous, and timely data and information to help them fulfil their responsibilities. This is achieved through the interoperation of the various components (people, technology, models, methods, processes, procedures, rules, and regulations) of the system.[30] The implementation of this system will result in a more complete, data-driven profile of students, as well as improved system planning, administration and policy implementation.

4.2.1 The State of the Current Education Management and Information System (EMIS)

A 2019 review of Jamaica's current EMIS concluded that it was deficient in several areas. The report scored the country on the extent to which a country's management and information system is functioning. It concluded that the Jamaican EMIS is in an "incipient" state of development (2.07) which meant that it partially covers the processes and structural conditions that define it but is not geared to efficient management.[31]

According to the report, "EMIS sub-systems are dispersed and poorly integrated and are not covering all the needs of management processes related to the EMIS" (Chapelet, 2019).[32] There are several shortcomings which were identified within the report including the fact that the MOEYI lacks a sector-wide unified system for storing and maintaining school-related data that may be utilized to influence decisions at all levels, including at the school level.

Also, there is currently no complete student directory that covers all levels and uses the School-Education Programme-Section-Student identification paradigm to identify the school, curriculum, and section to which each student belongs. For teachers' professional development plans, the MOEYI has yet to establish full digital support and monitoring systems.

Given the shortcomings in the current EMIS, a proposal was made for the transformation and strengthening of the current EMIS to a world class system. One such system exists in Afghanistan

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[28]Chapelet, P. (2019). Analysis of the education management and information system of Jamaica: Diagnosis and proposal for strengthening the EMIS.

[29]United Nations Educational, Scientific and Cultural Organization (2008). Education for All by 2015: will we make it? EFA global monitoring report, 2008. Paris: UNESCO.

[30]United Nations Educational, Scientific and Cultural Organization (2008). Education for All by 2015: will we make it? EFA global monitoring report, 2008. Paris: UNESCO.

[31]The development status of each process and subprocess is determined according to the following range: • Latent: 1.00 - 1.74 • Incipient: 1.75 - 2.49 • Emergent: 2.50 - 3.24 • Established: 3.25 - 4.00

[32]Chapelet, P. (2019). Analysis of the education management and information system of Jamaica: Diagnosis and proposal for strengthening the EMIS.

where the World Bank's Systems Approach for Better Education Results-Education Management Information Systems (SABER-EMIS) tool was adopted and utilized to transform the previous paper-based EMIS to a single centralized electronic portal which provides comprehensive education data to stakeholders at the click of a button.[33]

Likewise, Malawi has a very effective EMIS which is utilized to gather, analyse and present data on several indicators including to facilitate education sector planning. The data is collected on a regular basis and is published annually in the Education Statistics Bulletin. The EMIS requires further strengthening to fill in the data gaps and ensure data validity and reliability. Additionally, there are plans to implement a separate teacher management information system.[34]

4.2.2 The Proposed Education Management and Information System (EMIS) Strengthening Plan

A well developed and implemented EMIS will positively impact the development of sector plans given the access to rich data on key elements of the education system. It will also facilitate better planning and management at the Ministry level. An Education Management and Information System (EMIS) strengthening plan was proposed as a component of the IDB assessment. The committee recommends that this plan be implemented as soon as possible. The key recommended areas for the EMIS implementation include but are not limited to:

- technological requirements for schools
- institution and student management
- consolidation of the executive information system
- management of buildings and equipment
- management of human resources and financial transactions
- management of digital contents
- school management systems
- student and teacher portals; and
- capacity development for technical staff and end-users.

The Ministry is however still doing the groundwork and as such are unable to comment on the state of implementation so far.

4.3 The Regions

The structure of the Ministry of Education, Youth and Information (MOEYI) is one built on regional autonomy as seen by the enhanced autonomous role of the Regions in improving the education sector as a certain degree of autonomy is given to the Regions with a level of freedom from the central office. This is seen through their role in providing oversight and administration to schools within a particular geographical area. The Regions are currently tasked with overseeing operations within the schools in the specific regions.

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[33]Saraogi, N., Mayrhofer, D. and Abdul-Hamid, H. (2017). Afghanistan education management information systems: SABER country report 2017. Retrieved from https://elibrary.worldbank.org/doi/pdf/10.1596/28260

[34]Saka, T. (2021). Digitalization in teaching and education in Malawi Digitalization, the future of work and the teaching profession project. International Labour Organization: Geneva. Retrieved from http://ilo.org/wcmsp5/groups/public/ ---ed_dialogue/---sector/documents /publication/wcms_783666.pdf

However, in the 2004 Task Force on Educational Reform, it was clearly stated that the regions should be accorded more power and that they should take on more of the operational responsibilities while the central Ministry should be the policy-making regime as outlined by the organizational structure. However, that has not been realized as there has not been as much devolution of responsibilities and authority by the Ministry. The regions are currently ill-equipped to assume the increased responsibilities in their current form given the lack of resources allocated to them.

The general structure of the regional offices of the Ministry of Education, Youth and Information varies but there are some common sections especially throughout Regions 1 to 6. The highest degree of variability is observed within the structure of Region 7, which is very unique as it consists of several posts which are not common to any of the other Regions. Throughout the regions, there is a total of 275 posts. Of this number, 243 (89%) are filled (See **Table 29 in Appendix 3**).

While some additional human resources were allocated to the regions, the regions are not organized and resourced to achieve the goals articulated in the 2004 Taskforce Report. One notable improvement has been a reconfiguration of the regional education boundaries which ultimately led to an increase in the number of Regional Education Agencies (REAs) from six to seven. This was undertaken with a view to ensuring a more proportionate spread of the school population.[35]

However, there is still a very high school-to-staff ratio as the regions are grossly understaffed. There is also a need for reform of the education officer function to lessen the administrative duties so that these valuable resources can focus on improvements within the schools. There is therefore need for more administrative staff to carry out the administrative duties which the education officers would be relieved of. It must be reiterated that as currently structured and resourced, the regions are not equipped to bear more responsibility.

4.3.1 Rethinking the Role of the Education Officer

The ratio of education officers to schools in each Region varies. There is significant variability in the ratio of education officers to schools where in Regions 2 and 6, each education officer is required to cover 15 schools; while in Regions 3 and 4 each education officer is required to cover 8 and 10 schools respectively. It must again be noted that not all posts are filled. For example, in Regions 1, 2, and 7 where the full complement is not in place the effective ratio is currently one education officer to 18 schools (See ***Table 3*** in ***Appendix II***).

The job description of Education Officers in the MoEYI varies based on the nature of the responsibility with which they are tasked. For example, some education officers are mandated to deal with Primary Supervision, Regional Guidance and Counselling, Community Relations or are responsible for specific subject areas. They are tasked with management and administrative duties in addition to other technical and professional responsibilities based on the area which they are given responsibility for. Generally, the qualification requirements for Education Officers

[35]Jamaica Information Service (2009). Ministry of Education Reconfiguring Regional Boundaries. Retrieved from https://jamaica-gleaner.com/article/lead-stories/20180921/ministry-education-add-7th-region

entails a First Degree, Diploma in Teaching and 3-5 years of experience, except for the subject-specific officers who are expected to have six (6) years' teaching experience in the subject area and a post-graduate degree in Education. However, these requirements are insufficient for the roles which they must play.

There is therefore a need to revamp the requirements to become more reflective of the equivalent to an executive coach wherein they are well versed in change management with a track record of transforming schools. It requires tremendous experience and training which could be administered through a college or a training program designed specifically for equipping these education officers with the requisite skills once they are employed.

There is also a need for increased involvement of Education Officers within schools. Such engagement is likely to result in a more balanced system of both centralized and decentralized educational governance. "The education officer, over the years, has primarily carried the role of an administrator".

However, their role is being revamped to allow for greater efficiency in the teaching and learning process.[36] In light of this, there is an even greater need for them to be effective instructional leaders and facilitators. This is necessary as they can play a pivotal role in policy formulation as well as the creation and implementation of the national curriculum. Moreover, it will allow for greater monitoring and evaluation of school heads and teachers. They can make a significant contribution to the development of high-quality education within Jamaica.

4.4 The School Boards

School boards are integral to the governance framework of the education system and their responsibilities are quite comprehensive. They are responsible for the governance of the school and academic administration, must deal with matters concerning the faculty and ancillary staff and institute disciplinary measures when required. Thus, a position as a member of a school board necessitates a significant commitment of time to provide guidance to the school administration throughout the academic year.

The role of the chair is particularly demanding as, pursuant to ***Regulation 89***, she must be responsible to the Minister for the administration of the institution. She is also required to ensure its sufficient operation, that proper accounts are kept, and that the relevant appointment of appropriate administrative and ancillary staff takes place, among other things. The criticality of boards is also seen in the correlation between the effectiveness of the boards and the output and performance of schools.

Currently, school boards are appointed by the responsible Minister to serve for a three-year period pursuant to ***Regulation 79***. There is no minimum qualification for an individual to be nominated to serve on a board. In addition, this service is voluntary, and members are not remunerated for their service.

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[36]The Gleaner (2019). Education officers' roles being revamped. Retrieved from https://jamaicagleaner.com/article/news/20191022/education-officers-roles-being-revamped

There is an imbalance in the availability of qualified and competent representatives. Schools that are overseen by churches or trusts tend to attract more qualified and experienced board members. These schools tend to have an established reputation as a 'traditional school' and have carved out a legacy as a top performing academic institution. Therefore, a membership position on the school board is perceived as a key form of service (albeit unpaid) an alumnus can offer their alma mater and achieves the aim of upholding the standard of the institution.

However, where there are numerous institutions of lesser historic esteem at both the primary and secondary level, there is in some instances a significantly limited pool of candidates for board selection. As such, selections tend to be made based on availability of individuals who can attend board meetings on a regular basis.

As seen in some boards, there may not be sufficient members that fully understand the impact of their decisions on the administration, faculty, ancillary staff, or the student body. There remains the critical need to have community involvement in schools, but this must be balanced with the inclusion of individuals that understand the requirements of the complex Education Code and can support underperforming schools to develop a strategy to improve the processes and policies to improve student outcomes.

Proposed Recommendations

- It is proposed that a pool of possible school board members be collected and delineated based on the school regions determined by the Ministry.
  - These individuals should be capable and available for training on the requirements of an academic board.
- All members of the school board must be subject to training prior to becoming appointed as board members.
  - Also, there should also be continuing training of the board members to keep up with best practice.
- The board framework for schools should be aligned with the GOJ's governance framework for public bodies.
- Membership on a school board should be limited to two consecutive terms (that is, six years)
- Education Officers should be empowered to provide continuing assistance and guidance to the Chair and members of the school board to ensure effective governance and administration.

There should also be an amendment to be a current rule under the ***Regulations*** requiring principals to undergo training courses. It is recommended that a provision be added to the ***Education Regulations*** stating that Principal nominees must go through training prior to their appointment.

BOARD EFFECTIVENESS AND SCHOOL PERFORMANCE: A Conclusion Based on Re-Analysis of Data from the National Education Inspectorate Report

Based on original research by the IADB (Inter-American Development Bank) specialists, the Inspectorate developed eight (8) indicators of educational performance, four of which measured the main inputs into the schools and the other four measuring the desired outputs.

The four input indicators included: Leadership and Management, Teaching in Support of Students' Learning, Curriculum and Enhancement Programmes; and Human & Material Resources. The four output indicators were: Students Performance in National or Regional Tests and Assessments, Students' Progress in English and Mathematics, Students' Personal and. Social Development and Safety, Security, Health and Wellbeing. A ninth indicator "Overall Effectiveness" was developed to link these eight indicators together.

In assessing board effectiveness versus the output of schools, an analysis was conducted on data retrieved from the National Education Inspectorate in its 2015 – 2019 Report.

The Inspectorate's Baseline Evaluations, 2015
In the leadership and management of schools, schools received either unsatisfactory ratings, or barely satisfactory. 41 percent of leaders were found unsatisfactory and there was a wide disparity in performance: 12 percent of leaders were judged very good and 47 percent only satisfactory.

Subsequent Reports and Changes in Relation to the Baseline Report of 2015.
Three reports have followed the baseline study of 2015: those for the years 2016, 2017 and 2019. Each report has claimed that significant progress has been made when compared with the baseline findings of the 2015 report. Among the biggest changes in the 8 indicators was leadership and management, which jumped from 59 percent satisfactory and above in 2015, to 76% in 2016, including 19% good or excellent.

However, between 2015 and 2016 there was a remarkable degree of progress based on a sample of 103 primary and secondary schools, the Inspector found in 2016 that 63 per cent of all schools were effective overall, compared with only 45 percent the previous year, a startling 18-point change. No attempt was made to explain this extraordinary improvement. This overall leap was largely a reflection of substantial improvements in nearly all the other indicators. Among the biggest changes in the 8 indicators was leadership and management, which jumped from 59 percent satisfactory and above in 2015, to 76% in 2016, including 19% good or excellent. A strong correlation exists between leadership and management and overall effectiveness as the schools with exceptionally high leadership and management, majority (78%) of them had an exceptionally high overall effectiveness score as seen by the most recent NEI Report.

The main take-away from this preliminary re-analysis is that although teaching is by far the most important factor in explaining school effectiveness, school leadership also plays a pivotal role in explaining this phenomenon.

4.5 The Principal

The leadership of the school is critical. Principals as is the case with all leaders are important in establishing the strategic direction of the school while also ensuring the appropriate management of all aspects of its operations. In many instances, principals are required to not only perform important administrative functions but are also required to teach and/or take on the role of financial manager.

Given this heavy burden in many instances, it is imperative that appropriate training be provided to principals. NCEL (discussed in section 4.6.3) has provided significant training for the leadership of the sector, and this has been very valuable in improving the competencies of principals. There is, however, need for more training in financial management as evidenced by the number of adverse findings in audits conducted by the Internal Audit team of the MOEYI.

The lack of bursars in many basic and primary schools leads to a heavy burden on principals to do significant work in financial management which can detract from the important academic aspects of their role. This further indicated the need for cluster bursars to assist these principals as is already being implemented by the MOEYI.

It is therefore recommended that a review of the NCEL Training Manuals for principals be conducted. A review of the courses offered indicates that there is need for more financial management training as well as training in change management.

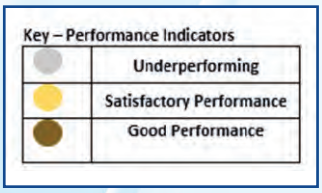
A principal nominee must be trained in accordance with the method that the Minister will specify. This provision should also apply to aspiring principals that acquired a Master's degree in education leadership. This is because the theoretical university course may not cover certain practical considerations such as financial management.

Additionally, principals should participate in psycho-social evaluations or psychometric testing to ensure that they can take up the position of principal. This provision should also be included in the amended ***Education Code***.

The Supporting Structure

There are several agencies supporting the MOEYI in achieving its goals and objectives, the Committee reviewed these entities with a focus on those created after the 2004 Taskforce Report. The general view is that these institutions are operating at world class standards and should be commended. These include the UCJ and the NEI. The rest of this section details the work of the newly created institutions and assesses the extent to which they are fulfilling their mandates.

Assessment of Supporting Entities Within the MOEYI



After the 2004 Taskforce Report a number of institutions were established. This level of institutional development was quite impressive, but it is imperative that we look at the outcomes of these expansion in institutions. The table below outlines the key agencies and the extent to which they are fulfilling their mandate.

Table 10: Layers of Governance within the Education Sector

Entity	Function	Performance Indicators
University Council of Jamaica	Registers and assures the quality of local programmes and institutions, and foreign programmes being offered in Jamaica.	
National Education Inspectorate	Assesses the standards attained by the students within primary and secondary schools at key points in their education, generate a report on the findings and make recommendations to support improvements.	
Early Childhood Commission	Coordinates all activities, development plans and programmes within the early childhood sector.	
Jamaica Tertiary Education Commission	To regulate, standardize, safeguard and transform Jamaica's tertiary education sector.	
National Parenting Support Commission	Coordinates parenting support programmes.	
Overseas Examinations Commission	Supervises overseas examination boards at the secondary and tertiary level.	
Jamaica Teaching Council	Responsible for the enhancement and maintenance of professional standards in teaching.	
National College for Educational Leadership	Responsible for preparing school leaders for effective leadership	
Jamaica Library Service	Provides information, educational and recreational programmes and services through a Public Library Network and School Library Network.	
National Council on Education	Ensures effective governance of public educational institutions.	
National Education Trust	Mobilizes financial and quality resource investments for schools	
Nutritional Products Limited	Produces and distributes meals to schools.	

4.5.1 The National Education Inspectorate (NEI)

The 2004 report conceptualised the establishment of a National Quality Assurance Agency (NQAA) with the following objectives:

- National Student Assessment and Reporting (Implement a monitoring and verification system for Grades One, Three and Four tests to ensure the integrity of test results)
- Quality Assurance
- Registration and Accreditation of Institutions (as well as certification and monitoring of independent schools)
- Develop and implement regulations for continuous licensing of teachers

The report also recommended the development of a new reporting format for GSAT which would include a detailed report of the performance of each student at every stage and a standardised, transferable record of student achievement and reporting of national assessment to parents. The report further recommended that annual surveys be done with students and parents to determine the satisfaction with the service provided, and that the agency produce "timely" reports at the school, community, and national levels.

Some of the above responsibilities are now executed separately by the Jamaica Teaching Council, the Student Assessment Unit of the MOEYI and the National Education Inspectorate, as the NEI does not execute any objectives directly related to student assessment, teacher regulation and licensing, or accreditation of institutions.

In keeping with the quality assurance mandate, the NEI began inspections in 2009 after the institution was introduced in 2008. Between then and 2015, initial inspections were conducted of all schools, in line with the target set by the ESTP. External funds garnered provided support to assist in the establishment of the systematic inspection process and a baseline (including a management information system) on school and student performance through contracting of inspectors, training, and resources to carry out the inspections.

Schools also do an internal evaluation prior to school inspections. Schools are asked to evaluate their strengths and weaknesses in key areas, with the results being used to guide the NEI inspection. Following inspections, the NEI produces a report, and schools are given an opportunity to review the report before it is published. School reports and national inspection reports are published on the NEI's website. Furthermore, schools are tasked with the development of a school improvement plan (SIP) in collaboration with the DSS and an action plan to respond to the report, as the NEI is not mandated to act on what it recommends. A major challenge with the follow up to the reports is the understaffing of Regional Offices and the mounting responsibilities of education officers, significantly hindering the implementation and evaluation of school improvement plans.

Responses from a principal survey revealed a high level of satisfaction with the reports provided by the agency, with most principals indicating that they knew about the agency and its work, that they had done an inspection before, and that they also found the report and its recommendations useful.

Since the COVID-19 pandemic in 2020, the NEI has shifted to conducting inspections mainly online. Inspectors visit the virtual classroom spaces and in relatively few cases, meet face-to-face as necessary. A new inspection framework was also created by the NEI that takes into consideration the current realities of schools during the pandemic. Nevertheless, the human resource and mandate challenges continue to stymie the progress of the NEI, as it was unable to complete its target of inspections for the current academic year and has also been delayed in publishing its report.

4.5.2 The Jamaica Teaching Council (JTC)

The 2004 Task Force recommended, among the quality assurance needs, the establishment of an entity which would be responsible for the registration and licensing of teachers. The entity was mandated to "develop and implement a licensing and certification system with relicensing occurring every five years". The directive to coordinate registration of teachers was partly achieved in 2008 with the establishment of the council, as loan funds were used to establish the system for registration and licensing of teachers as well as an out and in-service teacher training programme.

Teachers are now registered through an online portal where they upload certification and history of employment. It was also envisioned that JTC (and NCEL) would "develop and implement a comprehensive distance education programme for pre- and in-service teachers to be offered to in-service teachers outside of school hours."[37] This has been achieved by JTEC and NCEL, both delivering professional development short courses to teachers and school leaders, including during the COVID-19 pandemic, where courses were delivered synchronously and asynchronously from virtual learning platforms.

The issue of licensing, requirements for licencing, and holding teachers accountable to standards set by the Council are yet to be addressed with the JTC, as the legislation to facilitate this has yet to be prepared and the institution is not yet legally constituted. The proposed bill is intended to "recognize the teaching profession as being on par with other regulated professions; to introduce a system of licensing; to establish the Jamaica Teaching Council (JTC); to effect consequential amendments to the provisions of the Education Act."

A Bill to establish the JTC has seen many reiterations resulting from extensive consultations. The most recent Bill was produced in 2020 and is awaiting comments from the MoEYI. This legislation is an important step in the professionalisation of this very important profession and can address some of the concerns regarding the existence of a minority of who may have engaged in abusive actions in relation to students. The JTC therefore not only addresses the professionalisation goal, but also can be seen as one mechanism to further ensure the safety of our students.

4.5.3 The National College for Educational Leadership (NCEL)

The 2004 Task Force highlighted several gaps in the education system in the area of general school leadership; identifying specific weaknesses of principals and school boards, and the absence of accountability mechanisms within school structure. The report recommended continuous training and upskilling for school managers and boards, and greater accountability for these key actors.

The NCEL was initially conceived to be an operational arm of the JTC, however its scope was very early expanded to become the training and goal setting institution for principals and school leadership. It is intended to improve the standards and qualifications for school principals and education leaders, including training of current staff and preparation of future leaders and managers to move into positions of leadership. It should also work in conjunction with the

[37] 2004 Task Force Report on Educational Reform

Department of School Services to identify the strategic leadership needs of schools and provide required individualised support. Its programmes and initiatives are aligned with standards outlined by the Jamaica Teaching Council for school principals, and indicators of effective school leadership and management from the National Education Inspectorate. NCEL also provides training for other key staff that support school management such as Bursars. Aspiring principals are now encouraged and have been required to take courses offered by NCEL, and some offerings are also made for senior teachers or teachers in leadership positions.

The flagship programme of the NCEL is the Effective Principals' Training Programme, which sensitises and prepares principals for roles of school leadership and challenges to be encountered in striving for effective school management. It was also envisioned at a point to provide training to education officers to sensitise them on functions of principals and provide better support. This was however discontinued given the low uptake and given the lack of a clear policy articulation on NCEL training for EOs.

The programme includes several modules related to general responsibilities of principals, school government and planning, data and records management, accountability, human resources, student and behaviour management, and school financial management. Training is followed by field experience and developing a professional portfolio as evidence of competencies gained in a second round. The NCEL has however reported a lag in the number of individuals proceeding to the second round after completing the first. According to the institution, while there have been 1017 principals and education officers completing 17 cohorts of round 1 of the training component of the EPTP, there were only 367 participants completing the second round. Reasons for this lag, as outlined by the NCEL included principals feeling overwhelmed with requirements of round 2, not meeting matriculation requirements, and lack of prioritisation of the second round, given that appointment to the position of principal is only tied to completing one round.[38] Furthermore, the NCEL indicates that participants have only successfully completed a round of the programme when all post-training documents have been submitted and assessed. Only 584, or 57% of participants in the first round have done so. Completion rates have ranged between 18% and 86% over the 16 cohorts completed. Reviews of the relevance, usefulness and impact of the modules have been mixed, but largely positive suggesting satisfaction of participants with the training programme. The absence of a clear policy from the MoEYI mandating teachers and aspiring principals to do NCEL training prior to assuming a role of principalship has however compromised the gains to be had on the system's leadership.

4.5.4 The National Education Trust (NET)

The 2004 Task Force Report recommended the establishment of a Trust, through which parents, guardians and other benefactors could make direct, long term investments to supplement the cost of educating their children (or intended beneficiary) and improving the infrastructure in schools. This recommendation has shifted slightly to focus on elements of receiving donations from larger, diaspora, private and international donors and on mobilising these funds for the execution of infrastructure work or the procurement of school-related equipment.

[38]NCEL 2021. Programme Report of EPTP.

The NET was also conceptualised to find ways to increase sources of funds and increase private and institutional participation in providing education services. The direct recommendations for the entity should have included launching an Education Debenture, facilitating private investment and multilateral loans and grant funds. While the organisation has succeeded in standardising routes for private sector investment in the education system, including donations and funding for specific projects, it has not received sufficient private investment to transition to become a self-financing entity or to source consistent streams of investment in the education sector for non-targeted programmes.



The NET was also to "establish a clearing house for private sector companies to facilitate their support for the education sector". While serving as Minister of Education, Prime Minister Andrew Holness indicated interest in similar models of education trusts in operation around the world, including the Ghana Education Trust Fund, which aided students of all levels of education. The National Education Trust Fund, as it should have been called, was intended to improve the infrastructural gaps in the Jamaican education system, by soliciting funds from international donors, the diaspora, the private sector, and individuals interested in investing in school infrastructure. Suggestions were made for the Fund to be supplemented or receive a consistent flow of income from the Consolidated Funds, through the Education Tax Act, or a similar levy on

casinos and the gambling industry. This would support the need to build new schools and classroom blocks to alleviate the infrastructural strain on the heavily overcrowded system.

The Trust was officially established by the GoJ in 2010 to raise funds for the improvement of education infrastructure. The Trust was eventually registered as an Approved Charitable Organisation on 27th August 2014 under **Section 2** and **Section 17** of the ***Charities Act, 2013*** and as such is eligible for tax exemption or relief under the ***Income Tax Act, GCT, Property, Stamp Duty, Transfer Tax and Customs Acts***, thus allowing it to receive goods for clearance purchased abroad on behalf of local and international donors. This function has been achieved, and the agency has seen an increase in donations since the start of the COVID-19 pandemic.

The ESTP Report, published 13 years after the 2004 report details the new vision for the NET outlining that the entity has become the new vehicle through which the Ministry of Education would secure a consistent and reliable source of funds to support capital programmes in education with a particular focus on, but not limited to, infrastructure. The NET, under its Articles of Incorporation, is empowered to receive endowments, bequests, borrow and lend and participate in the bond market for the purpose of raising funds to support investment in activities that are education priorities. A loan from the World Bank supported the provision of mechanisms to mobilize resources to the National Education Trust (NET) by funding the cost to implement a marketing and public awareness strategy to mobilize resources for the NET, as well as, development of NET‘s financial capability to manage investments and the NET’s —education trust fund and a firm specialising in organization development was engaged to ensure the organization is structured to meet its obligations and commitments in an optimal way. Training for NET and other relevant GOJ staff in the use of public-private partnership arrangements was also funded.

NET obtained its legal status having been incorporated as a government company in December 2010. NET has also launched a marketing campaign and has engaged with donors who have provided support through donations of various gifts and donations in-kind to support education. Its online portal has capacity to provide for cloud funding, reaching out to Jamaicans in the diaspora, as well as others wishing to donate funds to support education.

Despite this status, and the articulation of its original mandate, the NET was ultimately positioned to take over the construction and project management functions of the MOEYI. It now complements the MOEYI Technical Services Unit in the execution of some construction projects, with special emphasis on capital expansions, as well as those that are donor funded. The MOEYI continues to execute the bulk of the core maintenance projects to be done in schools. One of the major challenges, however, is conflicts arising from potentially duplicating projects between the NET and the MOEYI, and the lack of a consistent source of external funding to finance the operations of the NET.

4.5.5 The Jamaica Education Transformation Commission (J-TEC)

The J-TEC was established through a Cabinet decision to regulate and supervise the tertiary education sector. Its responsibilities since its establishment in 2011 have included extensive research on options for tertiary education existing in Jamaica, student and staff satisfaction,

registration of operational institutions, development of standards for the teaching profession, and development and implementation of the National Qualifications Framework (NQFJ). The JTEC was also established to monitor labour force needs and ensure that resources are allocated based on the demand. It however intersects with the responsibilities of the Tertiary Unit of the MoEYI and lacks legal standing to establish and enforce standards to be met and adhered to by tertiary institutions, and to routinely collect data from all operating institutions on their operations. While it maintains a register of institutions in the sector, its regulatory functions are impeded by the lack of legislation upholding the institution and defining the roles of the other players in the sector.

One iteration of a J-TEC Bill was originally conceptualised as "An Act to modernize and strengthen the legal and regulatory framework for the higher education sector in Jamaica, including for the registration of higher education providers, the establishment of a National Qualifications Framework, the re-structuring of institutional arrangements to support the higher education sector and consequential amendments to the University Council of Jamaica (UCJ) Act, the Council of Community Colleges of Jamaica (CCCJ) Act and the Education Act." It should be noted that the CCCJ (Amendment) Act was recently passed this year.

The J-TEC now lists as its functions:

1) To regulate and oversee the operations of tertiary level institutions through inspections and ongoing institutional monitoring and support to ensure their development.
2) To set standards, consistent with international best practices, governing all aspects of tertiary level institutions, including, but without limitation, standards governing institution's governance arrangements, infrastructure, faculty, programmes and student services inter alia.
3) To establish and maintain a National Qualifications Framework as a mechanism for formal classification and recognition of qualifications and awards The Organisation: Focus
4) To utilize the NQF as a tool to determine equivalencies across and between the various types of qualifications and awards
5) To provide the Minister with responsibility for education with policy advice based on research including that which has been commissioned by the J-TEC.

The J-TEC is however yet to be legally constituted as the sector's oversight and regulatory agency, as its structure is now hinged on the Cabinet's decision on the newest Higher Education Policy Concept Paper, which has also seen many iterations. As such, there is little public understanding of the role of J-TEC, and no penalty for the non-maintenance of registration requirements set by the institutions due to the lack of a legislative framework.

4.5.6 The National Parenting Support Commission (NPSC)

The 2004 report noted the lack of parental involvement in education and poor health conditions of children who were coming to school. These observations stemmed largely from conversations with early childhood practitioners, which were also relevant to the general school population. The report also highlighted the fact that many parents did not know their roles and responsibilities as parents. The Commission recommended measures to promote greater involvement of parents in school activities, as well as greater interest in student performance and behaviour. It also recommended efforts (between the MOEYI and the MOHW) to provide parenting information in communities, health centres and wherever necessary to build better parenting habits. It also

recommended the development of Parent-Teacher Associations where non-existent to provide parents with opportunities to handle responsibilities in the school, as well as to provide an avenue for providing training in literacy and parenting skills where necessary. The NPSC was also tasked with the revitalisation and promotion of November as Parent Month, which has been achieved, though it also coincides with Youth Month, also celebrated in November. As part of Parent Month, the NPSC does hosts parent villages and seminars.

The ***NPSC Act*** was passed in 2012, paving the way for the establishment of the Commission in 2013 as a coordinating agency, responsible for child development and support for parenting. It operates in four tiers of involvement: home, school, government, and community (having the largest influence on children). Soon after the establishment of the Commission, however, a decision was made to merge the NPSC with the ongoing merger of the CDA and the NCR to form the CPFSA. The CPFSA, in contrast to the remit of the NPSC, is a regulatory agency that focuses on child protection and is non-punitive, which contradicts with the mandate of the CPFSA.

The activities of the NPSC include:

- Parent mentorship programme (supported by 20 volunteers)
- Establishment of parent places attached to schools, churches, community centres etc
- Framework for the accreditation of parenting programmes

While the NPSC does not experience severe funding challenges, it has human resource challenges, where most of the actors responsible for parent education are volunteers and has stymied the establishment of parenting programmes in each school. The ideal structure would have included one parenting officer assigned to each region. While this structure has been approved, it has not been materialised, given the ongoing deliberations regarding merger with the CPFSA. The Commission is also challenged by its reliance on shared services, given that it operates like a department of the MOEYI. The Commission relies on the consolidated funds, which presents challenges for time-bound projects.

4. Accountability in the Jamaica Context

Accountability in education is generally understood as, "the process by which the education system holds itself answerable for delivering the appropriate services and meeting its goals for educating students."[39]

Three (3) types of accountabilities are generally acknowledged in education systems. They are:

1. ***compliance with regulations*** (the standards and processes that schools must uphold – i.e. Institutions and educators are accountable for adherence to rules and are accountable to the bureaucracy),
2. ***adherence to professional norms*** (i.e. teachers are responsible for adhering to norms and standards of the teaching profession and are accountable to peers and to the regulating body); and

[39]De Coster, Isabelle, Peter Birch, Sylwia Birch, and Orla Colclough. Assuring quality in education: policies and approaches to school evaluation in Europe. Publications Office of the European Union, 2015. ; Anderson, Jo Anne, and International Institute for Educational Planning. Accountability in education. Paris: International Institute for Educational Planning, 2005.

3. ***results-driven accountability*** (i.e. accountability which is based on student learning, assessments and other pre-determined indicators of achievement. Institutions are accountable for student learning and student success and are accountable to the general public).[40]

Most education systems attempt to use a mix of all three types of accountability in their own models, though there has been a general transition from a reliance on compliance with regulations to results-driven accountability. [41]

Results driven approaches, where there is significant focus now, tend to focus on high-stakes assessments, and fail because they cause breakdowns in the teaching and learning process, and are ineffective in providing individualised, diagnostic reports to be addressed in the classroom. These approaches, however, are convenient for the publicising of large-scale data to parents and the wider population.[42]

Across Europe, 31 education systems use a combination of internal and external reviews to evaluate schools.[43] In 27 of those systems, as well as in Hong Kong, New Zealand, and others education jurisdictions, internal assessments are either compulsory or recommended, and go on to inform external evaluations, especially where standards and the overall framework for conducting internal evaluations are set by the state or central authority.

The external evaluation procedure tends to be carried out by external, independent bodies, reporting to the central ministry (i.e., the National Education Inspectorate in Jamaica, the Office of Standards in Education in the UK, the Office of Education Standards in the Cayman Islands, External Review Office in New Zealand, etc.). This procedure becomes a lever to influence public opinion and choice of institutions and pressures schools to perform better. This includes setting standards and determining how these standards are measured against a set of targets, as well as determining how often and under what circumstances schools are to be assessed.

The success of any model also depends on how they are received by those being held to account. Measures will have the intended effect only when the internal accountability matches the external accountability. Internal accountability refers to the norms, expectations and processes felt by teachers and those who directly have a hand in the major responsibilities of the institutions. A weak internal accountability is usually an effect of low collective responsibility and an extraordinarily high individual responsibility.[44]

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[40]Hutton, Disraeli M. "Governance, management and accountability: The experience of the school system in the English-speaking Caribbean countries." Policy Futures in Education 13, no. 4 (2015): 500-517 Anderson, Jo Anne, and International Institute for Educational Planning. Accountability in education. Paris: International Institute for Educational Planning, 2005.

[41]Anderson, Jo Anne, and International Institute for Educational Planning. Accountability in education. Paris: International Institute for Educational Planning, 2005.

[42]Anderson, Jo Anne, and International Institute for Educational Planning. Accountability in education. Paris: International Institute for Educational Planning, 2005.; National Research Council. Testing, Teaching, and Learning: A Guide for States and School Districts. Washington, DC: The National Academies Press.1999. https://doi.org/10.17226/9609.

[43]De Coster, Isabelle, Peter Birch, Sylwia Birch, and Orla Colclough. Assuring quality in education: policies and approaches to school evaluation in Europe. Publications Office of the European Union, 2015.

[44]National Research Council. Testing, Teaching, and Learning: A Guide for States and School Districts. Washington, DC: The National Academies Press.1999. https://doi.org/10.17226/9609.

Frequency of evaluations varies across education systems, though there is consensus that they should take place "frequently" and where requested or where special intervention may be needed. The system in Austria, for example, includes the engagement of quality managers in each educational region to ensure that schools are achieving and maintaining what is commonly understood as "good quality". Schools not maintaining required standards risk being penalised with revocation of their accreditation status.[45]

The School Development and Accountability (SDA) Framework in Hong Kong emphasises school self-evaluation and external review in a planning, implementation and evaluation cycle, which is grounded on the cyclical nature of the process (reiterative cycles of self-improvement) to deter against the belief that the process ends at either stage.[46] An impact assessment showed evidence that the model for self-evaluation had become embedded in schools' day to day practices, and a high sense of collective responsibility was brewing. There is enhanced internal accountability through activities such as peer-lesson observation and collaborative lesson planning.

Accountability also involves the provision of access to information, as required on a timely and consistent basis. The effectiveness of a system will depend heavily on their ability to establish and maintain a database that can be manipulated in response to a variety of inquiries, and with varying levels of security permitting differentiated levels of access to stakeholders of different levels. The model must be one that can be easily understood, shared, and used, and should take into consideration the context within which the data should be interpreted.[47]

In most models, frequent reports are published or there is an easily accessible online website, portal, or dashboard that shows key areas of performance of all schools, including reports of school inspections. In these models, while the institutions conducting inspections are scrutinised by the general public, there is general understanding and respect for the body, for the work that they do and for the information that they make publicly accessible. Furthermore, when the public understands data derived from an aligned accountability system, they are more likely to respond to the performance of schools in a thoughtful and supportive way.[48]

Several education systems use sanctions and incentives in the accountability model in place. The rewards vary from cash bonuses, relaxation of regulations, national awards and official statuses. In few cases, the sanctions may also include budget cuts, but very frequently include stipulations for school development or improvement plans, reconstitution of staff and in extreme measures, a conversion or takeover by the state or responsible government authority.

Jamaica's accountability structure appears to integrate many of the structures in place in other education systems, including an external assessment body (NEI), an external examining and qualifications body (Student Assessment Unit - SAU), and somewhat decentralisation of some

[45]https://eacea.ec.europa.eu/national-policies/eurydice/content/quality-assurance-early-childhood-and-school-education-1_en
[46]https://www.edb.gov.hk/en/sch-admin/sch-quality-assurance/about-sch-quality-assurance/index.html
[47]https://www.gov.uk/guidance/january-2021-maintained-schools-and-academies#how-we-will-select-schools
[48]Anderson, Jo Anne, and International Institute for Educational Planning. Accountability in education. Paris: International Institute for Educational Planning, 2005.

functions (e.g., some functions are delegated to the regional offices). Nevertheless, there are gaps in the accountability processes and structures in place across all levels of governance; the school, the board, the regions, and at the level of the central Ministry. For example, because of capacity constraints, inefficiencies, and other challenges, the decentralisation of several functions of the central ministry foreseen decades ago is yet to be realised.

There is little standardisation of the school internal review processes, and reports of external reviewers are not widely read, though made available to the public. At the teacher level, while the system has retained quality teachers, they are challenged with limited resources, significant disciplinary issues, and responsibilities in the classroom that go beyond their teacher training.

Nevertheless, and as noted before, legislation on, and regulations for the registering, licencing and renewal of teacher licences are incomplete, which has stalled the establishment of a reward structure that is linked to incentives or sanctions. The absence of this legislation and its accompanying mechanisms risk further undermining the profession and the capacity of schools, as the government or other stakeholders fail to hold teachers and school boards and leaders accountable for their performance or for that of the school. While the MOEYI collects routine data through an annual schools' census and regular examination data, it is unclear to what extent the data collected is adequate and is analysed and incorporated in decision-making of the policy ministry. These factors moreover contribute to a lack of transparency at that level, where information on trends in performance and quality of schools (except for high-stakes assessments) and the overall system is limited and selectively available to the public. Greater effort needs to be placed on coordinating the collection of data on student performance and school experience, as well as in the use of this data to inform decision and policy.

The performance of all levels of governance should be codified in a strategic plan from the MOEYI, to include targets that are data-driven and publicly accessible to hold each actor accountable.

5.1. The Legislative Agenda

Legislation is the backbone of the education sector and is a key component of the governance framework.
Currently, the sector is governed by the ***Education Act*** and ***Education Regulations*** which was promulgated in 1965 and 1980, respectively. However, the standing legislative framework does not contemplate the current educational landscape and its rapid transformation. This has created a lacuna in the educational sector because the multiplicity of powers bestowed upon the education minister cannot be effectively utilised based on the existing legislative framework.

To bring the Ministry in alignment with the 21st Century, the relevant legislation must be reconsidered and modified to ensure that it is fit for purpose for the current state of play as well as to facilitate the future development of the education sector.

There are currently a suite of proposed legislation and legislative amendments that will form the pillars of the education sector that are yet to be tabled in Parliament. These will be outlined in turn.

5.1.1 Key Bills

The Education Regulations

Since the publication of the Task Force on Educational Reform Report, 2004, it was recommended that:

> ***"A number of legislative changes must be made with greatest urgency to provide the foundation for implementation of the recommendations. While the precise changes will be determined by the Transformation Team based on detailed studies noted in the recommendations, at a minimum the following will have to be addressed:***
>
> ***Education Regulations: We urge that the updating process which has been in progress since 1989 be concluded in the immediate term with the addition provided by the recommendations, such as the Terms and Conditions of the teachers."***

However, **none of the amendments in the 2004 Report have been drafted or implemented in the Regulations**.

In drafts of amendments to the Regulations, the Ministry has noted that the purpose of the proposed amendments is to modernize the regulations governing public education institutions within the scope of the existing ***Education Act***. Currently, a Cabinet Note is under development to inform the Cabinet of the amendments being pursued.

Passage of Regulations are subject to negative resolution. Therefore, the Regulations must be tabled before the Houses of Parliament and are reviewed to a Regulation Committee.

Currently, there are over one hundred (100) proposed changes to the Regulations. These have been grouped under themes for the proposed amendments that have been identified as priority. The committee spent a significant portion of its deliberations reviewing the proposed amendments. The committee then identified the priority areas for amendment based on the need to facilitate fundamental changes to the education system. The most important proposed amendments have been prioritised and include the rationale and justification for these changes.

It is imperative that the amendments to the Education Regulations be fast-tracked to ensure that the education sector has the legislative infrastructure to accommodate the new academic and institutional landscape. This imperative has become more evident during the COVID-19 pandemic.

Education (Jamaica Teaching Council) Bill

It is proposed that an Act to recognize the teaching profession as on par with other regulated professions be promulgated. The JTC Act will introduce a system of licencing for teachers and establish the Jamaica Teaching Council as well as effect consequential amendments to the ***Education Act***.

A Bill to establish the JTC has seen many iterations as a result of extensive consultation. In January 2019, the Cabinet endorsed the Ministry's direction for the establishment of the JTC.

Further, drafting instructions were issued via letter dated October 23, 2019. The Office of the Parliamentary Council produced a draft Bill dated February 14, 2020, for the Ministry's review. The JTC Advisory Committee and the Jamaica Teacher's Association were consulted and provided feedback in March and April respectively.

The Ministry provided its feedback to the OPC in June 2020 which led to an amended Bill dated July 29, 2020. This iteration of the Bill is under review by the Ministry and comments will be provided shortly, further to a meeting held with the Chief Parliamentary Council on August 14, 2020.

The next steps are to submit the draft Bill to the Attorney General's Chambers for their non-objection. The Ministry will aim to resolve any issues raised by the Attorney General with the draft Bill prepared by the OPC. Once this is completed, a Submission for the Legislation Committee of Cabinet will be prepared.

Jamaica Tertiary Commission (J-TEC) Bill

This Bill aims to be an Act to modernize and strengthen the legal and regulatory framework for the higher education sector in Jamaica.

This includes the registration of higher education providers and the establishment of a National Qualifications Framework, the restructuring of institutional arrangements to support the higher education section and consequential amendments to the University Council of Jamaica, the Council of Community Colleges of Jamaica (CCCJ) and the ***Education Act***.

Currently, the Bill is being reviewed and the Ministry is awaiting the development of the Higher Education Policy. A draft Bill was provided by the Office of the Parliamentary Counsel which gave the recommendation to seek Cabinet's approval on policy direction.

The Ministry will develop a Higher Education Policy to guide the revision of the JTEC Bill, which will be re-named the Higher Education Bill. The next step is to prepare a Concept Paper on the Higher Education Policy and submit it to Cabinet for approval.

The Council of Community Colleges of Jamaica (Amendment, Validation and Indemnity) Act, 2021

The Council of Community Colleges of Jamaica (Amendment, Validation and Indemnity) seeks to:

a. expressly empower the Council of Community Colleges of Jamaica (hereinafter "the Council") to grant and confer academic awards and distinctions, and to rescind such awards and distinctions, where the Council may have good and sufficient cause so to do; and
b. validate and confirm previous acts of the Council in granting such academic awards and distinctions, and to provide for indemnification in respect thereof.

By way of Cabinet Decision No. 44/06 dated 18th December 2006, Cabinet approved the issue of drafting instructions to the CPC to amend the Council of Community Colleges of Jamaica Act, 2001 (hereinafter "the CCCJ Act") to make express provision empowering the Council to grant and confer certificates, degrees and other academic awards and rescind such certificates, diplomas degrees and other academic award which may have been issued if such necessity should arise.

By ***Act 29 of 2001***, shortly entitled the Council of Community Colleges of Jamaica Act, the Council was established and incorporated to, *inter alia*, supervise and coordinate the work of community colleges, collaborate with other institutions, including institutions of further and higher education in the provision of educational opportunities; and provide policy advice to the Ministry of Education, Youth & Information (MoEYI) and promote the interests of community colleges, in addition to providing a forum for the adjudicating of disputes (i.e. Section 4 of the Act). The Council's membership comprises representatives of the colleges, the secondary and tertiary levels of the education system, as well as business and industry.

Prior to the enactment of the ***CCCJ Act***, when the Council was formed on or after the 1st day of January, 1993, the members of the Council, in good faith and in the purported exercise of their jurisdiction, issued awards which were authenticated by the signature of the principal of the respective college, the chairman of the Council and the Permanent Secretary in the Ministry with responsibility for education. The Council continued this practice upon incorporation until it became aware that the CCCJ Act did not confer on the Council authority to make awards.

Section 4 (d) of the CCCJ Act empowers the Council to determine the conditions for the holding of examinations leading to awards. The emphasis is not on the granting of awards itself but on the holding of examinations. Similarly, ***Section 4 (j)*** of the Act refers to the examination and assessment of students by the Council, not the conferring or granting of awards. ***Section 4 (o)*** of the Act is limited to acts that further the functions listed in the said Act.

Consequently, the award of degrees, diplomas, certificates, inter alia by the Council is outside the powers expressly conferred by the ***CCCJ Act***. At common law, there is a presumption of validity of the award until a court of competent jurisdiction declares the award to be void or if it is withdrawn by the Council on the basis that it is null and void.

The Amendment Act seeks proposes to amend the ***CCCJ Act*** to validate and confirm the previous actions of the Council, and members of the Council, acting in good faith in the purported exercise of their functions, in granting or conferring degrees, diplomas, certificates and other academic awards and distinctions. The Bill also seeks to validate and confirm awards and distinctions so granted, to provide for indemnification in respect thereof, and to expressly empower the Council to grant and confer, as well as rescind such awards and distinctions, where the Council has good or sufficient cause to do so.

The proposed amendments do not pose any immediate implications for existing legislation. The Ministry is in the process of reviewing the governance arrangements of the Higher Education Sector to inform necessary reforms, which, as required, will be advanced to Cabinet in due course.

School Improvement Bill

This is an Act to amend the ***Education Act*** to make provision for the introduction of school improvement and special measures to address chronic school underperformance. The establishment of the National Education Inspectorate is a complementary measure.

Currently, a draft Cabinet Submission has been prepared. Additionally, the situational analysis will be amended to reflect the relevant data from the NEI. The policy proposal was strengthened by research conducted on similar schemes in other jurisdictions.

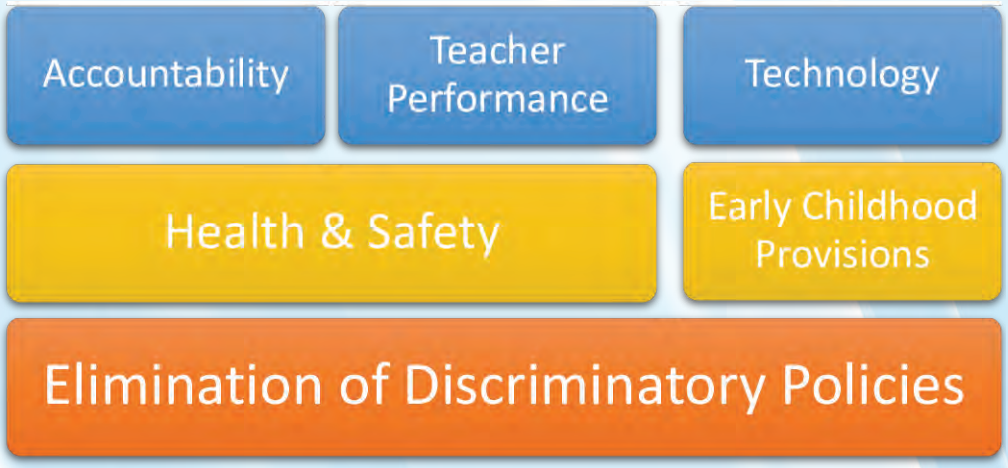
Model provisions were reviewed and approved by an Internal Committee and will be incorporated into the proposal. The Ministry's response to feedback from national and stakeholder consultations will also be incorporated in the proposal.

The next steps are to finalize the proposal, prepare the draft Cabinet Submission seeking the Cabinet's approval of the proposal and to issue drafting instructions and amend the draft Cabinet Submission post circulation to consider feedback.

5.2. Urgent Amendments to the Education Act Regulations

The following are six of the key areas for urgent amendment that must be made to the **Education Act, Education Regulations, 1980**. These areas will be further detailed under the Legal Reform heading in this Report.

Figure 20: Key Areas for Urgent Amendment of the Education Regulations, 1980



5.2.1 Accountability Amendments

Currently, accountability at all levels of administration in the education system is not at the level required for an effective education system. The Education Regulations, 1980 provides some flexibility for institutions to implement their own accountability standards that are fit for purpose for each institution.

However, it is evident that there are many channels where a lack of oversight and proper governance can create a lack of accountability. This in turn may lead to misappropriation of funds

and other administrative issues and places an additional burden on the Ministry of Education to correct the issues as they arise which takes time away from their other portfolio objectives.

Importantly, students who are the essential stakeholders of the education system are deprived of the quality education they deserve when there is a lack of accountability in institutions at any level.

Thus, it is in this context that the committee proposes that the regulations that speak to accountability of school administrations at every level be prioritized for amendment. This will provide the first step necessary to expand the powers of the Ministry of Education to monitor and evaluate the routine operations of said institutions to ensure that it is in accordance with codified standards.

(See Section 6 for the details of the proposed Amendments)

5.2.2 Teacher Performance

With the review of the proposed amendments to the Education Regulations, the committee concluded that greater emphasis on teacher performance and evaluation needs to be prioritized in the process.

Thus, it is recommended that greater emphasis be placed on regulating the process utilized to assess teachers. This will include clearly stating the key performance indicators that must be attained by teachers as well as impact on the student and their performance.

Additionally, the teacher disciplinary procedure must be outlined and prioritized for implementation. The disciplinary procedure must be in keeping with the laws of natural justice. There should also be sufficient regulation for on-boarding acting teachers to fill in for teachers when there are on leave.

(See Section 6 for the proposed Amendments)

5.2.3 Technology

The technological divide in Jamaica has been exacerbated during the pandemic. The deployment of technology to all students is important and, in this process, it is critical that no student is left behind. Access to adequate modern technology will ensure that Jamaica's learning population is equipped with the necessary skills to understand and contribute to the development of Jamaica.

There is a provision in the draft regulations recommending that digital attendance registers be codified. However, this is not sufficient. In a post-pandemic reality, provisions must be made to ensure that students are equipped with the adequate technological tools and internet access to ensure connectivity in diverse circumstances.

The Ministry of Education is currently implementing the tablets in schools programme which provides students with access to a device that would allow them to complete assignments and access learning material.

It is recommended that this policy directive be standardized and formalized in the Regulations and that a framework for technology and its use in the classroom be more deeply entrenched in the Regulations.

(See Section 6 for the proposed Amendments)

5.2.4 Health and Safety

One result of the pandemic has been the greater priority accorded to proper sanitization and policies geared towards maintaining the safety of the various stakeholders and participants in the education system. Mandates for the installation of sanitization stations, social distancing in classrooms, virtual learning and compulsory wearing of masks in classrooms have been circulated by the Ministry of Education.

Currently, there is a recommendation that an additional clause be inserted in regulation 12 of the proposed amendments to include the regulation of institutions that slaughter meat for consumption within said institution. Additionally, the 2019 draft Regulations expand the 'Health' category to include policy statements and guidelines on the health and wellbeing of students and the inspection of a public school by health personnel or a School Medical Officer.

However, the scope of both proposed amendments is quite limited and does not adequately address the new standards of health and sanitization requirements stipulated by the Ministry of Health.

As it relates to safety, there are proposed amendments in the 2019 draft that include safety precautions and equipment as well as the control of laboratory workshops and agricultural projects. These amendments do not make mention of protocols that must be activated should a health or national emergency arise. This gap must be addressed in the Regulations

(See Section 6 for the proposed Amendments)

5.2.5 Children with Special Learning Needs

This commission has already noted that early childhood education is essential to provide children with a strong foundation for learning. It is at this stage that the foundation for learning is set and it is imperative that attempts be made to determine whether students have any learning challenges or needs and to provide a pathway to address these learning needs.

Thus, along with implementing the regulations that prioritize pre-primary and primary education, further regulations must be drafted to address children with special and developmental needs.

(See Section 6 for the proposed Amendments)

5.2.6 Elimination of Discriminatory Policies

Currently, institutions can determine the policy of their schools on many matters. This includes discipline, uniforms, among other things. In recent times, the Supreme Court determined that the wearing of certain hairstyles like dreadlocks can be prohibited by schools. However, in a modern post-colonial society, this approach can be highly discriminatory.

Additionally, the recent controversy that arose with a prominent all-girls' school regarding permitted masks for upper school students who are required to attend school to prepare for external exams resulted in negative media attention and the intervention of the Minister of Education. This can be remedied through the standardization of policy development and implementation among public educational institutions.

These regulated policy directives should include the express prohibition of discrimination in schools. The amendment should mandate a culturally inclusive position that protects children from being barred from any educational institutions based on ordinary hairstyles, financial or religious reasons.

(See Section 6 for the proposed Amendments)

6. The Recommendations

I. GOVERNANCE

a. Education Reform: A National Priority

- **The reform of the education sector should be designated an area of national priority, and a structure similar to EPOC should be implemented (short term)** The Education Progress Commission (formal name to be determined) should be responsible for monitoring the implementation of Jamaica's education reform measures. This body should develop annual work plans with targets and should prepare quarterly and annual reports that outline achievements against targets. This committee should have dedicated resources and institutional support, and the performance reports should be publicly available.

- It is also important that a deliverable of this commission be the development of a Change Management roadmap for education in Jamaica.

b. Funding Model for Primary and Secondary Schools

- **The existing funding model should be adjusted to allocate funds based on the needs of the schools (short-term; significant expenditure implications)**

- Resources are currently allocated to all schools on a per student basis irrespective of the unique circumstances of the school. Currently, this per student allocation is $9,500 for primary schools and $11,500 for secondary schools. This approach to allocations does not contemplate the:

  – nuances between schools in relation to the academic performance of students
  – socio-economic background of students
  – number of students with special learning needs; and
  – other issues faced by a school such as health and security concerns.

Therefore, the MOEYI must implement a funding model that re-calibrates the allocation based on the needs of the school in order to ensure equitable treatment. Students with lower levels of prior attainment or who are from lower socio-economic backgrounds would require more centrally-funded resources to fund their education and to enable remedial actions.

c. School Boards

School board selection framework should be more rigorous and should include vetting and training to better facilitate the important strategic role of boards in the education system to be on par with other bodies in the public sector. The selection and operation of school boards should also be consistent with the GOJ's Governance Framework for Public Institutions (short term; no expenditure implication).

Boards are critical to the functioning of schools as they set the direction of schools, make personnel decisions, and generally oversee the operations of the school. They are required to hold the principal accountable for the attainment of performance targets in schools and they are required to ensure that the school is operating within GoJ regulations.

The National Education Inspectorate Report (2014) shows that of the 129 schools inspected that year, 40 percent had poor leadership and management. This percentage improved and in 2019 where only 11 percent were classified as having poor leadership and management. Some of the issues identified include the boards not operating at a strategic level and in many instances the boards were not fully constituted and did not focus on student achievement and were limited in their capability and capacity to drive change management in schools. It is therefore imperative that members of school boards are carefully selected and vetted.

The role of chair is particularly important and it is essential that board chairs are equipped to deal with the very important functions ascribed to them via the Education Regulations. Currently, the NCE indicates that nominees for board chair should have the following qualifications:

- Secondary/Vocational education
- Three years' experience in supervisory management
- Proven track record in supervision and management
- A deep interest in education and nation building
- Excellent negotiating, interpersonal and conflict resolution skills

All other nominated members of the board are required to simply be literate and numerate and should facilitate some opaque fit and proper criteria. It is clear that the bar for qualifications has been set too low for the stewardship that is demanded of Boards for managing the strategic, policy and operational direction of the schools.

Given the important role of school boards in guiding the institutions to achieve the educational and holistic development of students it is further recommended that:

- **The NCE should vet the CVs of all nominees and review boards for appropriate mix of expertise (short term; no expenditure implication).** The key areas of competence needed are:
  - Strategic planning
  - Financial management
  - Education
  - Human resource management
  - Legal expertise
  - Knowledge of the community within which the school operates

- **Database of potential school board candidates should be developed and populated with a list of names garnered from a public call for expressions of interest in serving on school boards (short term; no expenditure implication).** This could be done in collaboration with the various Chambers of Commerce in each parish and given the access to on-line meeting platforms should be open to members of the Jamaican Diaspora.

- **Board Chairs and Board members to have minimum qualifications and leadership experience and a demonstrated track record for contributions to education and or community development to be considered for selection (short term; no expenditure implication)** [see specific recommendations in amendments to the Education Regulations]. These minimum qualification standards should be enshrined in the Education Regulations.

- **Enhanced governance training for school board members should be undertaken (short term; no expenditure implication).** This training should be done at the start of every term of boards and should also be done for the committees with responsibility for finance and personnel decisions which should mirror the Government's Corporate Governance Framework for Public Bodies in Jamaica.

- **Implementation of term limits for board chairs (short term; no expenditure implication)**

Board chairs should not serve more than two consecutive terms on the board of a single school. This will facilitate enhanced renewal in schools over time and will facilitate the incorporation of fresh ideas and approaches that can serve the school and its students. This will not restrict the Board Chair from serving at other schools.

- **Non-monetary recognition of the service provided by directors of school boards (short term; no expenditure implication)**

There are thousands of individuals performing voluntary service on school boards across the country. These individuals are performing valuable national service and should be recognized. While we do not recommend payment for service on boards at this time, it is important that non-monetary means of acknowledging this work be identified and implemented. One such approach is the development of a Governance Award for school boards to honour the cadre of individuals serving our country through their work on boards and to spur the development of more robust governance in schools.

d. Principals

- **Principals should receive adequate training in strategic planning, change management, financial management, human capital management and corporate governance (short term; limited expenditure implication)**

Principals are the chief administrators of schools and as the Ministry has attempted to move responsibility for outcomes closer to the school and the administration the demands on principals has increased exponentially. There has, however, not been any commensurate increase in allocations to schools and the addition of these non-academic roles has meant reduced time to

deal with some of the strategic and academic imperatives of the schools. In addition, some principals not only have to take on the heavy administrative burden, but they also are required to teach classes based on the allocation of teachers to the particular institution.

The absence of a bursar in primary schools also places additional burden on those principals to handle financial matters which invariably they are not trained to handle.

Principals should therefore receive ongoing training and support in achieving the strategic goals of the school while managing the operations and finances according to approved plans. NCEL currently has several courses geared towards the senior leadership of schools. Given the critical role of principals and the data on the leadership concerns in NEI assessments of schools, it is therefore recommended that a review of the NCEL Training Manuals for principals be conducted. A review of the courses offered indicates that there is need for more financial management training as well as training in change management.

- **Update current NCEL course for principals to better incorporate financial management and change management processes; this course should be a requirement prior to confirmation of principals into those posts (short term; no expenditure implication).**
- **Additional courses and hands-on training in technology including suitable office suite of applications/information systems, on-line meeting platforms, learning tools, time and attendance systems and workflow tools that are now the new reality for managing the modern organization.**

- **The MoE's plan to expand the number of roving bursars to support principals in primary schools should be accelerated** to provide greater support to principals in this non-academic element of their responsibilities (short term; significant expenditure implication).

e. Central Ministry

Strategic review of the Ministry of Education structure is necessary to identify inefficiencies and to create a structure that is fit for purpose. This review will include an optimization study of the Ministry (short term; significant expenditure implication).

Organization structures need to be designed with clear guidance from the Strategy and Policy direction, consideration for the current context (e.g. severe under-resourcing, out-dated technology, unfilled vacancies, etc.), to address organizational imperatives (e.g. the need for rapid transition from manual to automated workflows, use of on-line platforms for teaching, work from home imperatives, need to deliver sustainability and Vision 2030 goals, regulations) and principles (e.g. guidelines for handling staff changes arising from recommendations, developing talent, collective labour agreements, etc.). Once these considerations are established the design will require a close examination of the "FROM" position to the "TO" state and interdependencies in the following key areas: Strategy, Technology, Processes, Governance/Risks, Talent Capability, Talent Capacity and Culture among others. Once these parameters are understood the organization can be reviewed and re-designed with the support of research, practical tools, analysis and change management as recommendations are developed.

- **Given the serious concerns regarding cultural issues in the Ministry, it is recommended that an organizational review be conducted.**

f. Regional Offices

- **Review of structure of Regions is imperative as they are not functioning well (this would be a component of the organizational review recommended above).**
- **Regional offices to be better resourced to manage the schools in their districts (medium term).**
- **Consideration for the use of centralized and shared services that can be accommodated with the use of technology (with self-service features) so as to optimize talent capability and capacity as well as the productivity of the Ministry.**



The 2004 Task Force clearly stated that the regions should be accorded more power and that they should take on more of the operational responsibilities while the central Ministry should be a policy-centred ministry. However, that has not been realized as there has not been as much devolution of responsibilities and authority by the Ministry. The seven regional offices are currently ill-equipped to assume the increased responsibilities in their current form given the lack of resources allocated to them.

The committee believes that over time more responsibilities should be devolved to the regions so as to facilitate decision-making that is closer to the actual learning arena. This should be done in the medium term as the current structure of these regions is not fit for purpose. As such, there should be a comprehensive review of the regions as a component of the review of the central Ministry.

g. Education Officers

The role of Education Officer should be adjusted to better reflect the needs of schools, especially those that are challenged in achieving the learning outcomes of students (medium term).

Education officers are a key support to boards and principals and they should be more strategically deployed. The current job description does not position education officers in a strategic light and has them acting in many instances more as liaisons between the Ministry and the schools. In a system that has such pressing needs it is imperative that education officers be reimagined as primarily responsible for assisting in change management in schools and acting as executive coaches to principals and chairs. As such, it is specifically recommended that:

- The Education Officer role be adjusted to that of School Improvement Officers
- The job description be amended to reflect a more strategic and change management role
- Performance management targets of education officers should be linked to improvements in school performance

II. ACCOUNTABILITY

h. Performance Management in the Ministry: Alignment with Strategic Plan

The Ministry has a strategic plan, but it is not relevant to its current priorities (see section 4.1.3 of this report). The specific recommendations in this regard are:

- **Development of a realistic performance management framework for the senior team at the Ministry aligned with the implementation of recommendations from the Commission (short term; no expenditure implication).**
- **Development of practical strategic plan with relevant targets and wherein performance assessments are more closely aligned with the achievement of elements of the strategic plan (short term; no expenditure implication).**
- **Cross reference to the Government of Jamaica Performance Accountability Framework for benchmarking purposes.**

i. Enhanced Financial Accountability

A review of the audit findings for public schools reveals that a significant percentage of audits uncover some adverse findings. These range from merely incorrect elements in financial accounts to potential misappropriation of public funds. These audit findings signal potentially pervasive issues regarding the financial accountability framework in the public education sector. It is therefore recommended that:

- **More financial audits to be conducted by the Internal Audit team of the MoE of schools to identify irregularities in a more timely manner (short term; limited expenditure implication).**
- **Increased staffing in Internal Audit in the Ministry as well as in the financial control units of the regions (short term; significant expenditure implication).**
- **Development of a centralized cloud-based accounting software suite to be used across all schools (short term; significant expenditure implication).**
- **Principals should receive enhanced training in financial management and the use of related technology/software (this is especially critical for those in basic and primary schools that have no bursars assigned) (short term; no expenditure implication).**

- **Enhanced board training on financial management in schools and the requirements as per MoE regulations (short term; no expenditure implication).**

j. More public information on school budgets and performance

Accountability has several dimensions, and one area of importance is the provision of information to communities and the broader public on several dimensions of a school's operation. The availability of information is a key step on the road to enhanced accountability and can even be seen as more effective than sanctioning school officials. In many other jurisdictions, information is readily available on the performance of schools as well as public funds allocated to schools. It is proposed that a similar approach be implemented in Jamaica. Specifically, the committee recommends:

- **The creation of a website that provides dashboards detailing the performance of all schools as well as the funding allocated by the GOJ (short term; no expenditure implication).** It should include exam passes, NEI reports on the schools and any other relevant performance indicators. Importantly, it should not only feature academic performance, but should also highlight achievements in co-curricular activities and other initiatives undertaken by the schools.

k. Code of Conduct for Teachers

Much has been said about the need for greater accountability at the school level and teachers are central to this thrust. The JTC Bill is an important step in professionalizing the profession of teaching and has been in various stages of implementation for many years. It is critical that this legislation move forward as it will provide a framework for the licensing of teachers and will set and maintain high standards of conduct for teachers. As a corollary, it is important to have a Code of Conduct for teachers codified as a component of the Education Regulations.

- **JTC Code of Conduct for teachers is necessary and should be linked to Education Regulations as well as other behaviour change initiatives such as the recently passed Sexual Harassment Act (short term; no expenditure implication).**
- **JTC Act to be passed urgently and should include the recommendations garnered from years of consultation with the JTA and other interest groups (short term; no expenditure implication).**

l. Strengthen the NEI

The National Education Inspectorate plays a critical role in the accountability framework of Jamaica's education system. As noted in the committee report, the organization has performed very well and the quality of reports is very high. There is, however, need for the reports to be more broadly shared and for enhanced follow-up of underperforming schools. In many instances the handoff between the NEI and the Department of School Services is not smooth and there is inordinate delay in the completion of a school improvement plan to address the issues identified in the reports.

- **Provide greater resources to the NEI to facilitate carry out its required assessment targets (short term; significant expenditure implication).**

- **Better handoff between the NEI and the DSS in facilitating the improvement of schools deemed underperforming through the timely development of school improvement plans and implementation of the agreed plan (short term; no expenditure implication).**

III. ADMINISTRATION

m. Education Management Information System critical

- **The MoEYI must develop and deploy a functioning and fit for purpose Education Information Management Systems that can handle the large volume of data on students, schools, and teachers that should be maintained, processed, and analysed *(short term; significant expenditure implication)*.**

This EMIS system should be real-time and must also provide information re investments per school and teacher remuneration and allocations, among others.

- **A Data Analytics department should be established as a priority in the MoE (short term; significant expenditure implication).** There is need to analyse significant volumes of data so as to have a more comprehensive understanding of performance and issues so as to better inform policy decision-making. The commission had significant difficulty accessing key data required for the analysis of the education system and in many instances the information had gaps or had to be sourced from multiple entities and departments. Big data is an important trend not just in private entities but also in relation to decision making at the government and policy level. As the data becomes more voluminous it is critical that appropriate systems and teams be in place to analyse the significant volume of education-related data generated on a daily basis so that appropriate policy decisions can be made.

- **Development of a fully functioning Monitoring and Evaluation Unit (short term; limited expenditure implication)**

The Programme Monitoring and Evaluation Unit (PMEU) of the MOEYI was established in the Planning and Development Division of the MoEYI to monitor and evaluate programmes and projects introduced and/or being utilized by the Ministry.[49] The Unit's responsibilities include providing feedback on how resources are used to implement these activities as well as inform the relevant stakeholders of the on the progress thereof and indicate ways in which the programmes can be improved.

As was highlighted in section 4 of this report, the unit's evaluation framework as well as the ministry's responsiveness to findings of the unit is not suitable. A better functioning monitoring and evaluation unit will equate to better policy formulation and more effective programmes and resource allocations.

[49]Ministry of Education, Youth and Information (2021). Programme Monitoring and Evaluation Unit. Retrieved from https://www.moey.gov.jm/node/58

n. Flexibility in Movement of Teachers

- **Additional flexibility to be embedded in Education regulations re the movement of teachers where the teacher-student ratio is well below the established standards (based on consultations with teachers and boards) (short term; no expenditure implication).**

The current framework for teacher appointment has no built-in flexibility as teachers are employed to individual schools by the school board and there is no mechanism to reallocate teachers in the event of overstaffing to other schools where there is understaffing. Any movement would have to be voluntary and as such there are limitations to widescale redeployment of teachers where necessary.

The Committee explored several ways to address this including the MoE hiring all teachers or the regions hiring teachers and making resourcing decisions based on the needs of schools in a particular region. Given the limitations of the regional apparatus, it is recommended that in the short-term the Regulations should expressly speak to enhanced flexibility in the movement of teachers for resourcing, but in the medium-term resourcing decisioning should take place in the appropriately resourced regions. Multilateral consultants reviewing the education system have recommended moving staffing decisions even lower to the schools, but this recommendation is not supported as there is need for strategic and national view of staffing and this is stymied by moving staffing decisions to the school level.

IV. LEGISLATIVE CHANGES

Legislation is the framework upon which all the proposed recommendations will be built upon. At present, the two main governing documents are the ***Education Act*** and ***Education Regulations***.

The Governance and Accountability Committee spent copious amounts of time reviewing the Discussion Draft of the Proposed Amendments to the ***Education Regulations, 1980*** that was produced in 2019. This forms the basis of our recommendations for the amendments that must be prioritized.

Although the recommendations are primarily focused on amending the ***Education Regulations***, portions of the ***Education Act*** must also be amended to ensure that the proposed amendments to said Regulations can be adequately implemented.

The specific recommendations for amendment have been categorized and detailed based on the six (6) major headings expounded upon in **Section 5**.

i. Accountability

- Amend the criteria for appointment and assessment of teachers to allow for greater movement of teachers across institutions.[50]
- Prioritize the implementation of the ***"School Improvement and Special Measures"*** aspect of the Regulations for the Minister to state the other agencies or mechanisms that are activated once a school is deemed underperforming.[51]
- Remove the requirement for the members of the Board of Management to be appointed by the Minister to include that the Ministry will collect a pool of candidates who are competent to sit on school boards.[52]
- Prioritize the implementation of the procedure for the appointment, disqualification, removal and resignation of members of the board to make independent determination on whether separate schools should be governed by joint boards where the need arises, and the resources are in place.[53]
- Prioritize the implementation of the duties and responsibilities of a Board to ensure that all boards get trained to a standard level of competency.[54]
- Prioritize the implementation of the proceedings that outlines the code of conduct for board members to assess the performance of teachers in a general assessment.[55]

ii. Teacher Performance

- Implement the regulations regarding "Curriculum and Assessment" in the Regulations to strengthen the development of national curriculum standards within the Ministry.[56]
- Amend the criteria for appointment and assessment of teachers including the development of the Teachers' Handbook by the JTC.[57]
- Prioritize the implementation of the regulations that address 'Cessation of Appointment' which should also allow for teachers to be reassigned to other the schools within the same regions or in other regions altogether.[58]
- Prioritize the implementation of the regulations that address the discipline of teachers.[59]
- Draft and include regulations that address the assessment of teachers' performance and prioritize the implementation of the regulations regarding ***"School Improvement and Special Measures" including a definition of 'under-performing' schools.***[60]

[50]See Regulations 42-44B and 51-53A of the 2019 draft Regulations
[51]See Regulations 6A-6F of the 2019 draft Regulations
[52]See Regulations 69P-69W of the 2019 draft Regulations
[53]See Regulations 77A-84 of the 2019 draft Regulations
[54]See Regulations 89-90H of the 2019 draft Regulations
[55]See Regulations 85-88D of the 2019 draft Regulations
[56]See Regulations 5-5M of the 2019 Regulations
[57]See Regulations 42-44B and 51-53A of the 2019 draft Regulations
[58]See Regulations 53B-54B of the 2019 draft Regulations
[59]See Regulations 55-62 of the 2019 draft Regulations
[60]See Regulations 6A-6F of the 2019 draft Regulations

iii. Technology

- Prioritize the implementation of the regulation relating to ***'Attendance Register of Staff'*** in the 2019 draft Regulations and expand the regulations to allow for other school records to be digitized and to ensure that the education sector is in alignment with data protection and cyber security.[61]
- Draft and include regulations that standardize the provision of one tablet or laptop to students for academic purposes.[62]
- Expand the facilities for investment in digital technologies in the educational sector to ensure that teachers and students are equipped with the knowledge, mindset and tools to thrive in the digital age.
- Draft and include regulations that address developing, enhancing and maximizing distance learning objectives.[63]
- Standardize the Emergency Education Plan that currently trains teachers in technological and online distance learning systems.[64]

iv. Health & Safety

- Expand the 'Health' category to include provisions for the installation and maintenance of sanitization stations in all schools and the regularization of sanitization practices as recommended by the World Health Organization and the Ministry of Health.[65]
- Expand the 'Safety' category to include proper preparation for epidemics, pandemics, national disasters, or national emergencies in keeping with the World Health Organization, Ministry of Health and the Office of Disaster Preparedness and Emergency Management for proper guidance should the need arise.[66]

v. Early Childhood Education

- Implement the regulations regarding the "Special Education" programme for students with special needs and require teachers qualified in that area.[67]
- Prioritize the implementation of "Home Education" programme to ratify that provision parents who opt to home-school their children receive the same level of engagement and support from the Ministry.[68]
- Prepare draft Regulations regarding educational programmes for children with special needs and disabilities and expand the benefits and facilities that will be provided under the special education programme.[69]

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[61]See Regulation 19 of the 2019 draft Regulations
[62]Include the tablet in school's initiative in the draft regulations for the benefit of teachers and students.
[63]The proposed regulations should facilitate the integration and development of the blended (physical and online) learning approach to schooling to ease the demand for additional teachers and classrooms given the present physical distancing requirements
[64] This means that Technological distance learning should become a part of the training for established and prospective teachers.
[65]See Regulations 10C, 10D, 11, 12 and 12A of the "Discussion Draft, Education Regulations, 2019"
[66]See Regulations 13, 14 and 14A in the "Discussion Draft, Education Regulations, 2019"
[67] See Regulation 4B-4E of the 2019 draft Regulations
[68]See Regulations 4F and 4G of the 2019 draft Regulations
[69] It should be noted that the ***Education Act*** provides guidance on how children requiring special educational treatment should be catered to. However, this is not articulated further in the ***Education Regulations, 1980***

- Ensure that it is clear whether the regulations are referring to children with special (academic/ developmental) needs, children who are deemed 'exceptional students' or children with disabilities[70]

vi. Elimination of Discriminatory Policies

- Prioritize the implementation of the regulations regarding ***"Students and Scholarships"*** and expand the provisions to ensure that they prohibit cultural, physical, financial discrimination and codify the policy on non-discrimination in schools for Afrocentric hairstyles or religious beliefs[71]
- Prioritize the implementation of ***'Division 6—Associations Affiliated with a Public Education Institution'*** in the Regulations to empower the prescribed youth organizations within the education sector to make representations to the school boards or the Ministry for instances of discrimination or injustice[72]
- Ensure that the proposed amendments to the regulations have horizontal applicability to ensure that the faculty, the principal and the school boards must meet the same standard
- Codify the development and implementation of strategic plans for public education institutions that outline the development of the institution; this should be readily available online
- Codify the publication of financial allocations to schools made by the Ministry of Education
- Implement the mandatory annual audit of public education institutions
- Prohibit discrimination in schools. The Education Act should reflect a modern and culturally inclusive position that protects all children from being barred from any education institution based on wearing dreadlocks as an ordinary hairstyle irrespective of religious reason.

EARLY CHILDHOOD EDUCATION

Early Childhood Definitions

The Early Childhood Period (ECP) is commonly defined as the period from conception or birth to eight years. In the education system, the ECP starts with nurseries or Day Care Centres (for children 0-2 years) and pre-schools and ends at Grade 2.[73] However, public perception is that the ECP ends at pre-school. Early Childhood Development (ECD) refers to comprehensive development of young children, encompassing physical development (gross and fine motor and sensory development), cognitive and language development, personal-social development, and socio-emotional development. Optimum development for young children is the responsibility of multiple sectors: health (including nutrition), education, social protection, and child protection. Early Childhood Education (ECE) is a much more narrow concept and is focused on schools providing services to children in the ECP.

Focus of the Report

This report will be primarily focused on the functioning of Early Childhood Institutions (ECIs).

[70]Upon an initial read of the draft Regulations, it appears that special education is used interchangeably for persons with special (academic) needs and those who may be classified as exceptional students

[71]See Regulations 23-37 of the 2019 draft Regulations

[72] See Regulations 69D-69O of the 2019 draft Regulations

[73]Early Childhood Commission Publication. Jamaica's Zero to Three Strategy; Making the First Thousand Days Count. M Samms-Vaughan, 2018.

Importance of ECD

Research has shown that the experiences of young children predict their academic and social success in later childhood and in adulthood. The High/Scope Perry Pre-School Study demonstrated conclusively that children at risk who had a high quality ECD programme, had better short and long term academic and social outcomes than their peers who did not have this exposure[74]. In childhood there was better school readiness, academic achievement, and high school graduation; in adulthood, there was higher annual earnings and employment and reduce criminality. Indicators of a quality ECD programme included qualified teachers; teachers trained in participatory education; daily pre-school attendance; a low teacher: pupil ratio of 1:8; and parent engagement.[75]

The economic returns on investment were high at US$17.00 for every $1.00 of investment. Approximately 75% of the return on investment was to the public, and 25% to individuals. Of the public return on investment, 88% represented savings from crime, whereas up to 7 percent represented savings from special education and welfare, as well as increased funds from taxes on higher earnings. Importantly, 93% of the public return was attributable to males, due to the substantial reduction in crime committed by males. Similar findings have been replicated in other studies in high income countries.

The Jamaica Supplementation and Stimulation Study showed that at-risk children under the age of 2 years who received psycho-social stimulation through home visits (which built parental capacity in child development and stimulation) had higher IQs, and better academic skills and mental health in childhood and adulthood; and greater earning capacity and less violent behaviour in adulthood than their peers.[76]

Brief History of ECD in Jamaica

Jamaica has a long tradition of concern for its pre-school population, beginning in the 1940s when a small subvention to develop community based 'basic schools' was provided by the colonial government. By the 1960s, the island was being hailed as "one of the few countries of the 'Third World' which can boast a low-cost model of provisions of preschool education despite its shortcomings." During the seventies, the Manley government significantly increased the early childhood programme, introducing salary subsidies for basic school teachers and infant departments in primary schools, and in 1976 passed the first Code of Regulations for the management of basic schools, which specified the health facilities, enrolment size and teacher qualifications for basic schools.

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[74]Schweinhart, L. (2007). Outcomes of the High/Scope Perry Preschool Study and Michigan School Readiness Program. HighScope Educational Research Foundation, Ypsilanti, Michigan, United States.

[75]Britto, P. R., Yoshikawa, H., van Ravens, J., Ponguta, L. A., Reyes, M., Oh, S., Dimaya, R., Nieto, A. M., & Seder, R. (2014). Strengthening systems for integrated early childhood development services: a cross-national analysis of governance. Annals of the New York Academy of Sciences, 1308, 245–255. https://doi.org/10.1111/nyas.12365 ; Sylva K, Melhuish E, Sammons P, Siraj-Blatchford I and Taggart B (2004) 'Effective provision of pre-school education: Final report', London: Department for Education and Skills

[76]Walker SP, Chang SM, Vera-Hernández M, Grantham-McGregor S. Early childhood stimulation benefits adult competence and reduces violent behaviour. Pediatrics 127, 849-57, 2011.; Gertler P, Heckman J, Pinto R, Zanolini A, Vermeerch C, Walker S, Chang S, Grantham-McGregor S. Labor market returns to an early childhood stimulation intervention in Jamaica. Science 344, 998-1001, 2014.

The Planning Institute of Jamaica (PIOJ) commissioned a Strategic Review of the EC Sector by KPMG. The 2001 review reported that all elements of a comprehensive EC programme existed, but there was poor co-ordination, duplication, and inefficiency.[77] The establishment of a national, inter-ministerial, inter-sectoral, advisory, and regulatory co-ordinating body, the Early Childhood Commission, was recommended.

The Early Childhood Commission

Roles and Functions

The Early Childhood Commission Act (ECC Act), an Act to establish a Commission to govern the administration of early childhood care, education, and development in Jamaica and to make provision for connected matters was approved by both Houses of the Jamaican Parliament in March 2003. The ECC is a body corporate with reporting responsibility to the Minister of Education.

The legislated functions of the Early Childhood Commission (ECC) as documented in the ECC Act are as follows:

(a) advise the Minister (on policy matters relating to early childhood care, education, and development in Jamaica, including initiatives and actions to achieve national early childhood development goals;
(b) assist in the preparation of plans and programmes concerning early childhood development;
(c) monitor and evaluate the implementation of the plans and programmes referred to in paragraph (b) and, in respect thereof, make to the Minister such recommendations as it thinks fit;
(d) act as a co-ordinating agency to ensure effective streamlining of all activities relating to early childhood development;
(e) convene consultations with relevant stakeholders as appropriate;
(f) analyse resource needs and submit recommendations for budgetary allocations for early childhood development;
(g) identify alternative financing through negotiation with donor agencies and liaise with such agencies to ensure effective and efficient use of donor funds;
(h) supervise and regulate early childhood institutions.

Structure of the ECC

Commissioners

The functions of the ECC are effected through a cross-sectoral Board of Commissioners which provides oversight for and policy direction for the Operational Arm of the ECC. The Commission is required to have sixteen to twenty members and includes a chairman; a representative of the political party forming the Opposition; the Permanent Secretary, or his/her nominee from the MOEYI, Ministry of Health and other pertinent Ministries and agencies of government concerned with the welfare of children and at least seven professionals with expertise in ECD.

Operational Arm

The Operational arm of the ECC is responsible for day to day management of the organisation's affairs. Headed by an Executive Director there are technical departments of Regulation and

[77]Samms-Vaughan, M. E. (2005). The Jamaican Pre-School Child: The Status of Early Childhood Development in Jamaica. Planning Institute of Jamaica. ISBN 976-8103-10-8

Monitoring with responsibility for inspecting and regulating ECIs; Sector Support Services with responsibility for providing development services to ECIs and the wider ECD sector; and Cross-Sectoral Co-ordination, with responsibility for ensuring co-ordinated delivery of services across sectors. The current organizational structure has 181 positions, of which resources have never been provided for 26 posts. These unfilled posts include 13 development officers, 1 Manager for ECD Development Services, 5 inspectors, and 5 other positions. The total number of inspector positions is 40; 33 posts are currently filled. The total number of development officer posts is 70; 56 are currently filled.

Strategic Direction of The Early Childhood Sector

The strategic direction of the ECC was co-ordinated by the ECC through a consultative process with a broad group of stakeholders.

Cross-Sectoral National Strategic Plans

Using all available information, and consultation with stakeholders, a comprehensive cross-sectoral NSP for ECD was developed for the period 2008-2013. The NSP was designed to co-ordinate activities across multiple-sectors though a single strategic framework, as indicated in Table 11 below. Because of its cross-sectoral nature, collaboration with sector partners in government ministries, departments and agencies was required. The World Bank invested US$ 27 million in the implementation of the NSP. Other international and local development partners also invested, by identifying areas of the NSP that they wished to support. The 2018-2023 NSP is now in effect. The ECC identified parenting support as critical to the development of the ECD sector and in 2014 initiated the establishment of the **National Parenting Policy and the National Parent Support Commission.**[78]

Distribution of ECIs - Types of ECIs

A variety of ECIs provide services to Jamaica's children. Of the 2,676 ECIs that have applied for registration, the ECC reports that 408 (15.2%) are identified as public institutions fully funded by the Government of Jamaica. Infant schools are stand-alone public schools and infant departments are attached to primary schools. Basic Schools are privately operated community-based ECIs that receive some financial support from the GoJ, typically in the areas of teacher salaries and nutrition support; these 1630 public-private partnership schools form the majority of ECIs (n=60.9%). Some 638 ECIs (23.9%) are fully private, and do not receive any GoJ support.

The ECC conducts an annual census. The latest census data obtained in 2019, provided the information in Table 2. The census reflects responses obtained from 2,163 ECIs that returned census questionnaires; this represents 80.8% of all ECIs that have applied for registration with the ECC and are in operation.

[78]Samms-Vaughan M & Tortello R. (2014). Jamaica's National Parenting Support Policy: origins and early implementation. Early Childhood Matters, Bernard van Leer Foundation; 122: 62-67

Table 11: Distribution of Children by ECI Type

0 - 2 Yrs						
ECI Type	**Number**	**Males (No.)**	**Males (%)**	**Females (No.)**	**Females (%)**	**Total**
Day Care Centre	62	906	50.9	873	49.1	1,779
Mixed Pre-School/Nursery	160	5049	50.8	4893	49.2	9,942
TOTAL	**222**	**5,955**	**50.8**	**5766**	**49.2**	**11,721**

3 - 5 Yrs						
ECI Type	**Number**	**Males (No.)**	**Males (%)**	**Females (No.)**	**Females (%)**	**Total**
Basic School	1396	34327	50.5	33682	49.5	68,009
Infant Department	249	5529	51.3	5249	48.7	10,778
Infant School	75	4486	51.4	4240	48.6	8,726
Kindergarten & Preparatory	178	4975	49.5	5083	50.5	10,058
Pre-School	41	1208	49.3	1242	50.7	2,450
Special Education	2	10	62.5	6	37.5	16
TOTAL	**1,941**	**50,535**	**50.5**	**49,502**	**49.5**	**100,037**

Data from the Statistical Institute of Jamaica indicates that there were 101,370 children 0-2 years and 107,115 children 3-5 years in 2019.[79] Children in ECIs responding to the census represent 12.0% of the 0-2 year population and 93.4% of the 3-5 year population. Children in Government-operated Infant Schools and Departments represent 20% of all children 3 to 5 years in ECIs, those in Basic School represent 68.0%. Very few children are in special education. In 2011, the proportion of children 3-5 years in Government-funded ECIs for children 3-5 years was 10.7%.

The large proportion of children in ECIs increases the financial responsibilities of the Government to ECIs and to staffing of the ECC. For example, only 60.3% of children 3-5 years are in pre-school in the USA and 88% of 3-4 year olds in the UK.[80] [81]

Integration of ECIs in Primary Schools

Up to 2012, there were 127 Infant Departments and Infant Schools. The recognition that infant departments and schools have a higher proportion of trained teachers led to a Ministry of Education partnership to expand infant departments in primary schools that had capacity. This was also a recommendation of the 2005 Task Force Report on ECD. Between 2012 and 2021, 258 new infant departments were created, providing Government-funded ECI spaces for 2,500

[79]Statistical Institute of Jamaica (2021). https://statinja.gov.jm/Demo_SocialStats/PopulationStats.aspx
[80]UK Department of Education (2018). Childcare and Early Years Survey of Parents in England.
[81]Kids Data, 2018. https://www.kidsdata.org/topic/767/preschool-kindergarten/table

children. Additionally, 188 community Basic Schools fully or partially merged with newly established infant schools.

Brain Builder Centre Programme (BBC)

The Brain Builder Centres Programme was launched in July 2018, and sought to close the gap in provision of education and care for the 0-2 year early childhood cohort.[82] A main objective was to widen access to high quality, tuition-free early childhood development services particularly in areas of socio-economic need. Existing infant departments and private or public pre-schools are assessed to determine suitability for a BBC Centre. Financial support through grants-in-aid is provided by the Government for remuneration of qualified staff (trained teachers and vocational staff), nutritional support and maintenance. At the end of FY 2019/2020, there were 69 BBCs in operation, employing 40 trained teachers, and impacting children.[83] Currently there are 116 in operation (personal communication, ECC)

Eci Teacher And Practitioner Qualifications

The early childhood sector both locally and internationally has traditionally had both teachers trained to the tertiary university level and vocationally trained staff (e.g. Child Development Associate in the USA; National Nursery Examination Board Certificate in the UK). Vocational training in Jamaica results in NCTVET Level 1 ECD certification indicating a Directly Supervised Worker (Entry Level) equivalent to Assistant Teacher Level 1; NCTVET Level 2 ECD certification indicating a supervised skilled worker equivalent to Assistant Teacher Level II and NCTVET Level 3 indicating a supervisory level with administrative skills, equivalent to an Associate Teacher.

The previous and current state of teacher qualification is indicated in Table 3. While there have been improvements in teacher qualification, vocational trained staff are still the majority. Of the 5561 vocationally trained staff, 11.1% are trained to Level 1, 71.8% to Level 2, and 17.1% to Level 3.

Table 12: Highest Education Qualification of ECI Staff

Highest Level of Education Attained	2011		2021	
	No.	Percentage	No.	Percentage
Primary	772	8.7	-	-
Secondary	282	3.2	-	-
Vocational	4642	52.3	5471	47.7
Tertiary – Diploma	1299	14.6	1822	15.9
Tertiary – Bachelor's Degree	745	8.4	2026	17.7
Tertiary – Master's Degree	97	1.1	314	2.7
Unable to be Verified	1041	11.7	1830	16.0
Total	8872	100	11,463	100.0

Source: Registration Information System, ECC

[82]Jamaica Brain Builder's Programme, ECC, 2018
[83]ECC Annual Report, 2019-2020

Despite the significant improvement in educational qualification for staff at ECIs, at the level of individual ECIs, analysis of data obtained from inspection against the Standards indicate that a large proportion of teacher functions are being carried out by personnel without adequate training (Table 4). Some 211 ECIs (7.9%) are above the standard and have more than one trained teacher.

Table 13. Educational Qualification at Level of ECIs (2020)

Standard	Required Qualification	No. of ECIs at or above Standards	% of ECIS at or above Standards
ECIs have at least one Lead Teacher	Bachelor's Degree or Diploma	854	36.0
50% of those undertaking Associate Teacher functions trained	NCTVET Level 3	289	14.1
50% of those undertaking Assistant Teacher I functions trained	NCTVET Level 2	580	28.3
50% of those undertaking Assistant Teacher II functions trained	NCTVET Level 1	88	8.4*

Source: Registration Information System, ECC (Standards Data) * Large number (n=1046) rated Not Applicable



Analysis in 2011 showed that trained teachers are not distributed equitably throughout the sector (Table 4). Nurseries and Day Care centres for children 0-2 years have appropriately low pupil: teacher ratios. For ECIs for children 3-5 years, infant departments and infant schools have more children per teacher, but infant schools and infant departments have fewer children per trained teacher.

The number and qualification of staff have implications for children's development, as well as their safety. Only 41.1% of ECIs reported having at least two staff members on the premises at all times, with at least one at the Assistant Teacher II level. Few ECIs (8.7%) achieved the established pupil: teacher ratios recognised to be critical to advance children's development, but a third (36.5%) achieved the voluntary standard limiting group size. Group size and pupil teacher ratios vary by age, with group size typically twice the number of children allowed per practitioner. Only 13.9% of ECIs had appropriately trained personnel, at the level of at least Associate Teacher, supervising groups. However, the majority of ECIs met continuity of care standards, ensuring that there are no more than three caregivers in an 8 hour day.

Teacher Training

The Bachelor's Degree in Education is offered by teacher's colleges, under the administration of the UWI; and other universities (Table 5). The BEd. Early Childhood and Family Studies, a new undergraduate programme, is offered online by the Open Campus of the UWI. The Master's degree in Early Childhood Development is offered by the UWI.

As shown earlier, the Diploma in Early Childhood Education is currently the main qualification of trained EC teachers in Jamaica. In 2011, the Diploma was offered by four teacher training colleges and the International University of the Caribbean, in association with the Joint Board of Teacher Education (JBTE) at the UWI. The Diploma was completed in 3 years full time or in four years part-time. Approximately 250 students graduated per year, with one third of students from the Shortwood Teachers' College.

The Associate Degree in ECE is currently offered by three teacher's colleges (Church, Shortwood, St. Joseph's), the College of Arts Science and Education (Portland), and the International University of the Caribbean.

Table 14. EC Graduates 2019-2020

Teacher Training Institution	Bachelor's Degrees
Bethlehem Moravian College, St. Elizabeth	10
Church Teachers College, Mandeville	26
Moneague Teachers College, St. Ann	14
Sam Sharpe Teachers College, St. James	19
Shortwood Teachers College, Kingston	50
St. Josephs Teachers College, Kingston	45
Hydel University College, Kingston	N/A
Mico University College, Kingston	N/A
University of the West Indies, Open Campus/Online	3

N/A Data not available

Regulation of ECIs

Legislation

The ECC co-ordinated the development of the Early Childhood Act and Regulations (2005), to provide for the regulation and management of early childhood institutions and for other connected matters. In keeping with the law, ECIs had a 90 day period to apply for registration with the ECC, ending on February 28, 2008. An application for registration requires certification of training of staff, fire and public health safety certification, medical certification of health for staff, and police records indicating that staff were free from criminal offences. Standards were assessed against those of the USA, Canada, UK, Australia, and New Zealand. Some standards (teacher qualification) were adjusted downwards to reflect realities in Jamaica. Other standards specific to the culture were included, such as consistent water supply, including tanks.

There are twelve Standards related to categories of Staffing; Developmental/Educational Programmes; Interactions and Relationships with Children; Physical Environment; Indoor and Outdoor Equipment Furnishing & Supplies; Health; Nutrition: Safety; Child Rights, Child Protection & Equality; Interactions with Parents & Community Members; Administration; and Finance.[84] Legal items can range from income dependent indicators such as having a trained teacher (Staffing), to practice indicators, such as having proper hand-washing technique (Health). ECIs are inspected against these standards.

Inspection and Registration of ECIs

The first ECI inspections were conducted in April 2008. With 40 inspectors and 2600 ECIs, initial inspections took almost 3 years. ECIs that had completed the application process were prioritised, followed by those with incomplete applications. There are 3 possible outcomes from an inspection process, based on the EC Act. A Certificate of Registration of 5 years' duration is provided when all legal standards are met; and a Permit to Operate of one year's duration is provided when all health and safety standards are met (fire, public health, police records); a Permit to Operate is accompanied by a report which identifies the areas required for improvement under the law. A recommendation for closure is made when critical health and safety standards are not met and children are at risk at the ECI. The ECC has no authority to close ECIs; public health and fire departments can close ECIs.

Figure 21: ECI Inspections and Permits to Operate by Year



[84]Early Childhood Commission (2007). Standards for the Operation, Management and Administration of Early Childhood Institutions in Jamaica. Ed. Samms-Vaughan, ME.

A total of 11,405 inspections have been completed up to 2019, with 8,700 repeat inspections (Figure 21). Inspection rates varied by year based on available staff. Staff attrition, primarily a result of relatively low remuneration, is high due to higher paying jobs in the sector, such as principals of infant schools. Falls in inspection rates 2020 and 2021 likely reflect the impact of the Coronavirus pandemic.

Some 2,281 Permits to Operate have been issued since 2009. Only 37 Permits (1.4%) are valid currently. While inspections have been hampered by school closures as a result of the Coronavirus pandemic, there was earlier evidence that Permits to Operate were not being renewed annually.[85] The ECC reports that despite the number of inspector and development officer positions filled, the ECC has never been provided with an adequate budget for travelling for these officers, severely limiting their operations (Personal Communication, Executive Director, ECC).

The first 17 ECIs achieved full registration in 2016. By October 2018, there were 129 ECIs fully certified. Currently, there are 280 such ECIs (10.5%). The ECC reports that 170 ECIs (6.4%) have attained 70-99% of the standards; 800 (30.1%) have attained 50-69%; and 1412 (53.0%) have attained less than 50% of the standards. Since the onset of inspections, over 200 ECIs have closed voluntarily, due to low numbers of students and inability to meet standards.

Curriculum, Teaching and Learning

Data for this section were obtained from the Registration Information System at the ECC, based on information obtained from inspection of ECIs against operational standards. As the focus is primarily on education, only selected data from Standard 2 (Developmental/Educational Programmes) were analysed.

Curriculum and Programme Planning

The ECC, in partnership with the Dudley Grant Trust developed the Jamaica Early Childhood Curriculum for children 0-2 years and children 3-5 years, and associated documents. Curricula were provided to each ECI, are available online, and in all public libraries. Despite this, only 80% of ECIs used a curriculum approved by the ECC to plan children's activities.

Further only approximately a third of ECIs included developmentally appropriate activities for the age groups present and gave special attention to children whose developmental progress was slower than others; included a variety of activities in children's daily schedules and had a programme that included all domains of development.

Just under 5% of ECIs had short and long term developmental/educational plans for children or had flexible program plans that allowed for the needs of individual children to be met; and only 6% had staff meetings to discuss program plans for children. However, almost 95% of ECIs reported that there was no gender bias in activity choice in programmes; girls and boys were free to choose all activities.

[85] Early Childhood Commission (2015). Auditor General's Department Activity-Based Audit Report.

Programme Content

Table 6 shows that there is overall inadequate exposure to developmental and educational activities within early childhood developmental/educational programmes. Only a representative two of all socio-emotional activities evaluated for are included. Children at ECIs are most likely to be engaged in fine motor activities (68.2%), such as writing and colouring 68.2%; children 3-5 years were most likely to be engaged in a similar activity, early writing skills (85.0%). Children were least likely to be exposed to gross motor development (32.6%), conflict resolution as part of socio-emotional development (21.3%) and, for children 3-5 years, scientific activities (17.5%). Exposure to technology is also a challenge at 32.2%; of those meeting standards, 17.7% had access to radio tapes and CDs, and 14.5% (N = 350) had access to television and a computer.

Table 15: Developmental / Educational Activities at ECIs

Programme Activities	Meet Standard		Below Standard	
	No.	%	No.	%
Fine Motor Development	1643	68.2	767	31.8
Gross Motor Development	785	32.6	1624	67.4
Cognitive Development	1333	55.3	1078	44.7
Creative Development	1041	43.2	1367	56.8
Socio-Emotional Development: Pro-Social Behaviour	985	41.0	1417	59.0
Socio-Emotional Development: Conflict Resolution	512	21.3	1890	78.7
Exposure to Early Reading Skills (3-5 year)	1638	69.1	732	30.9
Exposure to Early Writing Skills (3-5 years)	2008	85.0	355	15.0
Exposure to Early Mathematical Skills (3-5 years)	1273	53.7	1100	46.4
Exposure to Scientific Activities (3-5 years)	418	17.5	1970	82.5
Exposure to Technology for Language Development	776	32.2	1634	67.8

Access to Learning Resources

Overall, only 11% of ECIs were rated as having adequate numbers of play material for the numbers of students present; the standard being that each ECI should have enough material for each child to be in an activity at the same time. Most notable was limitation in the number of developmentally appropriate books available per child (29.2%), books with socio-emotional content (12.0%), gross-motor equipment (12.5%), fine motor materials were the most likely to be available (58.4%); these are typically lower cost items, such as pencils and crayons. A separate evaluation for variety of materials by domain showed consistently lower percentages. For children 3-5 years, there were much fewer resources available for mathematics (35.8%) and science (6.0%).

Development Support to Ecis

Development Support to ECIs include school development planning, management of grants and subsidies, teacher placement on special programs, modernisation of basic schools, classroom observation, and in-service workshops for practitioners. There is also support to parental involvement programmes at ECIs.[86] In FY 2019-2020, the 40 ECC Development Officers conducted 3,162 ECI visits, providing supervision to 13,678 EC staff members and impacting 157,829 children.[87]

Developmental Outcome of Children at Ecis

The Jamaica School Readiness Assessment (JSRA) was developed by the ECC to assess children's readiness for primary school, and screen children for developmental disability and behaviour disorders. It is designed to be completed by pre-school teachers at the end of the second year of pre-school, that is, when children are four years old. This allows a year for intervention prior to entry to primary level schooling.

Child Outcomes at Four Years Old

The JSRA was administered in 2017, 2018 and 2019. Of eleven developmental problems enquired of, two-thirds of children (67.3%) had no developmental concerns, almost a fifth (19.2%) had one concern. The most common concerns identified by teachers were understanding (comprehension), learning, behaviour, and social concerns; speech, gross and fine motor concerns, hearing, and vision were less frequent. Significant behaviour concerns were identified in 7.5% of children. The most frequently identified behaviour concerns were inability to self-correct, difficulty focusing and resistance to try new tasks. Physical aggression was identified in 5.7% of children and verbal aggression (teasing and threating peers) was identified in 4.2%.

Just under a tenth of children (9.7%) had concerns in their approach to learning. Early literacy concerns were identified in 18.3% and early numeracy concerns in 20.3%. Boys, children attending infant schools and departments and children on the PATH programme were those that had the greatest concerns. Overall, a fifth of children had some concern that needed further evaluation.

Children With Special Educational Needs

A recent detailed evaluation of services for children with special needs at the EC level was conducted.[88] System strengths of legal and policy support, a well-developed primary care system, universal access to ECIs for children 3-5 years, elements of a national screening system (including the JSRA) and existence of a social protection system and a public early intervention programme (Early Stimulation Programme) were identified.

System challenges identified included failure of implementation of laws and policies; absence of data on prevalence, distribution and aetiology of disabilities in young children for appropriate planning; inadequate screening services; inadequate access to inclusive developmental/ educational services for children with disabilities, and particularly for children 0-2 years; limited training to support children with disabilities in the health and education sectors; inadequate

[86]ECC Annual Report, 2019-2020
[87]ECC Annual Report, 2019-2020
[88]Samms-Vaughan M. (2020). Bridging the Gap: Towards a System of Early Years Care and Support. UNICEF Publication.

access to tertiary medical and therapeutic services due to limited medical and allied health professionals; inadequate social protection mechanisms; inadequate co-ordination of services and stigma and discrimination.

Evaluations of ECD in Jamaica and the ECC

There have been two internal evaluations of ECD/ECC completed under the directive of the Government of Jamaica, the Task Force Report on ECD (2005), and the Auditor General's Activity-Based audit of the ECC conducted in 2015. The World Bank completed three evaluations: a comprehensive cross-sectoral evaluation of the ECD sector using the standardised Systems Approach for Better Education Results (SABER) in 2013; an evaluation of the performance of the ECD Project co-ordinated by the ECC in 2019; and a World Bank Public Expenditure Review of the Education Sector in Jamaica, which included the EC sector, conducted in 2021.

Prime Minister's Task Force Evaluation of ECD, 2005

Task Force Report on Educational Reform (2005) made recommendations in the areas of Governance and Management; Curriculum, Teaching and Learning Support; Stakeholder Participation; and Finance.[89]

Of 7 recommendations on Governance and Management proposed, four were completed and 3 were partially completed.

There were 22 Curriculum, Teaching and Learning Support recommendations. Four recommendations were achieved, ten are in process (partially achieved) and eight were not completed. Seven of those not completed were under the jurisdiction of MoE; one was contradictory to the EC Act

Auditor General's Activity-based Audit of the ECC, 2015

The Attorney General's Office conducted an Activity-based Audit of the ECC in 2015.
The main findings were as follows:

1. There has been no registration certificate issued to early childhood institutions in the 10 year existence of the Commission.

The Auditor General was concerned that ECIs were operating on perennial permits and some on expired permits. The ECC responded that ECIs operating without permits occurred as a result of limited staff to conduct inspections twice annually as indicated in the EC Act.

2. Permits granted to early childhood institutions do not have the requisite supporting documents to validate the decision for the issuance. The ECC responded by advising that documents present within the ECC may have been outdated, but that records resided at the ECIs, and not at the ECC, and were evaluated on the day of inspection at ECIs.

3. The Commission has been accepting invalid police records from employees of early childhood institutions. The ECC advised that the validity of the police records had been altered in consultation with the JCF, and was done to match the 5-year validity of the Certificates of

[89]Task Force on Educational Reform Jamaica (2005). Early Childhood Education, Care and Development Sector Report.

Registration. A formal agreement with the Ministry of National Security regarding validity of police records was recommended. It should be noted that the ECC is the only section of the education system requiring police records for all staff at schools.

4. The Early Childhood Commission did not have established timelines for early childhood institutions to meet the established standards prior or subsequent to the granting of an operating permit. The ECC acknowledged that this was not in the written documents sent to ECIs, and indicated that this would be enforced subsequently.

5. The Commission did not carry out the minimum biannual inspections as required by the Early Childhood Regulations 2005. The Auditor General's Report acknowledged that at the time, there was one inspector to 107 ECIs and one Development Officer to 64 ECIs and recommended critical review of inspections. The ECC acknowledged this finding, advising that staffing limitations precluded frequent inspections.

6. Development Plans designed for use by the Early Childhood Commission's Development Officers in monitoring early childhood institutions were not effectively used for adequate monitoring of the institutions. The Auditor General reported that only 32.6% of ECIs had development plans. The ECC acknowledged this finding, but indicated that development plans are based on inspection reports, which were impacted by staffing levels.

7. There was no evidence to support the appointment of three members of staff, as the requisite qualifications were not seen on the personnel files. This was resolved through provision of proof of qualification.

The Auditor General's Department made three recommendations to improve the efficiency and effectiveness of the monitoring of early childhood institutions:

1. The Early Childhood Commission should consider implementing a system or programme that commits early childhood institutions to achieving the 12 standards within a specified time.

2. The Early Childhood Commission should immediately review the decision to extend the validity of police records from one to five years.

3. ECC should review the current listing of registered early childhood institutions and adequately plan inspections to ensure all institutions are inspected at least twice annually.

SABER Evaluation of ECD In Jamaica, World Bank, 2013

The SABER ECD Country Report for Jamaica (2013) was prepared by the SABER-ECD team at the World Bank headquarters in Washington, DC and presents country data collected using the standardised SABER-ECD policy and program data collection instruments and data from external sources.[90] The report analyses the ECD sector comprehensively, including health, education, and social sectors. Jamaica's data availability was rated at the highest level, Advanced. Most other

[90]World Bank (2013). SABER Early Childhood Development Country Report, Jamaica.

areas were rated Established, including Legal Framework, Inter-sectoral Co-ordination (by the ECC), Scope of Programs, Equity, and Quality Standards. The lowest rating assigned to Jamaica, Emerging, was assigned to two areas: Finance and Compliance with Standards. There were no areas assigned the lowest possible rating, Latent. Jamaica compared favourably with other higher income countries in the region, such as Chile and Colombia.

World Bank's Evaluation of the Jamaica Early Childhood Project, 2019.
The World Bank reported that Jamaica had experienced tremendous improvement in ECD over the 10 years of the loan investment.[91] The overall performance of Jamaica (the Borrower) was rated Highly Satisfactory as project development objectives, and 66 out of all 67 Disbursement Linked Targets, were achieved. As shown in Table 11, the final project outcome was Satisfactory, the second highest rating of six; project efficacy and efficiency were rated Substantial (third highest rating of four), with three of four Project Development Objectives rated High (highest rating). Enhancing the quality of early childhood schools and care facilities was rated Modest (the second highest of four); this was due to the inability of the Ministry of Health to meet the target of certifying health centres against the standards that were developed for care of young children. However, the Bank noted that the establishment of standards was significant and the process was likely to continue after project closure. The World Bank's economic analysis estimated the cost benefit ratio of investment in the ECD programme to be 2.32 with an Internal Rate of Return (IRR) of 10.86 percent. This exceeded the original estimated IRR of 7.5-9%, despite excluding benefits from improved health monitoring; screening, and early intervention; and strengthening of EC organizations and institutions.

In its recent (2021) PER report on Jamaica's education system, the World Bank recommended reallocation of resources to early childhood education. It found that early childhood education is currently underfinanced and experiences significant pressure through high demand and an inadequate number of qualified teachers. Funds could be dedicated to improving the learning environment, teacher quality, and affordability of early childhood education, through direct support to both basic and infant schools to provide a higher quality of education for all children in Jamaica.

Recommendations

ECD1: Conduct institutional review of the ECC

ECD1.1 Conduct analysis of the human resources needs to effectively implement, regulate and provide development support to the ECD sector.
Human resource needs should include not only adequate numbers of inspectors and development officers but also adequate numbers of supervisors for quality assurance. Regulation and monitoring of ECIs is an important function that is able to demonstrate and monitor improvement in quality.

ECD1.2 Conduct analysis of the remuneration of staff at the ECC relative to other similar agencies such as the CPFSA, OCA and infant school leadership. Inadequate remuneration and rapid staff turnover are costly and impedes organisational efficiency. Bureaucratic Government processes to engage staff further impedes efficiency.

[91]World Bank (2019). Implementation, Completion and Results Report IBRD-83340, IBRD-75540 on Two Loans to Jamaica for the Early Childhood Development Project. Education Global Practice, Latin America and Caribbean Region.

ECD1.3 Conduct analysis of regulatory processes to identify areas to increase efficiency. Frequency of inspections should be reviewed consistent with international practice. In keeping with a review of frequency of inspections, validity of permits should be reviewed. Closer supervision of Inspectors, including regular auditing of their reports, is essential both to improve quality and ensure fairness in evaluations of the ECIs.

ECD1.4 Increase capacity of ECC to utilise data to inform its own interventions and practice, and to inform the public. ECC data collection systems are established, but there has not been analysis and public sharing of data on the sector, such as data from regulation of ECIs (Standards), as required by law. Additionally, only analysis from the 2017 JSRA was available for this report. This should include review of the policy, research, and IT divisions of the ECC.

ECD1.5 Conduct research to evaluate the impact of ECI Standards, new infant schools and merged Basic schools on children's development/educational outcomes After 12 years of implementation, the impact of establishing and monitoring standards should be evaluated. Further expansion of infant schools and merged Basic Schools should be guided by evidence of effectiveness.

Evidence-based legislative review is now necessary to ensure that the 2005 ECD law has been effective, to identify gaps and to improve relevance, by adjusting for changes that have taken place since its promulgation.

ECD 2: Conduct legislative review of laws guiding the EC sector

ECD 2.1 Conduct comprehensive legislative review. Comprehensive review addresses all areas of the legislation.

ECD 2.2 Conduct specific review of frequency of inspections and validity of permits based on ECD1.3

ECD 2.3 Conduct specific review of teacher qualifications based on changes in programmes.

While many ECIs have shown improvement in quality over time, some 50% have not been able to meet at least 50% of standards. Some ECIs have closed, and many small ECIs will not be able to meet Standards. Efficiencies and higher standards are likely to be possible with evidence-based merging, consolidation, and creation of ECIs, while continuing to ensure easy access to services within communities.

ECD3: Rationalise the provision of centre-based ECD services

ECD3.1 Conduct geographic analysis to determine optimum number and location of ECIs relevant to population needs. This information should then be utilised to plan for sector needs.

ECD3.2 Accelerate the programme of creating infant departments within primary schools. This was a recommendation from the Task Force Report (2005) and results in an increase in tuition free early childhood places. However, these newly created infant departments should meet all ECI Standards, and particularly pupil: teacher ratios.

ECD3.3 Identify ECIs within areas of poverty and prioritise these ECIs to meet ECI Standards. All research has shown that children in the lowest socio-economic groups make the greatest gains in development when provided with quality ECD services. The lowest quality ECIs are typically found in communities of lower socio-economic status. The impact of **quality** ECD services on educational attainment and the labour market is without question. The focus on areas of poverty will facilitate equity in education.

ECD3.4 Increase service provision for children 0-2 years, by accelerating establishment of Brain Builder Centres. Lower socio-economic areas should be prioritised for such centres. Provision of centre-based services for children 0-2 years is low. Research shows that children 0-2 years from lower socio-economic groups and with lower maternal education benefit from centre-based care.[92] [93] Research is less conclusive for children from higher socio-economic groups.

The ECC conducts numerous training activities throughout the year, including curriculum training. However, analysis of the COT Observations and Standards indicate numerous deficiencies in curriculum planning and delivery. Integration of science and math, critical for engagement with STEM subjects later on, was a particular challenge. While the proportion of trained teachers has doubled over the last few years, only a third of ECIs have a trained teacher. Fewer EC staff are now being trained at the associate degree level, between vocational training and Bachelor's degrees, previously represented by the diploma in EC.

ECD4: Increase quality of teaching and learning through provision of trained teachers and resources to ECIs.

ECD4.1 Rationalise training and qualification for the early childhood sector. Articulation across vocational and trained teacher programmes should be clearly defined and made publicly available to increase interest in, and access to, EC training. There should be adequate places available for students wishing to pursue the Associate degree.

ECD4.2 Accelerate programme to provide at least one trained teacher for each ECI with urgency. This was a recommendation from the Task Force Report (2005).

ECD4.3. Improve quality of pre-service and in-service training at all training levels. This recommendation is consistent with that of the World Bank PER, 2021. Special attention should be paid to training in science and mathematics teaching, as well as socio-emotional development. Training at associate degree and vocational levels are important to meet pupil: teacher ratio standards, one of the identified measures of quality.

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[92]National Institute of Child Health and Human Development Early Child Care Research Network [NICHD ECCRN] (2004) 'Type of child care and children's development at 54 months', Early Childhood Research Quarterly 19(2): 203–230

[93]Bryson C, Brewer M, Sibieta L and Butt S (2012) The role of informal childcare: Full report, London: Nuffield Foundation. http://www.nuffieldfoundation.org/sites/default/files/files/ The_role_of_informal_childcare_FULL_REPORT.pdf

ECD4.4 Improve teaching and learning resources available at ECIs. This is particularly so for science, mathematics, and socio-emotional learning. Though gross motor resources are also deficient, many gross motor activities (running etc.) occur in the outdoor environment naturally. One programme that could be considered for STEM education and socio-emotional learning is the digital playground pedagogical technique (Bers, 2019), in which pre-primary children learn to code and code to learn, marks the first stage of STEM education and of Social and Emotional learning.[94]

Research on children with special needs has shown deficiencies in service provision. The JSRA showed that some 20% of children at the EC level have concerns that require further evaluation. Many recommendations for children with special needs are addressed in the Out of School Factors section of the Curriculum, Teaching and Teacher Training Report (OSF 8,9,10,11). Specific recommendations for the EC sector are mentioned here.

ECD5 Improve the services available to children with disabilities and their families

ECD5.1 Conduct research to accurately identify the prevalence and types of developmental disabilities at the EC level. Most research to identify prevalence and nature of disabilities is conducted in the EC age group, typically 2-8 years; this is also the age group when therapeutic interventions are most effective. The need for such services is best determined by research in the EC sector. This could be completed at the same time as the annual census undertaken by the ECC, and include Grades 1 to 2 at primary level.

The home learning environment is known to have a greater impact on children's development than child care settings.[95] The High/Scope Perry pre-school project included parental support and the Jamaican ECD study focussed on parent support. The CMPO study (2006), as quoted in Parker (2013) found that the home environment accounted for around 10 per cent of the early learning deficits of children from academically or financially disadvantaged families.[96] [97] ECIs can have their greatest impact by providing quality services, while supporting parents in comprehensive child development practice. As the majority of children 0-2 years are in home settings, parent support is especially important for children at this age. Research has also shown that a high quality ECD programme must be accompanied by parental engagement and training in child development and stimulation to be effective.

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[94]Bers, M.U. Coding as another language: a pedagogical approach for teaching computer science in early childhood. J. Comput. Educ. 6, 499–528 (2019).

[95]Melhuish E C, Sylva K, Sammons P, Siraj-Blatchford I, Taggart B, and Phan M (2008) 'Effects of the home learning environment and preschool centre experience upon literacy and numeracy development in early primary school', Journal of Social Issues 64: 95–114

[96]Centre for Market and Public Outcomes [CMPO] (2006) 'Up to age 7: family background and child development up to age 7 in the A von Longitudinal Survey of Parents and Children (ALSPAC)', Department for Education and Skills Research Report RR808A. https://www.education.gov.uk/publications/eOrderingDownload/RR808B.pdf

[97]Parker I. (2013) Institute for Public Policy Research Report. Early Developments: Bridging the Gap between Evidence and Policy in Early Years Education.

ECD6 Develop a co-ordinated strategy to engage and support parents of young children

ECD6.1 Develop a structured parent support, child development and stimulation programme to be offered at ECIs. This should be associated with certification and allow for parents to transition into existing vocational training in ECD. The programme should be co-ordinated with existing parent support programmes offered by the ECC and NPSC.

ECD6.2 Provide education and training for parents in basic academics and other vocations. This should be done through ECIs, particularly infant departments associated with primary schools and particularly those in areas of lower socio-economic status. ECIs should become hubs of parent training in basic literacy and numeracy, and other vocational skills through partnership with NCTVET and the private sector.

Early childhood education is only one aspect of comprehensive early childhood development. Health, nutrition, child protection (including against violence), and social protection are particularly critical to young children's development and learning.[98] The progress of recommendations made in this report should be actively monitored in order to ensure their implementation

ECD7 Ensure co-ordination and monitoring of educational strategies with all other strategies in the current NSP and those for young children in other ministries, departments, and agencies, that are not included in the NSP.

ECD7.1 Establish an oversight body to co-ordinate and monitor implementation of strategies to improve services to young children. A cross-sectoral body is recommended to guide the development of a monitoring and evaluation framework.

Recommendations listed in ECD 1 to ECD 5 have implications for financing of the ECD sector. The Task Force Report 2005, SABER Report 2013 and World Bank PER 2021 indicate under-funding of the EC sector with long term implications for educational attainment and societal development. Indeed, failure to invest adequately in the ECD sector is likely responsible for inefficiency of the education system at higher levels.

ECD8 Ensure adequate financing of the ECD sector

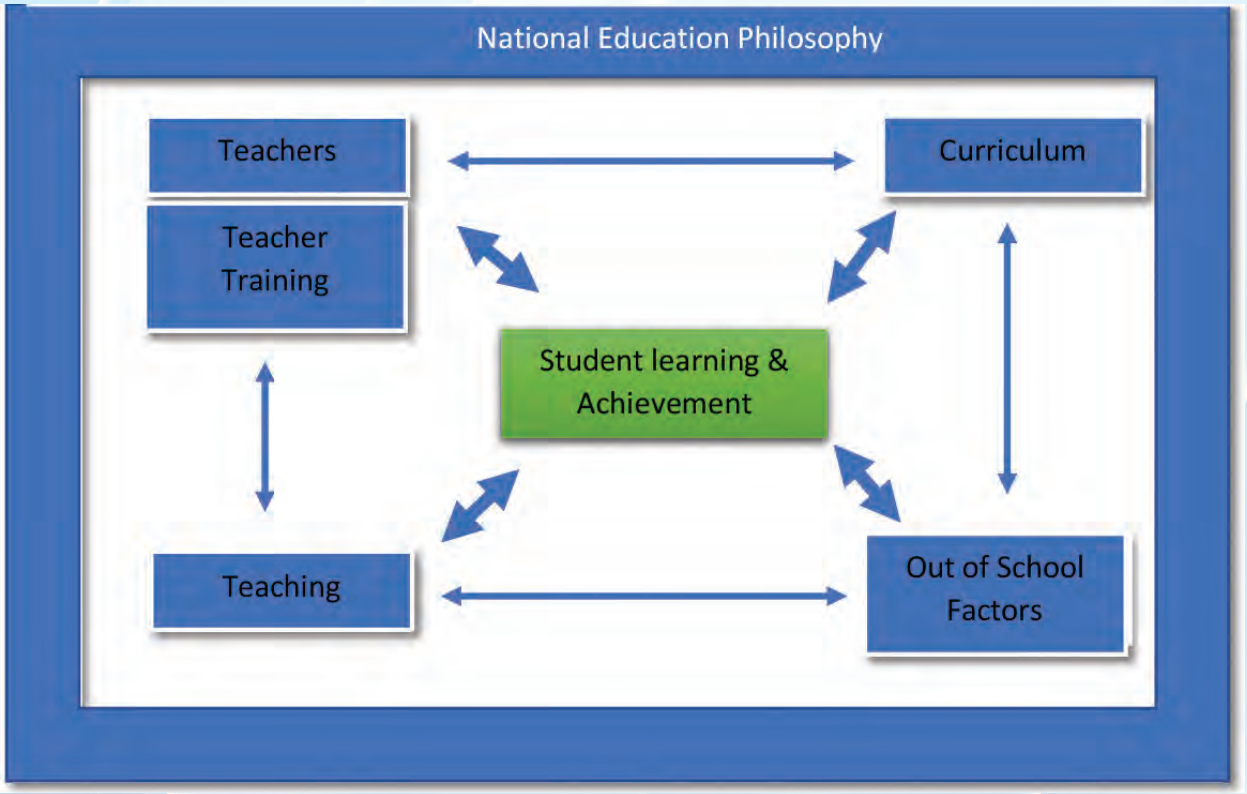
ECD 8.1 Specific areas of financing include provision of trained teachers for each ECI, teacher training, investment in teaching and learning resources at ECIs, investment in support services for children with disabilities, and investment in improving efficiency of the ECC.

[98]Grantham-McGregor SM, Powell CA, Walker SP, Himes JH. Nutritional supplementation, psychosocial stimulation, and mental development of stunted children: the Jamaican Study. Lancet 338, 1-5, 1991.
Kids Data, 2018. https://www.kidsdata.org/topic/767/preschool-kindergarten/table

CURRICULUM, TEACHING AND TEACHER TRAINING

Section 1	Introduction: How this report is structured
Section 2	Approach: Getting to the Recommendations
Section 3	Pathways to Transformation
Section 4	Key Recommendations Education Philosophy The Teaching Profession Teacher Training Teaching Curriculum and Assessment Out of School Factors Responding to COVID
Section 5	Conclusion
Section 6	Appendices

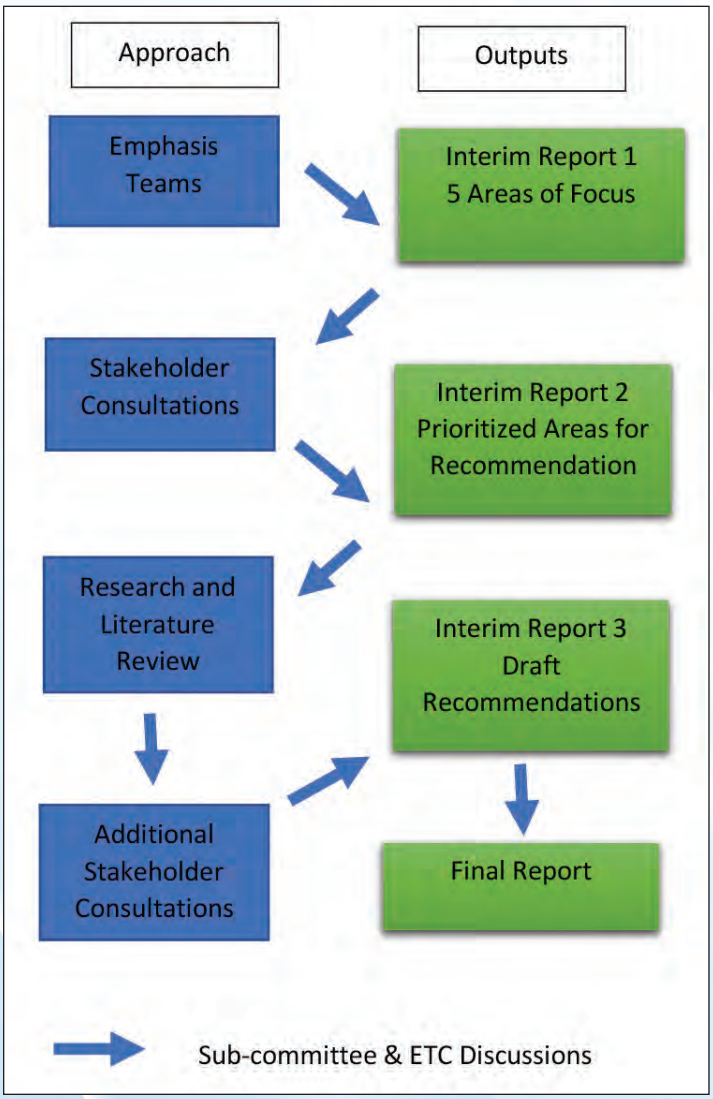
Figure 22. Areas of focus for the report (blue boxes) and some inter-connections.



1. Approach: Getting to the Final Recommendations

Figure 23 summarises the methods employed and the process taken to reach the final list of recommendations presented in Section 4. Interim outputs and the points at which they were produced are also shown. The primary methods used are summarized below.

Figure 23. Summary of progress to final recommendations



Emphasis Teams It has already been noted from the previous section, that the initial remit to produce recommendations related to Curri-culum, Teachers and Teacher Training was interpreted as demanding a focus on five areas: Teachers, Teacher Training, Teaching, Curriculum and Assessments, and Out of School Factors. To bolster the initial team of 5 assigned Commissioners and to add expertise in the areas of focus, 9 additional members were co-opted for the sub-committee. This enabled the formation of five 'Emphasis Teams' consisting of 3-4 persons each, which would work on one of the five focus areas. The approach of using Emphasis Teams ensured that each focus area would receive dedicated and sustained attention throughout the entire process. Emphasis Teams led the engagement of the entire sub-committee in discussions related to their area of focus and produced interim and final recommendations.

Consultations Emphasis Teams also guided the sub-committee on entities and individuals to be consulted with respect to their area of focus. An initial round of consultations covering all five focus areas were conducted at the sub-committee level over the course of two months. This was complemented by other consultations undertaken by Emphasis Teams. The aim of the consultations was to ascertain what the stakeholders felt were the main strengths and challenges related to the area being focussed on and key recommendations, if any, that they would make. At the end of the first round of consultations each Emphasis team produced a list of 4-5 priority

areas from which recommendations might likely emerge. Other sub-committee level consultations were held as deemed necessary later in the process in order to fill gaps in knowledge or to hear additional perspectives. The Emphasis Team looking on Out of School Factors also engaged a short-term consultant funded by UNICEF who produced a report which guided the prioritization in that area.



Research and Literature Review Literature review was an ongoing part of the entire process. The secretariat provided research assistance in the 4-5 priority areas that had been identified and for where recommendations were likely to emerge. The research sought to ascertain what, if anything, was happening and what models might exist elsewhere. On the basis of the research, Emphasis Teams proposed initial recommendations for further discussion at the sub-committee level. Note that the decision was taken to limit the research to priority areas since both time and resources precluded doing otherwise.

Sub-committee Discussion Throughout the entire process of producing the final recommendations, internal sub-committee discussions facilitated the vetting and refinement of ideas. This final report represents the last output from the entire process.

Things to note about the Final Recommendations.

The recommendations in the following section draw on much of the data and descriptive information already presented in the framing sections of this ETC document. As such we do not

duplicate that here but simply refer readers to where they can find some of the supporting information.

The recommendations presented in the following section emerge after a prioritization from amongst a pool of other recommendations. Only the top 4-5 recommendations per focus area are presented.

Every attempt has been made to make the recommendations simple and targeted. Therefore, this accompanying narrative is short and focused.

It was not possible to attach a detailed cost to each recommendation. Neither time nor access to resources afforded this. However, where possible, the fiscal implication of a recommendation is indicated e.g., no fiscal implication, reallocation of funds, new resources needed. As best as possible, the time frame for implementing the recommendation is also indicated. Short-term assumes within 2-3 years while medium-term assumes up to 5 years or longer. Cross-referencing based on the recommendation number is used to indicate recommendations that are interrelated.

2. Pathways to Transformation

The following section (Section 4) details specific recommendations related to Teaching and Learning under seven headings: The Education Philosophy, The Teaching Profession, Teacher Training, Teaching, Curriculum and Assessments, Out of School Factors, and Responding to COVID. In total 53 recommendations with supporting sub-recommendations are listed. Given that the process pursued to get to the final recommendations focussed on prioritization, the final number (surprising even to the drafters) indicates a consensus view on the need for a revision approach to delivering quality teaching for effective learning in Jamaica's education system. The recommendations individually provide components for that re-visioning. Collectively, however, they also point to pathways to be pursued in that re-visioning. Five pathways are suggested as emerging from the recommendations. They are outlined below.

Pathway 1: Placing a High Value on the Human Resource. Teachers are the heart of the educational system and highly motivated, quality teachers are essential to improving Jamaica's educational outcomes. Fixing the education system in recent years has focussed a lot on infrastructure (e.g., building schools and classrooms), equipment (e.g. tablets); and new initiatives in support of recent shifts in educational philosophy (e.g. NSC roll-out and a focus on STEAM-centric teaching methodologies). Arguably, the strong (and necessary) resource-focussed fixes for education may unintentionally be contributing to the erosion in the perception of teachers as the most critical component of the educational system. Restoring the centrality of the role of teachers to a successful education system is important for how they are perceived by community, but also to their own confidence that they are indeed highly valued by government. How much teachers feel valued directly impacts job satisfaction and motivation. Recommendations related to incentivization (especially in the absence of significantly better remuneration) are offered given the role this can play. As important, however, are recommendations made related to professionalizing teaching. These include establishing frameworks for licensing, accountability, continuous development, and professional advancement, in ways that sees them working synergistically, fairly and to the ultimate benefit of the teachers. As far as possible, it is

recommended that the value and role of the teacher always be self-evident in any fix being announced and/or enacted to improve the education.

Pathway 2: Prioritizing Early Intervention and an Avoided-Cost Approach. A fair amount of the current educational capital is wrapped up in remedial or corrective endeavours. This is not a sustainable approach. The resulting cost is not just financial but can also be measured in time spent and potential not harvested early enough. Some of the recommendations offered are geared at strategic interventions at the primary level e.g., early identification of and resources for special needs; emphasizing literacy & numeracy and values & attitudes; and promoting ICT-infused teaching. These will, over time, allow for reduced investment in secondary and post-secondary remedial efforts now considered integral to the Jamaican education model. It will also eventually allow resources to be re-allocated to other areas including to the early interventions themselves. Other recommendations emphasize the value of monitoring and robust evaluation of newly implemented strategies before wide-scale rollout, to avoid the need for later fixes. Further, a whole sub-section of recommendations is aimed at strengthened teacher training institutions (TTIs), including a mechanism to mainstream changes in educational philosophy into their curriculum prior to roll-out to ensure that the desired impact on the educational system is assured over time. There is much value to adopting an avoided-cost approach to Teaching and Learning.

Pathway 3: Ensuring Equity of Access. Achieving equitable access to quality education is the goal for all students, irrespective of school or educational pathway being followed. Steps to achieving this will necessarily involve models for allocating resources, not premised on equal distribution, but rather on matching need. For this reason, some of the recommendations target flexibility at the regional level to re-allocate (for example) teaching competencies where needed. The advent of widespread use of online education modalities is, however, a significant recent development which If appropriately managed, can go a long way in ensuring equitable access to quality education. It provides the possibility for access to the best teaching and teaching resources irrespective of location. It opens up avenues for customizing the education experience, and for mentoring of new teachers in the best methods for delivering content. Some of the recommendations in Section 4 target ensuring school, teacher, and student access to ICT within the broader vision of equitable access to the quality teaching that it can deliver. Other recommendations target preparation for the use of online teaching in this manner. The MOEYI has a present opportunity to capitalize on the opportunities for equitable access presented by online education given that it is likely to be a permanent feature after the pandemic. It will, however, require innovative leadership and careful planning to ensure that the institutionalizing of ICT-enhanced education does not have the opposite effect.

Pathway 4: Partnerships for Total Learning. The recommendations suggest that the odds of improved educational outcomes are improved when there are strong and dynamic partnerships between the stakeholders involved. Schools have long realized the importance of community partnerships not only to fill financial gaps, but also now, more so than ever, to provide non-academic support to the educational process. Jamaica's present-day context, make schools the safe haven for significant numbers of at-risk children and youth. For example, schools serve as the reliable source of daily meals. Increasingly they are also being called upon to undo the effects of greater exposure to a more aggressive and violent society. While some of the recommendations

are for institutionalizing resources, curriculum, and training to help teachers recognize and deal with this latter challenge, others go after the role school-community partnerships and initiatives can play in character formation and improving student and parent well-being. The pervasiveness and magnitude of the problem also demands coordination of community-based interventions from the level of the MOEYI in support of and in addition to individual school efforts. Recommendations to strengthen other important partnerships to Teaching and Learning are also provided e.g., between the MOEYI and TTIs.

Pathway 5: Data Driven Decisions. Finally, some of the recommendations made in the following section hinge on mapping circumstances or alignment of procedures to drive efficiencies or target actions. This is premised on comprehensive data collection, an efficient data management system and the eventual mining of the data to support decisions. The recommendations made in the Governance section of this Transformation Commission Report for both an Educational Management Information System (EMIS) and a Data Analysis Unit are wholeheartedly supported. It is further suggested that the MOEYI immediately begin to contemplate how AI (artificial Intelligence) and data mining across GOJ ministries (not just the education sector) can be used in ways to enhance Teaching and Learning. For example, within the education sector, AI holds tremendous potential for customizing learning (e.g. personalizing curricula for students; smart online and always accessible tutors; gap identification in understanding); producing smart content (e.g. continuously updated and tailored digital textbooks); optimizing and automating routine administrative and teaching tasks (e.g. grading) thereby freeing up time for other learning activities; and providing greater access to education for students with special needs (e.g. deaf, visually impaired). Across ministries, AI has the ability to mine data for patterns and trends which can be used in a proactive manner for management of schools, teachers and students.

For example, AI can be used to predict the likelihood of a student dropping out due to multiple factors captured in data already being collected (e.g., absences, increased incidents of violence in areas where they live, and recent access to social support systems such as PATH). AI and machine learning algorithms can transform the EMIS being implemented into an intelligent learning management system (LMS). Though not further picked up in this report, it is strongly recommended that the MOEYI not just promote an ICT-based educational future but expand the data analysis unit proposed in the Governance Report so that it can lead in the use of AI to transform the education sector.

All the individual recommendations are presented in the following section. They should, on the one hand, be considered on the basis of their individual potential to transform the focus area within which they fall, but also within the context of how they contribute to one or more of the Five Pathways above. Importantly, because a pathway is made up of multiple recommendations spanning different focus areas it suggests a strong need for alignment and coordination within and across MOEYI Units. Following the Pathways and effecting the recommendations will demand a culture shift in the approach to education within and beyond the MOEYI. It is the simultaneously pursuit of all Five Pathways which will, however, eventually bring about the transformation envisioned in Teaching and Learning.

3. KEY RECOMMENDATIONS

4.1 Education Philosophy

The overarching vision and mission statements of the MOEYI place teaching and learning among its central foci.[99] The Ministry operates under the slogan "Every Child Can Learn, Every Child Must Learn". Its vision is to ensure Jamaica has a "globally competitive and innovative education and training system, producing informed, socially conscious and empowered citizenry." Its stated mission is "providing quality education and training in a caring, inclusive and enabling environment to engender sustainable development." It further lists "Quality Education and Training" as one of its seven policy priorities, while strategic objectives #2, #5 and # 6 imply or state teaching and learning as critical elements for fulfilling the MOEYI's mandate. Notwithstanding, it is not easy to locate anywhere on the MOEYI's public website what education philosophy it is using to guide the teaching and learning it considers central to its mission.

There is a strong perception that the (under)performance of the system can be linked to an outdated educational philosophy that (i) supports teaching methodologies that are not capable of delivering the education and training required to meet modern workforce needs;[100] and (ii) is largely premised on a dominant-teaching methodology (or traditional teaching methodology). The latter places teachers at the centre of the learning process, sees students as receptacles who are reliant on teachers and textbooks for learning, designs classrooms and assessments to support the traditional teaching approach, and leaves little room for things like experimental learning approaches and alternative measures of educational success beyond content-based exams [101].

There are sufficient indicators that the MOEYI is shifting away from a teacher-centric approach to learning. The Jamaica National Education Strategic Plan 2011-20 (NESP) calls for holistic learner-centred, competency-based curricula that allow alternative pathways to success and make connections with the real world - including workplace settings. The NESP gave rise to the National Standards Curriculum (NSC) which is based on a constructivist approach to learning and advocates pedagogical methodologies such as the 5E's teaching model[102] and STEM infusion to support this. The fairly recently introduced PEP exam is also intended to shift the emphasis to acquiring knowledge and "21st-century skills" which includes critical thinking and communication. It is important that this shift be documented and mainstreamed in the MOEYI culture and operations and be made widely known across the sector.

Recommendations:

EP1: Widely promote an education philosophy which sees learning as a collaborative interaction between teachers, students and the curriculum and pursue efforts to ensure widespread acceptance.

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[99] https://moey.gov.jm/

[100] https://jamaica-gleaner.com/article/news/20190320/transform-education-philosophy-urges-mitchell

[101] https://www.researchgate.net/publication/323706018_Education_in_Jamaica_A_need_for_redefinition_and_a_changing_of_the_old_philosophy_of_education

[102] Each of the 5E's describes a phase of learning, and each phase begins with the letter "E", namely: Engage, Explore, Explain, Elaborate, and Evaluate. The 5E's allow students and teachers to experience common activities, to use and build on prior knowledge and experience, to construct meaning, and to continually assess their understanding of a concept

In the short term:

EP1.1: Make both a summary of its guiding educational philosophy and the relevant strategy or policy documents highly visible and easily accessible from the MOEYI's website. An old but still accessible version of its webpage listed priority policies which support the mission of the MOEYI[103]. The new equivalent page no longer lists any key policies. Easy accessibility to a clearly articulated summary of the prevailing educational philosophy with links to appropriate supporting documents is important for the widespread understanding of, buy-in for, and confidence in (especially new) approaches taken, initiatives introduced, partnerships forged, and decisions made by the MOEYI with respect to Teaching and Learning. It also helps align internal Ministry functions, holds the MOEYI accountable to its educational goals and guides existing or new engagements with private sector and other external stakeholders.

In the medium term:

EP1.2: Conduct a mapping exercise to ensure that the national educational philosophy (i) is embedded in the curriculum and training programmes for teachers, so that once trained they will replicate what they have been exposed to, and (ii) is captured in the evaluation metrics used to gauge teaching efficacy and school performance. It is likely that the absence of widespread dissemination, easy access to, and clear articulation of the prevailing national education philosophy, has contributed to the continued prevalence of the teacher-dominant approach to learning, and created misalignment within the education sector with respect to existing and new teaching and learning initiatives, programmes, and curricula. A MOEYI-led mapping of the sector with particular emphasis on ensuring that accountability metrics measure adherence to the philosophy will help identify present misalignment and enable the targeting of initiatives to correct them. This, along with a similar targeting of teacher training programmes and curriculum for consistency, will ensure alignment of the sector over time with the educational philosophy. Periodic reviews linked to the Ministry's annual corporate planning exercise should thereafter be done.

4.2 The Teaching Profession

Data from the Annual School Census for 2018 (the most recent data made available to the sub-committee) indicates that there are 23,892 teachers across the early childhood through secondary levels of the education system[104]. Approximately 56% of this number operate at the secondary level including grades 7 through 9 of All-Age and Primary and Junior High Schools, and approximately 87% are professionally trained. The NESP in 2012 noted similar statistics (over 25,000 teachers of whom 85% were trained teachers) suggesting that the numbers have held fairly constant. It is unclear whether the MOEYI has a target number of qualified teachers to meet the needs of the educational sector.

1. Attractiveness

Stakeholder consultations did not indicate the availability of qualified teachers to meet overall demand as an issue. They did point to the challenge of increasing the quality of teachers in the profession. This was associated with the negative 'image of teaching as a profession' which contributes to an inability to attract and retain the best.

[103]https://moey.gov.jm/content/mission-statement
[104]Data supplied by the NEI on request.

1.1 Licensing

The introduction of licensure is seen as integral to enhancing the attractiveness of teaching through the regulation of teacher quality and the professionalization of the career in Jamaica. Licensing is common in many jurisdictions.

BOX 1: Models of Licensing

The **United States of America** requires that individuals **obtain** a license before they begin teaching in public schools. The rigorous process for certification and licensing ensures that teachers meet certain standards in their subject areas, pass required background checks for the age groups they teach, and are up to speed in accepted teaching methods.

In **Nepal**, the government has made teaching licenses mandatory and to obtain same, a candidate must sit a written examination. Notwithstanding that, **revocation** of a teacher's license may be evoked should a candidate provide false particulars or acts against the discipline of examination or attempts to commit such an act; as well as if it is discovered that a candidate suggested for appointment could not be recommended for appointment. Nonetheless, the Asian Development Bank recommends that the **renewal** of teacher's license must be done every five years to ensure that teachers do not become complacent about their responsibilities and continue to perform at the highest level as well as to inform them about the latest trends in education.

Though culturally and geographically displaced, in **Nigeria**, the Teachers Registration Council, similar to the JTC in Jamaica, is responsible for regulating the teaching profession in Nigeria. They have sole responsibility for the registration and licensing of qualified teachers, the organization of Internship Schemes for fresh Education graduates to equip them with the necessary professional skills before licensing them for full professional practice and, the publication of a register of qualified and licensed teachers in Nigeria which is made available on the internet for the consumption of the international community. Noticeably, a teacher is required to renew his/her license every three (3) years. However, he/she must have paid his/her annual dues consecutively for those three (3) years for his/her license to be renewed. Other conditions expected before a teachers' license is renewed include good conduct, earning of credit units stipulated for professional development in the TRCN Mandatory Professional Development Manual (MCPD) and, regular participation in TRCN membership activities. – see section 2.1.1

The Jamaica Teaching Council (JTC) is the body responsible for regulating the teaching profession. Its formation came out of the recommendations of the 2004 Task Force on Education to create an entity to manage the professionalization of teaching, bringing it on par with other regulated professions. Its roles include raising the public status of teachers and ensuring that policies and guidelines to advance the teaching profession are in place and are informed by performance. Its intended regulatory functions are both the registration and licensing of teachers.[105] Though the Council has been in place since 2008, the bill to legally establish it continues to languish. Therefore, though teacher registration has been in place since 2008, the issue of licensing and the JTC's role as the governing authority is yet to be addressed. Some issues raised

[105]JTC. (n.d.). JTC Online Resistration Process. Retrieved from https://moey.gov.jm/sites/default/files/Teacher%20Registration%20-%20New%20Application.pdf

from as early as 2014 by the Jamaica Teachers' Association (JTA) remain to be resolved [106]. The most recent Bill was produced in 2020 and is still awaiting comments from the MoEYI.

Recommendations:

TP1: Quickly move to a regime of licensing given its direct link to professionalizing teaching and other co-benefits including greater accountability structures.

In the short term:

TP1.1: Complete legislative processes to enable the JTC to act as the Sole Entity to Issue teacher licenses by the end of 2021. There should be prioritization by the GOJ to ensure quick passage of the bill before the end of the present year.

TP1.2: Resource JTC to launch and effectively manage the licensing process. The JTC is likely to require additional resources to expand its capabilities to quickly roll out licensing. It identifies the need for additional human resource and computing capacity. This support should be prioritized in the short term given the importance of licensure.

1.2 Career Paths in Teaching

The attractiveness of teaching is also linked to perceived career paths/options in the profession. The JTC list many possible career paths and options (Figure 24), though how well these are known to students leaving high school or persons entering the profession is unsure. One perceived gap is that the pinnacle of the profession is ultimately linked to administration in schools, teacher training institutions, or public sector roles related to managing the sector. This takes some of the best primary and secondary teachers out of the classroom. It also limits achievement and remuneration at the highest levels to when vacancies in administrative positions become available.

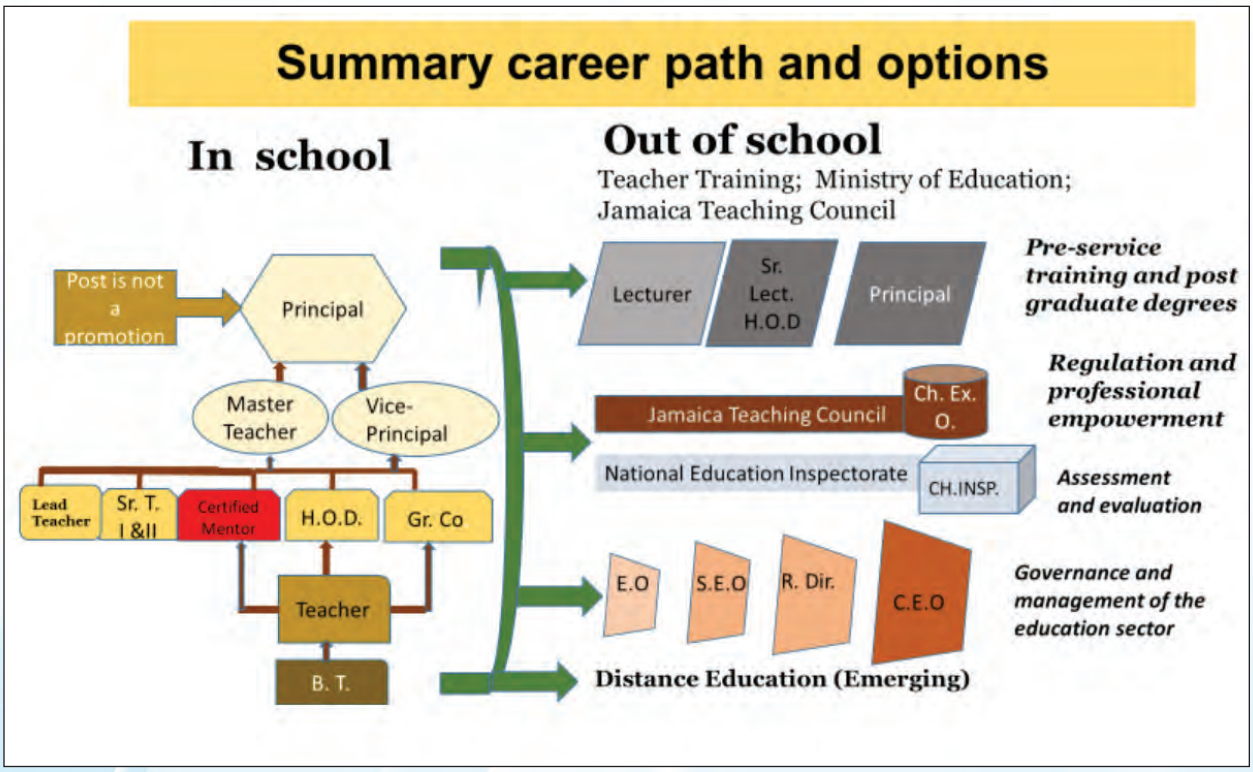
Currently, within the sector, the highest designation for someone remaining in the classroom is a Master Teacher. The Master Teacher is a "professional teacher who has demonstrated the mastery of the art and craft of teaching, by achieving excellence in current practices, through a comprehensive assessment process.[107] " The process to become a Master Teacher is rigorous and professionally managed by the JTC through a National Committee for Selection and Appointment of Master Teachers (NCSAMT). In Figure 24, the Master Teacher designation is included as a step in a career path toward becoming a principal. The JTC further notes that the number of Master Teachers (presently about 32) has been significantly depleted by promotion to principalships[108]. This suggests that Master Teachers might themselves see becoming a principal as the next step in their professional advancement and as the way to attain better remuneration. At present, Master Teachers are remunerated at a level equivalent to a Vice Principal.

[106] Reynolds, J. (2014, February 1). RIPPED TO SHREDS - JTA knocks Teaching Council bill, says it could triggerlegal challenge. Retrieved from The Gleaner: https://jamaica-gleaner.com/gleaner/20140201/lead/lead1.html

[107]https://jtc.gov.jm/masterteacherhm/

[108]https://jtc.gov.jm/masterteacherhm/

Figure 24: Summary of career path and options. Courtesy of JTC



Recommendation:

TP2: Create/Define a professional (non-administrative) track which teachers can pursue without leaving the classroom.

In the medium term:
TP2.1: Define a three-tiered professional teaching track based on levels of teaching mastery which culminates at the Master Teacher level. The MOEYI and JTC should collaborate on defining a three-tiered professional teaching track (e.g. Teacher, Senior Teacher and Master Teacher) which at its highest level compensates comparably to the highest administrative levels (e.g. Principal). Including a middle tier would be both motivational and developmental. Some features of this new professional track could include:

- Steps within each level of mastery linked to years of service and pre-defined professional competencies gained.
- Peer-based evaluation to move from one level of mastery to the next which considers senior roles and responsibilities undertaken (e.g. grade supervisor, curriculum developer, subject lead) and additional educational achievements. Evaluation could build on the system currently managed by the NCSAMT.
- Salary adjustments for step attainment within mastery level and for advancement to a higher mastery level. This would require a careful realignment of the current salary scale premised, in part, on years of service.

- Compensation at the mastery level is comparable to the highest level of attainment in other education career paths (e.g. Principal).
- Retention of mastery level status with relocation or assignment to another school.

2. Incentivization

There are teachers in our education system who are excellent at their jobs. Some, however, become frustrated in the system because there are only limited paths to advance professionally as teachers. At present advancement is linked to moving into administration, becoming a principal or vice-principal, becoming an education officer, or applying to become a master teacher ***(cross reference)***

4.2. The Teaching Profession, section 1.2). An inability to advance also limits opportunities to better their remuneration outside of across the board pay increases. In a limited fiscal environment, strategic incentives can enhance the profession, contribute to teacher retention, and inspire excellence.

Many countries have developed innovative ways to incentivise the teaching profession. Globally, incentivization is strategically used to attract, retain, increase teaching quality, and fill gaps in underserved subjects or geographical regions (Box 2). There have long been calls for incentives for teachers in Jamaica. For example, the Jamaica Teachers' Association (JTA) has called for incentives including better land and housing opportunities and tax breaks in terms of duty concession on motor vehicles.[109]

[109] Loop News. (2020, February 9). Chronic teacher shortages getting worse; educators, JTA speak out. Retrieved from https://jamaica.loopnews.com/content/chronic-teacher-shortages-getting-worse-educators-jta-speak-out

Box 2: Models of Incentivization

In Singapore for example, as an incentive, teachers receive a stipend equivalent to 60% of a teacher salary while in training and commit to teaching for at least three years. Interest in teaching is seeded early through teaching internships and a system for mid-career entry.[110]

Nigeria, just as Jamaica, has been suffering from a brain drain of teachers. Their situation, however, has been exacerbated since most of the educators in their teaching force are poor quality graduates. In 2020, the country strategically ventured on to incentivising the profession by putting in place measures to increase the quality of graduates as well as retain the brightest within their education system. These incentives include an enhanced entry point for teachers in the civil service by restricting entry into the teaching profession only to highly gifted, academically outstanding students/scholars with the right attitudinal and emotional disposition; special teacher salary scale for teachers in basic and secondary schools, including provisions for rural posting allowances, science teachers allowance and peculiar allowance; as well as a harmonized retirement age and teaching service years for teachers in Nigeria.[111]

In the Jamaican context, consideration should be given to promotion-based incentives for teachers who engage in activities that enhance the education sector e.g. in active research and who have their findings published and utilized in the sector. These teachers, who are willing to move beyond the accepted boundaries, should be afforded the opportunity to become senior teachers of research, for example, and assist the principal in the monitoring and mentoring of inexperienced teachers.

Presently, the number of senior teachers in a school is limited by the establishment of the school i.e. to one-third of teachers on staff. With school leaders now being required to perform wider functions than is traditionally accepted in the Code of Education Regulations, more assistance is needed from staff to carry out all their duties effectively. Therefore, the positions of special responsibility should be reviewed and expanded. Presently, the Code of Education Regulations only stipulates Positions of Responsibility as Heads of Departments and Supervisors of Grade Levels.

It is also well known that a number of our schools in rural and inner-city communities find it difficult to attract teachers to serve in their mathematics and science departments. With the national focus on equity in schools, incentives provide an opportunity to encourage teachers trained in STEM areas to teach in the rural and inner-city schools. Furthermore, incentives should also be

[110]Stewart, V. (n.d.). How Singapore Developed a High-Quality Teacher Workforce. Retrieved from Asia Society: https://asiasociety.org/global-cities-education-network/how-singapore-developed-high-quality-teacher-workforce
[111]Agbola, B. (2020, November 9). FG approves new incentives for teachers. Retrieved from Premium Times: https://www.premiumtimesng.com/news/more-news/426950-fg-approves-new-incentives-for-teachers.html



developed to attract more male teachers to the classroom and to encourage them to remain in the profession. [112] The MOEYI does have some of these kinds of incentives in place. These should be maintained and, in some cases, expanded. For example, only principals currently receive a remote allowance. Data should be periodically used to ensure continued relevance of the incentives now in place and to update what is being targeted (e.g. demographic shifts or teacher migration may remove or create new need). It is unclear, for example, the extent to which NEI data are used to efficiently manage, target and update the current incentives offered.

Performance incentives should also be considered. Though suggestions about performance-based salary have continued to meet resistance among stakeholders [113], the potential acceptance for performance-based incentives premised on value-added metrics does not seem to have been widely tested. Incentives would be in addition to regular salary. The mechanism would consider teacher performance based on relative improvements in student/classroom performance, rather than performance in absolute terms. This would avoid disincentivizing teaching disadvantaged students. The metrics would have to be carefully worked out and agreed upon by all stakeholders. This however has the potential to retain the best teachers in the classroom and motivate excellence in teaching.

[112] Beng Huat See, Rebecca Morris, Stephen Gorard & Nada El Soufi (2020) What works in attracting and retaining teachers in challenging schools and areas?, Oxford Review of Education, 46:6, 678-697, DOI: 10.1080/03054985.2020.1775566
[113] https://jamaica-gleaner.com/article/lead-stories/20180917/gleaner-editors-forum-jta-says-performance-based-pay-not-workable

Recommendations:

TP3: Consider how incentives can be strategically utilized to attract, retain, fill gaps, and improve quality in the teaching profession.

In the short term:

TP3.1: Use data to ensure that current allowances/incentives for serving in underserved geographical (e.g. rural and inner-city) and subject areas remain appropriately targeted. Use of data to periodically update the efficient targeting of incentives.

In the medium term:

TP3.2: Link incentives to professional development and advancement. Consideration should be given to:

- Increasing the categories of Teachers with Posts of Responsibilities.
- Increasing the categories in which Teachers with Posts of Responsibilities can be appointed to address the expanded areas that are now being included in the school system; for example, Co-ordinator of Co-Curricular Activities, Co-ordinator of Community Service, Supervisor of IT Systems and Digital Resources; Co-ordinator of Social and Emotional Learning Programme. This means that the present ratio of 1:3 of Teachers of Posts of Responsibility: Teaching Staff has to be reviewed. Teachers with Post of Responsibilities are paid additionally for carrying out their roles.

TP3.3: Consider providing performance incentives to schools and teachers based on value-added metrics. Performance incentives would be in addition to regular salary. The mechanism could consider teacher performance based on relative improvements in student/classroom performance, rather than performance in absolute terms.

3. Need Versus Supply

3.1 STEM Teachers

Consultations point to a critical shortage of quality teachers in some STEM and TVET related subjects e.g., Math and Science. The shortage is repeatedly highlighted as an immediate concern with the link often made between the number of high school students with STEM competencies and a globally competitive workforce. The World Economic Forum Global Competitiveness Report for 2017-18 ranked Jamaica 73rd of 137 countries in terms of the quality of science and math education.[114]

Attrition of science and math teachers is a significant contributor to the problem[115]. The JTA estimates that close to 50,000 teachers have left the school system over the past 20 years, with many of them being STEM teachers.[116] Between the 2014 and 2015 academic years, nearly 500 mathematics and science teachers left the public secondary school system.[117] At the start of the pandemic, Jamaica lost an estimated 390 teachers between September 2019 and January 2020.[118]

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[114] http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf
[115] https://jamaica.loopnews.com/content/chronic-teacher-shortages-getting-worse-educators-jta-speak-out
[116]https://www.jamaicaobserver.com/news/jta-miffed-no-education-minister-appointed-monday_202921
[117]http://www.jamaicaobserver.com/news/500-maths-and-science-teachers-quit-over-2-years
[118]https://jamaica.loopnews.com/content/390-teachers-resigning-within-six-months-no-big-deal-says-samuda

In 2018, in its bid to boost the cadre of Mathematics and Science teachers, the MOEYI offered STEM education scholarships to 500 suitably qualified persons: 200 Mathematics Education, 200 Science Education and 100 Technical Vocational Education scholarships. The scholarships cover full tuition, support for boarding where needed, and a stipend to assist with the cost of books and other supplies.[119] They bond the teachers for five years. The level of take-up of these special scholarships has waned in recent years, due to a combination of reasons including due to the lack of qualified applicants, a reluctance to be bonded, and the perceived unattractiveness of teaching as a career, especially compared to other STEM and TVET professions. Even with full take-up, it would take some time for the scholarship mechanism to ease the present demand. Even then it is unlikely to meet demand given a strong competing demand for STEM and TVET skills and competencies from other sectors.

Contract teachers have been used by several countries to help fill demand in desired subject areas. The most popular models recruit recent college graduates and professionals with degrees/competencies in demand areas to teach for two-three years. Studies show that contract teachers, even though most often uncertified, have the capacity to raise learning outcomes when added to a school's teaching corps, sometimes more effectively than their certified counterparts. [120] Teach for America is a programme based on this model which has been replicated across several countries.[121] The recently launched UWI BOOST programme is a home-grown attempt at doing something similar.[122]

Recommendations:

TP4: Formalize a framework for the engagement of contract teachers to fill teaching gaps in STEM and TVET areas.

In the short term:

TP4.1: Conduct a gap analysis to ascertain where contract teachers are needed. Use data from the National Education Inspectorate (NEI) to ascertain numbers, subject areas and skillsets needed.

TP4.2 Ensure provisions are made for the licensing mechanism to accommodate contract teachers. Ensure the JTC Bill provides a framework for accommodating contract teachers including standards related to who can be engaged. Work with the JTC to craft short training modules to prepare them for entry into the classroom. In New Zealand, for example, the governing Council has a specific certificate for individuals from other careers who did not undergo the regular teacher training but teach specific areas of specialisation.[123]

In the medium term:

TP4.3: Develop and/or partner on programmes similar to the Teach America or UWI BOOST models. The MOEYI should capitalize on strong private sector interest in graduates with STEM competencies. It should pursue partnering on models which see the private sector incentivizing recent graduates or experienced professionals to enter teaching for a limited period. Government incentives including student loan repayment concessions and 'back-end scholarships' payable on participation in such schemes should also be considered.

[119]https://jis.gov.jm/scholarships-persons-teach-mathematics-science/
[120]Is teacher certification an effective tool for developing countries? IZA World of Labor 2017: 349 doi: 10.15185/izawol.349
[121]https://www.teachforamerica.org/
[122]https://www.mona.uwi.edu/fst/nbcfboost-programme
[123]https://teachingcouncil.nz/getting-certificated/getting-started/what-is-registration-and-certification/

TP4.4: Promote the profession to contract teachers and provide them with incentives to remain in teaching. Incentivize remaining in the profession through mentoring and the provision of scholarships to pursue postgraduate training and degrees in exchange for additional years of service.

3.2 Staff Allocation

Consultations coupled with available data highlight inefficiencies linked to the allocation of teaching staff. Shifting demographics due to migration patterns and greater demand concentrated in some schools have left some institutions overstaffed and others understaffed. A recent World Bank study also identifies variations in the number of students per teacher across schools (within the same education level) and an inequitable allocation of university graduate teachers across schools with a noticeable rural versus urban divide. [124] [125] Rural and remote areas have significantly more students per university graduate teacher. The mismatches, especially with respect to student-teacher ratios, results in unequal access to quality teaching and affects student performance **(cross reference: 4.4 Teaching, section 4).**

The same World Bank study also shows that 90 percent of the variation in student-to-teacher ratios across all levels is explained by differences within parishes and MOEYI regions i.e. as opposed to across them. Greater efficiencies could therefore be achieved with the flexibility to distribute qualified teachers within regions according to need. This might be possible if Regional Educational Authorities are allowed to monitor and adjust the workforce within their jurisdiction. At present teachers are appointed by the Board of Management of each school after consultation with the principal and subject to confirmation by the MOEYI. The MOEYI cannot redeploy except on a voluntary basis. One drawback is that, as noted in the Governance sub-committee report, MOEYI Regional Authorities are not currently well equipped to bear more responsibility. This would have to be addressed. An additional factor to be considered would be the need to adjust the teacher employment mechanism which presently does not facilitate mobility schemes based on changes in enrolment.

Recommendations:

TP5: Allow for the reallocation of teachers within regions in response to needs.

In the short term:

TP5.1 Pilot within one MOE region the granting of authority to reallocate teachers according to need. Create the guiding framework and allow one Regional Authority to pilot the proposed approach. This would involve adequately resourcing (human and otherwise) the Regional Authority to undertake the task.

In the medium term:

TP5.2 Modify the way teachers are employed to allow mobility within a region to areas of staff shortage. Develop and pilot the implementation of a teacher deployment policy in which regions have a role in distributing teachers within their jurisdiction. The policy should allow teachers to retain their professional status if re-assigned to another school, consistent with the (non-administrative) career track previously proposed (cross reference: 4.2 The Teaching Profession, section 1.2).

[124] [125]World Bank Group. (2021, June). Public Expenditure Review of the Education Sector in Jamaica,[Draft] (Forthcoming).

4. Leave

From as far back as 1998, a KPMG Peat Marwick Report identified Teachers' Leave Entitlements as one of the constraints to achieving greater efficiency and effectiveness at the school level. The report indicated that at any point during the school year, up to 10% more teachers than is required are employed by the Ministry because of the number of teachers on leave; and the teaching work of individual schools is disrupted when up to 10% of the staff is away on leave. Noticeably, teacher absences fracture students' experience, present challenges for principals to plan, as well as further challenges in scheduling and carrying out professional development of teachers. These difficulties among others led the 2004 Taskforce on Education to recommend that the Ministry of Education Youth and Information renegotiate the leave entitlement of teachers and principals and implement scheduled vacation leave during the school holidays only.

Teachers in the Public Education System are granted all categories of leave - study, vacation, sick, special and casual. Currently, teachers spend approximately 14 weeks outside of the classroom which is an accumulation of time spent during long holidays, mid-terms, and other days off, though they are compensated for a full 52 week year. It has been suggested that the rationale for this model of working conditions for teachers, originated in the British system, and other countries where the seasons of winter and summer meant a change in weather and where the agriculture-based economy required extra labour of children. In 2013, the cost of study and vacation leave to the Government was estimated at roughly $2.5 billion per year and a further $574 million, at that time, was owed to schools for substitute teachers. The methodology of substitute teachers came in 2012, when the Jamaica Teaching Council proposed that there be a Substitute Teacher programme to eliminate the practice of leaving students unattended and without work to do. It came consequent to teacher absence data collected by the Jamaica Teaching Council (JTC) involving select number of schools across the island. The JTC concluded that students were cumulatively losing years' worth of contact hours because of a failure to replace teachers who were on sick or casual leave. The Ministry at the time, however, argued that the system was unsustainable. According to section 64 of the Jamaican Education Regulations of 1980, teachers in public educational institutions shall not normally be eligible for vacation leave with pay in addition to school holidays. This, though in theory, is not always the case in practice. This exacerbates the cost borne by the MOEYI to replace teachers who are on leave.

Another issue raised is the need to align teachers' leave entitlements with that of other civil servants. The Education Regulation of 1980 establishes a correlation between the length of service and the number of days teachers are granted for sick leave. The number of sick days given to teachers are shown in Table 1. It has been proposed that the number of sick days for public school teachers should be aligned with the Civil Service Regulations i.e. in accordance with the Civil Service Regulations, civil servants are not granted sick leave based on years of service. Instead, January 1, 2002, is used as a central point to determine the regulations that governs individual employees as well as the individual work status of the said employees. In general, civil servants employed after 2002 have a fixed number of sick leave days per year which at its maximum is less than that granted to teachers employed for five or more years. Other contentious issues relate to how casual and sick leave are handled and who is eligible for study leave. In other jurisdictions, such as the United States of America, there is a recognition that teachers have unique work schedules, and so they do not generally receive "vacation days" in the same way as most professional workers. Instead, school districts provide their teachers with a certain number of sick leave days (the average being 11 days for large districts) as well as a limited number of days to address personal business (the average being 4).

Sick leave allocations for teachers

Continuous years of service	No. of sick days with full pay	No. of sick days with half pay	Total no. of days
.25 <	5	0	5
.5 < 1	5	5	10
1 < 2	10	10	20
2 < 5	20	20	40
5<	40	40	80

The Ministry of Education Youth and Information has the authority for, among other things, the approval of leave for teachers. Attempts have been made by the Ministry to address the challenges related to leave entitlements over the years. For example, the Ministry of Education Youth and Information in 2014 began drafting a series of amendments to the Education Regulations of 1980. One related proposed amendment was that the number of persons to whom study leave and vacation leave may be granted at the same time shall not exceed ten /five percent of the total number of the academic staff. Other proposed amendments include greater alignment of sick days with other civil servants and a recommendation for the treatment of the school holiday periods which would require a teacher to still perform service connected with his/her substantive duties; or to attend training courses, seminars or workshops approved by the Minister. Examples of other recommendations include that a teacher leaving his/her official address during school holidays or vacation would be required to notify the Board of his/her temporary location, and a teacher leaving the island at any time would have to apply to the Board and the Minister through the Principal stating his/her expected date of departure; his/her expected date of return; and his/her contact information while abroad.

The proposed amendments from 2014 have yet to be passed in part due to resistance from some educational stakeholders. In some instances the generous leave entitlements are seen as compensation for inadequate pay packages, while it is also argued that school holiday weeks are periods for teacher training and development. Studies have however shown that leave given to teachers for training and development (as opposed to, for example, in-service training) has little impact on student performance. It has been further suggested that any move to amend teachers' leave entitlements must be in the context of a holistic review of the education system so that recommended changes do not unfairly single out teachers' leave as a primary reason for lack of student performance.

Recommendation

TP6: Use the occasion afforded by the present Education Transformation Commission to both re-examine and renegotiate the leave entitlements of teachers and principals, within the context of holistic reform of all aspects of the education system, and to the benefit of both the teachers and student performance.

TP7: Utilize money saved for the purpose of leave to increase the salary of teachers.

In the short term:

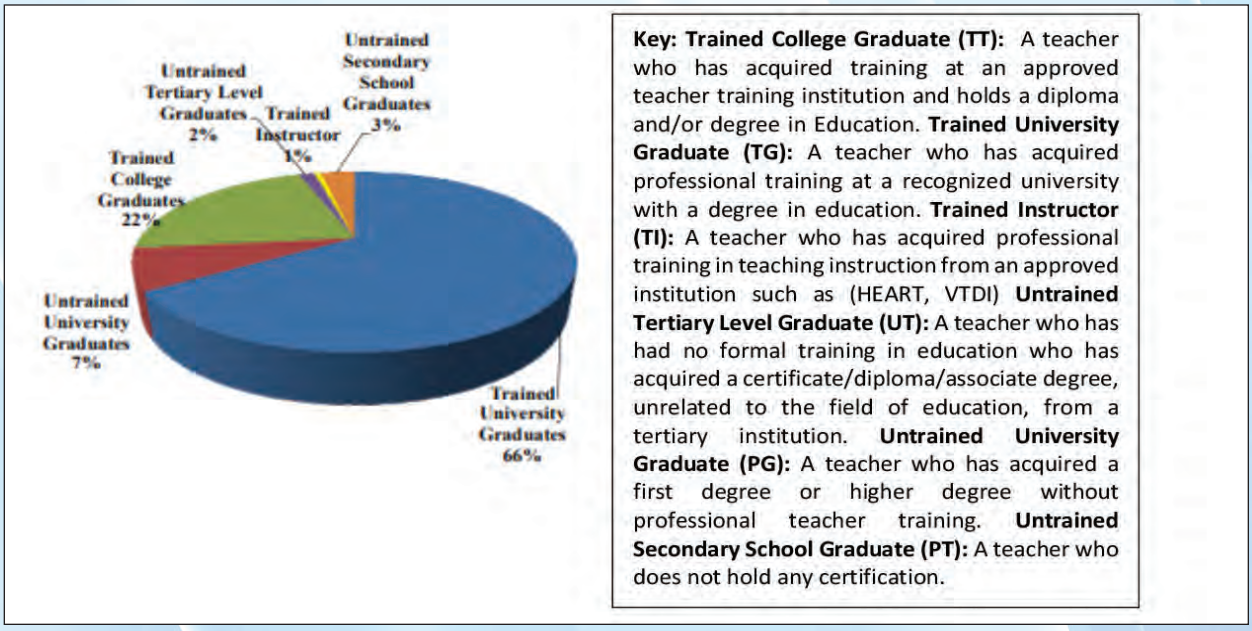
TP6.1 Set a 2 year timetable for implementation of renegotiated teachers' leave entitlements. A re-look at teachers' leave remains an outstanding recommendation from the 2004 Task Force on Teacher Reform. Significant strides have been made with respect to revised considerations for teachers' leave which can be built upon. Within a two year timeline, (i) finalize a renegotiated leave structure (ii) map the economic and other benefits for both the teachers and the educational system, (iii) allocate any cost savings toward increased teachers' salaries, and (iv) decide on a transition mechanism to account for existing teachers in the system and new teachers to come on board.

4.3 Teacher Training

Teachers have been described as being the "cornerstone" of education and student success, with an irrefutable link between teacher/teaching quality and student performance.[126] The quality of teaching is influenced by several factors, of which, the quality of teachers is the most consequential. The quality of teachers refers not just to the personal characteristics of the individuals entering the profession, but also the quality of their preparation.

A major recommendation from the 2004 Task Force on education was that the baccalaureate degree be the minimum requirement for entry into the teaching profession. The implementation has meant that Jamaica has a trained education workforce with most teacher having advanced education certification (Figure 25). In early childhood education (public schools), about 53 percent of teachers are university graduates,[127] compared to 75 percent in primary and 81 percent in secondary schools.[128] Notwithstanding, the continued underperformance of the education system may suggest weaknesses in the training of teachers, in turn affecting the quality and preparedness of graduates entering the classroom.

Figure 25: Distribution of Teachers by Qualification in Infant, Primary and Secondary Schools (2018/2019). Source: MOEYI Education Digest 2018-2019



[126] Haydar Ates. "New Trends in Teacher Training and the Place of Information Technology in Education". Merit Research Journal of Education and Review (ISSN: 2350-2282) Vol. 7(10) pp. 109-113, October, 2019; IDB Education. Developing Teachers.
[127] World Bank, June 2021: Public Expenditure Review of the Education Sector (Draft). (Forthcoming).
[128] MOEYI Education Digest 2018-2019.

In 2016 there were eight public Jamaican institutions designated by the MOEYI as teacher training institutions. There were also three other colleges, one university college and one post-secondary institution offering Bachelor's degrees or Post Graduate Diplomas whose programmes are accredited by the University Council of Jamaica (UCJ). Three Jamaican universities at the time offered B. Ed., B.S. or B.Sc. degrees in a variety of educational specialities. Eight Canadian and American universities offered accredited degrees in education in partnership with Jamaican institutions, and three overseas universities offer UCJ-accredited Master's degrees in education subjects locally (face-to-face) without Jamaican partners. While all of the identified programmes were UCJ accredited, the requirements, systems, and certifications were different. In total, there were 27 public and private post-secondary, tertiary and higher education institutions offering teacher education programmes at the Post Diploma, undergraduate and graduate levels in Jamaica.[129] In comparison to 2016, the situation has only become more diverse with additional players entering the teacher training space.

There are a diverse set of institutions with varying levels of oversight roles for teacher education. These include:

- Ministry of Education — oversees and provides government support for public teachers' colleges
- Joint Board of Teacher Education — coordinates the quality assurance of teacher education programmes in the colleges
- Jamaica Teaching Council — carries out regulatory functions for teachers; establishes standards for licensing of teachers
- University Council of Jamaica — external accrediting body; accredits teacher education programmes
- The Jamaica Tertiary Education Commission (J-TEC) — the regulatory and supervisory body for tertiary education in Jamaica. It is mandated to ensure the provision of quality tertiary education in Jamaica.

The above suggests a complexity to the teacher education landscape.

1. Standards and Suitability for Teaching

1.1 Screening

A study of the world's best-performing school systems found that these do not simply employ rigorous and effective selection procedures at the certification and licensure stages; they also begin the process of seeking to ensure the selection and recruitment of the potentially most effective teachers at an earlier stage, through restricting entry to initial teaching practice, while at the same time attempting to ensure that the pool of candidates for initial teacher practice is as large and strong as possible.[130] Countries such as France employ a system of competitive screening during the initial teacher practice course, in order to determine which candidates are allowed to continue with their training. This also helps them to control the number of candidates with access to public employment as a teacher.[131]

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[129]ICET 2016 60th World Assembly 60th Yearbook of Teacher Education. 2017. School of Education, Faculty of Humanities and Education. The University of the West Indies Mona, Kingston 7. ISBN 978-976-632-058-

[130]https://www.oecd-ilibrary.org/docserver/5kmbphhh6qmx-en.pdf?expires=1626712683&id=id&accname=guest&checksum=6592BCD89DF1F09BD3FDFDA7CC5BD917 p.5

[131]idib

The complex teacher training landscape in Jamaica with both public and private providers makes screening while in training a challenge. Doing so, at the point of entry into teaching, may be much easier to manage. Screening at the point of exit and/or at registration would allow the most suitable graduates from the teacher training institutions (TTIs) to continue into the teaching profession while also providing an exit point for others while still allowing them to leave with a degree. Over time, this kind of screening to ensure only the most suitable and best enter teaching would also help change the perception of the profession from a 'last resort' to being 'highly selective'.

Currently, no statutory mechanism exists to screen candidates leaving colleges who wish to enter the teaching profession. This is primarily due to the decentralized hiring process whereby the school board is the authority responsible for hiring teachers, though the teachers have contractual obligations to the MOEYI. The schools, therefore, have sole responsibility for screening the teachers entering their institution at the secondary level.

As already noted, the JTC has the responsibility for registering all teachers as a requirement for candidates prior to entering the education system. Registration at present only requires teachers in public and private educational institutions to complete an online application and submit supporting documents for approval.[132] There is no assessment and rigorous screening to ensure that individuals in the teaching professions are competent and qualified enough for the job. In Nigeria, for example, the Teachers Registration Council of Nigeria, TRCN, has begun nationwide screening of teachers in public and private primary and secondary schools, with the aim of weeding out unqualified/unregistered persons from the system.[133] Similarly, the Teaching Council in Ireland stipulates that, all applicants must undergo the Garda Vetting process which can be completed at the same time as an application for registration. Each application is assessed according to set criteria regarding qualifications and teaching experience, as well as evidence of character.[134] The aforementioned teaching councils among others, are tasked not only with the registration of teachers but are also responsible for screening and assessing candidates for the profession.

Recommendations

TT1: Institute a mechanism for screening of entrants into the teaching profession from teacher training institutions (TTIs).

In the short term:

TT1.1 Ensure the JTC is legislated to work in conjunction with teacher training institutions and other partners to assess and screen candidates entering the teaching profession.

In the medium term

TT1.2 Work with the JTC to institute a mechanism for psychosocial screening of entrants into the teaching profession at year 3 of teacher training. Qualified students will be elevated

[132]https://jtc.gov.jm/registrationhm/
[133]https://www.vanguardngr.com/2020/03/400000-to-go-as-trcn-begins-screening-of-unqualified-teachers/
[134]https://www.teachingcouncil.ie/en/registration/

to a one-year probationary period of school-based practice and with a provisional licence given by the JTC during this period.

TT2: Institute a mechanism for screening of all entrants into the teaching profession.

In the medium term:
TT2.1 Implement a screening mechanism that could include a psychometric test to assess the quality of the teachers, measured against standards for teachers set by the JTC.

1.2 Matriculation

Teacher quality has been defined as the most "significant and costly" resource input in schools.[135] There is therefore a need to ensure value for the investment made. Studies on educational reforms in some of the world's leading education systems show a high frequency of screening procedures for persons entering and pursuing the teaching profession. Some of these screening procedures use entrance examinations and the application of quotas on the number of teachers trained entering the profession. The India model is highlighted in Box 3.

Several countries across Latin America and the Caribbean also employ similar entrance examination or assessment strategies to filter through the large number of applicants to the teaching degree and teacher training programmes. The assessments done in the region range from competitions for spaces in colleges to spaces in the profession and include tests of teachers' academic as well as pedagogical and other skills. This is of special relevance for teachers pursuing specialisations in subject areas, and is important in identifying compatible teacher traits and professional aptitudes.[136] The data from these assessments, as well as general matriculation assessments across the region has revealed that the students applying for education programmes on average record lower scores than students applying for spaces in other programmes, such as in engineering.[137] A filtering mechanism employed in teacher education in some jurisdiction is limiting eligibility for entrance to only the top quintile of exiting students from teacher training institutions. In South Korea, university graduates are also required to sit the National Teacher Employment Exam in order to be considered for employment in the public school system. In Finland, teaching is considered to be the most respected profession, and only grants access to one in ten candidates, and requires higher than an undergraduate degree to be considered for entry.[138]

A critical distinction, noted here, is the inextricable link between the perception of the profession and the quality of graduates recruited, where countries that implement screening measures such as these, teaching is considered a highly prestigious profession.

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[135]OECD. Teachers Matter. 2005.
[136] IDB Education, "All students have access to effective teachers". 2017.
[137]IDB Education, "All students have access to effective teachers". 2017.
[138]Haydar Ates. "New Trends in Teacher Training and the Place of Information Technology in Education". Merit Research Journal of

Box 3: India

Since 2011 India, has conducted a Teacher Eligibility Test (central and state-level, depending on the school), which both existing teachers and those wishing to enter the profession were required to pass. According to the Indian government and the council for teacher education, teaching is becoming an increasingly challenging and attractive profession, which mandates that high standards must be met in order to maintain quality. The government has also set eligibility criteria, depending on the level of schooling and area of instruction.[139] The certification gained from passing the tests lasts for a lifetime. The tests are conducted across India's states and are administered in the respective languages roughly twice per year. Another screening measure was introduced in 2019, which invites students applying to 2000 institutions country-wide to compete for 2.5 lakh (250,000) spaces. Similar to the nursing profession in Jamaica, each year, there is a prescribed number of individuals needed to fill available positions. Bachelor of Education entrance examinations in India are mandatory for some institutions, while others use grades from assessments done prior, and are also followed by a counselling process before spaces are allocated.

Recommendations

TT3: Increase matriculation standards for entering TTIs over time.

In the medium term

TT3.1 Using a phased approach, increase the requirements for entry to teacher training institutions to include a combination of CAPE and CSEC Passes. Requirements should specify CAPE passes in Units 1 and 2 (or the equivalent) in the areas of specialization. This is recommendation is contingent on the successful policy implementation of a seven-year high school programme.

2. Pre-service Training

In Jamaica, there is currently a disconnect between the share of teachers with training (~85%) and improved learning outcomes. Incorporating more practical modules in the pre-service training which allow students to be immersed daily in a school for a specified period to learn school culture, prepare lesson plans, substitute for teachers, while under supervision, has the potential to improve the preparedness of teachers entering the profession and yield improved educational performance. There are many models for increasing pre-service practical experience (Box 4). In the Netherlands it is a 3+1 model which sees pre-service teachers doing a 3-year institutional learning programme (post-secondary training) which includes 60% of time spent in classes and the remaining 40% in an intensive internship. Other models e.g. the Cuba or Nigerian models have the training infused throughout the 3 year training programme. There is a fiscal implication to increased pre-service training, making careful consideration of the most cost-efficient model necessary.

[139]https://www.niit.com/ctet/about-ctet.aspx

Teacher training programmes in Jamaica, last three to four years with school-based experience spread across the period of training. Notwithstanding, there is a need to expand and provide full immersion in field-based practice for a longer period. This will allow for greater opportunities for mentoring and coaching beginning teachers before licensure

Box 4: Models of pre-service training

The Netherlands uses a 3 + 1 year system for teacher training, which sees pre-service teachers doing a 3-year institutional learning programme (post-secondary training) which includes 60% of time spent in classes and the remaining 40% in an intensive internship. The following year after completion of the training programme is typically used for specialisation.

Alabama, USA, stipulates a mandatory 16-week internship/immersion period for pre-service teachers – including 10 days of consecutive teaching.

In **Nigeria**, the requirements for teachers vary depending on the level that will be taught. At the primary level, the minimum certification is a Nigeria Certificate in Education (NCE), granted at the culmination of a 3-year programme in a College for Education. The 3-year NCE programme comprises of a total of 130 credits, including 14 credits for general studies, 36 credits for elements and theories of education, 70 credits for studies in areas of specialisation, 6 credits for teaching and co-curricular practice, and 4 credits allocated for a research product conducted in an area of education observed during teaching practice. During the third year of study in a College for Education, students undergo twelve weeks of teaching practicum where students are immersed in a school and are expected to attend every day, learn school culture, prepare lesson plans, substitute for teachers, and are supervised by other teachers. Schools are not involved in this process, as the faculty supervisor serves as the advisor to the student and observes and offers critique on student performance.

The model in **New Zealand** also maintains different requirements for teacher training, depending on the level to be taught at. Universities employ individual requirements for matriculating from secondary school, or bridge programmes, into teacher training programmes. Programmes to qualify to teach at the primary and early childhood level typically last 3 years, while secondary teachers must study for 4 years. An in-service training component follows, which typically lasts between 14 weeks and 26 weeks, during which student teachers are closely supervised. A two year "probationary" period follows, where teachers are given provisional registration while they are expected to maintain a high quality of teaching.[140]

Recommendations:

TT4: Re-examine Pre-service training to increase hours spent in practical training.

In the medium term

TT4.1 Increase hours spent in practical training using the 3 plus one (3+1) model. This will have students spending three years engaging in the content, psychology, and pedagogy of teaching and then one year of internship.

[140]Teachers, Teacher Education, and Professional Development, http://timssandpirls.bc.edu/timss2015/encyclopedia/countries/new-zealand/teachers-teacher-education-and-professional-development/

TT4.2 Remunerate beginning teachers on school-based practice/internship i.e. during their one year of internship under the model proposed above.

Teacher Training Institutions/School Partnerships

Pre-service teaching is arguably the most critical point of pre-service teacher training.[141] Research has highlighted the effectiveness of mentorship/induction programmes for teachers that ease them into the responsibilities of the profession.[142] One assumption of teacher mentorship for pre-service teachers, has been that the experience compensates for the variances teacher experience in the teacher training programme; though that is hardly the case, especially where specific standards and measures are not set for teacher mentors. In the Scottish model, the Teacher Induction Programme introduced in 2007 stipulates that pre-service teachers engage with mentors for professional development for 30% of their required hours weekly, with the remaining 70% allocated to time for classroom teaching. Funding for both pre-service teachers, as well as teachers released/relieved of hours to facilitate mentorship is provided by the local government.[143]

Research also highlights need to be attentive in pairing pre-service teachers with mentors, and increasing the time that teachers engage in pedagogical practice during the training process. This is critical not just in maintaining a healthy relationship between the pair, but also in ensuring that pre-service teachers receive adequate instructional guidance and supervision, given research which shows that mentor / cooperating teachers "imprint" on them.[144] While some research has demonstrated that pre-service teachers have "well-grounded beliefs about teaching and learning which are resistant to change", there is also data to show that these beliefs and perceptions may be subject to change during internship/ pre-service training period, especially when the internship takes place in a school environment that is socially and culturally different to the environment that they were schooled in. This segment of the teacher training is significant in that it creates a new perspective for pre-service teachers, and heavily influences their understanding of their role as a teacher.[145] As one researcher puts it, "student teachers are not passive receptors of socialization processes, but rather as active agents interpret their experiences, make sense of them and learn from them."[146]

Discourse on mentor/cooperating teachers support their role in moulding young teachers and preparing them for the transition from theory into teaching practice. "The mentor teacher is expected to be the exemplar who guides and evaluates the trainee in lesson planning, delivery of lessons, and both direct and indirect classroom management and control."[147] The more experienced teacher is not only responsible for grooming pre-service teachers on what takes place in the classroom, but also on relationships with other teachers and with authority. There is a heavy social and psychological element to the responsibility, and the selection of the person who will mentor a pre-service teacher. Education specialists place value on some level of training

[141]Daniel D. DelGesso and Marison P. Smith, The Undergraduate Student Teaching Experience: Perspectives of Student Teachers, Cooperating Teachers, and Student Teacher Supervisors. ; Jennifer Avery Lawley, Pairing Of Pre-Service And Cooperating Teachers, 2012.
[142]http://eprints.gla.ac.uk/2770/1/What_makes_a_good_induction_sup.pdf
[143]http://eprints.gla.ac.uk/2770/1/What_makes_a_good_induction_sup.pdf
[144]Jennifer Avery Lawley, Pairing Of Pre-Service And Cooperating Teachers, 2012
[145]Peter Oluwaseun Merisil and Ansurie Pillay, Exploring pre-service teachers' beliefs about teaching and learning grammar: Implications for teacher education, Journal of Education (University of KwaZulu Natal) n.79 Durban 2020
[146]Rots et al. Learning (not) to become a teacher: A qualitative analysis of the job entrance issue. Teaching and Teacher Education 28 (2012) 1e10
[147]"On-the-Job Training: Pre-Service Teacher Training in Trinidad & Tobago". 2000.

for mentors to prepare them for the role, as well as the expectation of the individual having significant years of experience, and, or "special responsibilities" or a "special post" within the school. The common belief is that once teachers have accrued several years of experience, they are adequately prepared to fulfil the needs of a mentor for pre-service teachers. In reality, the competences required for this role are learned, and not necessarily inherent in all individuals. Furthermore, in the selection and pairing of teacher mentors and the effective execution of duties, it would also be beneficial for mentors to be aware of the requirements of the specific course of teacher study, to be incorporated in the mentoring strategy.[148]

The Alabama State Department for Education in 2005 included additional requirements for mentor / cooperating teachers, to include holding a master's degree, certification for the assignment, and a requirement to be teaching in the same field as the pre-service teacher that they are assigned to. There is also care in selection of individuals to serve in the position and to be assigned to pre-service teachers. Some countries, such as Trinidad and Tobago have also taken to develop structured guidelines for mentor teachers, which outlines expected roles and responsibilities. Moreover, in some countries, perceptions of teacher mentors of in-service teacher performance and readiness are sought in some countries in determining the progress of their mentee.[149]

Some countries, including Singapore and China have models for teacher education which include partnerships between schools and teacher training institutions. The benefits of such partnerships are mutual and include opportunities for consistent development and upskilling of school human resources, consistent renewal of the understanding of teacher educators and content shared to student teachers, and school learning communities (a similar concept to quality education circles as is the case in Jamaica). In sum, partnerships such as these are intended to bridge the problematic gap between theory and practice in teaching, and address the "fragmented approach to teacher education, professional development, and school improvement."[150] In Singapore, a triparty model exists between the Ministry of Education, individual schools and the National Institute for Education (the sole provider of teacher training in Singapore), where standards for accountability are set for each partner. This model includes prescribed school attachments, opportunities for closely monitored testing and piloting in schools, and a very active role of schools in the practical component of teacher training.[151]

Recommendations:

TT5: Enhance partnerships between teacher training institutions and schools.

In the medium term

TT5.1 A school-based practice/teacher training institution policy should be developed by the MOEYI to include a robust induction programme. This induction programme must include a mechanism for mentoring and coaching of beginning teachers and underpinned by an incentivised provision for school participants.

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[148] Angelina Ambrosetti. "The impact of preparing mentor teachers for mentoring". 2012.
idib
[149]Goran Fransson. European Journal of Teacher Education. Mentors assessing mentees? An overview and analyses of the mentorship role concerning newly qualified teachers. Volume 33. Issue 4. 2010
[150]Chunmei Yan, Transforming the existing model of teaching practicum: A study of Chinese EFL student teachers' perceptions
[151]National Institute of Education. The Enhanced Partnership Model.

TT5.2 The MoEYI should assign designated practicum schools.

TT5.3 The JTC, along with the JBTE, should establish criteria for and monitor the partnership between the TT institutions and practicum schools.

4. Governance and Operational Structure of Teacher Training Institutions

4.1 Legislation

The overall educational governance system should be urgently revisited as the parts of the existing structure of relevance to the Teachers' Colleges hinges on the same regulations that primarily govern secondary institutions. This limits the ability of Teachers' Colleges to expand on or adequately execute their mandates.

Teacher Colleges in Jamaica are governed by the 1980 Education Act which defines them as "any institution established for the purpose of training teachers for service in public educational institutions", simultaneously categorising these institutions themselves as Educational Institutions. The act states that every public education institution should be administered by a Board of Management, which should consist three or more people based on appointment. There should also be a constitution, which contains the powers and duties of the Board of Management for the educational institution to which the scheme relates and shall also provide for the keeping and audit of the accounts of such Board in a manner satisfactory to the Minister.[152] In addition, the Public Education Regulation states that the salary scales and allowances of teaching personnel in public education institutions must be as approved by the Government.[153] Therefore, the government is responsible for determining and distributing payments to principals and other individuals in Teacher's Colleges.

By regulating the Teachers' Colleges through the Education Act, one of the problems that arises is the lack of Autonomy that these institutions have. The Education Act creates a governance structure similar to that of high school. There is a need for a more modern approach to governance by allowing these institutions to have greater freedoms, in alignment with higher education institutions such as universities. For example, Teachers' Colleges do not presently have the authority to award degrees and other certifications that they deliver. The awarding of certifications is currently under the portfolio of partnering universities and therefore restrict the activities and power of the colleges.[154] An example of this is seen in the UWI in the award of B.Ed. degrees on behalf of Jamaica's public teacher training colleges. Under a Heads of Agreement with the University of the West Indies (UWI), the University provides programme coordination through the Joint Board of Teacher Education (JBTE) and the School of Education, Mona.[155]

Knowledgeably, prior to the agreement with UWI, the eight institutions would have formed the Teaching Colleges' of Jamaica (TCJ). TCJ was established in 2010 as a consortium of eight government-funded institutions engaged in the delivery of teacher education programmes. These institutions include: Shortwood Teachers College, St. Joseph's Teachers College, Churches

[152]https://moj.gov.jm/sites/default/files/laws/The%20Education%20Act.pdf
[153]https://moj.gov.jm/sites/default/files/laws/EA%20Regulations%201980.pdf
[154]https://wenr.wes.org/2019/09/education-in-jamaica
[155]https://www.mona.uwi.edu/icetjamaica2016/conference-partners

Teachers College, Moneague College, Bethlehem Moravian College, Sam Sharpe Teachers' College, G.C. Foster College of Sports and Physical Education, and the College of Agriculture, Science and Education.[156] The partnership occurred consequent to the Government's policy decision that teachers are required to have a first degree to gain normal employment in the secondary school system.[157]

Recommendations:

TT6: Review the legislation under which TTIs are presently governed. Currently the TT colleges operate under the Education Act of 1965 and Regulations of 1980 and as such are subjected to the policies and functions of the school system. This compromises the autonomy, efficiency and creativity of these institutions.

In the medium term

TT6.1 A higher education act should be developed to include regulations for teacher training colleges. The new act would separate TTIs from the school system, and strengthen and modernize their governance structure to align to the standards of similar tertiary institutions.

4.2 A Consortium

A consortium is an association of institutions for the purpose of improved and expanded economic collaboration to achieve mutually beneficial goals. It was initially designed to foster inter-institutional cooperation among a group of colleges and universities for the purpose of enhancing services within a geographic region. However, as information and communication technologies increases the availability of resources for research and development purposes, universities have joined with corporations and government agencies to form national and international consortia.[158] The Mid Somerset Consortium for example, is a well-established consortium of schools which work together to offer excellence in teacher training.[159] MSC offer training in most secondary subjects, all subjects for those people who train whilst employed as unqualified teachers by a school (self-funded). Countries around the world have utilized the consortium approach in order to not impose on the day to day operations of higher education institutions and allow some level of autonomy. Teacher colleges in Jamaica have all made their historical contribution toward the Jamaican society in their own ways. In recognizing Institutional autonomy within consortiums, the group of institutions designs the programs together, and each school decides whether and how to participate on their own terms.[160] Maharashtra system of an Autonomous Institutions' Consortium, allows students from one autonomous college to take courses in another autonomous college with full credit given. The consortium serves as the vehicle for sharing resources and best practices among autonomous colleges.[161]

The State University of New York (SUNY) represents the largest comprehensive university system in the United States. Currently there are 64 institutions, including research universities, academic medical centres, liberal arts colleges, community colleges, colleges of technology and an online

[156]https://www.mona.uwi.edu/icetjamaica2016/conference-partners
[157]https://jis.gov.jm/uwi-deliver-degrees-behalf-teachers-colleges/
[158]https://education.stateuniversity.com/pages/1881/Consortia-in-Higher-
[159]https://www.crispinschool.co.uk/About-Us/MSC-Teacher-Training/
[160]https://www.thelcmc.org/
[161]https://economictimes.indiatimes.com/industry/services/education/how-autonomous-colleges-are-breaking-indias-rigid-degree-system/articleshow/69380082.cms?from=mdr

learning network. It was created to meet diverse needs across a vast geographic landscape. In terms of their shared governance system, it is seen where while the administration and governing board of the institution are compelled to consider the campus governance body's resolutions and recommendations, though they are not required to accept or implement them. This model however presents challenges relating to racial bias incidents that are often under-reported, and may not reveal the extent of any issues on a particular campus.[162] Nonetheless, there exist a SUNY-UWI Centre for Leadership and Sustainable Development and the SUNY Global Health Institute. It is a multidisciplinary approach to focus on solutions to specific problems in advancing research, advocacy and leadership. This comes in alignment with SUNY's mission to provide a mechanism for global health programs in system-wide universities and college campuses that will foster collaboration and innovation in education, training, and research initiatives with international partners and regional corporate and economic leaders.

One incentive for remaining in a consortium is the benefits to be accrued, such as resource sharing. Currently, teacher colleges in Jamaica struggle financially as they depend on the subvention from the Government to cover salaries, and student tuition to cover operational costs, and pursue any infrastructural development and other needs that will incur a cost. Furthermore, teachers' colleges are limited in their capacity to raise funds for the efficient operation of the institutions, as permission must be granted by the MOEYI in order to do so.

Recommendations
In the medium term

TT7: The MOEYI should work with public and private institutions to establish a consortium of higher education institutions engaged in teacher training.

5. Funding and Sustainability
The Tertiary Unit in the Ministry of Education Youth and Information provides guidance, scholarships and boarding grants to those who want to access tertiary education. It also administers Teacher Exchange Programmes, helps to appoint staff to tertiary institutions and manages the budget of all public tertiary institutions. The funding of teacher training institutions however, are inadequate as such there needs to be greater financial investments in them. Currently, the government only finances the salaries of administrators which therefore means that the schools have to source funds for other things that needs funding. This makes them heavily dependent on tuition and miscellaneous fees to remain sustainable. This has caused teachers' colleges to expand their course offerings in order to generate sufficient income in order to complement what is sent by the government. To add to this, there are noticeable inconsistences in the amount of money that is allocated to each teachers' colleges. For example, the Shortwood Teachers College received $462,370 per student in 2019 as compared to Sam Sharpe Teachers College who received $1,170,120 in the same year and St. Joseph's Teachers College who received $368,490. G.C. Foster College of Physical Education and Sports received $344,280, again from 2019 expenditure data from the MOEYI.[163] The four aforementioned institutions are from the group of eight consortium forming the Teachers Colleges of Jamaica (TCJ).

[162]https://www.suny.edu/suny-news/press-releases/2-21/2-26-21/index.html
[163]MoEYI. Allocations to Tertiary Institutions. 2021

There is no defined mechanism for the award of grant for capital investments for teachers' colleges which presents a challenge for old institutions who need urgent repair. The existing physical infrastructures such as buildings, teaching and learning resources etc. are antiquated. For example, laboratories are significantly below the required standard and often below the standard in some secondary institutions. This impacts how well-equipped teachers trained through these institutions are for entering their profession.

Recommendations

TT8: Review current funding model for Teacher Training Institutions.

In medium term

TT8.1 Establish a more suitable mechanism (80% government / 20% tuition) for the funding of teacher training institutions, to include quality programme delivery, infrastructural development and investment in human resource.

6. Curriculum

Expectations for teachers and teacher outcomes have evolved, given the evolution of the requirements for the current and future labour force, and the changing features and sensitivities of the country's population (including religious, racial, and otherwise cultural diversities). Economic and social demands now, more than ever, require human capital that is digitally literate and competent in a wide range of ICT related skills. As a result, there is mounting relevance of education based on "21st Century Skills" (including collaboration, communication, ICT literacy, social and/or cultural competencies, creativity, critical thinking, and problem-solving),[164] which continues to transform the role of teachers and teacher training institutions.[165] Taken together this demands that the curriculum of TTIs be reviewed.

Research on use of ICT by classroom teachers has shown impacts of multiple factors on levels of competence and comfort in use. In pre-service training, the research has supported the influence of teachers as role models, attitude to ICT and pre-existing competencies, peer collaboration, continuous feedback and scaffolding authentic technology experiences.[166] Worldwide, education systems and teacher training institutions have shifted closer toward an overt inclusion or integration of ICT in pedagogy, and away from the concept of ICT as a standalone, or complementary skill. In other words, "[increasingly]… ICT is conceptualized as a pedagogical tool rather than a skill-based competency", which should be used to create an "ICT-rich learning environment" and support student use of ICT.[167]

This emphasis on ICT use in teacher training has also translated to new trends in institutions, including the use of vlogging as a component of pre-service training, the introduction of e-portfolios as exit requirements for some institutions and entry to some schools, and a general

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[164]UNESCO International Bureau of Education, "21st Century Skills" http://www.ibe.unesco.org/en/glossary-curriculum-terminology/t/twenty-first-century-skills;

[165]OECD. Teachers Matter. 2005.

[166]Jo Tondeura, Koen Aesaertb, Sarah Prestridgec and Els Consuegraa; A multilevel analysis of what matters in the training of pre-service teacher's ICT competencies, Computers & Education, March 2018

[167]idib

transformation of frameworks and curricula for teacher training. This new trend allows pre-service teachers to deliver a digital story of his/her developing professional identity and demonstrate skills in ICT. Some research from other countries also shows a transition of the ePortfolio from a teacher training requirement to a tool for employability and has been gaining acceptance by schools and teacher recruiters.[168] Studies on the relevance of the use of ICT in the classroom and the need to place emphasis on ICT in teacher training has summarised its usefulness in seven main areas. They are:

a. Reaching students in different locations directly via the Internet-based systems,
b. Expediting teachers' finding and accessing course materials,
c. Facilitating teachers' access to class programs and training guides,
d. Facilitating students' access to resources necessary for their class research projects,
e. Enabling teachers to teach two or more classes anywhere in the world at the same time and facilitating their communication,
f. Enabling teachers to teach online in multiple classes concurrently,
g. Facilitating teacher in-service trainings (Chapman and Mahick, 2004).[169]

Other benefits identified include opportunities to improve on research skills and methods of presenting and sharing information. Greater use of ICT also minimises the risk of human error in making calculations, as well as in writing and spelling. It represents an opportunity to deliver knowledge and similar ICT stills to the student participants, as well as new innovative solutions for classroom and school management, both now heavily being explored as a result of covid-19. School inspections have now transitioned online, for the moment, and present another level of inquiry in the delivery of teaching, that of teacher computer literacy. International organisations have had increasing influences on trends in teaching, learning and teacher education, through the development of international assessments to compare and rank performance of students and teachers alike. This includes through PISA, which was recently to be introduced in Jamaica, and TALIS, which has not yet been explored.[170]

Other developments in the Jamaican society also place a demand for review of the curriculum in TTIs. Some of these are expounded on in section **4.3 Teaching, sub-section 4.1.**

Recommendations

TT9: Conduct a review of the curriculum offered in teacher training institutions.

In the medium term

TT9.1 Teacher training institutions, the MOEYI, JBTE, and the UCJ should work in partnership to review the teacher education curriculum as needed to ensure relevance and alignment with local and international standards and trends for teacher training.

[168]Helen Boulton. "ePortfolios Beyond Pre-Service Teacher Education: a New Dawn?" European Journal of Teacher Education. 2014.
[169]Haydar Ates. "New Trends in Teacher Training and the Place of Information Technology in Education". Merit Research Journal of Education and Review (ISSN: 2350-2282) Vol. 7(10) pp. 109-113, October, 2019;
[170]rends in teacher education: a review of papers published in the European journal of teacher education over 40 years

TT9.2 The MOEYI through its agencies should set standards and criteria for teacher training programmes that all institutions must adhere to.

7. Teacher Educators

Since nearing the end of the twentieth century, there has been a gradual shift in the governance and placement of teacher training programmes and institutions, including approaches for pathways into the teaching career and transitioning from teachers' colleges to university-level teacher education. The implications of this shift have included in some cases the granting of university status to some institutions, increased regulations for alternative entries into the profession, and dramatic shifts in the curriculum and expected outcomes of teacher education. There has been in some countries greater emphasis of the research requirements of degree status, greater links between theory and practice, and a general professionalisation of teacher education programmes. For some, these shifts underscored the rising tensions between academia (i.e., standards and norms in academia), and the professional practice of teaching.[171] The research component of pre-service teacher training has undergone much scrutiny, as researchers, policy makers, and teacher educators seek strategies to mould and recruit high quality teachers.[172] The purpose of the research component extends from simply showing the mental ability of student teachers, to demonstrating their process of inquiry, their capacity to interrogate systems and issues, links between the society and the classroom, and find solutions. A study looking at pre-service teacher research published in 2021 found "positive perceptions of practitioner research and a positive correlation between the quality of inquiry and quality of teaching", and substantiates research that suggests that this research component contributes to better teachers.[173] Another quality learned through the process is the ability to make decisions, not only based on classroom observations, but on what is evidenced in theory and in research.

Recommendations

TT10: Develop standards for teacher educators.

In the medium term

TT10.1 The Ministry of Education, through the J-TEC and/or JTC should develop standards for teacher educators which should be closely monitored and reviewed against local and international trends for relevance.

4.4 Teaching

There is extensive research confirming that the single most important factor determining academic performance is the quality of teachers and teaching practices. While budgetary allocation on education has been increased over the years, the education system has not produced the expected results. This has turned the spotlight on deficiencies in teacher quality and teaching. Teaching, now more than ever, requires a skillset that forms the basis of getting students to learn skills and competencies that will allow them to make meaning of their learning. The Jamaican

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[171](..) European Journal of Teacher Education. "University-based teacher education in the field of tension between the academic world and practical experience in school: a Norwegian case". Volume 33. Issue 4. 2010.

[172]Lidewij Van Katwijk, Ellen Jansen & Klaas Van Veen (2021): Pre-service teacher research: a way to future-proof teachers? European Journal of Teacher Education,

[173]Sabar, N., & Shafriri, N. (1981). The Need for Teacher Training in Curriculum Development. *Journal of In-Service Education,* 8(1), 22-27. doi:10.1080/0305763810080105

teacher must be pivoted in the centre of the educational system to ensure Jamaicans have a world-class education and training system.

1. The Imperative to Retrain

Three recent shifts in the education system place an urgent demand for re-training teachers presently in the classroom.

The NSC Curriculum: One of the most important methods of introducing educational changes is through new curricula, and like most induced changes, the success of any new curriculum depends upon an appropriate level of qualified input on the part of many individuals at different stages of the change process. This involves the following stages: first, the design and development of a new curriculum, which is generally handled by a specialised development team; next, a dissemination process handled by the same team and/or their agents; and finally, the implementation stage, which should be accomplished primarily by regular teachers.[174] The National Standards Curriculum (NSC) was piloted in selected schools in Jamaica between 2014 and 2016 and fully rolled out in September 2016[175]. The NSC guides instruction for all grades from 1 through 9, spanning six years of primary education and the first three years of secondary education. Noticeably, the implementation stage of the National Standards Curriculum presented hiccups as highlighted in the Monitoring and Evaluation Report, as seen through complaints by teachers who said that the NSC required specialized teachers in particular subject areas for an effective delivery **(cross reference: 4.5 Curriculum and Assessment, section 1.2).** In fact, in 2016, reports were that teachers were not adequately prepared to deliver the new curriculum as the trainers, during the training sessions were unprepared, consequently hampering the overall purpose of the sessions.[176] There is no doubt that this would have influenced teachers' delivery of the curriculum and thereby the students' performance. Arguably, the lack of or limited training of teachers to deliver the curriculum could even be used to further explain the low student performance in the Primary Exit Profile Examination in 2019.[177] Therefore, teachers should be retrained to cope with the content and teaching methods in two ways: by preparing teaching materials that teachers can handle in accordance with their inclinations and not just the teacher's guide, in addition to training teachers in reasoning selection and adaptation in accordance with a set of rules.[178]

STEAM The MOEYI has an acknowledged thrust toward STEAM infusion across the education system. Under the Ministry framework, the focus is not just on the STEAM subjects but also "speaks to the methodology that is actually used as the fundamental basis to ensure that all subjects are integrated and are taught in a manner where the curriculum is not seen as abstract, it is seen as practical and engages in problem-based and project-based approaches to learning, so that the students can see themselves in real-life situations."[179] The shift to the constructivist approach underlying the National Standards Curriculum aligns to the push to infuse STEAM in the curriculum. Consultations suggest however that not all education stakeholders are cognizant

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[174]Sabar, N., & Shafriri, N. (1981). The Need for Teacher Training in Curriculum Development. Journal of In-Service Education, 8(1), 22-27. doi:10.1080/0305763810080105

[175]https://ncel.gov.jm/content/jamaica-cutting-edge-curriculum-design-national-standards-curriculum

[176]Poyser, A. (2016, November 6). Curriculum complaints - Teachers unhappy with regimen. Retrieved from The Gleaner : https://jamaica-gleaner.com/article/news/20161108/curriculum-complaints-teachers-unhappy-regimen

[177]PMEU. (2014, 6 23). An Assessment of the National Standard Curriculum Monitoring Process. Kingston, Jamaica.

[178]Sabar, N., & Shafriri, N. (1981). The Need for Teacher Training in Curriculum Development. Journal of In-Service Education, 8(1), 22-27. doi:10.1080/0305763810080105

[179]https://moey.gov.jm/stem-has-gathered-steam-increased-ministry-funding-arts-now-included

of the STEAM methodology. All teachers therefore must be trained in the philosophy, methodology and practices of STEAM to effectively guide students in and to use the curriculum based on this new teaching emphasis.

Recently the GOJ announced the construction of six new STEM schools.[180] It is not clear the model for their operation (e.g., how they will operate differently from traditional high schools) and how students will be selected and placed in these schools. To resource and set apart six new STEM schools run the risk of furthering inequities and denying schools and students the value of interaction between STEM inclined and other students. The GOJ should consider using the Quality Education Circle approach, with a STEM Hub located within each cluster that can provide, knowledge, advice and resources that all other schools (primary through tertiary) can draw on.

COVID and Online Teaching The pandemic forced the education system to quickly pivot to an online mode of delivery. Online teaching and learning have been used by teachers and students on an unprecedented scale. Many teachers felt unprepared and have not been coping. Since lockdowns may be needed again from time to time, and with suggestions already emerging about the move to a hybrid system post-COVID, there is the need to retrain teachers to teach in this mode.



[180]https://moey.gov.jm/government-establish-six-new-stem-high-schools

Recommendations:

TG1 Roll out a targeted programme of re-training for all teachers at all levels of the education system.

In the short term:

TG1.1 Re-introduce and re-train teachers in the NSC curriculum. The full roll-out of the NSC curriculum has been interrupted by the pandemic. Teachers should be re-introduced to the NSC curriculum and trained to cope with its content and teaching methods (cross reference: 4.5 Curriculum and Assessment, section 1.2).

TG1.2 Train teachers in the STEAM-infused methodology of teaching. Ensure that teachers are cognizant of the STEAM methodology and trained in the philosophy, methodology and practices of STEAM. This will ensure that they can effectively guide students in and to use the curriculum based on this new teaching emphasis.

TG1.3 Train teachers in online and blended learning skills to ensure quality education during and after COVID-19 in Jamaica. Quickly scale up initiatives that emerged during the pandemic to incorporate all teachers at all levels.

In the medium term:

TG1.4 Consider the Quality Education Circle model for the placement of new STEM Schools. The MOEYI should consider the placement and model to be used for the new STEM schools. Consider a STEM Hub model that will see them serve as resources for all schools within a jurisdiction.

2. Professional Development

2.1 Linking Licensing, Professional Development, and Professional Advancement

Absence of in-service training of teachers will retard professional growth of teachers and create "missing gaps" between demands and actual achievement levels.[181] Noticeably, research has demonstrated that one of the ways through which the quality of education can be improved is through continuous teacher training.

The JTC includes in its remit the provision of on-going professional development for teachers. For example, they have been offering a course dubbed 'TECH-ing it to New Levels in G-Suite' which is a course designed to introduce teachers to the core features of G-Suite for Education and to expose them to the appropriate pedagogy to be employed when developing and delivering lessons using the various applications and tools in G-Suite. The course is offered over 15 hours using a mixture of synchronous and asynchronous methodologies. Courses are also offered by

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[181]Boisvert, N. (2020, August 20). *TDSB approves plan to reduce class sizes in Toronto neighbourhoods hardest-hit by COVID-19. Retrieved from CBC Radio-Canada:* https://www.cbc.ca/news/canada/toronto/tdsb-class-size-caps-1.5694104

ken-Maduako, I., & Taiwo-Oyatogun, A. (2015). Application of Team Teaching in the English Language Class. *Journal of Education and Practice, 6*(29).

Miller, A. (2020, January 03). *Creating Effective Professional Learning Communities.* Retrieved from Edutopia: https://www.edutopia.org/article/creating-effective-professional-learning-communities

the National College of Educational Leadership (NCEL) but are targeted specifically at teachers in leadership positions or those aspiring to become such. For example, they offer the Aspiring Principals Programme and the Effective Principals' Training Programme, targeting practicing principals and other senior staff. Similarly, in-service training programs in other countries offer teachers the opportunity to work on short-term tasks related to national examinations, for example, writing examination questions, administering examinations, or scoring them.

Professional development is currently linked to advancement through provisions made by the JTC for teachers to apply for the post of Master Teacher. A Master Teacher is in turn expected to be involved in providing training and upgrading to other teachers in the school system as well as providing training for new and inexperienced teachers.

Continuous professional development of teachers in Jamaica is not mandatory. Instead, educators state that teachers should be mindful of their own need for continuous professional development to maintain a high standard of teaching that improves student learning outcomes. A policy attempt was undertaken in 2017 for the establishment of mandatory teacher development for special education teachers. Though there is no evidence of policy approval, the policy would have allowed for teachers serving students with exceptionalities to complete a minimum of fifteen (15) hours of professional development in special education, within a three (3) year period. Mandatory continuous teacher training or development can be realized through the licensing of the teaching profession **(Cross reference: 4.2 The Teaching Profession, section 1.1.)**.

Recommendations

TG2 Make continuous professional development mandatory by making it a condition for the renewal of licenses.

In the medium term:

TG2.1 Work with JTC and NCEL on a scheme that defines professional development credits among other requirements for licensing renewal. The JTC and NCEL should define transparent requirements for the renewal of licenses for the teachers which include professional development credits.

TG2.2. Work with JTC and NCEL to manage the accreditation of continuous development courses. The opportunity exists to partner with multiple stakeholders to deliver professional development courses. The JTC and NCEL should provide an overarching framework for accrediting such courses ensuring that they support the training needs of the sector and contribute to the professional development of teachers.

TG3 Link professional development to professional advancement.
In the medium term the MOEYI should:

TG3.1 Work with JTC on a scheme that includes mandatory professional development credits in teaching career path. All career advancements including the non-administrative track proposed should include mandatory professional advancement credits (cross reference: 4.2 The Teaching Profession, section 1.2).

2.2 Refocused in-service training
A recent World Bank study notes that classroom time is not effectively and efficiently used by teachers to the potential detriment of student learning.[182] They note that "In Jamaica, observational data indicates that teachers only use 62 percent of the total class time for instruction. According to best practices, instructional time should be at least 85 percent of classroom time (Great Teachers, 2015), meaning that students in Jamaica are losing more than 20 percent of potential instructional time relative to global targets. The foregone time is equivalent to a full day of instruction per week. Most of the time lost is used on classroom management activities, such as taking attendance, cleaning the blackboard, grading homework, or distributing papers, which could be performed by a teacher aide. However, Jamaican teachers spend 11 percent of total class time in "off-task" activities (neither teaching nor managing the classroom), one of the highest rates in the LAC region (Great Teachers 2015). This could also suggest a need for improved school leadership and systems for monitoring and mentoring to improve classroom performance."

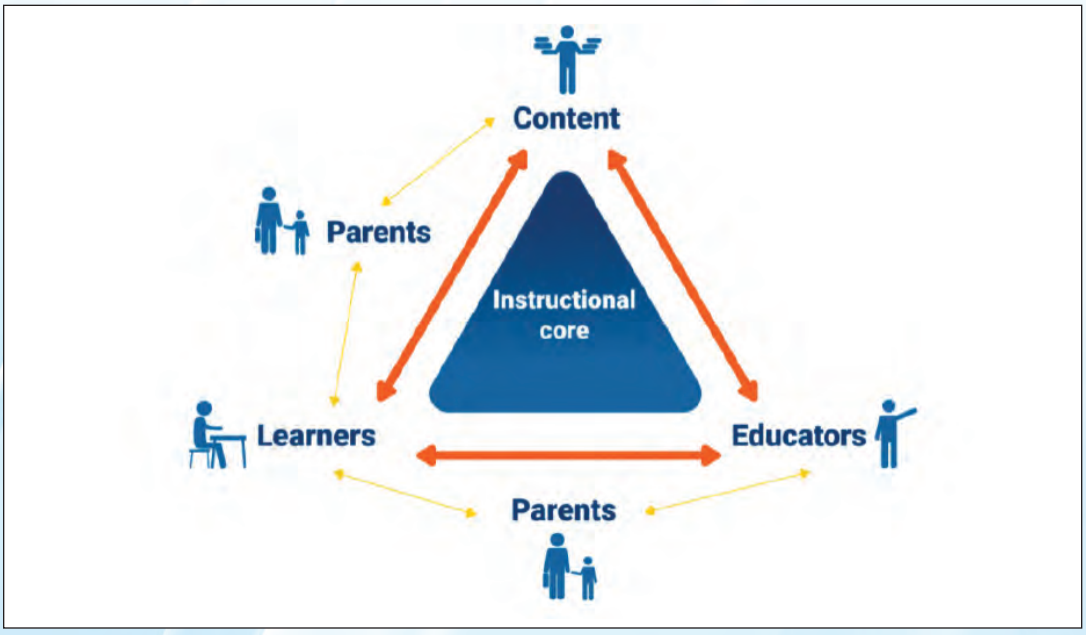
There are growing concerns about whether teachers have the requisite knowledge and skills to meet the needs of the students, and also about the limited connection that exists between the teachers and their pursuit of ongoing training once they assume responsibilities upon entering the profession. This comes as teachers are now expected to have much broader roles, such as, considering the individual development of children and young people, the management of learning processes in the classroom, the development of the entire school as a "learning community" and connections with the local community and the wider world. This raises concerns about the effectiveness of teachers to adapt to the demands of the profession and its emerging trends.

In order to improve students' learning outcomes, a radical approach needs to be taken to reshape in-service training. This includes structuring planning time for departments in the schools' schedules. Using continuous professional development, teachers would explore, for example, the importance of protecting instructional time, research and share successful strategies in lesson planning, classroom management and improving students' engagement in learning. Furthermore, with the heightened use of the online platform, teachers can more efficiently share with each other information on how to carry out their teaching responsibilities. Department heads should be given the responsibility to create a professional learning community (PLC) **(cross reference: 4.4 Teaching, section 4.2)** among their subject teachers.[183] [184] The Principal, as the instructional

[182]World Bank Group. (2021, June). Public Expenditure Review of the Education Sector in Jamaica, pg 69. [Draft] (Forthcoming).
[183]Xiaowei Yang, Hua Ran & Meng Zhang (2020) The Shanghai model: An innovative approach to promote teacher professional development through teaching-research system, Educational Philosophy and Theory, DOI: 10.1080/00131857.2020.1794155
[184]Miller, A. (2020, January 03). *Creating Effective Professional Learning Communities.* Retrieved from Edutopia:

leader, should develop, among the staff, a culture of collaboration and action research. Professional development efforts could therefore also include school leaders as well as teachers, with recognition of their unique role as both administrators and pedagogy leaders. More prominence should be given to the instructional core idea of teaching as an interaction between teacher, student and curriculum, with support where available from parents (see figure 26 below). The interaction is more important than any of the three elements viewed separately. To encourage this culture, the principal should find ways to acknowledge and celebrate those teachers and departments that are most successful in developing such practices. The JTC should recognize in a formal manner, the schools that are actively engaging in such activities and monitor and evaluate the outcomes. Where such efforts are successful, they should be published so that other schools can benefit from what has been learnt.

Figure 26: The Instructional Core



Source: Brookings, "Realizing the Promise: How Can Education Technology Improve Learning for All?" https://www.brookings.edu/essay/realizing-the-promise-how-can-education-technology-improve-learning-for-all/

Recommendations

TG4: Refocus in-service training to improve teaching effectiveness.

In the short term the MOEYI should:

TG4.1: Reconsider the focus of in-service training. Revise in-service training to emphasize efficient lesson planning, use of class time, strategies to improve student engagement, and more effective teaching techniques especially considering the shift to ICT.

TG4.2 Work with the NEI and JTC to monitor and evaluate teacher effectiveness and to formally recognize schools with best practices. NEI reports can be used to target schools for

refocussed in-service training. Best practice schools should be formally recognized with strategies published so that other schools can benefit from what has been learnt.

3. Accountability

3.1 Licensing, Appraisals, and Professional Development

Licenses in most jurisdictions are for predetermined fixed periods e.g. 3 or 5 years. Renewal of teachers' licenses are, then, tied to the attainment of optimum teacher performance based on the systems in place for their continual professional growth, thereby introducing accountability, and enhancing teacher quality and professionalization of the teaching career. Revocation and refusal of licenses further help to ensure the quality of teachers in the system.

The NESP 2011-2020 notes that "The absence of clearly established policies governing teaching standards has made it challenging to measure teacher performance at the primary and secondary levels. The weaknesses in the checks and balances that should hold all providers of educational services accountable mean that the system of accountability is inadequate. The institutional arrangements currently are unable to hold educational managers or educators accountable for the results of teaching and learning in classrooms, which are currently measured almost entirely by national and regional tests and examinations. The important components of an improved accountability system will include systems for ensuring teacher and education manager accountability, teacher licensing and professional development, the ability of the schools/principals to demand parental accountability, parents' interaction with the school on behalf of their children, and systemic support for the work in schools."[185]

Recommendations:

TG5: Ensure a robust and mandatory appraisal system linked to licensing and professional advancement.

In the short term:

TG5.1: Ensure that the Standards for Licensure (renewal) are aligned to the current standards for Teacher Appraisal by JTC. According to the Caribbean Community Task Force for Teacher Education, quality is assured through the system of teaching performance management, teacher appraisal and licensing.[186] Therefore, the standards for an ideal teacher can be understood based on the Teacher Performance Appraisal Descriptors[187] put forward by the JTC and as such, these standards should establish the criterion for licensure. These standards include but are not limited to:

- Understand the curriculum that embodies the subject(s) and sees its relationship to the attainment of educational and national goals
- Know how to integrate subjects to deepen understanding, being able to identify related concepts in other subjects and uses such concepts to strengthen the subject being taught.

[185] https://www.mona.uwi.edu/cop/sites/default/files/Jamaica_NESP_2011-2020.pdf

[186] Mark, P. (2013, April). Standards of Practice for the Teaching Profession in the Caribbean Community. Retrieved from file:///C:/Users/travi/Downloads/10+-+STANDARDS++DOC+final+revised+1.pdf

[187] MoEYI. (2020). Teacher Performance Appraisal Descriptors. Retrieved from file:///C:/Users/travi/Downloads/GENERAL%20BULLETIN%20202%20-%202020%20-%20Teacher%20Performance%20Appraisal%20with%20descriptors%20VII%20(1).pdf

- Access and keep abreast of knowledge and developments in the subject area, using technology and other sources of information.
- Know and is able to apply theories of learning, in particular, differentiated instructions and incorporate such understanding in the practice of teaching.
- Engage in reflective teaching and classroom investigative action (action research) to evaluate the impact of his or her instructional choices, action and interactions on the achievements of the learners.
- Foster competence, self-confidence and a desire for knowledge through a collaborative, supportive and an interactive teaching and learning environment.
- Integrate national goals into class organization and management to inculcate values and attitudes for social, cultural and economic development.
- Identify learning differences and the barriers that impede learning and demonstrates competency in adapting instructions to meet the diverse learning needs of students with exceptionalities.

In the medium term:

TG5.2 Take advantage of the online environment to create customized professional development programmes. Ideally the professional development courses should target growth areas highlighted in appraisals. The development of multiple online and on-demand courses can enable the customization of professional development so that it is targeted and linked to appraisals done.

TG5.3: Resource JTC and NCEL to adequately manage and exchange data (with each other and MOEYI) related to teacher appraisals. Given the proposed redefined intertwined roles of licensing, accountability, and professional advancement it is important to appropriately resource the relevant agencies to capture and exchange information. Roles need to be clearly defined. There should also be a seamless interface with MOEYI which manages payments.

4. The Teaching Environment and Teaching Tools

4.1 Student to Teacher Ratio

Research has shown that there is a correlation between class sizes and students achievements.[188] In 2017, the Ministry began working on a revised policy for the establishment of a teacher-pupil ratio.[189] The then minister proposed that an overall teacher-student ratio in schools be 1:25 with special provisions for technical areas to be 1:20, as it was found that teacher-student ratio had in some cases grown significantly.[190] This large student-teacher ratio was seen in schools such as Old Harbour Primary School where Principal Goode mentioned that as attendance grew, the student-teacher ratio was as much as 60:1. The recommendation made by the Task Force on Educational Reform 2004, to rationalize class sizes from Early Childhood to Secondary Schools should be implemented. Though less cost-effective, this rationalization has been tested in other

[188]Jepsen, C. (2015). Class size: does it matter for student achievement? *IZA World of Labor.* doi:10.15185/izawol.190

[189]JIS. (017, August). *Government Working To Achieve Teacher-Pupil Ratio Of 1:25.* Retrieved from Ministry of Education Youth and Information: https://moey.gov.jm/government-working-achieve-teacher-pupil-ratio-125

[190]*Gunn, T. (2020, March 21). Old Harbour Primary School Transformed Through CDB Support.* Retrieved from Jamaica Information Service: https://jis.gov.jm/features/old-harbour-primary-school-transformed-through-cdb-support/

countries who have subsequently decided to legislate fixed class sizes (Box 3). The early childhood sector has realized a reduction in class sizes since the start of the coronavirus pandemic, following guidelines from the MoEYI. For the zero to 12 months' cohort, the student-teacher ratio will be five to one; for the 13 to 35 months' cohort, groupings should be eight to one; and the three to five years' age cohort groupings of 10 to one. Effecting the reduction in class size will incur a cost and may require further infrastructural development in schools where limited space, among a myriad of other reasons, hamper the realization. of this. An alternative to infrastructural expansion is to add additional teachers to the classroom. The approach of **Teaching Teams** could be pursued as an alternative to reduce the student-teacher ratio.

Box 5

Florida and Toronto have mechanisms in place for mandatory class sizes which differ by grade. At the start of the 2010-2011 school year, Florida's law stated that core classes should have a maximum of 18 students in prekindergarten through grade 3, 22 students in grades 4 through 8, and students in grades 9 through 12 in each core class. Additionally, Boisvert (2020) mentioned that the Toronto District School Board (TDSB) has approved a plan to reduce kindergarten and elementary class sizes, primarily at schools in communities with a heightened risk of COVID-19. In communities with high COVID-19 transmission, schools have a 15-student limit, while Grade 1–8 classrooms will have a 20-student limit. In other schools, kindergarten classes are capped at 26 students, Grade 1 to 3 classes are capped at 20, and Grade 4 to 8 courses are capped at 27 students.

In countries such as **Barbados and Guyana** in the region, there is a policy preference for small class sizes. In Barbados for example, it was found that the average class has a teacher-student ratio of 1:12 for pre-primary schools. For primary schools on the other hand, it was found that the average student-teacher ratio at this level is 30:1. Secondary schools show an average class size of roughly 30 pupils with a student-teacher ratio being just around 18:1. In considering these differences, it is relevant to recall that while there are significantly fewer students enrolled in the Education system, more teachers are produced, relative to Jamaica. According to a report by the Inter-American Development Bank there are roughly 45,623 students in Barbados' education system. Of the 101 primary schools in Barbados there are approximately 25,039 students in both public and private primary schools and for the 29 secondary schools there are 20,584 students in both public and private schools and just under 3,500 teachers for the year 2020. On the other hand, in Guyana the ratio of students to teachers has been agreed and listed in the Memorandum of Agreement (MoA) signed with the Education Ministry and the Guyana Teachers Union (GTU). The MoA in Guyana currently requires 15 students to one teacher for nursery schools; 20 to one for Grades One and Two; 25 to one for Grades Three through Six; 25 to one for secondary schools and 15 to one for practical instructional centres.

According to Ken-Maduako & Taiwo-Oyatogun (2015), countries in the developed world have realized the significance of team teaching in the classroom, that is, where two teachers work together to teach a lesson. In Japan team teaching is employed where a native English speaker is paired with an assistant teacher who speaks the local language. Developing countries could

adopt team teaching because of their typical large classes as it has been proven that it is easier to manage large classes with two teachers than with only one teacher.[191] It has been highlighted however, that as a disadvantage team teaching makes more demands on time and energy as it will require members to arrange mutually agreeable times for planning and evaluation. This, among other challenges such as teachers with rigid personality types who may be wedded to a single method as well as a teacher's dislike towards other teachers on the team may become hindrances to the success of the team teaching approach. However, teaching teams cuts teaching burdens and boosts morale; reduces student-teacher personality problems and should an emergency arise, one team member can attend to the problem while the class goes on.[192]

Recommendations:

TG6: Reduce Student to Teacher ratios to create a more conducive physical and online teaching environment to facilitate student engagement and teaching effectiveness.

In the short term

TG6.1 Mandate classroom sizes and the Teacher: student ratio.

TG6.2 Pursue a Teaching Team model.

In the medium term:

TG6.3 Revise and update minimum infrastructure and equipment standards for classrooms and schools. Define standards to support teaching delivery with special emphasis on ICT standards to support online delivery ***(cross reference: Infrastructure Report).***

4.2 Multi-grade Schools

The multi-grade school is not a novel concept in education systems. It is widely practiced across various societies with a consensus that absence of a teacher should not result in diminished students' learning achievements. Multi-grade teaching is where a teacher teaches more than one grade at the same time in a single classroom. These classroom settings are structured to allow for direct observation and attention of the students by the teachers and vice versa. As such, in the multi-grade teaching classroom, the students are seated in a circle / in small groups while getting the opportunity to look at the teacher directly. These groups are as follows Fully self & supported group, Partially teacher supported group, Fully teacher supported group, Peer group supported, and TLM users group for learning (Self Learning).[193] The multi-grade method of teaching is seen in countries such as the Philippines, Vietnam, China, Pakistan, Indonesia, Nepal, Australia, England, Canada, Germany, Switzerland, Netherland, New Zealand and United States of America.[194]

Research suggests a number of benefits to the multi-grade model. See Box 6.

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[191]ken-Maduako, I., & Taiwo-Oyatogun, A. (2015). Application of Team Teaching in the English Language Class. Journal of Education and Practice, 6(29).

[192]Buckley, F. (n.d.). Team Teaching Advantages, Disadvantages. Retrieved from Education State University: https://education.stateuniversity.com/pages/2493/Team-Teaching.html

[193]Multigrade teaching strategies. nd.

[194]Multigrade teaching strategies. nd.

Box 6: Benefits of the Multi-Grade Model

The multi-grade model this model is seen as an innovative or strategic measure in which there is a combination of students from two or more grade levels, as a matter of choice in order to address similar learning or social needs of students.[195] Another factor promoting the use of multi grade setting is due to its ability to facilitate the different achievement levels of students. The achievement level of students differs in each standard and in each section in primary schools. Some students may not attain the requisite skills in the content for their grade while some may very well be exceeding the expected performance at that level.[196] In the same light, handling gifted or average students or those with learning challenges, as well as special children in a classroom with different grades creates a chance for all the students to mingle freely with other students in their learning process.[197] In situations like these, multi-grade classroom settings are seen as more beneficial than a threat to students' achievements.

On top of this, there are positive student returns from multi-grade classroom settings. Research has shown where this method of schooling helps students to develop the skill of data collection and communication from an early age. These settings also help with developing co-operative learning, group learning, thereby fostering positive attitude among the students. Additionally, students strengthen their learning by explaining the learned concepts to the other students while developing social habits like helping attitude, co-operation, and service mentality. Group discussion predominates in multi-grade environment which allows students to give up shyness and fear and helps one another to improve oneself.

On top of this, there are positive student returns from multi-grade classroom settings. Research has shown where this method of schooling helps students to develop the skill of data collection and communication from an early age. These settings also help with developing co-operative learning, group learning, thereby fostering positive attitude among the students. Additionally, students strengthen their learning by explaining the learned concepts to the other students while developing social habits like helping attitude, co-operation, and service mentality. Group discussion predominates in multi-grade environment which allows students to give up shyness and fear and helps one another to improve oneself.[198]

Research has nevertheless shown where multi-grade institutions face challenges in facilitating quality teaching and learning. This is primarily due to the fact that the multi-grade approach forces schools to combine as many as three sets of cohorts of students in a single classroom to be guided by only one teacher.[199] Though ideally, multi-grade schools should allow for teachers to lend themselves to the recognition of students' diversity, such settings do not guarantee these outcomes. Additionally, strenuous efforts need to be made to build assessment tasks for self-

[195]Ministry of Education, Youth and Information. National Standards Curriculum. Companion Manual for the Jamaican Multigrade Context. 2020.
[196]Multigrade teaching strategies. nd.
[197]Multigrade teaching strategies. nd.
[198]Multigrade teaching strategies. nd.
[199]https://www.jamaicaobserver.com/news/Three-classes--one-classroom--one-teacher_9710663

study guides based on the notion of "gradeness", which would require mastery of a learner's grade before they are allowed to progress to the next.[200]

Whereas the rationale for implementing and maintaining the multi-grade classroom structure in the countries referred, is salutary, the same is not true in the Jamaican context as can be seen from the following research information.

An interview with a principal of a multi-grade school provided the following information.
Principals are required to lead the school, perform all administrative and financial tasks as well as teach. Multigrade schools do not to have the range of administrative and bursarial staff and it is only recently that clerical assistants have been provided. They also do not have guidance counsellors. With only one teacher per multi-grade, teaching and learning becomes a challenge when the teacher is absent. Principals are also not paid differently from teachers. When principals are to go on leave no one wants to act or take on additional responsibilities. Principal of multi-grade schools do not get remote allowance.[201]

In 2018, multi-grade schools comprised approximately 20% of primary schools across Jamaica, which is a reduction from the over 30% reported in the 1990s. There are 286 multi-grade schools currently operating in Jamaica. Of this total, the highest concentration is in Port Antonio, which is located in region 2 with 69 such schools. Port Antonio is followed by Montego Bay (Region 4) with 56 schools and Mandeville (Region 5) with 48. Apart from these locations there are 19 multi-grade schools in Kingston (Region 1), 34 in Brown's Town (Region 3), 31 in Old Harbour (Region 6), and 29 in Clarendon (Region 7).

Figure 27: Distribution of multi-grade schools per region

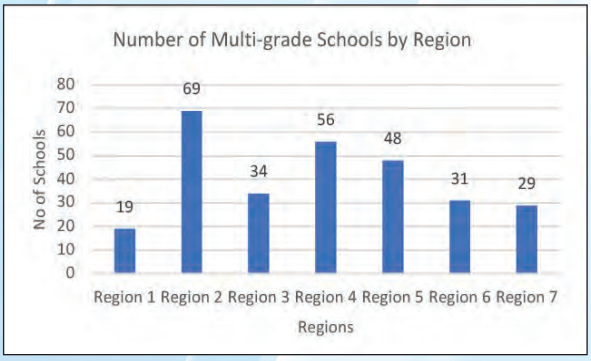


Table 16: Number of schools per region.

REGIONS		NO OF SCHOOLS
REGION 1	Kingston	19
REGION 2	Port Antonio	69
REGION 3	Brown's Town	34
REGION 4	Montego Bay	56
REGION 5	Mandeville	48
REGION 6	Old Harbour	31
REGION 7	Clarendon	29
GRAND TOTAL		286

[200]http://multigrade.ioe.ac.uk/fulltext/fulltextLittle.pdf
[201]nterview with multi-grade principal.

Research has nevertheless shown where multi-grade institutions face challenges in facilitating quality teaching and learning. This is primarily due to the fact that the multi-grade approach forces schools to combine as many as three sets of cohorts of students in a single classroom to be guided by only one teacher.[202] Though ideally, multi-grade schools should allow for teachers to lend themselves to the recognition of students' diversity, such settings do not guarantee these outcomes. Additionally, strenuous efforts need to be made to build assessment tasks for self-study guides based on the notion of "gradeness", which would require mastery of a learner's grade before they are allowed to progress to the next.[203]

Hamwalk Primary, is an example of a multi-grade schools in Jamaica. The school was inspected by the NEI in 2013. The inspection report indicated that the quality of teaching and learning at the institution was unsatisfactory. The report stated that most teachers had a secure understanding of the subjects they taught. However, it was found that teaching and learning were negatively impacted by teachers who were not versed in the use of multi-grade teaching strategies. They found that while teachers had access to the multi-grade manual, they were not trained to effectively use it to enhance learning.[204] A 2012 report by the NEI also revealed that similar issues prompted the Waldensia Primary School to reduce the number of multi-grade classes, in an effort to meet students' academic needs. The NEI reported that parents at the school raised concerns about the multi-grade classroom setting, safety and security, health and the academic performance of students. These concerns were further supported by the fact that in some multi-grade classes, many lessons do not include strategies to reach the different ability levels, resulting in students becoming restless, noisy and unruly.[205]

In other countries such Japan, there is a substantial number of multi-grade classes, especially at the primary level in the less populated areas of the country. Contrastingly, multi-grade classes in Japan never comprise more than two grades. A special two-year cycle curriculum, based on the general national curriculum policy, is often developed for multi-grade classes on the local level. According to this curriculum pupil of two grades are taught as a single class.[206]

Recommendations

TG7: Review the multi-grade school structure to determine its effectiveness in achieving optimal student learning with a view to improve its operation or eliminate it from the education system.

In the short term:

TG7.1 Reduce classes to no more than two grade cohorts being taught together.

TG7.2 Train teachers of multi-grade classes in differentiation skills.

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[202]https://www.jamaicaobserver.com/news/Three-classes--one-classroom--one-teacher_9710663

[203]ttp://multigrade.ioe.ac.uk/fulltext/fulltextLittle.pdf

[204]https://jis.gov.jm/estp/docs/Financial%20Inspection%20Reports/Region%206/Hamwalk%20Primary%20School%20Final%20Inspection%20Report.pdf

[205]https://jis.gov.jm/estp/docs/Financial%20Inspection%20Reports/Region%203/Waldensia%20Primary%20School%20Final%20Inspection%20Report.pdf

[206]http://multigrade.ioe.ac.uk/fulltext/fulltextJapPerSriViet.pdf

TG7.3 Train teachers in social and emotional learning.
TG7.4 Develop a system of voluntary parent assistants in each class to help in classroom management.
TG7.5 Introduce a shared resources model for administration, bursarial and guidance staff with nearby schools.
TG7.6 Where the number of students in a class is over 20, provide teaching assistants.
TG7.7 Consider using subject teachers who teach across grades instead of one teacher per multi-grade.
TG7.8 Provide incentives for principal who carries additional responsibilities.

In the medium term:
TG7.9 Monitor and evaluate the operation of these schools on a termly basis.
TG7.10 Use the data captured after one year to determine the continuation of this structure.
TG7.11 Where the outcome of the evaluation shows that the school is failing, assist communities by providing transportation for the students to attend single grade schools in other districts.
TG7.12 Make provision to relocate teachers to other institutions, in the event that the school has to be closed.

4.3 Professional Learning Communities

According to Miller (2020), Professional Learning Communities (PLCs) harness an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. It is a common and proven practice geared at promoting teacher collaboration thereby increasing student achievement.[207] Furthermore, Professional learning communities tend to serve two broad purposes: (1) improving the skills and knowledge of educators through collaborative study, expertise exchange, and professional dialogue, and (2) improving the educational aspirations, achievement, and attainment of students through stronger leadership and teaching.[208] This approach would be beneficial to Jamaican educators and is an effective attempt at eradicating the unwillingness of teachers to work together. Simultaneously, the Jamaica Teaching Council acknowledges the importance of collaboration among teachers. In fact, they mentioned that teachers working with their peers should be planned and not left to chance. Staff planning time is absolutely necessary in order to ensure meaningful classes. Members of staff have various strengths and they should use their strengths to improve the teaching and learning environment. In a practical sense, examples are seen in technical classes where a student may be required to construct furniture; these students would undertake the mathematics related to the construction of the furniture. Another example is seen in the relationship with science subjects and technical subjects; in science they can learn about the furniture polish, content and behaviour of the substance.[209] This is mutually beneficial to the teacher and the students as the teachers get to reach students based on their areas of

[207]Miller, A. (2020, January 03). Creating Effective Professional Learning Communities. Retrieved from Edutopia: https://www.edutopia.org/article/creating-effective-professional-learning-communities
[208]Edglossary. (2014, March 3). Professional Learning Community. Retrieved from The Glossary of Education Reform: https://www.edglossary.org/professional-learning-community/
[209]Council, J. T. (2015). Handbook of Strategies Enabling Boys to Learn. Kingston: The Commonwealth.

interest while learning novel ways of delivering the curriculum. While students on the other hand garner knowledge from both subject areas.

Recommendation:
TG8 Establish Professional Learning Communities in Schools

In the medium term:
TG8.1 Work with the JTC to establish PLCs in schools. The advent of greater use of technology also affords the use of PLCs across schools.

4.4 Adequately Resourced for Online teaching

Even before the pandemic, ICT was being used more and more to enhance teaching-learning interaction, as demonstrated by approaches such as replacing chalkboards with interactive digital whiteboards, using students' own smartphones or other devices for learning during class time, and the "flipped classroom" model, in which students watch lectures on the computer at home and use classroom time for more interactive exercises. There was always a need to expand the use of ICT and therefore, it remains of grave importance that the Ministry of Education Youth and Information (MOEYI) make available, the necessary resources for facilitating learning in the digital era, as done in other countries (Box 6).

The COVID-19 pandemic has, however, highlighted the digital divide that not only exists among students but teachers. For teachers to successfully navigate the digital space and effectively prepare students for the digital era in which the world is situated, they must be adequately equipped with the necessary resources. Despite efforts by E-Learning Jamaica Company Limited to distribute tablets and accessories to approximately 21,000 eligible teachers island-wide under the Tablets for Teachers Programme, deficiencies exist. There are questions as well around how sustainable the model is. A further challenge that has emerged is that tablets are proving inadequate for all the planning and teaching tasks of teachers and there is a need for laptops. The model utilized in countries such as New Zealand may be considered. In New Zealand, under the Laptops for Teachers (TELA) scheme, all permanent full-time and part-time teachers in state schools can lease selected laptops, tablets, and Chromebooks for a three-year period with the government paying up to two-thirds of the cost and teachers or schools covering the remaining third. Principals can access a fully subsidized device on a three-year lease.[210]

[210]TKI. (n.d.). TELA+ digital devices for teachers and principals. Retrieved from Te Kete Ipurangi: https://elearning.tki.org.nz/Ministry-initiatives/Hardware2

Box 6: Online Resources

In Chile, the government spent years and more than $200 million putting computers and internet connections in almost every classroom of the country's public schools by 2009. They also expanded mobile computer labs for third graders and a set of netbooks that rotate from classroom to classroom, one per student.

In India, the concept of ICT in schools was initially introduced in December 2004 and later revised in 2010 by the Central Government to ensure opportunities for students enrolled at the secondary level of education. From then, the Government of India has launched several efforts to increase the use of ICT in the education sector. The digital India movement has encouraged the usage of ICTs in the teaching-learning process.

Recommendations

TG9 Ensure teachers and school are adequately resourced to deliver online teaching.

In the medium term:

TG9.1 Implement schemes for teachers to access laptops and accessories. This could be through government distribution and lease schemes and/or brokered arrangements with the private sector to offer concessions.

4.5 Curriculum and Assessment

The curriculum is the formal and informal content and processes by which learners gain knowledge and understanding, develop skills and alter attitudes, appreciations, and values under the guidance of a school. It involves a range of interactions and deliberations and is influenced by a range of factors. One cannot overstate the importance of the curriculum to the educational process. Changes to any aspect of the curriculum have a butterfly effect on other aspects of the education system related to teaching and learning and on educational outcomes.

As previously noted, the National Standards Curriculum (NSC) was piloted in selected schools in Jamaica between 2014 and 2016 and fully rolled out in September 2016. The NSC guides instruction for all grades from 1 through 9, spanning six years of primary education and the first three years of secondary education. **(Cross reference: 4.4 Teaching, section1).** Assessment for students at the primary level is guided by a continuous national assessment programme. Curriculum in the upper years of secondary school is primarily guided by the examination being pursued such as CSEC, City and Guilds, CAPE, NVQ-J. CSEC and CAPE (offered by CXC) and City and Guilds are the main assessments done at the secondary level.

The MOEYI in seeking to cater to the diverse needs of students in order for them to maximise their capabilities has created a curriculum for alternative pathways to receiving an education at

the secondary level. The Alternative Pathways to Secondary Education (APSE)[211] programme defines a 7-year (Grades 7-13) period of instruction for students on three learning pathways. Of the three learning pathways, pathway two is expected to be a transitional programme where at grade 8 students are assessed and placed on pathway one or three. Placement in a pathway is primarily decided upon from the PEP assessment results. APSE is intended to provide a customizable education experience. The examinations that students pursue between grades 10-13 is dependent on the learning pathway on which he/she is placed by grade 9. Students on pathway three transition to the Career Advance Programme (CAP) from grades 10 to 13 which helps students to transition to careers of their choice.

Curriculum development for children in primary and secondary schools is the responsibility of the Core Curriculum Unit of the MOEYI. The unit is divided into six parts: Cultural Studies (Drama, Music, Physical Education, Religious Education); Functional Education (involving cross-subject and cross-grade co-ordination): Languages (Language Arts, Spanish, and French); Mathematics & Information Technology; Science (Biology, Chemistry, Physics, Integrated Science) and Social Sciences (Geography, History, Social Studies). The Core Curriculum Unit is responsible for updating the curriculum. Updates to the curriculum must be executed in line with the guidelines stipulated in the Piloting Protocols for the Revised Jamaican Curriculum (PPRJC). The Core Curriculum Development Unit monitors the implementation of the curriculum through its Curriculum Monitoring Teams (CMT) and school-based Curriculum Implementation Teams (CITs).

As curriculum is developed or updated a programme of activities referred to as co-curricular activities is expected to be developed and implemented to compliment the academic development of students. Co-curricular activities typically focus on the development of students' moral values, character development and social and intellectual skills. These are usually offered through various clubs and societies in schools. Based on the establishment of the units within the MOEYI there seems not to be a dedicated unit responsible for the development, implementation and evaluation of co-curricular activities. Schools are tasked with developing such programme of activities for students' enhancement.

1. Curriculum Alignment and Simplification

1.1 Alignment of the NSC with educational philosophy, development goals & national socio-cultural issues.

The MOEYI's vision is an education system that is innovative, inclusive and one that provides an enabling environment for the creation of socially conscious and productive Jamaicans **(Cross reference section 3.1)**. The NSC aims to enhance the quality of education offered to learners and improve the general academic performance, attitude, and behaviour of students, which will redound to the positive shaping of the national social and economic fabric, while placing emphasis on project-based and problem-based learning, with science, technology, engineering, arts and mathematics at all levels.[212] Despite this, there are inconsistencies in regard to the NSC's alignment to the Vision 2030 of Jamaica. Under Goal 1 of the vision 2030, a part of the philosophy

[211]Ministry of Education Youth and Information. "Fact Sheet APSE –CAP". N.d.
https://moey.gov.jm/sites/default/files/APSE-CAP-Factsheet.pdf
[212]Stennett, T. (2018, April 18). National Standards Curriculum Promotes Inclusive Learning. Jamaica Information Service.
https://jis.gov.jm/national-standards-curriculum-promotes-inclusive-learning-morris/

of education is to empower the citizens by focusing on achievement of a high level of human resource development (education, training, and health system reform), fostering of innovation and cultural preservation, and strengthening of systems geared to protecting vulnerable groups in the society.[213]

A main function of the educational system is to transmit the cultural heritage to the new generation.[214] As such, subjects such as History and Civics should be considered mandatory throughout schools at all levels, and act as a supplement to the educational philosophy of the country. History as a subject helps students to understand the evolution of their society and how people and society behave. This is especially crucial for societies like Jamaica which were once colonised. History as a subject is not taught at the primary level and is offered as optional at the secondary level. The NSC utilises themes from Civics as a problem-solving approach at grades 1 -4 and only as a discrete subject at grades 7-9. Some schools treat civics only as an enrichment area rather than as core curriculum that must be on the timetable of all schools.

A not unrelated idea is the need for curriculum to be responsive and aligned to national circumstance. For example, there have been urgent and repeated calls for greater emphasis on values and attitudes in curriculum at all levels,[215] especially during (but not restricted to) the earlier formative ages. There are other national circumstances that also warrant curriculum alignment or adjustment in the pursuit of making students more resilient. For example, adjustments aimed at integrating and emphasizing conflict resolution and developing negotiation skills in the face of greater exposure to aggression and violence; promotion of mental health; and coping in disasters and adapting to changes in norms driven by (for example) climate emergency and the pandemics, seem especially pertinent now. The NSC curriculum does recognize some of these areas. For example, aspects of values and attitudes are covered in Health and Family Life Education (HFLE) taught in many schools and also as a part of Social Studies. One challenge, however, is with the varied level of emphasis placed on these areas when they are not part of the main assessment exams. On the flip side, when included in assessed subjects they are often viewed as topics to be covered for that purpose as opposed to being developmental. It is also to be noted that in 2020 the MOEYI issued guidelines for modification and adaptation of the NSC in response to the pandemic.[216]

Recommendations:

CA1: Review the NSC curriculum to ensure alignment with educational philosophy, Vision 2030 goals, and in response to national socio-cultural issues.

In the short term:

CA 1.1: Mandate greater emphasis in both primary and secondary schools related to civics, history and citizenship. While not eliminating the flexibility of schools with respect to mode of integration, mandate that at both the primary and secondary levels there should be coverage of civics, history and citizenship in at least one mandatory subject area.

[213]Vision 2030. "Chapter 2: National Goals"
http://www.vision2030.gov.jm/Portals/0/NDP/Chapter%202%20(web).pdf
[214]Mathews, S., & Arulsamy, S. (2020). Role of Education in Transmitting Culture in Society.
[215]Gleaner. "Society in shambles - Students want values and attitudes in curriculum to rescue country".
https://jamaica-gleaner.com/gleaner/20121115/lead/lead1.html
[216]Ministry of Education Youth and Information. "Curriculum focus & Guidelines for Modification and Adaption". 2020.
https://educate.gov.jm/wp-content/uploads/2020/11/GENERAL-BULLETIN-175-2020-CURRICULUM-FOCUS-_-GUIDELINES-FOR-MODIFICATION-AND-ADAPTATION.pdf

In the medium term:
CA1.2 Review and appropriately revise children's curricula to include resilience. This includes a focus on moral behaviour, conflict resolution skills, promotion of mental health, skills in negotiation, coping in disasters, and adapting to changes in norms driven by e.g., climate emergency, pandemics.

1.2 Review of the NSC since the implementation

Curriculum evaluation is a necessary aspect of the educational system of any country. It provides a basis for decision-making on curriculum policy, ongoing curriculum adjustment, and feedback on the curriculum implementation process. It is the usual practice in most of the developing countries to update the curriculum every 5 - 10 years. For example, Korean schools follow a national curriculum developed by the Ministry of Education and revised every five to 10 years. In developed countries such as Finland, the curriculum is managed by the Finnish National Agency for Education (EDUFI) which leads the curriculum development work every ten years. The roll-out of the NSC began five years ago in 2017. The pilot phase of the NSC implementation began in 50 schools. Given that it is a fairly new curriculum governing much of the primary and education years, and that it is premised in part on experiential learning and infusion of STEM methodology **(Cross reference 4.4 Teaching, section 1)** which would have been impacted by the pivot to online learning due to the pandemic, there is merit to a review of its implementation five years in. There is further value in undertaking a review of the NSC given concerns about how its pilot roll-out was reviewed. The NSC was tested at the primary level (grades 1 to 6) during a pilot phase which commenced in January of 2014 and continued through to May 2014.[217] The use of monitoring and evaluation (M&E) guidelines governing implementation, as established in the PPRJC, are reported on in a 2014 Monitoring Report by The Programme Monitoring and Evaluation Unit in the MOEYI. The report highlighted breaches to the guidelines established in the PPRJC. For example, the M&E report 1 stated that the three-tier approach for monitoring and evaluation was not effected in schools, as should have been the case. "Instructional walkthroughs" was the only monitoring tool recommended by the PPRJC that was adhered to. Other tools, for example, standardized classroom observations schedules or monitoring forms were never utilised. Instead of adhering to the tools and guidelines outlined by the pilot protocol, principals used the established system for the general monitoring of school operations.

Monitoring and Evaluation (M&E) Reports 1&2 also pointed to challenges to the effective implementation of the NSC implementation. Issues included teacher's unwillingness to interrupt students' preparation for national exams, administrators' inability to supervise the pilot process as they were not included in orientation activities, the inability of schools to include new subjects in what is considered to be an already overcrowded time-table, and the inability of teachers to deliver subjects such as Spanish, Visual Arts, Resource and Technology, Physical Education, Music and Drama.

Recommendations:
CA2: Commence an evaluation on the last five years of the implementation of the NSC.

[217]Programme Monitoring &Evaluation Unit. An Assessment of the National Standard Curriculum Monitoring Process. p. 27, Ministry of Education, Youth and Information. Monitoring and Evaluation Report of Phase 2 of the Implementation of the National Standards Curriculum.

In the short term:

CA2.1: Commission either a task force or research-based study to evaluate the state and effectiveness of various aspects of the NSC and its implementation. The importance of the NSC as the governing curriculum through to mid-way secondary school is not to be missed. The use of a Task Force or study is consistent with methods recommended by UNESCO and the International Bureau of Education. Attention should be paid to:

- appropriateness and adequacy of training of pre-service and in-service teachers in the NSC implementation methodologies. Especially preparation of primary trained teachers to teach Spanish, Visual Arts, Resource and Technology, Physical Education, Music and Drama
- alignment of the NSC to the curriculum in teachers' colleges and TVET training institutions
- effectiveness of the curriculum content, existing pedagogies, and instructional materials
- how the roll-out of NSC has been impacted by the pandemic
- sufficiency and appropriateness of NSC content for a level of learning and stage of development of students
- level of complexity in NSC layout and language
- appropriateness and applicability of subjects offered by NSC
- level of integration of ICTs
- level of appropriate utilisation of principles and strategies associated with STEAM methodology; fidelity of implementation of NSC
- how data is used by teachers to inform teaching and learning decision-making

1.3 ICT integration in NSC in primary schools.

The NSC emphasises the use of Information and Communication Technology (ICT).[218] Jamaica is, however, faced with resource constraints as it relates to implementing ICT in schools across the island **(cross reference 4.4 Teaching, section 4.3).** In fact, one of the main impediments to the implementation of the revised curriculum was the lack of ICT resources.[219]

Despite this, there are considerable advantages to introducing ICT from the earliest stages of education linked to the development of an IT comfortable and knowledgeable workforce. Research has shown that when used to support learning goals in the primary school curriculum, ICT can actively promote children's learning throughout the curriculum, including their literacy and calculation skills, high-level (critical thinking, creative thinking, problem-solving) skill, collaboration and interpersonal skills as well as social skills. Perhaps most importantly, ICT promotes the differentiation of the curriculum to suit the needs of the range and the learning style of individual children. In this way, ICT can provide teachers with powerful teaching resources to help ensure that all children can succeed as learners.[220] The delivery of the NSC is enhanced with the use of ICT and the Aesthetics. The use of ICT such as Internet applications, CD-ROMs, video technology and various computer attachments and software programme will bring about more active, and collaborative learning through students' engagement in ICT-based learning environments.

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[218]https://ncel.gov.jm/content/jamaica-cutting-edge-curriculum-design-national-standards-curriculum

[219]Ministry of Education, Youth and Information. Monitoring and Evaluation Report of the Pilot Implementation of the National Standards Curriculum.

[220]"Information and Communications Technology (ICT) in the Primary School Curriculum: Guidelines for Teachers". https://www.curriculumonline.ie/getmedia/4adfbc22-f972-45a1-a0ba-d1864c69dff2/ICT-Guidelines-Primary-Teachers.pdf

Studies have, however, also show that if used inappropriately or overused, technology may potentially affect students. When using technology in teaching, teachers need to be aware of the potential obstacles that technology may bring to the teaching process. Some of the negative effects of technology in today's classrooms are that it takes up valuable learning time, may be overused and take away from the development of social skills that comes from human interaction, and may turn the educational experience into a student's game. If students lack experience in technology in class, class time is often wasted on technical issues. In addition, teachers also face the difficulty of filling a class with students of different skill levels. In many schools, most students have no computer experience. Teachers may have a large proportion of students with little computer science experience. Although technical education for these children is very important, it must be carried out at a speed that meets everyone's needs, otherwise, more learning time will be wasted.



Recommendations:

CA3: Promote ICT integration in NSC in primary schools as a means of enhancement but not as a primary method for teaching and learning.

In the short term:

CA3.1 Equip all primary schools with ICT. The use of ICT should be seamlessly integrated into teaching and learning at the primary school (cross reference 4.4 Teaching, section 4.3; Infrastructure Report).

CA3.2 Target tablet distribution schemes at the primary level. All children entering secondary level should be competent and comfortable with the use of ICT.

In the medium term:

CA3.3 Make the use of ICT to enhance teaching of the NSC curriculum an important focus of in-service training at the primary level. It is important that teachers at the primary level be trained in how to use ICT so that it enhances teaching and builds student competence, but not as the primary method of teaching (cross reference 4.4 Teaching, section 4.2).

1.4 A simplified curriculum framework for alternative curriculum pathways to success

Ideally the education system should be such that it allows students to access multiple pathways for success based on their gifts and talents. Within the Jamaican Education system, APSE and CAP are viewed as an alternative pathway programme for students' success. Rolled out in 2016, APSE aims to provide students with a tailored curriculum and ensure that each learner performs at his/her fullest potential, based on aptitude, interest and ability.[221] At the time of its initiation, students were placed in one of three pathways based on their performance in the Grade Six Achievement Test which has now evolved into the Primary Exit Profile.[222]

The challenge with APSE is that currently it is seen as a streaming and remedial mechanism rather than a mechanism that provides a pathway for success for all students. This is linked to the fact that it is PEP scores that are used to determine pathways, and those pathways only become accessible at the secondary level. The result is that under APSE a bulk of students (especially students on Pathways II and III) are sent primarily to non-traditional high schools lacking the prerequisites they should have garnered from basic and primary school. This strongly associates the alternative or parallel pathways to remedial learning. Additionally, the progress of the APSE approach is further stifled by the MOEY&I and the schools' inability to provide the needed resources to cater to the students' needs.[223] This results in further challenges in the classroom as secondary trained teachers are forced to re-teach the prerequisites thus resulting in further delays in the teaching of the age-appropriate prescribed curriculum, especially for mathematics and English language.

As an alternative pathway to educational success and as a transition from Pathway III of the APSE programme, CAP is focused on providing opportunities for all students (ages 16-18) to identify, understand, choose, and prepare for careers and occupations of their choices. Like APSE, CAP is viewed as remedial and for underperforming students. This programme targets students in grades 12 and 13 and provides a list of subject areas namely Technical and Vocational Skills, Entrepreneurship, Mathematics, English Language, Coaching and Mentoring, and Values-Based Learning and Citizenship.

A curriculum framework is needed that ensures a balance between cognitive and noncognitive skills in the curricula and shows how students transition in different ways from one level of the education to the next and ensures comparability of opportunities provided by each pathway.

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[221] https://moey.gov.jm/tags/apse

[222] Ministry of Education Youth and Information. "APSE: Gov't Launches Alternative Pathways To Secondary Education. https://jamaica-gleaner.com/article/news/20160323/government-launches-alternative-pathways-secondary-education-initiative

[223] The Gleaner. "Government launches Alternative Pathways to Secondary Education initiative". March 23, 2016. https://jamaica-gleaner.com/article/commentary/20200211/daniah-mignott-apse-needs-support

Recommendations:

CA4: Revamp APSE and CAP or develop a simplified curriculum framework that provides alternative curriculum pathways to success mapped from early childhood through tertiary. Scores alone should not be used to place students as there are various factors that may affect a student performance. Some students are simply not good test takers. A curriculum framework that allows parents and students to envision different ways in which they can be successful based on their strengths may help reduce the number of students we label as remedial and failing ***(cross reference 4.5, Curriculum and Assessment, section 3.2)***.

2. Core standards for Curriculum Enrichment

2.1 A Co-curricular curriculum

Research has proven that co-curricular activities form an important aspect of students' life.[224] Within the Jamaican culture, many parents see co-curricular as time-wasting and as such prevent their children from indulging in them.[225] Co-curricular activities enhance and supplement classroom learning by emphasizing social, emotional, and physical development (cross reference: 4.6 Out of School factors, section 2). Additionally, they provide opportunities for informal learning and life experiences, build leadership and organisational skills, and develop students' talents, skills, and interests.[226] The National Education Inspectorate has demonstrated in its reports the correlations between well-performing schools and an effective curriculum enhancement programme, as well as the absence of and inadequacy of such programme in poorer performing or less effective schools. Additionally, there is significant academic underperformance among schools situated in communities with high levels of violence, including those under Zones of Special Operations and Enhanced Security Measures. Notwithstanding, there is no integration between the behaviour-change objectives for school and community-wide behaviour change objectives formulated as part of national-security interventions. Extra-curricular activities present an opportunity for this integration.

Schools should provide a menu of activities and allow all students to participate in some way, no matter their gender, language, background, physical condition, intellectual capacities, or out-of-school responsibilities. For example, they can offer activities, such as intramural sports, that require less time and involve less intense competition than traditional offerings. Similarly, schools should offer activities on a schedule that meets students' differing needs. Some schools may need to rethink policies that prevent students from participating if they do not meet minimum academic and behaviour thresholds. Such policies often do more harm than good, blocking marginalized students, especially, from opportunities to interact with peers and become more connected to the school community. Barring students from activities because of their grades will not necessarily have a positive impact on their classroom performance, but it will exclude them from activities that tend to build character, self-esteem, confidence, and motivation, which often translate to academic success. Some countries have moved towards what is called a

[224]Work towards extracurricular activities - Jamaica. (n.d.). Jamaica Education. https://www.jamaicaeducation.info/career-options/career-guide/work-towards-extracurricular-activities.html

[225]Work towards extracurricular activities - Jamaica. (n.d.). Jamaica Education. https://www.jamaicaeducation.info/career-options/career-guide/work-towards-extracurricular-activities.html

[226]The Gleaner. (n.d.). Education Matters | Clubs and Uniformed Groups Key Allies in Students' Development. The Ministry of Education Youth and Information. https://moey.gov.jm/education-matters-clubs-and-uniformed-groups-key-allies-students%E2%80%99-development

curriculum for students' well-being. One drawback is that at present it is schools that are challenged with bearing the cost of implementing and sustaining enrichment programmes for the benefit of students. While there is budgetary support from the Ministry of Education Youth and Information for schools, no specific provisions are made for the financing of enrichment programmes within schools though schools are encouraged to implement these programmes.

Recommendations

CA5: Implement core standards for a basic mandatory and uniformed co-curricular curriculum structure for all schools to be used alongside the formal curriculum.

In the short term:

CA5.1: Expand the mandate of the Curriculum Unit to include developing, implementing, and monitoring a co-curricular curriculum. This should include a list of suggested standard co-curricular clubs and societies for all schools mapped against the likely emotional, physical, and social well-being provided for students and parents through these activities.

CA6: Improve access to, co-ordination of and integration of extra-curricular activities in especially under-performing schools, particularly those with behaviour challenges and/or those located within Zones of Special Operations.

In the short term:

CA6.1 Implement nationally available extra-curricular activities with centralised coordination and shared monitoring, evaluation and learning.

CA6.2 Create MOUs between professional groups and MOEYI to support teacher involvement in and extra-curricular activities in schools.

In the medium term:

CA6.3 Provide a budget for extra-curricular activities in schools

2.2 Co-curricular activities and Graduation

There should be a National School Leaving Certificate that incorporates co-curricular/ extracurricular activities as a part of the requirement for the award of same. The idea of having a National School Leaving Certificate (NSLC) is not alien as prior to the recommendations of the 2004 Task Force Report, a Jamaica School Certificate and Secondary School Certificate exams were sat and issued to students, though not recognised by most institutions. The NSLC was introduced in 2011 and again in 2019 with discussions within the Ministry of Education Youth and Information for the institutionalization of a NSLC for students who successfully completed secondary education.[227] In 2019, it was established that under the programme all students who successfully complete the secondary education programme will be awarded a certificate. This certificate will document the learner's competencies developed over the entirety of their secondary school years (Grades 7-13). This certificate will be unique to the learner and reflect each learner's achievement of competencies, performance in external examinations and completion of community service.

[227]Morris, A. (2019, September 1). Roll-Out of National School Leaving Certificate Programme This Academic Year – Jamaica Information Service. https://jis.gov.jm/roll-out-of-national-school-leaving-certificate-programme-this-academic-year/ See also: https://www.credly.com/org/ministry-of-education-youth-information/badge/national-school-leaving-certificate-level-1

Prime Minister Holness in his then capacity of Education Minister in 2011, said that graduation is meaningless if it is merely a school-leaving exercise unattached from the achievements of the students over their five years of education.[228] As such, it should consider co-curricular activities and behaviour. There are top-performing traditional high schools in Jamaica that have already realised this. Campion College is one such traditional school that has mandated that to receive a school-leaving diploma, students must be involved in at least two co-curricular activities in school, one of which should be a sport. Other schools such as York Castle High have also adopted mandatory community service whereby for graduation eligibility, a student must provide 40 hours of community service and must be involved in at least two co-curricular activities. Other schools should follow suit.

Recommendations:
CA7 Modify the National school leaving certificate to include co-curricular activities as a requirement for graduation in all schools.

2.3 Standardized curriculum framework and procedures for students with special needs.
Research conducted by the UWI Centre for Disability Studies constitutes a major effort to scientifically assess the levels of access and inclusion of the disabled in the Jamaican education system. It concluded that policymakers must make the necessary adjustments to make the education system more responsive to the needs of persons with disabilities.[229] The concept of an inclusive education is important as it allows for the full engagement of all students, including those with disabilities or learning challenges. Importantly, there must be an assessment of a child with a delay or disability at the earliest age possible. There should also be a system of coordinated services that promote a child's growth and development during the critical early years of life.[230] The Special Education Unit in the MOEYI is responsible for supervising Special Education schools that are Government-owned or Government-aided, and those which receive special grants. They are also tasked with supervising education facilities in private homes and community-based schools and groups. The unit also offers curriculum supervision and monitoring services, and facilitates training, networking, assessment and programme planning for children with Hearing Impairments, Visual Impairments, Physical Impairments, Mental Retardation, Giftedness and Learning Disabilities.

There is value in having a standardised curriculum framework for all schools that outlines the core strategies and principles for detecting students with special needs and procedures for managing these needs. For example, where school-based interventions are identified, as needed, the framework should guide the designing and selection of appropriate content, methodology, assessment and psychosocial support.

Recommendations:
CA8: Implement a standardized curriculum framework that outlines the core strategies and principles for students with special needs and procedures for managing these needs.

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[228]Holness to create minimum graduation standards | Lead Stories | Jamaica Gleaner (jamaica-gleaner.com)
[229]https://www.eyecarecaribbean.com/ecc/research/Official_Report_On_Access_And_Inclusion_In_Jamaican_Schools.pdf
[230]Hayes, A & Bulat, J. "Disabilities Inclusive Education Systems and Policies Guide for Low- and Middle-Income Countries". 2017https://www.ncbi.nlm.nih.gov/books/NBK554622/

3. Curriculum Assessment Diversification

3.1 Validating parallel alternative assessment pathways

Knowledgeably, CXC is not the only avenue for certification in Jamaica. However, one of the major issues surrounding the one-sided view for education success is perpetuated in the great zeal or importance that is placed on obtaining a CXC certification (including unwittingly by the MOEYI) which in turn undermines the perception of the quality of certification outside this area in Jamaica. Other certification programmes include City and Guilds and NVQ-Js through NCTVET. These certification programmes focus on specific skills and spell out to potential employers exactly what an individual can do.[231] There also exists a Caribbean Vocational Qualification (CVQ) which is a competency-based qualification awarded to candidates who are deemed proficient against regionally approved standards.[232] A renaissance is needed in the attitudes and mindset of the Jamaican populace regarding these alternative assessment pathways that are parallel to CXC examinations, underscoring the plethora of opportunities that these technical and vocational areas present, not just in the local market, but internationally. This is exemplified in the treaty of Chaguaramas which allows for the free movement of skilled workers as one of the 12 named categories for free travel throughout CARICOM member states.[233] Skilled workers are afforded the opportunity to tap into the job market in other CARICOM member states. Outside of the region, there are countries like Canada whose immigration targets for 2018-2020 indicated that nearly 200,000 new economic immigrants will be welcomed to the country each year. This means that there are many opportunities for foreign nationals with the skills needed to fill labour gaps in the Canadian economy.[234]

Recommendations:

CA9: Give credence to parallel alternative assessment pathways especially at the secondary level of the education system.

In the short term:

CA9.1 Map Alternative curriculum pathways with parallel assessments especially at the secondary level to demonstrate the opportunities they provide. Mapping should ensure comparability of opportunities for each student.

CA9.2: Change eligibility for the top national school leaving scholarship to include a range of certifications and other tertiary institution; and/or create a similarly prestigious and promoted scholarship so targeted. According to the MOEYI website, eligibility for the annual Jamaica Scholarship is premised on CAPE subjects, and limits study to the University of the West Indies or University of Technology.[235]

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[231]Oney, P. "Should I get a College Degree or Certification?". Stevens Henager College. https://www.stevenshenager.edu/blog/should-i-get-a-college-degree-or-a-certification

[232]Fletcher, W. "Caribbean vocational qualification transition to employment in CARICOM Member States". International Labour Organization. 2020.

[233]Aragón, E & Mawby, B. "Free Movement of Persons in the Caribbean: Economic and Security Dimension". International Organization for Migration. 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/free_movement_in_the_caribbean_final_2.pdf

[234]CANADIM. "Professional & Skilled Workers". n.d. https://www.canadim.com/immigrate/professional-skilled-workers/

[235]Ministry of Education Youth and Information." Annual Jamaica Scholarship". https://tsap.moey.gov.jm/AnnualJamaicaScholarship

In the medium term:
CA9.3 Evaluate all the standardized examinations that students pursue throughout their school life to determine relevance and complementarity with expected outcomes.

3.2 Micro-credentialing and Stackable Certification

The NSC covers the primary level of the education system and the first three years of the secondary education system. Currently, a national assessment system exists for the NSC at the primary level, but none exists for the secondary level. At the secondary level, assessments are next done at the end of grade 11 and follow a two-year (grades 10 and 11) curriculum of the examination body. An opportunity exists for a national assessment programme that spans all grades of secondary education. Such an assessment programme would consider micro-credentialing and the inclusion of a range of stackable certifications which students can utilise to exit to the world of work or matriculate to further education. Certification could complement subjects being pursued or an extra-curricular activity involvement at the time e.g. allowing for credentials to be gained due to the attainment of basic or intermediate IT, foreign language, or skill-based competencies. Alternatively, selected short-term subjects could be timetabled where students amass certification as they progress through different grades. Such assessments would ideally focus on the use of the STEAM methodology to include greater use of modern technology, authentic and practical assessments as done in technical vocational subject areas.

There are examples of secondary schools that facilitate intermediate attainment of credentials e.g. HEART certification, but there is no framework governing this. Under such a framework these assessments and certifications would be recorded on the student's transcript and could contribute to qualifications for leaving high school e.g., the national school leaving certificate. They would also be used as a qualification for higher education or the world of work. This presents an opportunity to harmonize and customize teaching, learning, and assessment, as well as provide the flexibility for students to explore competencies, gifts, and aptitudes on the way to final high school assessment.

Recommendations

CA10 Consider a national assessment programme for secondary schools with stackable certification.

In the short term.
CA10.1 Map present and potential use of micro-credential-based certification in the secondary school system. Examine the extent of and manner in which credential-based certification is presently utilized in the school system. This should include a mapping of employer desired 21st century workplace skills and the extent to which micro-credentialing can complement the existing curriculum in providing these.

In the medium term:
CA10.2 Pilot a framework governing the use of stackable certification and micro-credentialing. The framework would include recording certification attained on students' transcripts and defining how they can stack and contribute to school leaving qualifications, higher education, or the world of work. Explore also how the framework could complement the APSE and CAP.

4. Curriculum governance and Implementation Monitoring and Evaluation

Leadership teams and teachers have a direct impact on curriculum implementation and delivery. As they lead curriculum change a cultural and mindset change is needed to understand the purposes of the change, the nature of monitoring and how to use data to improve curriculum implementation at the school and national levels.

4.1 Capacity for Implementation Monitoring and Evaluation

Research has shown that, the education system in Jamaica suffers from a lack of adequate system-wide supervision, resulting in inconsistent quality of educational delivery from rural to urban schools. This is closely connected to the allocation of resources, both material and human, with rural schools and those in volatile inner cities receiving fewer classroom resources and fewer teachers. The evaluation of both implementation phases of the NSC faced limitations that should be considered in any future implementation and evaluation exercise. Firstly, one of the problems hindering the previous evaluation exercise was the challenge faced by data collectors in gaining access to members of the monitoring team. Furthermore, monitors deviated from the original schedule they were assigned. Surprisingly, this issue was reflected in the evaluation exercise of both phase one and phase two of the NSC and as such, mechanisms must be established for a uniformed approach to curriculum evaluation. On several occasions data collectors visited participating schools to interview members of the monitoring team, however, these interviews were not conducted due to ad hoc changes in the monitoring schedule that were not communicated to the Programme Monitoring and Education Unit. Consequently, hindering the ability of the unit to effectively and conveniently execute its primary duty to monitor and evaluate programme and projects to thereafter, provide feedback on how resources are used in the implementation of these activities. Among the issues aforementioned, data collectors also faced challenges gaining access to school administrators as several interviews had to be postponed due to the unavailability of principals.

Recommendations:

CA11: Enhance the capacity of the MoEYI for implementation monitoring and evaluation of curriculum.

In the medium term the GOJ should:

CA11.1 Review the resource allocation, with a view to building the human capacity of the MOEYI to monitor and support curriculum implementation and evaluation

4.2 Enhanced structure for curriculum governance and implementation monitoring

Regardless of how good a curriculum is, if the ideas do not get effectively translated into practice then the curriculum outcomes will not be realised. An analysis of school leaders' and teachers' experiences with the Revised Primary Curriculum revealed a range of socio-cultural and school-related factors that led to the unsuccessful implementation of the curriculum.[236] Additionally, NEI reports have noted several implementation challenges with the NSC.

The Ministry of Education Youth and Information in its efforts to provide curriculum support to schools, established Curriculum Implementation Teams (CITs) to provide leadership, direction, and support for the effective delivery of the National Standard Curriculum. The Curriculum Implementation Teams are responsible for curriculum implementation at the local school level

[236]Roofe, C. (2019). Curriculum Policy and Practice in Jamaican Primary Schools: An Analysis of School Leaders' and Teachers' Experiences. Caribbean Journal of Education, 41(2) pp.162-190.

and for how the curriculum should be implemented in all schools.[237] Their primary focus is to facilitate the achievement of the academic aspirations of the school community by providing leadership, technical support, training, and resources while motivating teachers and members of the wider school community to embrace the revised curriculum in a manner that will positively impact students' academic experiences and the development of the whole community. Additionally, CITs play an important role in aligning practices and plans to strategies, structures, and systems, which would bring schools closer to attaining national educational outcomes. However, in 2020 the NEI reported that the curriculum implementation teams were not fully operationalised in many schools and that there are significant variations in how the education administrative regions are improving key indicators. Curriculum Implementation Teams should become more collaborative as how it was established to be. As a solution to the current issues surrounding the Curriculum Implementation Team (CIT), the Curriculum Monitoring Team (CMT) should act as support to the CIT while operating under the Quality Education Circle (QEC).[238] Contextualised professional development is needed to support the school, subject, and gender-specific curriculum interventions, competencies in NSC strategies, use of ICT, curriculum supervision, data-driven decision-making, and collaborative planning. Training should be conducted in how the CIT should function based on the specific school context.

Recommendations

CA12: Strengthen the structure for curriculum governance and implementation monitoring

In the short term:

CA12.1 Expand the Core Curriculum Unit to facilitate integration of specialists for assessment for teaching and learning and psychosocial support. Such specialists are currently housed in two separate Units of the MOEY&I. However additional specialists' support is needed for the ongoing monitoring of teaching and learning and other curriculum support in schools.

CA12.2 Implement a robust programme of ongoing training for Curriculum Monitoring Officers to support curriculum implementation workshops.

CA12.3 Assign dedicated human and non-human resources for monitoring how curriculum implementation happens for a range of stakeholders including teacher training and other tertiary institutions.

In the medium term:

CA12.4 Strengthen regional offices to offer contextualised training and curriculum support to schools

CA12.5 Strengthen school-based curriculum leadership to improve the fidelity of NSC implementation. Allow regional offices and school Curriculum Implementation Teams (CITS) to offer contextualized professional development to support curriculum interventions.

CA12.6 Provide a specific programme for change management to support curriculum implementation training. This should focus on shifting mindset, attitudes and improve school culture as necessary.

[237]https://ncel.gov.jm/content/jamaica-cutting-edge-curriculum-design-national-standards-curriculum
[238]Clover Hamilton-Flowers. Interview by Steven Kerr. Kingston. May 2020.

4.6 Out of School Factors

The school environment is a microcosm of the society, communities and homes in which children live. Factors in the society, community and homes influence children's learning in the classroom directly, and also indirectly, through school attendance. These factors external to the academic environment have been termed "Out of School Factors" in this report. Research in the United Kingdom identified minority children; children with special educational needs or disabilities; those with social, emotional and mental health needs; those with low school achievement; victims of bullying, poor relationships with teachers and not feeling a sense of belonging at school, home/family dysfunction, and life trauma as those most at risk for exclusion.[239]

The Jamaica Survey of Living Conditions identified similar reasons for older children not staying in school prior to Grade 11, i.e. when they were approximately 17 years old and above: money problems (a proxy measure for poverty), limited interest in school (a possible proxy measure for not feeling a sense of belonging), family problems, and expulsion (often associated with socio-emotional and mental health needs).[240] Pregnancy, and reaching the terminal grade were additional factors.

Table 17. Reasons for children not staying in school prior to Grade 11. Extract from Jamaica Survey of Living Conditions (2017)

Area

	Kingston MA	Other Towns	Rural Areas
Reached terminal grade	22	12	13
Money problems	15	37	21
Pregnancy	15	13	17
Expelled	7	13	9
Not interest in school	26	19	25
Family problems	12	4	8
Others	2	3	8
Total	**100**	**100**	**100**

Per capita consumption quintile groups

	Poorest	Second	Middle	Fourth	Richest
Reached terminal grade	21	13	19	0	4
Money problems	19	30	26	13	24
Pregnancy	26	13	4	29	0
Expelled	6	16	8	5	10
Not interest in school	19	21	24	45	13
Family problems	4	0	11	7	48
Others	4	8	7	0	0
Total	100	100	100	100	100

Many of these factors not only impact school exclusion and attendance, but also impact ability to learn once in school.

1. Poverty

Poverty is associated with poor academic achievement and impaired school readiness, including atypical structural brain development.[241] Both household and neighbourhood poverty impact school readiness, but household poverty has a greater impact.[242] Research in Jamaica has shown that the academic gap between socio-economic groups widens as children progress from Grades 1 to 3.[243] It is estimated that 15.7% of Jamaica's children live in poverty (approx. 114,000 children); this is higher than in the general population (12.6%).[244] Approximately, 4.3% of children

[239]JSLC, 2018, PIOJ, STATIN ; Timpson, E. Timpson review of school exclusion. Department for Education. 2019.
[240]JSLC, 2017, PIOJ, STATIN
[241]Hair NL, Hanson JL, Wolfe BL, Pollak SD. Association of child poverty, brain development, and academic achievement [published correction appears in JAMA Pediatrics. 2015;169(9):878]. JAMA Pediatrics. 2015;169(9):822–829pmid:26192216.
[242]Roos LL, Wall-Wieler E, Lee JB. Poverty and Early Childhood Outcomes. Pediatrics. 2019;143(6):e20183426
[243]Samms-Vaughan, M.E. A Profile of the status of Jamaican pre-school children and their learning environments: A comprehensive look at Jamaica's six year olds. Prepared for the Inter-American Development Bank. August 2001.
[244]SLC, 2018, PIOJ, STATIN

0 – 17 years in 2018 live in extreme poverty[245], unable to afford or access basic food items. This figure represents an improvement over the previous year when 6.7% of children lived in extreme poverty, but is likely to have worsened in 2020 and 2021, given the economic impact of COVID19. The main form of income support for poverty in Latin America and the Caribbean is the use of Conditional Cash Transfer (CCT) Programmes. Jamaica's CCT Programme, the Programme of Advancement through Health and Education (PATH) Programme commenced in 2001. Child assistance grants provide health and education grants for eligible poor children through age 17 and social assistance grants provide grants to pregnant or lactating mothers, the elderly, disabled and destitute. Receipt of grants for children up to the age of 6 years is conditioned on children being registered at a health centre and maintaining their attendance according to the compliance schedule for their age. The receipt of grants for children 6 years and older is conditioned on regular school attendance of at least 85% of school days attended. However, a compulsory benefit is paid for children if the conditions are not met.

Early evaluations of the PATH programme have shown positive impacts. The PATH programme has been identified as being among the top CCT programmes.[246] Some research has also shown significant impact on school attendance and number of preventive healthcare visits for children, but longer-term outcomes such as improvement in school performance and healthcare status were not able to be shown.[247] Sanigest International's 2013 report confirmed these findings of improved school attendance and targeting but showed no improvement in school retention or parental involvement, and generally limited improvement in sustained human development goals, such as transforming poverty.[248] Evaluations done by Levy and Ohls, and Sanigest reported that 58% and 51% of recipients, respectively, were in the poorest category; this was consistent with other CCT programmes. However, the Situation Analysis of Jamaican Children (2018) found that 15% of beneficiaries were from the wealthiest 40% of the population, 50% of the poorest Jamaicans were not receiving PATH benefits, and only 20% of the poor population were receiving benefits.[249] Levy and Ohls reported that schools and health facility staff were aware of children who received benefits who were not needy and those who were needy who were not receiving benefits.[250] Reviews of the impact of CCTs often also indicate that children from lower socio-economic groups who are the beneficiaries of CCTs often attend underperforming schools. While the CCTs improve school attendance, school quality cannot be addressed by CCTs, but need to be addressed separately.

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[245]The food poverty line is used to derive estimates of food (extreme) poverty, which represents the minimum expenditure needed for an individual to meet their basic nutritional requirements.

[246]Fiszbein, Ariel, and Norbert R. Schady. Conditional cash transfers: reducing present and future poverty. World Bank Publications, 2009.

[247]Levy, Dan, and Jim Ohls. "Evaluation of Jamaica's PATH conditional cash transfer programme." Journal of Development Effectiveness 2, no. 4 (2010): 421-441.

[248]Sanigest International. "Impact Evaluation of the Programme of Advancement through Health and Education – P.A.T.H." 2013

[249]CAPRI. Situational Analysis of Jamaican Children. 2018.

[250]Levy, Dan, and Jim Ohls. 2010. "Evaluation of Jamaica's PATH conditional cash transfer programme." Journal of Development Effectiveness 2, no. 4 (2010): 421-441.

Recommendation:
OSF1: Improve social protection for children in poverty by using research to support targeted investment.

In the short term
OSF1.1 Conduct research on social protection coverage for poor children. Research should not only identify the coverage, but also the validity of school-based identification of poor children not receiving benefits and non-poor children receiving benefits.

OSF1.2 Prioritise investment in schools in neighbourhoods where poor children/ PATH recipients are concentrated. Investments should include physical, human, learning and co-curricular resources. GIS mapping of schools in areas of poverty should be determined and proportion of schools meeting standards determined. This baseline can then be used to set targets. Schools should first be assisted to meet minimum standards, and thereafter assisted to attain high standards on a phased basis. For example, the target should be 70% of schools meeting minimum standards over 10 years.

OSF2: Improve social protection for children in poverty by targeting improved efficiency and enhancement of PATH.

In the short term:
OSF2.1 Improve system of PATH targeting for poor children. Collaboration with schools may be useful in improving PATH targeting. The research to be conducted will inform utilisation of this collaboration.

OSF2.2 Increase budgetary support to schools to ensure provision of meals, books, uniforms for children from lower socio-economic groups and for children on PATH programme. Ensure school essentials are met. There may be need to cast the net wider than PATH recipients.

In the medium term:
OSF2.3 Increase budgetary support to child assistance component of PATH. Existing data on coverage for the poor suggests that a significant increase will be required and may need to occur in phases. The absolute increase required will be determined accurately by the research.

OSF3: Use a partnership approach to expand social protection support for students.

In the short term:
OSF3.1 Provide a co-ordinating mechanism to facilitate school administration of social protection support. Many past students and corporate Jamaica are supporting students at schools. The MOEYI should develop guidelines for schools that will address identification of students, mechanisms for support, and monitoring and evaluation of social interventions.

In the medium term:
OSF3.2 Increase personal/community/corporate investment in schools through establishment of Past-Student week. It is the culture of Jamaicans to have strong attachments to the schools they attend. After having mapped the needs, past-students would be encouraged

to give back to their schools in cash or kind during Past-Student week. This allows past students not formally associated with associations to contribute.

2. Children's Interest in School

In order to increase children's interest in school, schools must meet children's current and future needs in terms of curriculum content and implementation, co-curricular experiences and school connectedness.

Schools have traditionally evaluated children's success purely in terms of academic measures. However, non-cognitive skills have been shown at a minimum to be as important as academic skills, and often of greater importance, in success in adulthood. Teaching of non-cognitive skills through social and emotional learning (SEL) programmes and emotional intelligence are associated with an 11 percentile increase in academic performance.[251] SEL programmes are more effective if they utilise a step-by-step approach, use active learning techniques, allow time for skill development, have explicit learning goals, and are led by teachers.[252]

Today's children are growing up in a rapidly changing world, fuelled by the advancement of technology. Every child needs to have basic STEM (Science, Technology, Engineering and Math) skills, requiring more practical and hands-on teaching. There is also increased emphasis on creativity, critical and systems thinking, and adaptive and life-long learning.[253] These require new, more practical, approaches to teaching and teachers trained in effective delivery of STEM programmes ***(cross reference 4.3 Teacher Training, section 6; 4.4 Teaching, section 3.1)***.

Students are increasingly more engaged by STEM subjects. In 2021, the Government of the UK reported a 50% increase in enrolment in Computer Science, 21% in Engineering and 400% increase in Artificial Intelligence programmes since 2011.[254] STEM graduates also earn higher wages and have a positive impact on the economy. Additionally, the onset of COVID 19 has increased awareness of the importance of ICT as one aspect of modern teaching and learning.

Mahoney et al (2005) identified the positive effects of participation in peer-activities (voluntary, school based and extra-curricular) as improved school achievement and increased participation or connectedness.[255] These were felt to occur as a result of facilitation of development of interpersonal skills and positive social norms, membership in prosocial peer groups, and strengthening of emotional and social connections with the school itself (cross reference 4.5 Curriculum and Assessment, section 2.1). There is limited information available about participation in peer activities in Jamaica. In a national birth cohort study of 4–5-year-olds (The JA KIDS Study),

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[251]Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. Child development, 82(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

[252]MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. Psychological Bulletin, 146(2), 150–186. https://doi.org/10.1037/bul0000219

[253]McKinsey Global Institute. "Technology, Jobs and the Future of Work". February 2017. https://www.mckinsey.com/featured-insights/employment-and-growth/technology-jobs-and-the-future-of-work#

[254]UK Department of Education blog, "More young people are taking STEM subjects than ever before." February 2021. https://educationhub.blog.gov.uk/2021/02/09/more-young-people-are-taking-stem-subjects-than-ever-before/

[255]Mahoney JL, Lord H, Carryl E. An ecological analysis of after-school program participation and the development of academic performance and motivational attributes for disadvantaged children. Child Dev. 2005 Jul-Aug;76(4):811-25. doi: 10.1111/j.1467-8624.2005.00879.x. PMID: 16026498.

25% of children were in extra-curricular activities, primarily children of the higher social classes, and primarily at school.[256] The MOEYI has announced plans to reinvigorate extra-curricular activities as part of its announced Character Education curriculum; target groups include Uniformed Groups (Cadets, Scouts, Red Cross, 4H, Rangers, among others). The Ministry recently conducted an audit of Uniformed Groups in schools to determine the areas of greatest needs and the type of support that will be required. There are currently 635 uniformed groups in schools; the target is to expand these to 1000 schools. MOEYI is also planning the simultaneous implementation of seven behaviour-change programmes involving extra-curricular activities in September 2021. These programmes will use different methodologies and their effectiveness will be compared.

School connectedness is defined as the belief by students that adults and peers in the school care about their learning as well as about them as individuals.[257] Four elements of school connectedness were identified: Adult Support (ability of school staff to dedicate time, interest attention and emotional support to students), Belonging to a Positive Peer Group, Commitment to Education (perception that adults at school are invested in their education) and School Environment (physical and psychosocial). In both the United States and the Caribbean, school connectedness is associated with better youth outcomes, including significantly fewer reported instances of emotional distress, suicidality, and early sexual intercourse.[258] Results were obtained from the Caribbean Adolescent Health Survey, which included Jamaican children.

Recommendations:

OSF4: Increase children's interest in school through curriculum revision and expanding teachers' capacities to meet their needs.

In the short term:

OSF2.1 Increase capacity of teachers to meet the non-cognitive and socio-emotional needs of children and adolescents. In the short term, this can be achieved through professional development courses (e.g. on non-cognitive skills, socio-emotional learning, emotional intelligence), but in the long term, courses should be embedded in curricula (cross reference: 4.4 Teaching, section 2.2).

OSF 2.2 Increase capacity of teachers to modernise teaching and learning and meet children's current cognitive and learning needs. As above, in the short term, this can be achieved through professional development courses in a variety of teaching and learning methods (e.g. co-operative learning; active, interactive and experiential learning such as invited speakers, visitation, group discussion, role play and problem solving), as well as in specific subject areas (e.g. STEM, ICT, financial literacy, environmental science). Adequate provision of time, resources and support to implement what was learnt.

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[256]Samms-Vaughan, personal communication

[257]Niehaus, Kate; Rudasill, Kathleen Moritz; and Rakes, Christopher R., "A longitudinal study of school connectedness and academic outcomes across sixth grade" (2012). Educational Psychology Papers and Publications. 158.; Centers for Disease Control and Prevention. School Connectedness: Strategies for Increasing Protective Factors Among Youth. Atlanta, GA: U.S. Department of Health and Human Services; 2009

[258]Blum, R. W., Halcón, L., Beuhring, T., Pate, E., Campell-Forrester, S., & Venema, A. (2003). Adolescent Health in the Caribbean: Risk and Protective Factors. American Journal of Public Health, 93(3), 456–460. https://doi.org/10.2105/AJPH.93.3.456

In the medium term:
OSF2.3 As part of overall review and revision of children's curricula give equal weight to cognitive and non-cognitive skills. Include such concepts as self-awareness, moral and pro-social behaviour, decision making, promotion of mental health, emotional intelligence and emotional regulation, negotiation and conflict resolution skills, refusal and resistance skills, resilience, coping in disasters, and adaptation to changes in norms (for example driven by climate emergencies and pandemics) ***(cross reference 4.5 Curriculum and Assessment, section 1).***

OSF2.4 Revise children's curricula to meet current cognitive and learning needs. Curricula should include concepts such as critical thinking, reflective thinking, visioning, creativity and innovative thinking.

OSF5 Increase engagement of students at all levels in extra-curricular activities (ECA)/life skill intervention programmes (cross reference 4.5 Curriculum and Assessment, section 2.1).

In the short term:
OSF5.1 Use data to guide extra-curricular implementation. This should include:
- Establishment of a clear definition and classification of ECA by the MOEYI
- Mapping of existing extra-curricular activities by school (to include types and numbers of children currently engaged)
- Identification of ECA gaps

In the medium term
OS5.2 Coordinate implementation and monitoring of extra-curricular activities. Steps should include:
- MOEYI to establish standards and accreditation process for ECA and after-school programmes, and co-ordinate a shared monitoring, evaluation and learning process.
- Facilitate implementation of ECA at all schools prioritising schools in areas of poverty, through provision of budgetary support
- Policy directive for each child to be enrolled in at least one ECA. This could be facilitated during class time.
- School inspection process should include assessment of provision of ECA.

OSF5.3 Establish partnerships for implementation of extra-curricular activities. MOUs should be established with professional groups/GoJ agencies (e.g. JFF, ASAJ, JCDC), Ministry of Culture, Gender and Sport, and MOEYI to support teacher involvement in and extra-curricular activities in school

OSF6 Increase student access to peer and adult mentors at primary and secondary levels.

In the short term:
OSF6.1 Use data to assess where mentorship programmes are needed. This should include conducting a situational and gap analysis on mentorship programmes at primary and secondary levels by school/region.

In the medium term

OS6.2 Coordinate implementation and monitoring of mentorship programmes at primary and secondary schools. Steps should include:

- MOEYI to develop and pilot a strategy for establishment, co-ordination, accreditation, monitoring and evaluation of national peer and adult mentorship programmes.
- Establish MOU with school principals and JTA for teachers to be engaged in mentorship programmes; establish MOU with service clubs and other similar agencies to be engaged in mentorship programmes
- Engage student and adult volunteer, including teachers, past students, and community members, in mentorship and provide training in mentorship.
- School inspection process should include assessment of provision of peer and adult-led mentorship programmes.

OSF7 Increase school connectedness through a variety of mechanisms (adapted from CDC, 2009).

In medium term

OSF7.1 Expand school leadership to include other stakeholders. School leadership should expand to include children, as well as parents, teachers and other school staff, and community members in decision making about school plans, policies, and activities and especially those related to improving school connectedness

OSF7.2 Provide students with a variety of opportunities to practice and improve their academic, and non-cognitive skills. These opportunities should be within and outside the classroom and at academic and co-curricular activities when representing the school.

OSF7.3 Utilise a variety of methods in each area of classroom activity to address the diverse needs and learning styles of students. These should include a diversity of instructional strategies and teaching methods, positive classroom management strategies, student leadership engagement activities, student rewards and recognition.

OSF7.4 Provide opportunities for students of differing abilities to interact and develop friendships and promote teamwork.

OSF7.5 Establish communication norms in the school. These should encourage open and respectful communication and teach respect for diverse opinions at all levels of interaction.

3. Trauma and Exposure to Violence

The most common form of trauma experienced by children, including Jamaican children, is exposure to violence. In 2015, at least three out of four of the world's children – 1.7 billion – had experienced inter-personal violence in the previous year.[259] Children typically experience violence in multiple forms of corporal punishment at home and at school, being victims or witnesses to community violence, and witnessing intimate partner violence in their homes.

[259]Know Violence in Childhood. 2017. Ending Violence in Childhood. Global Report 2017. Know Violence in Childhood. New Delhi, India

In Jamaica, a quarter of 11- to 12-year-old children attending school in urban Jamaica witnessed severe acts of physical violence such as robbery, shooting and gang wars, a fifth had been victims of serious threats or robbery and one in every twelve had been stabbed.[260] Children reported being least exposed to sexual violence and to being shot at. Robbery was an almost universal experience affecting children from all schools and socio-economic groups. The single commonest experience as a victim of violence was the loss of a family member or close friend to murder, affecting 36.8% of children. Children's experiences of witnessing violence occurred chiefly in their communities, but their personal experiences of violence occurred at school. In a 2015 survey, 70% of children reported being victims of bullying at school.[261] Boys and children attending public primary schools had greater exposure to violence as witnesses and victims. Socio-economic status discriminated exposure to physical violence as witnesses but not as victims.[262]

The UNICEF MICS4 survey completed in 2010-11 indicated that 84.5% of children 2-14 years experienced at least one form of violent discipline; 68.4% were physically punished, 71.9% experienced psychological aggression, and 27% of parents viewed physical punishment as a necessity. On a positive note, there was a 3% increase in the percentage of caregivers (9.9%) who indicated that they used non-violent discipline. In the school setting, 75% of 11-12 year olds reported being beaten with an object by teachers;[263] 80% of teachers in a separate study reported that they often used corporal punishment to discipline children[264] and Jones and Brown (2008) noted that 81% of Jamaican teachers study admitted to using implements such as a belt, strap, or board to hit children; students equated the punishment they received at school to the punishment they received at home.

Local research has confirmed that poly-victimisation significantly impairs children's reasoning cognition and learning and, particularly in boys, is associated with increased likelihood of disruptive and aggressive behaviour, both of which impair success in adulthood.[265] Childhood stress and early life adversity, including exposure to conflict and violence, parental loss, family instability, traumatic life events, and peer victimization (bullying) are also associated with long lasting effects associated with shortened telomere length. Telomeres are repeat sequences of DNA that cap the ends of chromosomes; they typically shorten over time with cell replication. However, there is accelerated shortening under conditions of high cell stress and inflammation and they are a biomarker for aging and early mortality and morbidity.[266] Helping children and families recover from trauma, and reduce toxic stress are critical to childhood recovery.

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[260]Samms-Vaughan, M. E., M. A. Jackson, and D. E. Ashley. "Urban Jamaican children's exposure to community violence." West Indian Medical Journal 54, no. 1 (2005): 14-21.
[261]Child Development Agency and UNICEF Jamaica. Investigating the Prevalence and Impact of Peer Abuse (Bullying) on the Development of Jamaica's Children. 2015
[262]Child Development Agency and UNICEF Jamaica. Investigating the Prevalence and Impact of Peer Abuse (Bullying) on the Development of Jamaica's Children. 2015.
[263]Samms-Vaughan, M., Jackson, M., Ashley, D., & Lambert, M. (2000). Jamaican children's experience of corporal punishment at home and at school. Kingston, Jamaica: Report prepared by the University of the West Indies & Ministry of Health, Jamaica
[264]Pottinger, A., & Nelson, K. (2004). A climate of punishment in Jamaican classrooms: Attitudes, beliefs, and use of disciplinary practices by educators. Caribbean Journal of Psychology, 1, 22–38.
[265]Samms-Vaughan M, Lambert M. The impact of poly victimisation on children in LMICs: the case of Jamaica. Psychol Health Med. 2017 Mar;22(sup1):67-80. doi: 10.1080/13548506.2016.1274411. Epub 2017 Jan 29. PMID: 28133980.
[266]Rentscher, K. E., Carroll, J. E., & Mitchell, C. (2020). Psychosocial Stressors and Telomere Length: A Current Review of the Science. Annual review of public health, 41, 223–245. https://doi.org/10.1146/annurev-publhealth-040119-094239

Recommendations

OSF8: Implement measures to ensure that schools at all levels are safe havens for children, protecting them from violence and providing early identification and initial management for victims of childhood trauma.

In the short term:

OSF8.1 Improve capacity of teachers and guidance counsellors to identify signs of child trauma and to provide initial intervention through training in mental health/psychological first-aid. In the short-term, this can be implemented through in-service training programmes; in the long term, this should be embedded in teacher training curricula. The initial target should be to have at least one teacher and guidance per school trained in mental health first aid; the objective is to have all teachers trained on a phased basis. Prioritise schools in geographical areas where children are at greatest risk of exposure to violence and trauma ***(cross reference 4.3 Teacher Training, section 6; 4.4 Teaching, section 3.1).***

OSF8.2 Scale up effective programmes that utilise alternative forms of discipline to address behaviour challenges in schools. The School-wide Positive Behaviour Intervention and Support (SWPBIS) framework system for primary level schools and the Irie Toolbox for pre-primary level have been shown to be effective in violence prevention in Jamaican schools, and should be introduced at teacher pre- and in-service training levels, and scaled-up on a phased basis in schools islandwide.

OSF8.3 Increase access to guidance counsellors. Strategically provide guidance counsellors to schools, prioritising schools located in geographical areas where children are at greatest risk of exposure to violence and trauma. Guidance counsellors should be engaged in prevention, through regular sessions with children in classes, as well as in intervention services for children exposed to trauma.

OSF8.4 All school leaders trained in promoting safety in schools. Programmes such as the NCEL Leadership for Safer Schools (LSS) programme and the Child Friendly Schools (CFS) course should be completed by all school leaders.

In the medium term:

OSF8.5 Amend the Education Act to ban corporal punishment in schools at all levels. Currently, corporal punishment is banned only at the early childhood level.

OSF8.6 Develop a structured referral system for children who are victims of trauma. Clear guidelines should be developed for the identification and referral of children who are victims of trauma who need additional support outside of the school system.

6. Children with Disabilities

Recent national surveys of children with disabilities in the USA and India have identified population prevalence rates of the most common disabilities as 17.8% and 13.6%, respectively, representing one in every six or seven children.[267] There are no accurate prevalence rates for Jamaica. Children

[267]Samms-Vaughan M & UNICEF. Bridging the Gaps. Towards a National System of Early Years Care and Support. 2020

with disabilities worldwide are often excluded from school and/or discriminated against within schools. A recent situational analysis on persons with disabilities (PWD) indicated that the type, quality and coverage of services, programmes and products offered to PWDs were inadequate or unequally distributed.[268] Existing efforts by the Government of Jamaica were considered insufficient to adequately provide for the needs of PWD in general and more specifically, children, particularly in accessing information, educational and support services. Financial resources were felt to be inadequate in comparison to the daily expenses of families. Where services existed, there was imbalance in geographical spread, with services primarily concentrated in Kingston.

At the early childhood level, another report identified system strengths and challenges for young children with disabilities.[269] System strengths included political stability; policy and legislative support; government agencies focussed on child rights (OCA), child protection (CPFSA), young children (ECC), persons with disabilities (JCPD) and parents (NSPC); health sector strengths of general access to primary health care, a national record of child health and development provided to all children at birth, and a structured referral system from primary to tertiary care; educations sector strengths of near universal access to educational services for children 3-5 years and the development of elements of a national screening system at early childhood level; social support strengths of a national conditional cash transfer programme; psycho-social support through parent support groups; and investment in children with disabilities by international and local development partners.

System challenges were identified as failure to operationalise and implement laws and policies; absence of accurate data on prevalence and nature of childhood disabilities; inadequate co-ordination of existing programmes and services across health, education and social services; significant stigma and discrimination; limited public and parent knowledge and understanding of developmental disabilities; inequity in access to tertiary medical, diagnostic and therapeutic services; inadequate new-born screening services; limited access to educational/development services for children 0-2 years; limited access to special or inclusive education services; inadequate training of health and educational professionals; failure of full implementation of the national early childhood screening system; inadequate monitoring of and compliance with national standards for early childhood centres; absence of national social protection mechanisms specific to children with disabilities; limited parent support services; and inadequate co-ordination of donor support.

Recommendations

OSF8: Ensure legal and policy framework in place to address rights of children with disabilities.

In the short term

OSF8.1 Finalise and/or operationalise existing laws and policies that address the rights of children with disabilities. This would include the Disabilities Act (2014) and Regulations, the draft Special Education Policy and the draft Early Childhood Policy, all of which include provisions to safeguard and enhance the welfare of persons with disabilities across Jamaica, including students. The Special Education and Early Childhood policies should explicitly address the integration of children with disabilities in classrooms for typically developing children.

[268]Wilson-Scott S & UNICEF. I Am Able. Report on the Situational Analysis of Children with Disabilities in Jamaica, 2018
[269]amms-Vaughan M & UNICEF. Bridging the Gaps. Towards a National System of Early Years Care and Support. 2020

OSF8.2 Develop a comprehensive and sustained public education programme on childhood disabilities, including their rights. This programme would include information on the rights of children with disabilities, and the importance of early identification, intervention and support for children with disabilities and behaviour disorders, and would aim to address the stigma associated with having a child with a disability.

OSF9: Provision of adequate services for early identification of children with disabilities and behaviour disorders.

In the short term:
OS9.1 Conduct research to accurately identify the prevalence and types of developmental disabilities. This would include intellectual and learning disabilities, physical disabilities, behaviour disorders, seizures, and sensory impairment, and would allow for accurate planning for diagnostic and assessment, support, and therapeutic service needs.

OSF9.2 Implement all aspects of the national early childhood screening programme for early identification of children with developmental disabilities and behaviour disorders. This requires operationalisation of the Family Support Screening Tool (to identify children and families at risk), full implementation of the use of the Child Health and Development Passport as a screening tool, and full implementation of the Jamaica School Readiness Assessment as a mechanism for early identification of, and intervention for, children with developmental disabilities and behavioural disorders.

OSF9.3 Improve access to diagnostic and assessment services. Specific schools should be provided with human and physical resources for diagnosis and assessment, including school and clinical psychologists. These schools would then provide services to a cluster of schools.

In the medium term
OSF9.4 Develop and implement an integrated cross-sectoral national screening and intervention programme for disabilities and behaviour disorders at the primary level. In conjunction with OSF 4.4, this would allow for a seamless early identification programme at the early childhood and primary levels, when the majority of disabilities can be identified. This programme would allow for increased utilisation of existing assessment systems (e.g. Grade 1 Readiness Inventory, Grade 3 Diagnostic Test) as screening and early intervention tools for academic-focussed disabilities, but would require development of new systems for identification of behavioural and sensory disorders. The cross-sectoral nature of the programme would involve the health and social sectors working in tandem with education to provide comprehensive services.

OSF10: Enable schools to better support children with disabilities and behaviour disorders and their families, through the provision of resources and training.

In the short term
OSF10.1 Improve access to educational services for all children with disabilities and behaviour disorders. Designate all Government of Jamaica owned and operated infant schools for children 3-5 years and Brain Builder Centres for children 0-2 years, as integrated/mixed ability schools.

All public primary and secondary schools should be identified as schools supporting integration. Designated schools in each parish/region should be provided with physical and human resources, to provide diagnostic and assessment, support and therapeutic services (including therapy rooms) to support a cluster of schools.

OSF10.2 Increase the capacity of all teachers to practice inclusive education. Inclusive education should be taught in all general education courses from early childhood to secondary level. In the short term, in-service education programmes should be developed for this purpose, but in the long term, the principles and practice of inclusive education should be embedded in all teacher training programmes.

OSF 10.3 Increase provision of social support through the PATH program for families of children with disabilities. The presence of a disability is known to be associated with poverty, due to the need for additional care and therapeutic services. There is the need for easier and greater access to special grant support for families of children with disabilities. Schools should be co-opted to enable this.

In the medium term
OSF10.4 Improve access to therapeutic services for children with disabilities and behaviour disorders by increasing available human resources. Develop training programmes at tertiary level institutions in speech, occupational and behaviour therapy and audiology. Operationalise online training programme in early intervention at the UWI.

OSF10.5 Use school-based support teams to improve access to support services for children with disabilities and behaviour disorders. Provide support service teams at designated schools to serve a cluster of schools (similar to Quality Education Circle model). Support service teams should include at a minimum, special educators to write and monitor implementation of Individual Educational Plans, and school/clinical psychologists (see OSF9.3), and therapists (see OSF 10.3). Increase reach and capability of the Government of Jamaica Early Intervention Programme, known as the Early Stimulation Programme, for children 0-8 years.

OSF10.6 Co-opt the assistance of schools in the establishment of parent support groups. Parent support services are important to reduce parental stress.

OSF11: Enhance coordination of support for children with disabilities and behaviour disorders and their families.

In the short term
OSF11.1 Include provision of services to children with disabilities and behaviour disorders in school inspection reports. The monitoring of provision of services to children with disabilities will assist in improvement of services.

In the medium term
OSF 11.2 Establish an oversight body to co-ordinate and monitor implementation of strategies to improve services to children with disabilities. Monitoring and co-ordination of these recommendations will be important to their success. A cross-sectoral body is recommended.

7. Out of School Youth

Unattached youth are defined as persons 15 – 24 years who are either not in school, unemployed or not participating or engaged in any training programme. In 2020, an estimated 22.4% of youth were neither in employment, education or training (NEET) and were deemed unattached youth, representing an untapped proportion of the labour force, who are not engaged in any productive activity (PIOJ, 2018). In fact, between 2020 and 2021, the unemployment rate for youth, aged 14-24, rose by 10,900 or 25.2 percentage points to 54,200 persons. The data also show that a greater proportion of female youth (26.9%) than male youth (19.6%) were unattached.

About one quarter of unattached youth only attain an educational level up to grade 9 (Children First, 2018). School dropout, poor educational outcomes and the lack of adequate skills training has contributed to the increase in "unattached youth" that has reached almost one out of three young people between 14 and 24. Additionally, as a result of the COVID19 pandemic, young persons at the terminal grades in academic years 2019-2020 and 2020-2021, would have had disruptions to school leaving processes and transition to work or higher education. This is likely to increase the proportion of unattached youth. It is estimated that approximately 1 out of every 3 persons in the labour force have received no formal training. Unattached youth are more likely to be involved in crime and violence.

Recommendations:

OSF12: Develop and/or expand successful Alternative Educational Programmes (AEP) in areas of socio-Economic Deprivation.

In the short term

OSF12.1 Increase access to successful AEPs. Develop and/or expand effective and validated programmes, such as the YMCA Youth Development Programme, through collaboration among MOEYI, NGOs offering programmes and Private Sector Organisation of Jamaica (PSOJ). The PSOJ will assist in identifying skill sets that are required. Programmes should be accessible to youth in their communities. School buildings are ideal for such programmes during after-school hours. This also supports Recommendation OSF6.

OSF12.2 Develop and/or expand access to successful Government of Jamaica programmes such as the CAP and NYS programmes. Prioritise participants from communities with high proportions of unattached youth.

In the medium term

OSF12.3 Pilot an alternative education curriculum in collaboration with the PSOJ. This programme should link out-of-school interventions with priority growth industries to rapidly prepare youth at risk of dropping out for work in industries that need employees.

8. Parent and Community Engagement

Engagement of parents and communities in schools increase support for education and protect investments in infrastructure.

Recommendations
OSF13: Increase parent and community engagement with schools.

In the short term:
OSF13.1 Include parental and community involvement indicator in school inspections at all levels.

In the medium term
OSF13.2 Increase capability of schools to engage with parents and community. Develop NCEL course on effective home-school and community-school participation for school leaders.

OSF13.3 Implement education programmes for parents after school. This is ideally done on school grounds in partnership with HEART so as to ensure greater access to employment.

OSF13.4 Implement micro enterprise programme at schools targeting parents. These programmes should be developed in partnership with the private sector and should create the kinds of jobs that lift people out of poverty, but it is pivotal that the enabling environment created by the government does not only allow for private sector development, but also protects the most vulnerable from the most extreme forms of profit-seeking.

4.6 Responding to COVID

1. Learning loss

It is only over time that the full extent of learning loss among Jamaican school children due to the COVID pandemic will be known. Notwithstanding, interventions are needed immediately if the situation is to not get worse. The MOEYI estimates that approximately 120,000 students have not been consistently engaged since the onset of COVID giving rise to learning gaps.[270] Using 2018/2019 statistics this represents 15-20% of the enrolled primary and secondary school cohort that year. Other stakeholders suggest this number as conservative.[271]

In an effort to address the issue the MOEYI announced a 'Recover Smarter-National School Learning and Intervention Plan'[272] which has four components: National School Learning Plan (embedded in the daily school operations and school improvement efforts), National Summer School, National Extra Lesson Classes, and National Homework Programme. The Recover Smarter National Plan is premised on increasing instructional time for those most in need. In that vein, the National Summer School delivered additional hours of instruction using both face-to-face and online delivery. The MOEYI indicated 43,000 students were engaged in the programme. As the programme was open to all students nationwide this number likely included some who did not fall in the disengaged category. It is therefore not clear how many of the 43,000 overlapped with the 120,000 disengaged cohort. The government is also targeting a return to face-to-face schooling as of September 2021.[273] If this occurs it is likely that some of the disengaged will be

[270]https://jamaica-gleaner.com/article/news/20210505/120000-students-missing-classes-over-last-year
[271]http://radiojamaicanewsonline.com/local/number-of-students-absent-from-school-since-pandemic-likely-much-higher-than-reported-says-educator
[272]https://jis.gov.jm/education-minister-announces-national-school-learning-and-intervention-plan/
[273]https://jis.gov.jm/govt-targets-september-for-resumption-of-face-to-face-classes/

re-enrolled. The challenge for schools will be accommodating their recovery while concurrently ensuring the learning of their peers.

A particular challenge exists at the primary level due to the use of PEP assessment for placement in high schools. Grades attained in PEP assessments spanning grades 4 through 6 also determine placement in secondary schools. There is a strong focus on 'teaching for these assessments' given the competition for the limited spaces in the 'top performing' secondary schools. This is many times at the expense of the total learning experience of all students. The potential for those with learning loss to get left behind over the next few years seems high.

Recommendations:

COV1: Set a target of 3 years from the 2021/22 school year to map, curb, and recover from learning loss, focussing on students already in the system or who have just exited the educational system.

In the short term:

COV1.1. Increase instructional time in schools by one hour for the most affected using the extra lessons model. Schools are best placed to quickly evaluate their students. Regional offices should coordinate mapping of additional resources needed (teaching assistants, specialist teachers, online access, etc.) to enable small class interventions. A shared resource model could be employed which allows schools within a region to pool expertise and resources. Continuous capture of student data indicating progress in the programmes should be used to quickly tailor interventions to meet individual needs and channel resources.

COV1.2 Consider suspending the placement value assigned to grades 4 and 5 PEP exams and use only grade six PEP results for placement for the next three years. The use of only grade six assessments for placement is not uncommon and existed up to 2018.[274] The PEP curriculum should, however, still be followed in grades 4 and 5 and PEP assessments still administered given their emphasis on continuous learning and to measure mastery of the NSC curriculum. It is just their use in eventual placement that should be temporarily discontinued. A firm policy to suspend the use of grades 4 and 5 assessments for placement for three years will allow teachers in grades 1 through 5 to concentrate on student learning, recovery of learning loss and mastery of the NSC curriculum. This has the potential to impact the current generation of students in primary school.

COV1.3 Provide opportunities for those leaving secondary school over the next three years to pursue a 'recovery year'. The announced initiatives so far target those still in schools. Opportunities should be provided for graduating students to access additional instructional time for up to a year e.g., by partnering with private educational enterprises or HEART and offering scholarships. The opportunities should also extend to sitting or resitting exit assessments up to one year following graduation.

4.6.1.1 Best practices.

At the onset of the pandemic, the pivot to an online teaching mode was sudden and resulted in a plethora of approaches and initiatives. After more than a year of online teaching, many lessons

[274]https://moey.gov.jm/exam-replace-gsat-pushed-back-2018

have been learned about what technologies, apps, teaching methodologies and approaches work best for the Jamaican context. In addition, there is a growing bank of online content covering the curricula of primary through tertiary levels. Some of these resources were commissioned by the MOEYI. There is scope for scaling up best practices, documenting what did not work, and making widely available to both teachers and students the abundance of online resources that now exist.

Recommendations

COV2: Immediately evaluate the online teaching experience with the aim of capturing best practices.

In the short term:

COV2.1 Task an appropriate unit within the MOEYI to collaborate with the JTC on capturing the best online teaching practices emerging over the past year. A deliberate attempt should be made to evaluate, document and store what worked, before it is forgotten or replaced. The best practices should be targeted for sharing and scaling up.

COV2.2 Keep an inventory of MOEYI approved online resources and expand existing (e.g., MOEYI, JTC, JTA) online repositories. Given the growing inventory of new resources, some of which are accessed at a cost, guidance from the MOEYI will be important for schools and the wider public. An MOEYI stamp of approval, similar to that used for printed texts used in schools, should be put in place as both a monitoring and mapping mechanism. In addition, existing online repositories and learning platforms should be expanded to capture the best material (videos, documents, etc.) used to support teaching and learning at all levels. These should be made easily and freely accessible to other teachers as guides or aides, and to students for self-guided learning.

4.6.1.2 Stakeholder interest and engagement

The pandemic has put in sharp focus the social roles of teachers and schools beyond delivering educational knowledge. Arguably, widespread recognition and appreciation of these functions has never been higher. There has also likely been no comparable period with as high stakeholder involvement and community engagement (e.g., parents, private businesses, churches, civic organizations, etc.) in the delivery of teaching and learning. It is important not to lose the momentum created by the re-engagement of the community in education that has been occasioned by the pandemic.

Recommendations

COV3: Capitalize on the current interest and engagement of community and private sector stakeholders in the educational process.

In the short term:

COV3.1 Create an inventory of initiatives not initiated by the Ministry in support of education. This should include an inventory of organizations e.g., churches that have facilitated learning by opening their spaces, and who can be targeted for participation in the National Recovery Plan by offering supervised community-based Homework/Summer School Centres with government sponsored Wi-Fi.

COV3.2 Negotiate on behalf of the education sector for new incentives, and the extension of present concessions offered by the private sector. It is likely that external stakeholders would be willing to participate in the 3-year National Recovery Plan if offered the opportunity to do so. They can be targeted for concessions on computer devices, internet access, instructional and other educational supplies, discounted training programmes and concessionary loans for educational supplies.

COV3.2 Collaborate to create a tablet/laptop pool. One of the most tangible responses from the community was the donation of tablets. The lifespan and technology of tablets is limited. An immediate challenge should be issued to donors to match their donations each year over the next 3 years. Schools or MOEYI regional offices should create tablet/laptop pools and schemes accessible by new entrants to the educations system over the next three years, or as replacement for damaged devices, and where is verifiable need.

COV3.4 Create a track-a-student Hotline. The private sector should be asked to collaborate on the implementation and marketing of a hotline for the community to report students not in school. Schools, in collaboration with the regional offices, should pursue information gathered to engage the missing students.

5. Summary of Recommendations

The recommendations made are summarized along with their relationship to the Five Pathways.

Pathway Key:
HR: Pathway 1 – lacing a High Value on the Human Resource
AC: Pathway 2 – Prioritizing Early Intervention and Adopting an Avoided-Cost Approach
EA: Pathway 3 – Ensuring Equity of Access
PfL: Pathway 4 – Partnerships for Total Learning
DD: Pathway 5 – Data Driven Decisions

Finance Key:
NC: No change in budget anticipated
RA: Reallocation of existing funding
NF: New Financing needed

Education Philosophy	**Short term**	**Medium Term**
EP1: Widely promote an education philosophy which sees learning as a collaborative interaction between teachers, students and the curriculum and pursue efforts to ensure widespread acceptance. Pathway: DD Finance: NC	Short term EP1.1: Make both a summary of the guiding educational philosophy and the relevant strategy or policy documents highly visible and easily accessible from the MOEYI's website.	EP1.2: Conduct a mapping exercise to ensure that the national educational philosophy (i) is embedded in the curriculum and training programmes for teachers, so that once trained they will replicate what they have been exposed to, and (ii) is captured in the evaluation metrics used to gauge teaching efficacy and school performance.
The Teaching Profession **Attractiveness**	**Short term**	Medium Term
TP1: Quickly move to a regime of licensing given its direct link to professionalizing teaching and other co-benefits including greater accountability structures. Pathway: HR Finance: NF (T1.2)	TP1.1: Complete legislative processes to enable the JTC to act as the Sole Entity to Issue Teacher Licenses by the end of 2021. TP1.2: Resource JTC to launch and effectively manage the licensing process.	
TP2: Create/Define a professional (non-administrative) track which teachers can pursue without leaving the classroom. Pathway: HR Finance: RA		TP2.1: Define a three-tiered professional teaching track based on levels of teaching mastery which culminates at the Master Teacher level.
Incentivization	**Short term**	**Medium Term**
TP3: Consider how incentives can be strategically utilized to attract, retain, fill gaps, and improve quality in the teaching profession. Pathway: HR Finance: RA (T3.1); NF (T3.3)	TP3.1: Use data to ensure that current allowances/incentives for serving in underserved geographical areas (e.g., rural and inner-city) and subject areas remain appropriately targeted.	TP3.2: Link incentives to professional development and advancement. TP3.3: Consider providing performance incentives to schools and teachers based on value added metrics.

Need versus Supply	**Short term**	**Medium Term**
TP4: Formalize a framework for the engagement of contract teachers to fill teaching gaps in STEM and TVET areas. Pathway: HR,EA, PfL, DD Finance: RA (T4.3)	TP4.1: Conduct a gap analysis to ascertain where contract teachers are most needed. TP4.2 Ensure provisions are made for the licensing mechanism to accommodate contract teachers.	TP4.3: Develop and/or partner on programmes similar to the Teach America or UWI BOOST models.
TP5: Allow for the reallocation of teachers within regions in response to needs. Pathway: EA Finance: NC	TP5.1 Pilot within one MOE region the granting of authority to reallocate teachers according to need.	TP5.2 Modify the way teachers are employed to allow mobility within a region to areas of staff shortage.
Teacher Training **Standards and Suitability for Teaching**	**Short term**	**Medium Term**
TT1: Institute a mechanism for screening of entrants into the teaching profession from teacher training institutions (TTIs). Pathway: HR, AC Finance: NF (TT1.2)	TT1.1 Ensure the JTC is legislated to work in conjunction with teacher training institutions and other partners to assess and screen candidates entering the teaching profession.	TT1.2 Work with the JTC to institute a mechanism for psychosocial screening of entrants into the teaching profession at year 3 of teacher training. Qualified students will be elevated to a one-year probationary period of school-based practice and with a provisional licence given by the JTC during this period.
TT2: Institute a mechanism for screening of all entrants into the teaching profession. Pathway: HR, AC Finance: NF (TT2.1)		TT2.1 Implement a screening mechanism that could include a psychometric test to assess the quality of the teachers, measured against standards for teachers set by the JTC.
TT3: Increase matriculation standards for entering TTIs over time. Pathway: AC Finance: NC		TT3.1 Using a phased approach, increase the requirements for entry to teacher training institutions to include a combination of CAPE and CSEC Passes.
Pre-service Training	**Short term**	**Medium Term**
TT4: Re-examine Pre-service training to increase hours spent in practical training. Pathway: HR, AC Finance: NF (TT4.2)		TT4.1 Increase hours spent in practical training using the 3 plus one (3+1) model. TT4.2 Remunerate beginning teachers on school-based practice/internship.
Teacher Training Institutions/ School Partnerships	**Short term**	**Medium Term**
TT5: Enhance partnerships between teacher training institutions and schools. Pathway: PfL Finance: NC		TT5.1 A school-based practice/ teacher training institution policy should be developed by the MOEYI to include a robust induction programme. TT5.2 The MOEYI should assign designated practicum schools. TT5.3 The JTC, along with the JBTE, should establish criteria for and monitor the partnership between the TT institutions and practicum schools.

Governance and Operational Structure of Teacher Training Institutions	**Short term**	**Medium Term**
TT6: Review the legislation under which TTIs are presently governed. Pathway: HR Finance: NC	Short term	TT6.1 A higher education act should be developed to include regulations for teacher training colleges.
TT7: The MOEYI should work with public and private institutions to establish a consortium of higher education institutions engaged in teacher training. Pathway: HR Finance: NF		
Funding and Sustainability	**Short term**	**Medium Term**
TT8: Review current funding model for Teacher Training Institutions. Pathway: AC Finance: NF (TT8.1)		TT8.1 Establish a more suitable mechanism (80% government / 20% tuition) for the funding of teacher training institutions, to include quality programme delivery, infrastructural development and investment in human resource.
Curriculum	**Short term**	**Medium Term**
TT9 Conduct a review of the curriculum offered in teacher training institutions. Pathway: AC Finance: NC		TT9.1 Teacher training institutions, the MOEYI, JBTE, and the UCJ should work in partnership to review the teacher education curriculum as needed to ensure relevance and alignment with local and international standards and trends for teacher training. TT9.2 The MOEYI through its agencies should set standards and criteria for teacher training programmes that all institutions must adhere to.
Teacher Educators	**Short term**	**Medium Term**
TT10: Develop standards for teacher educators. Pathway: PfL Finance: NC	TT10.1 The Ministry of Education, through the JTEC and/or JTC should develop standards for teacher educators which should be closely monitored and reviewed against local and international trends for relevance.	

Teaching		
The Imperative to Retrain	**Short Term**	**Medium Term**
TG1 Roll out a targeted programme of re-training for all teachers at all levels of the education system. Pathway: HR, AC, EA Finance: NC	TG1.1 Re-introduce and re-train teachers in the NSC curriculum. TG1.2 Train teachers in the STEAM infused methodology of teaching. TG1.3 Train teachers in online and blended learning skills to ensure quality education during and after COVID-19 in Jamaica.	TG1.4 Consider the Quality Education Circle model for the placement of new STEAM Hubs
Professional Development	**Short Term**	**Medium Term**
TG2 Make continuous professional development mandatory by making it a condition for renewal of licenses. Pathway: HR, PfL Finance: NC		TG2.1 Work with JTC and NCEL on a scheme that defines professional development credits among the requirements for licensing renewal. TG2.2. Work with JTC and NCEL to manage the accreditation of continuous development courses.
TG3 Link professional development to professional advancement. Pathway: HR, PfL Finance: NC		TG3.1 Work with JTC on a scheme that includes mandatory professional development credits in teaching career path.
Re-focused In-service Training	**Short Term**	**Medium Term**
TG4: Refocus in-service training to improve teaching effectiveness. Pathway: HR, EA, PfL Finance: NC	TG4.1: Reconsider the focus of in-service training to emphasize efficient lesson planning, use of class time, strategies to improve student engagement, and more effective teaching techniques especially considering ICT shift.	TG4.2 Work with the NEI and JTC to monitor and evaluate teacher effectiveness and to formally recognize schools with best practices.
Accountability	**Short Term**	**Medium Term**
TG5: Ensure a robust and mandatory appraisal system linked to licensing and professional advancement. Pathway: HR, PfL Finance: NF (TG5.3)	TG5.1: Ensure that the Standards for Licensure (renewal) are aligned to the current standards for Teacher Appraisal by JTC.	TG5.2 Take advantage of the online environment to create customized professional development programmes. TG5.3: Resource JTC and NCEL to adequately manage and exchange data (with each other and MOEYI) related to teacher appraisals.
The Teaching Environment and Teaching Tools	**Short Term**	**Medium Term**
TG6: Reduce Student to Teacher ratios to create a more conducive physical and online teaching environment to facilitate student engagement and teaching effectiveness. Pathway: HR, EA, DD Finance: NF (TG4.1)	T64.1 Mandate classroom sizes and/or Teacher: student ratio. TG6.2 Pursue a Teaching Team model.	TG6.3 Revise and update minimum infrastructure and equipment standards for classrooms and schools.

TG7: Review the multi-grade school structure to determine its effectiveness in achieving optimal student learning with a view to improve its operation or eliminate it from the education system. Pathway: HR, EA, PfL, DD Finance: NF (TG7.1, TG7.6, TG7.8, TG7.11)	TG7.1 Reduce classes to no more than two grade cohorts being taught together. TG7.2 Train teachers of multi-grade classes in differentiation skills. TG7.3 Train teachers in social and emotional learning. TG7.4 Develop a system of voluntary parent assistants in each class to help in classroom management. TG7.5 Introduce a shared resources model for administration, bursarial and guidance staff with nearby schools. TG7.6 Where the number of students in a class is over 20, provide teaching assistants. TG7.7 Consider using subject teachers who teach across grades instead of one teacher per multi-grade. TG7.8 Provide incentives for principal who carries additional responsibilities.	TG7.9 Monitor and evaluate the operation of these schools on a termly basis. TG7.10 Use the data captured after one year to determine the continuation of this structure. TG7.11 Where the outcome of the evaluation shows that the school is failing, assist communities by providing transportation for the students to attend single grade schools in other districts. TG7.12 Make provision to relocate teachers to other institutions, in the event that the school has to be closed.
TG8: Establish Professional Learning Communities in Schools. Pathway: HR, PfL Finance: NC		TG8.1 Work with the JTC to establish PLCs in schools.
TG9: Ensure teachers and school are adequately resourced to deliver online teaching. Pathway: HR, EA Finance: RA (TG8.1)		TG9.1 Implement schemes for teachers to access laptops and their accessories.

Curriculum and Assessment **Curriculum Alignment and Simplification**	**Short Term**	**Medium Term**
CA1: Review the NSC curriculum to ensure alignment with educational philosophy, Vision 2030 goals, and in response to national socio-cultural issues. Pathway: AC Finance: NC	CA 1.1: Mandate a greater emphasis in both primary and secondary schools related to civics, history and citizenship. CA1.2 Review and appropriately revise children's curricula to include resilience.	
CA2: Commence an evaluation on the last five years of the implementation of the NSC. Pathway: AC. DD Finance: NC	CA2.1: Commission either a task force or research-based study to evaluate the state and effectiveness of various aspects of the NSC and its implementation.	CA3.3 Make the use of ICT to enhance teaching of the NSC curriculum an important focus of in-service training at the primary level.
CA3: Promote ICT integration in NSC in primary schools as a means of enhancement but not as a primary method for teaching and learning. Pathway: HR, AC, EA Finance: RA (CA3.2)	CA3.1 Equip all primary schools with ICT. CA3.2 Target tablet distribution schemes at the primary level	
CA4: Revamp APSE and CAP or develop a simplified curriculum framework that provides alternative curriculum pathways to success mapped from early childhood through tertiary Pathway: AC Finance: NC		
Core standards for Curriculum Enrichment	**Short Term**	**Medium Term**
CA5: Implement core standards for a basic mandatory and uniformed co-curricular curriculum structure for all schools to be used alongside the formal curriculum. Pathway: AC, DD Finance: NF (CA5.1)	CA5.1: Expand the mandate of the Curriculum Unit to include developing, implementing, and monitoring a co-curricular curriculum.	
CA6: Improve access to, co-ordination of and integration of extra-curricular activities in especially under-performing schools, particularly those with behaviour challenges and/or those located within Zones of Special Operations. Pathway: AC, EA, PfL, DD Finance: NF (CA6.3)	CA6.1 Implement nationally available extra-curricular activities with centralised coordination and shared monitoring, evaluation and learning. CA6.2 Create MOUs between professional groups and MOEYI to support teacher involvement in and extra-curricular activities in schools.	CA6.3 Provide a budget for extra-curricular activities in schools
CA7 Modify the National school leaving certificate to include co-curricular activities as a requirement for graduation in all schools Pathway: AC Finance: NC		

CA8: Implement a standardized curriculum framework that outlines the core strategies and principles for students with special needs and procedures for managing these needs. Pathway: AC, EA Finance: NC		
Curriculum Assessment Diversification	**Short Term**	**Medium Term**
CA9: Give credence to parallel alternative assessment pathways especially at the secondary level of the education system. Pathway: EA, DD Finance: NC	CA9.1 Map Alternative curriculum pathways with parallel assessments especially at the secondary level to demonstrate the opportunities they provide. CA9.2: Change eligibility for the top national school leaving scholarship to include a range of certifications and other tertiary institution; and/or create similarly prestigious and promoted scholarships so targeted.	CA9.3 Evaluate all the standardized examinations that students pursue throughout their school life to determine relevance and complementarity with expected outcomes. CA10.2 Pilot a framework governing the use of stackable certification and micro-credentialing.
CA10 Consider a national assessment programme for secondary schools with stackable certification. Pathway: PfL Finance: NC	CA10.1 Map present and potential use of micro-credential-based certification in the secondary school system.	
Curriculum governance and Implementation Monitoring and Evaluation	**Short Term**	**Medium Term**
CA11: Enhance the capacity of the MOEYI for implementation monitoring and evaluation of curriculum. Pathway: AC Finance: NF (CA11.1)		CA11.1 Review the resource allocation, with a view to building the human capacity of the MOEYI to monitor and support curriculum implementation and evaluation
CA12: Strengthen the structure for curriculum governance and implementation monitoring. Pathway: AC Finance: NF (CA12.1; 12.2)	CA12.1 Expand the Core Curriculum Unit to facilitate integration of specialists for assessment for teaching and learning and psychosocial support. CA12.2Implement a robust programme of ongoing training for Curriculum Monitoring Officers to support curriculum implementation workshops. CA12.2 Assign dedicated human and non-human resources for monitoring how curriculum implementation happens for a range of stakeholders including teacher training and other tertiary institutions.	CA12.3 Strengthen regional offices to offer contextualised training and curriculum support to schools CA12.4 Strengthen school-based curriculum leadership to improve the fidelity of NSC implementation. CA12.5 Provide a specific programme for change management to support curriculum implementation training.

OSF7 Increase school connectedness through a variety of mechanisms (adapted from CDC, 2009). Pathway: AC Finance: NC		OSF7.1 Expand school leadership to include other stakeholders. OSF7.2 Provide students with a variety of opportunities to practice and improve their academic, and non-cognitive skills. OSF7.3 Utilise a variety of methods in each area of classroom activity to address the diverse needs and learning styles of students. OSF7.4 Provide opportunities for students of differing abilities to interact and develop friendships and promote teamwork. OSF7.5 Establish communication norms in the school.
Trauma and Exposure to Violence	**Short Term**	**Medium Term**
OSF8: Implement measures to ensure that schools at all levels are safe havens for children, protecting them from violence and providing early identification and initial management for victims of childhood trauma. Pathway: HR, AC, EA Finance: RA (OSF8.4); NF (OSF8.3)	OSF8.1 Improve capacity of teachers and guidance counsellors to identify signs of child trauma and to provide initial intervention through training in mental health/psychological first-aid. OSF8.2 Scale up effective programmes that utilise alternative forms of discipline to address behaviour challenges in schools. OSF8.3 Increase access to guidance counsellors. OSF8.4 All school leaders trained in promoting safety in schools.	OSF3.5 Amend the Education Act to ban corporal punishment in schools at all levels. OSF8.6 Develop a structured referral system for children who are victims of trauma.
Children with Disabilities	**Short Term**	**Medium Term**
OSF8: Ensure legal and policy framework in place to address rights of children with disabilities. Pathway: EA Finance: NC	OSF8.1 Finalise and/or operationalise existing laws and policies that address the rights of children with disabilities. OSF8.2 Develop a comprehensive and sustained public education programme on childhood disabilities, including their rights.	OSF9.4 Develop and implement an integrated cross-sectoral national screening and intervention programme for disabilities and behaviour disorders at the primary level.
OSF9: Provision of adequate services for early identification of children with disabilities and behaviour disorders. Pathway: AC, DD Finance: NF (OSF9.4)	OS9.1 Conduct research to accurately identify the prevalence and types of developmental disabilities. OSF9.2 Implement all aspects of the national early childhood screening programme for early identification of children with developmental disabilities and behaviour disorders. OSF9.3 Improve access to diagnostic and assessment services.	

OSF10: Enable schools to better support children with disabilities and behaviour disorders and their families, through the provision of resources and training. Pathway: HR, AC, EA Finance: NF (OSF10.3, 10.4, 10.5)	OSF10.1 Improve access to educational services for all children with disabilities and behaviour disorders OSF10.2 Increase the capacity of all teachers to practice inclusive education. OSF 10.3 Increase provision of social support through the PATH program for families of children with disabilities.	OSF10.4 Improve access to therapeutic services for children with disabilities and behaviour disorders by increasing available human resources. OSF10.5 Use school-based support teams to improve access to support services for children with disabilities and behaviour disorders. OSF10.6 Co-opt the assistance of schools in the establishment of parent support groups.
OSF11: Enhance coordination of support for children with disabilities and behaviour disorders and their families. Pathway: AC, DD Finance: NF (OSF11.2)	OSF11.1 Include provision of services to children with disabilities and behaviour disorders in school inspection reports.	OSF11.2 Establish an oversight body to co-ordinate and monitor implementation of strategies to improve services to children with disabilities.
Out of School Youth	**Short Term**	**Medium Term**
OSF12: Develop and/or expand successful Alternative Educational Programmes (AEP) in areas of socio-Economic Deprivation. Pathway: EA Finance: RA (OSF12.1, 12.2)	OSF12.1 Increase access to successful AEPs OSF12.2 Develop and/or expand access to successful Government of Jamaica programmes such as the CAP and NYS programmes.	OSF12.3 Pilot an alternative education curriculum in collaboration with the PSOJ.
Parent and Community Engagement	**Short Term**	**Medium Term**
OSF13: Increase parent and community engagement with schools. Pathway: PfL Finance: RA (OSF13.3); NF (OSF13.4)	OSF13.1 Include parental and community involvement indicator in school inspections at all level.	OSF13.2 Increase capability of schools to engage with parents and community. OSF13.3 Implement education programmes for parents after school OSF13.4 Implement micro enterprise programme at schools targeting parents.

Responding to COVID		
Learning Loss	**Short Term**	**Medium Term**
COV1: Set a target of 3 years from the 2021/22 school year to map, curb, and recover from learning loss, focussing on students already in the system or who have just exited the educational system. Pathway: AC, EA Finance: NF (COV1.1, COV1.3)	COV1.1. Increase instructional time in schools by one hour for the most affected using the extra lessons model. COV1.2 Consider suspending the placement value assigned to grades 4 and 5 PEP exams and use only grade six PEP results for placement for the next three years. COV1.3 Provide opportunities for those leaving secondary school over the next three years to pursue a 'recovery year'.	
Best Practices	**Short Term**	**Medium Term**
COV2: Immediately evaluate the online teaching experience with the aim of capturing best practices. Pathway: EA, DD Finance: NC	COV2.1 Task an appropriate unit within the MOEYI to collaborate with the JTC on capturing the best online teaching practices emerging over the past year. COV2.2 Keep an inventory of MOEYI approved online resources and expand existing (e.g., MOEYI, JTC, JTA) online repositories.	
Stakeholder interest and engagement	**Short Term**	**Medium Term**
COV3: Capitalize on the current interest and engagement of community and private sector stakeholders in the educational process. Pathway: HR, PfL, DD Finance: NC	COV3.1 Create an inventory of initiatives not initiated by the Ministry in support of education. COV3.2 Negotiate on behalf of the education sector for new incentives, and the extension of present concessions offered by the private sector. COV3.2 Collaborate to create a tablet/laptop pool. COV3.4 Create a track-a-student Hotline.	

THE TERTIARY SECTOR

The Tertiary Committee of the Jamaica Education Transformation Committee is primarily tasked with the development of recommendations relating to the reform of the tertiary sector as a part of the broader recommendations of the Commission. The higher education segment of the education system is a crucial backbone of the broader educational system. The segment provides critical elements of Jamaica's human capital development and the graduates are key to the development of several sectors in both the private and public sectors.

The GOJ spends a significant portion of the overall education budget on tertiary education and as such, the first task of the Committee was to determine the return on that investment by the people of Jamaica. It quickly became apparent that this analysis had not been done by any of the multitude of players in the GOJ's higher education governance framework.

The methodology employed by the Committee included a mix of consultations and deep dives with key tertiary institutions, tertiary students, and key departments and agencies involved in the governance of the sector.

1.1 Responsibilities

The main duties and responsibilities of the Tertiary Committee as per the TOR were outlined as follows:

- Review the current tertiary landscape (for example, programs, institutions, student enrolment numbers, funding, regulations);
- Review the performance of Jamaica's tertiary graduates (including vis-à-vis international tertiary graduates);
- Review role of the University Council of Jamaica (UCJ,) Tertiary Education Commission, and other relevant bodies;
- Review existing monitoring and evaluation framework for the tertiary sector;
- Review and assess the existing financial funding model for tertiary institutions (in partnership with the Finance Committee);
- Provide strategic advice and recommendations to the Commission in relation to policies, programs and services that impact Tertiary institutions.

  In addition to the general objectives outlined in the TOR, the members have also outlined key thematic areas that will guide the work of the committee. The key themes are:

  a. ROI of Tertiary Education (to the student; to the society)
  b. Access and issues of equity
  c. Possible specialization among institutions in the tertiary sector
  d. Regulation and Quality Assurance
  e. Brain Drain
  f. Alignment of research agendas with the country's strategic objectives

1.2 Survey

Due to the lack of detailed data for the sector, the Committee had to develop a survey instrument to ascertain key pieces of data that should have been readily available either in the Ministry or in JTEC.

The key areas of focus in the survey included, inter alia:

- Detailed profiles of applicants
- Data re acceptance rates
- Matriculation requirements
- Tuition charged for each programme offered
- Graduation/completion rates
- Tracer studies
- Satisfaction survey results
- Surveys of employers of recent graduates

Incomplete responses were received from most institutions and this signals significant issues with data collection and analysis in the tertiary institutions. The data received was, however, useful in examining the issue of excess capacity and student profile in those institutions. It also assisted in understanding the duplication of programmes across the system.

Consultations

A number of consultations and meetings were held over the period with key stakeholders in the tertiary sector. There were a total of 10 consultations and 20 additional committee meetings.

2. Introduction

Tertiary Education is defined for the purposes of this report as education that takes place beyond secondary education in institutions that grant degrees and other professional qualifications. It includes universities, community colleges, and teachers colleges. We do not contemplate TVET arrangements as that is subsumed in the work of a separate committee. Our definition is therefore more closely aligned to that of higher education which means, "education offered in universities and colleges that award academic degrees and professional qualifications". [275]

The Case for Tertiary Education

Tertiary education is increasingly important in the quest towards a more technology enabled knowledge society.[276] Numerous studies have shown that tertiary education leads to higher wages, increased ability to cope with economic shocks, and the raising of healthier children.[277] The benefits accruing from tertiary education can be private and/or social and can have long-term impact on a country's development. The private benefits redound to the individuals who access tertiary education and are seen in higher wages and better health outcomes.

Some social benefits or non-market externalities of tertiary education which are often overlooked include the fact that tertiary education allows beneficiaries to become more active participants in their society. Numerous studies show that these graduates tend to spend more time engaged in civic activities and also contribute to poverty reduction, income inequality, the protection of the environment, and human rights.[278]

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[275]Marmolejo, Francisco. World Bank Group. "What Matters Most for Tertiary Education." 2016.

[276]Santiago, Paulo, Karine Tremblay, Ester Basri, and Elena Arnal. Tertiary education for the knowledge society. Vol. 1. Paris: OECD, 2008.

[277]OECD. Education at a Glance. 2011.

[278]Marmolejo, Francisco. World Bank Group. "What Matters Most for Tertiary Education." 2016.

The 2015 ILO School-to-Work transition survey showed that in Jamaica tertiary educated persons were more likely to transition to stable employment within 7.4 months of graduation. This was significantly more than the secondary graduates who found employment after 15.7 months of entering the job market.

In addition, the unemployment rate for the youth population without tertiary education (40 percent) is twice that of individuals with a tertiary degree (19.9 percent).[279]

Where is Tertiary Education Headed?

There are many developments in tertiary education globally. These range from the internationalization of programmes, expansion in online offerings, emphasis on quality assurance, the granting of increasing levels of autonomy to institutions coupled with better accountability frameworks, and linking public expenditure more closely to the government's strategic priorities. In addition, there is increasingly a sense that tertiary education should be significantly more responsive to the society within which it operates.[280]

In attempts to be more responsive to society, tertiary programmes need to address the common misalignment between the skills of graduates and employer requirements.[281] This misalignment is also related to inadequate soft or behavioural skills.

In addition, given changes in global employment patterns, it is likely that graduates will have multiple careers instead of employment in one company or industry. This phenomenon means that tertiary studies should be geared towards preparing graduates for, "greater uncertainty and complexity involving frequent occupational, job and contract status change, greater probability of self-employment, global mobility, adaptation to different cultures and working in a world of fluid organisational structures."[282] This means that a tertiary degree is just one step in the ongoing educational requirements of graduates.

But What is the ROI in the Jamaica Case?

The question of the Return on Investment in Jamaica was one contemplated by the tertiary committee. ROI analyses are difficult in cases such as these where the benefits are not solely of an economic nature as has been pointed out above. The determination of a quantifiable rate of return on our investment in tertiary education was stymied by the lack of data on educational outcomes and income levels.

The debate in Jamaica (and the wider Commission) on the amounts of public and private financial resources that should be allocated to the different levels of education has made the calculation of the economic benefits of investing in education of particular importance. It is well established that knowing these benefits can have an enormous bearing on a country's budgetary efficiency, equity, and financing outcomes, given policymakers can use these benefits to help establish a rank order of investments that are supportive of economic development (Psacharopoulos & Patrinos, 2018).

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[279]International Labour Office. World Employment and Social Outlook for Youth. 2016.

[280]See Santiago, Paulo, Karine Tremblay, Ester Basri, and Elena Arnal. Tertiary education for the knowledge society. Vol. 1. Paris: OECD, 2008.

[281]See Marmolejo, Francisco. World Bank Group. "What Matters Most for Tertiary Education." 2016.

[282]Santiago, Paulo, Karine Tremblay, Ester Basri, and Elena Arnal. *Tertiary education for the knowledge society.* Vol. 1. Paris: OECD, 2008.

The economic benefits of education are often measured in terms of a singular metric, the rate of return. The rate of return seeks to put into quantifiable terms the difference between the net present value of the cost and lifetime benefit of education. As noted before, the return can be measured from a private, total, or social perspective. The private perspective concerns only the direct private cost and benefits accruing to the individual. The total return accounts for the private return as well as the direct public costs and benefits accruing to society. The social rate incorporates the total return and indirect (spill-over) benefits from investing in education. These indirect benefits include reduced crime, improved health outcomes, and higher rates of economic growth.



The estimate of the private rate of return on investing in education is more common because the related data tend to be more readily accessible and the statistical methods more convenient. This rate of return is typically estimated by using the earnings function approach (Heckman et al., 2008; Mincer 1958). This approach provides estimates of how earnings differ for individuals by years of schooling and/or level educational attainment. Importantly, these estimates control for the impact of a broad range of potentially confounding individual socioeconomic and demographic factors.

Unfortunately, for Jamaica, the data required for estimating an earnings function are not readily available. This data would ideally be from a nationally representative sample of individuals aged 15 years and older. Going forward, it is imperative that data be collected to inform such an analysis. The type of data required includes: (1) income; (2) years of schooling; (3) highest level

of educational attainment completed; (4) age; (5) sex; (6) marital status (single, married/common law); (7) parental status (household child(ren) age ≤ 18 years old); (8) labour market status (employed, unemployed, part time, full time, student, retired, etc.); (9) job classification; and (10) field of study.

3. The Tertiary Landscape In Jamaica

3.1 Governance Framework

Few pieces of legislation currently exist relating to the tertiary education sector. The Education Act (EA), 1980 makes very few references to the sector, including defining tertiary education as consisting of:

> "(i) full-time education other than primary or secondary education;
> (ii) part-time education; and
> (iii) leisure-time occupation in organized cultural training and recreative activities, available in pursuance of any provision made under this Act for further education for students who have attained the age of fifteen years."[283]

The EA also defines a community college as an educational institution "providing tertiary education and offering a wide variety of professional, para-professional, vocational and academic programmes, or any of them, based upon the needs of the community in which the college is based." The accompanying Education Regulations include few additional references to the higher education sector including provisions for student representatives; admission to institutions; grants and scholarships to be awarded to or revoked from students; provisions for students in receipt of scholarships to be bonded to the GoJ or other local institution; and constitution of boards of Government-owned tertiary institutions.

Several higher education institutions have their own legislation pertaining to their establishment or otherwise. These include the University of Technology, Jamaica Act, the Caribbean Maritime University Act (which recently replaced the Caribbean Maritime Institute Act), the University West Indies Act (which addresses issues of security on the Mona Campus, Jamaica), among others, still in draft. Some institutions, such as The UWI and The Mico University College also have a Charter, establishing them as an institution and conferring them with legal status.

The Council of Community Colleges Jamaica (CCCJ) Act (amended in 2021 to indemnify actions taken by the Council in awarding and rescinding degrees since its inception in 2001) establishes the CCJ as the institution responsible for the oversight and supervision of community colleges in Jamaica. The CCCJ provides support to community colleges through the development, oversight, and quality assurance of courses and curricula being offered by the colleges; as well its processes for programme development based on the principles of the UCJ. The CCJ also supports these institutions through setting and delivery of examinations, and as mentioned earlier, through the award and rescission of degrees, as appropriate. Most associates and bachelors programmes awarded by community colleges are currently awarded through the CCJ, or otherwise negotiated and offered through other degree-granting institutions.

[283]The Education Regulations however state the minimum age as 17 years, though suitable candidates may be admitted before that age

The University Council of Jamaica (UCJ) Act of 1987 establishes the UCJ as the national quality assurance agency for tertiary education in Jamaica. It has powers to: maintain a register of operational higher education institutions; to confer or deny degrees; to oversee the quality of education being offered in tertiary institutions and their quality assurance systems by setting standards to be met in each case; and to assign credits to programmes and institutions. The UCJ faces legal constraints due to the absence of legislation that mandates that institutions register with the UCJ and apply for accreditation for all courses offered.

The establishment Jamaica Tertiary Education Commission was recommended by the 2004 Task Force Report to be the oversight body of the tertiary education sector. It is responsible for the general oversight and standard-setting for institutions, and in theory, regulation of the institutions in the sector. In reality, the J-TEC has been unable to distinguish itself as the principal oversight body of the sector due to the absence of clear legislation on its functions, and distinctions between its roles, and those of similar operational institutions. J-TEC collects data on the players in the sector, maintains a register of institutions, and raises awareness on options for tertiary education among the student population. The institution in some ways acts in competition with the UCJ, as both complete functions of registration of institutions, data collection, conducting research to advise the MOEYI on policy issues, and general standard setting.

At the same time, despite intentions by both bodies to operate a regulatory body and impose sanctions on institutions not meeting the standards and requirements as articulated, neither body has been able to do so, due to the absence of legislative means to impose these intended sanctions for related breaches. While the UCJ has powers to grant awards and distinctions, and set requirements for them to be granted, its legislation does not expressly give it powers to penalise institutions that fail to register or meet its standards. The J-TEC, on the other hand, was established through a Cabinet Decision, and the related legislation has been in draft for well over a decade.

The National Council on Technical and Vocational Education and Training (NCTVET) operates in a similar fashion to the UCJ, as the institution responsible for prescribing requirements for certification for institutions in the technical and vocational (TVET) sector, and also formerly acting as the quality assurance agency for the TVET sector. The NCTVET was however established through the Human Employment and Resource Training Act (HEART) Act, and operated within that larger training institution, before being transferred to the MOEYI and its functions separated.[284] Prior to these changes, the institution was responsible for: developing standards, accrediting programmes, developing assessments and awarding certificates and diplomas to individuals who have demonstrated competence in vocational areas.[285] In the recent Amendment to the HEART Act, the clause referencing the NCTVET was omitted, given the pending changes to the role of the NCTVET.[286] A Cabinet Submission was also recently completed facilitating a transfer of the NCTVET's quality assurance functions to the UCJ. Its examining functions were also transferred to the Overseas Examinations Commission through a Memorandum of Understanding. Prior to this, the NCTVET acted as both the certifying entity and the quality assurance entity.

[284]his, given the thrust to better incorporate TVET in the higher education sector. Paradoxically, TVET institutions governed by the MoEYI are now included under the Secondary School budget of the GOJ

[285]HEART Act, 1967

[286]University Council of Jamaica. May 2021. Registered Institutions and Training Units as at May 2021

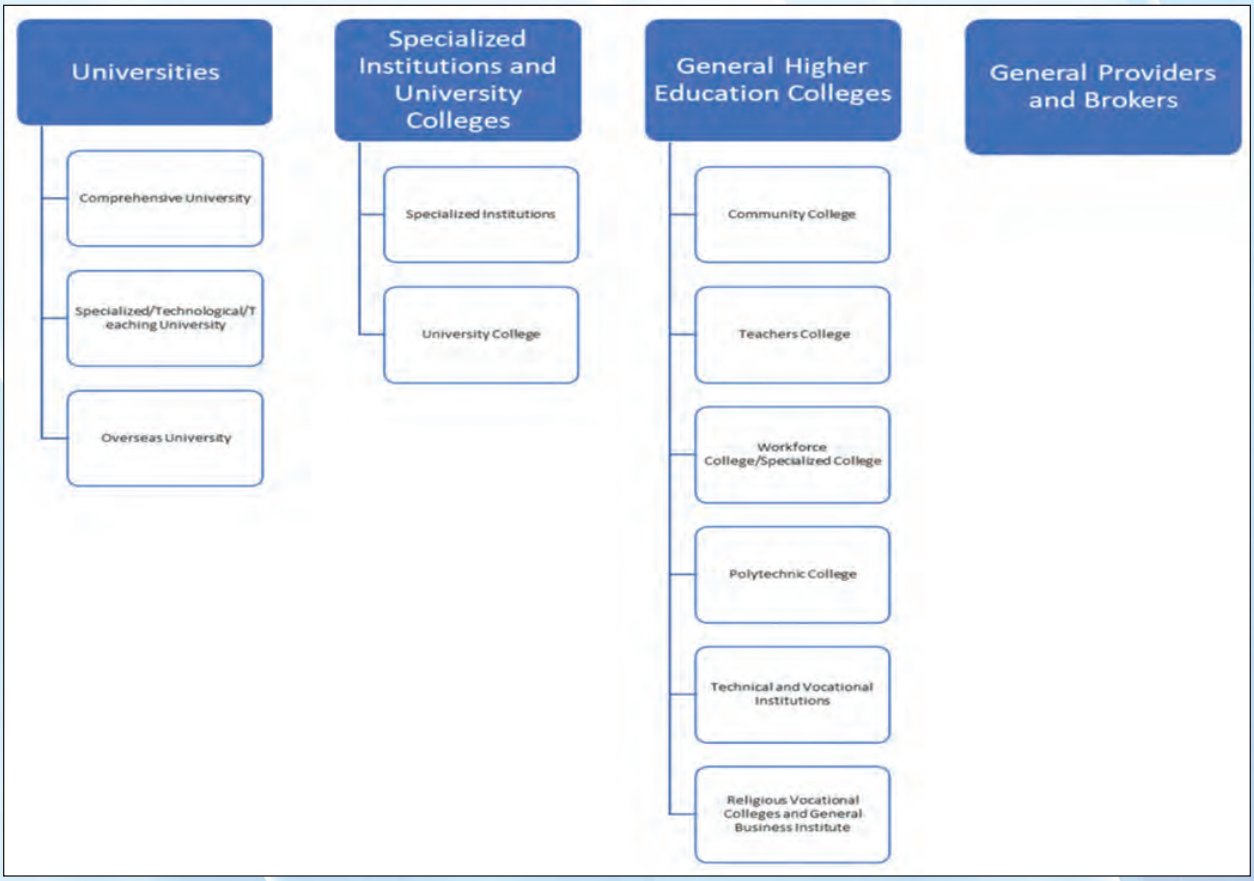
Notwithstanding these individual institution-related pieces of legislation, the system lacks an overarching law governing the higher education sector which outlines the philosophy for the sector, the relevant authority/ies and their roles, as well as a clear articulation of the government's responsibilities with regards to funding of programmes.

3.2 Institutions

Institutions operating in the sector tend to fall within the following categories: universities, colleges, community colleges, teachers' colleges, technical vocational training institutions operating above the secondary level, and other field specific training institutions. Both the UCJ and the J-TEC maintain separate processes for registration of institutions and use different classifications and sub-classifications for institution types. Several institutions listed as being higher education institutions by the J-TEC had not yet started the process for registration. In the case of the UCJ, given that registration is a pre-requisite for programme and institutional accreditation, most institutions are registered. On the UCJ's register, there are 4 Local Universities, 41 Local Colleges, Institutes and Training Units, 6 Institutions at Stages 1 and 2 of Registration and 31 Accredited Training Organisations that were formerly quality assured by the NCTVET.

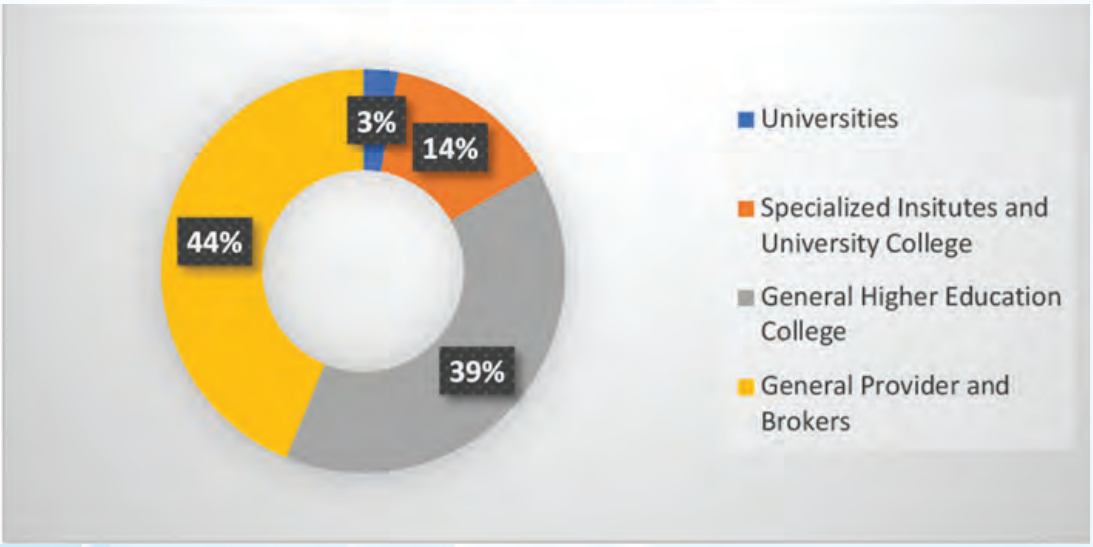
J-TEC has classified HEIs into four categories; Universities, Specialized Institutes and University College, General Higher Education College and General Provider and Brokers. Figure 28 illustrates the sub-categories.

Figure 28. Categorization of Higher Education Institutions in Jamaica (Source J-TEC)



Based on the above categorization of HEIs by J-TEC, the majority of the HEIs in Jamaica were General Providers and Brokers (44%). Thirty nine percent (39%) were General Higher Education College, Specialized Institute and University College accounted for 14% while Universities made up 4%. Different categorisations of tertiary institutions are also done by the UCJ and the Tertiary Unit of the Ministry of Education, including distinctions on whether institutions are private or public, categorisations based on the level at which they operate, and the types of programmes offered.

Figure 29: JTEC Categories for all the HEIs in Jamaica



3.3 Overlapping Programmes

Despite these different categorisations, however, there are overlaps in types of institutions, with institutions having expanded their mandate and programme offerings beyond their original scope; in many cases moving from specialised to multi-disciplinary institutions. Examples of these are teachers' colleges that once focused on a specific area of teacher education now shifting to include other specialisations, or a more general focus, or to offering a wider variety of associate and undergraduate programmes. Several community colleges, though originally conceived to meet the needs of desiring students in surrounding communities, have since expanded to offer a wide variety of programmes. A survey sent to a sample of these institutions showed that in many cases, several similar programmes across the post-secondary and undergraduate levels were being offered by multiple institutions, with several having low levels of enrolment and low graduation rates, showing evidence of redundancies, and glaring inefficiencies in the sector. In justifying the decisions to expand beyond the original scope, institutions have indicated that challenges with funding the overhead costs of the institutions have forced them to expand offerings to other popular, or high-demand programmes to compensate for the shortfall in other areas, as well as to meet the demand of employers for individuals with higher qualifications.

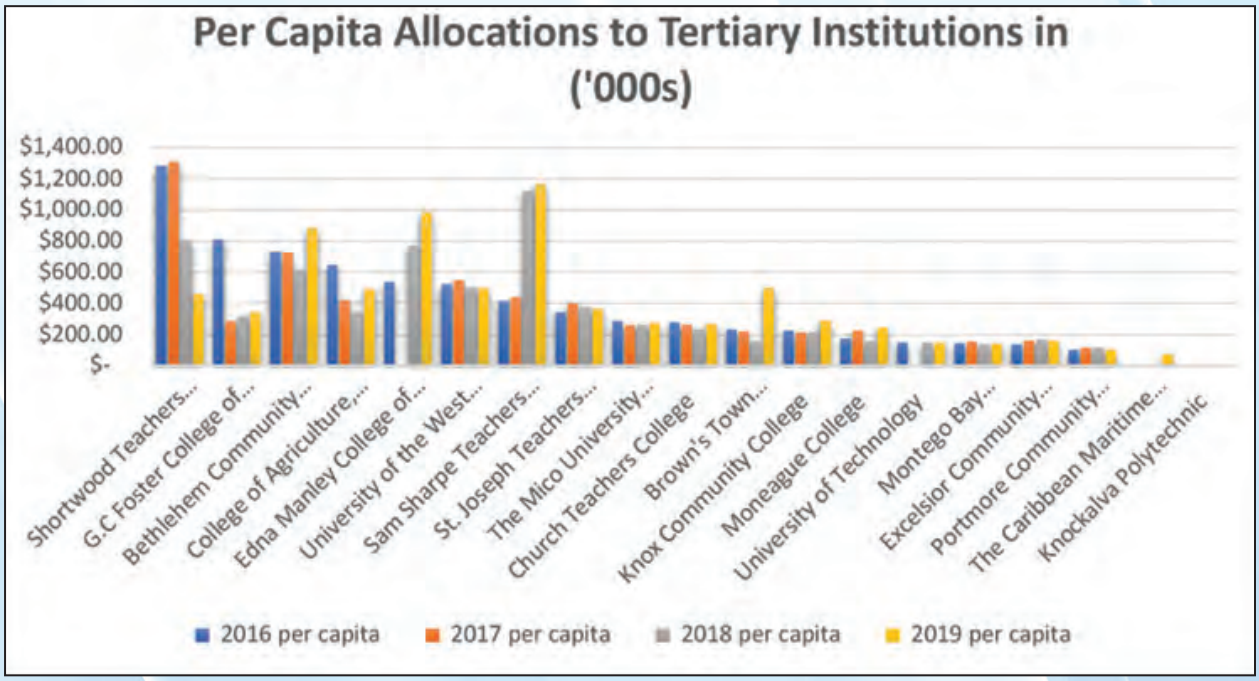
GOJ Funding of Institutions

The GOJ provides funding to government owned or affiliated institutions at the tertiary level. This includes universities, teachers' colleges, community colleges, and other training institutions. While

the Ministry's commitment to funding these public institutions has typically included salaries, and may include funding for other purposes, or one-off grants for capital projects or otherwise, the Ministry has not been able to furnish a definite formula for the determination of grants to institutions. A calculation of the per capita allocations to these institutions shows great disparity in the funding mechanism, which is in need of urgent revision.

For all except two public universities, the Government pays the salaries for staff on the approved establishment. Further to these, other institutions receive a grant of up to J$ 8 billion in the case of the University of the West Indies and J$ 1.8 billion annually for the University of Technology (UTech).[287] Several public institutions have lamented that while the Ministry once paid for salaries for those on staff, despite increases in staff complement, the allocations have not had a commensurate increase, leading to shortfalls in the institutions' revenue, this, especially given that institutions must seek permission from the MOEYI before instituting an increase in tuition. Institutions receive additional revenue from the government in the form of grants, scholarships and loans to students to offset the total cost of higher education. Despite these allocations, however, most public higher education institutions continue to experience challenges in meeting the total operational costs, which has prompted them to seek revenue from other means. This includes the addition of further in demand, cost effective programmes, rental of property, and offering other remunerable services to include research and consulting.

Figure 30: Per Capita Allocations to Tertiary Institutions



[287]Due to the nature of the establishment of the University of the West Indies, the Mona Campus has been largely funded by the Jamaican Government, as is the expectation of the host country to provide a larger share of the funding.

3.4 Key Issues Identified

A number of issues have been identified in the tertiary sector. These issues range from funding to concerns relating to questions of equity and access. Also included are issues relating to the output of tertiary institutions as well as the safety of students on campuses across the country. This section outlines some of these key concerns. Recommendations relating to these areas (and others corollary areas) are provided in the Recommendations section of this report.

3.4.1 Access to Tertiary Education

The issue of equitable access to tertiary education was a key concern of the committee. The Vision 2030 National Development Plan indicates that the major goal vis-à-vis the sector is to increase access to tertiary level education. The Vision 2030 Education Sector Strategic Plan targeted a 33 percent increase in enrolment by 2010 (compared with the 2005/06 29 percent enrolment as the base). This incremental increase would have translated to a 38.67 percent enrolment rate in 2010.

Furthermore, the National Education Strategic Plan included a target of a 50 percent increase by 2016 over the 2009 tertiary cohort (For 2009/2010, approximately 40,600 students were enrolled in tertiary level institutions). Additionally, the Ministry of Education in some reports have indicated an aim to double the gross enrolment rate which was 28.5% in 2017 by the year 2030 (Ministry of Education, Youth and Information, 2017).[288] Jamaica has not been able to meet these targets and is not on the way to achieving same. Currently, the enrolment rate is 27% which is below the Vision 2030 targets as well as what obtains in major economies.

Recent data from the World Bank indicates that access to primary education has been largely equitable and the gap has narrowed in early childhood, secondary and tertiary education. Despite these positive developments, the gap by socioeconomic level, gender and geographic location persists at the tertiary level (this is also seen at the secondary level). As such males, students living in rural areas, and students from socially and economically disadvantages populations are less likely to access tertiary education.

[288] https://moey.gov.jm/govt-looking-double-tertiary-enrollment-2030

Table 18. Net attendance rates by level of education, 2010 and 2017

	Primary Education		Secondary Education		Tertiary Education	
	2010	2017	2010	2017	2010	2017
Gender						
Male	90	92	79	81	12	13
Female	94	91	85	84	15	21
Area						
Kingston MA	89	90	86	87	26	24
Other Towns	93	91	83	85	11	20
Rural Areas	93	92	80	79	6	10
Quintile						
Poorest	92	92	73	69	3	11
Second	91	94	80	82	7	13
Middle	95	88	82	86	11	15
Fourth	95	88	87	90	8	19
Richest	84	94	94	90	40	36

Note: The Net Attendance rates for a given level of education is the percentage of the theoretical-school-age population that is attending that level of education. Theoretical ages: Preschool (3-5 years old), Primary education (6-11 years old), Lower secondary education (12-14 years old), Upper secondary education (15-16 years old), Tertiary education (17-21 years old)

Given the significant levels of investments by the Government at the tertiary level and the significant inequity in access seen, it is important to specifically channel resources to programmes aimed at attracting more students from marginalized groups (males, students from rural areas, and those from disadvantaged circumstances). This should be pursued through a mix of changes to the funding model for students especially in relation to the provision of means tested scholarships and grants. Greater emphasis should also be placed on better support to community colleges as a component of increasing access especially in rural areas and in other underserved areas.

3.4.2 Inequity in Allocations

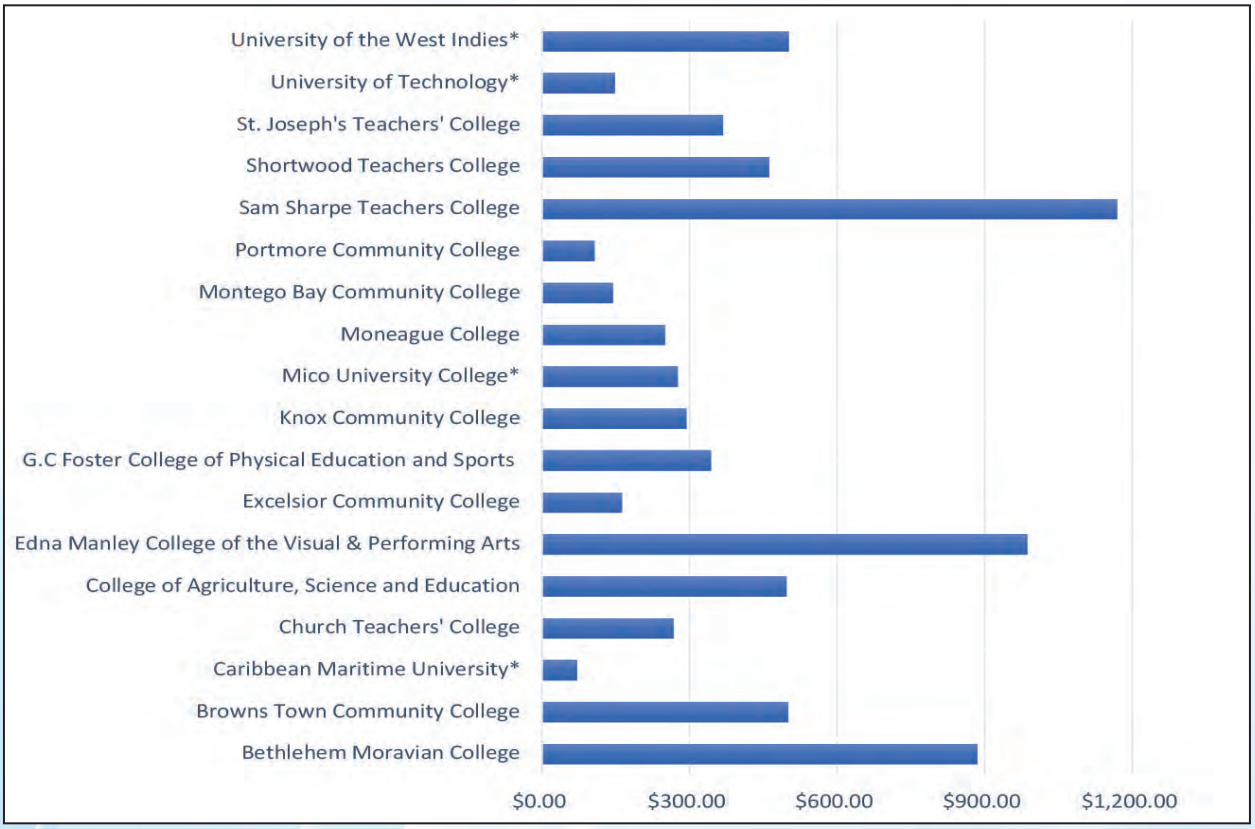
As noted before, public expenditure on tertiary education is quite significant and represents 18 percent of the overall education budget; and this allocation is close to OECD levels. Allocations are concentrated in universities and there are stark disparities on a per student basis in these allocations.

World Bank (2021) data shows that approximately 71 percent of the total expenditure in tertiary education is allocated to universities. The University of the West Indies accounts for 50 percent of total allocation in tertiary education and the University of Technology accounts for 17 percent. Additionally, Multi-Disciplinary Colleges receive 15 percent of the total expenditure, followed by "Teachers Education and Training", with 10.3 percent of total. "In-service Training for Teachers" accounts for 0.54 percent of the total expenditure in tertiary education (Table 8).[289]

[289]World Bank. Public Expenditure Review: Jamaica. 2021. (Forthcoming)

The committee's independent review of GOJ data supports the World Bank data. A review of the 2019 allocations (see chart below) indicates that per student allocations ranged from $71,000 per student to a high of $1.1 million per student.

Figure 31. Government Funded HEIs in Jamaica Per Capita '000 for 2019



There is little clear explanation for this disparity as allocations are not based on a transparent policy and funding formula. The recommendations section of this report highlights some options to address this issue.

3.4.3 Brain Drain Concerns

Emigration rates from Jamaica are quite high. The Diaspora Institute notes that there are as many Jamaicans residing outside of Jamaica as currently residing in the country. The brain drain concern is acute given the significant investment made by the government to the educating of these students. Between 1965 and 2000, the IMF reported that Jamaica lost 85 per cent of its tertiary-educated labour force, a figure only exceeded by Guyana, with 89 per cent.[290]

There are several questions about the labour absorption capacity in Jamaica. This is often linked to the fact that significant portions of the labour force migrate to higher income countries. The International Organization for Migration (IOM) data shows that approximately 45 percent of Jamaican emigrants have tertiary education.[291]

[290]Mishra, Prachi. "Emigration and brain drain: Evidence from the Caribbean." The BE Journal of economic analysis & policy 7, no. 1 (2007).
[291]Thomas-Hope, Elizabeth, Suzette Martin-Johnson, and Zelris Lawrence. "Migration in Jamaica: A country profile 2018." (2018).

There is need for more disaggregation of the existing data to identify the number of those migrating from the country that have accessed public tertiary education. In addition, there has been much discussion of the role of remittances in countering the negative local effects of this outward trend. There is, however, a dearth of data that explores the education background of individuals sending remittances to Jamaica. These data gaps must be filled if we are to better understand the implications of the brain drain concern.

One key concern is the non-payment of student loans upon migration. Currently, there is no mechanism to share information with foreign credit bureaus so that this debt is reflected on the credit history of the individual. This is a critical step in moving forward to address this issue. Another option is the use of incentives where students who remain in Jamaica can have a lower interest rate and possibly some debt forgiveness. The committee believes that scholarships should not only be means tested but must have a bonding component. Graduates would still be able to break the bond upon full repayment of the loan. In this case, the international credit bureau collaboration would be essential. These proposals are discussed further in the Recommendations section of this report.

3.4.4 Security of Students

A recent issue that has come to prominence regarding life on campus is the security of students. Safety concerns from students have ranged from issues relating to the inadequate lighting of campuses, to the non-presence of sufficient security guards in secluded areas, to questionable individuals roaming the campus, and have been as a result of reports of a variety of criminal activities. For example, the University of the West Indies, Mona and the University of Technology are situated in close proximity to two violence-prone communities.

Moreover, institutions, due to limitations in the funding provided by the government, have expanded their business model to include other services, including renting property, offering services other than education on campuses to persons not directly involved with the institution, and expanding on campus confectionaries. These expansions have in many ways compromised the level of privacy or seclusion students were guaranteed on campus. Business operations and other non-academic activities on campus are opportunities for persons not directly engaged with the institution to enter the campus unchecked, thus compromising student security.

At the UWI Mona campus, for example, the reliance of students on various forms of technology make them a target for robbery at a higher rate. This is compounded by the fact that due to the expanse of the campuses, persons who intend to rob students do not have to enter the UWI through specific entrances and there are many areas of the campus that are not frequently inspected by security personnel.

Incidences of violence on, or in areas surrounding university campuses are not solely restricted to robbery, but can range from sexual harassment to heinous crimes such as shooting, rape or kidnapping. Shooting incidents were reported in close proximity to the UWI Mona campus in 2016, and 2020 for example, in both events causing alarm among the student and staff populations and triggering the university's security protocol.[292]

[292]Jamaica Observer. "UWI Clarifies Shooting on Mona Campus". August 16, 2016. URL: https://www.jamaicaobserver.com/news/UWI-clarifies-shooting-on-Mona-campus_71044

Thus, the University of the West Indies (Mona Campus) (Security) Act was passed in 2002 (last amended in 2010) as means to empower the campus to protect their students. The purpose of the Act is to make provisions in respect to the security of the Mona Campus of the University of the West indies and for connected matters.

Instances of rape tend to go under-reported on various tertiary campus, but is of great concern for many female students. This is exemplified by many female students walking in groups or being accompanied by male colleagues to ensure their safety.

A recent incident regarding sexual harassment occurred at one tertiary institution and centred around a student and a senior lecturer. The matter garnered national attention, as the institution appeared hesitant to acknowledge the allegations, and to take decisive action on the engagement of the lecturer. This case, among others, prompted a move to review the institution's Harassment and Anti-Discrimination Policy, and later bolstered the requests for the passage of the Sexual Harassment Act.[293]

The kidnapping of a visually impaired UWI student brought to national attention the lack of adequate protections of students on campuses. It would appear that despite the passage of the University of the West Indies (Mona Campus) (Security) Act, more needs to be done to adequately sensitize and enforce protection mechanisms in place to protect students.

These security concerns were seen across all campuses and were discussed in the Committee's engagement session with tertiary student leaders. It is imperative that the proposed Education Policy also contemplates this critical area.

3.4.5 Preparation for Job Market

Jamaican students have long lamented the challenges related to job-seeking during and after the completion of tertiary studies. In a consultation with students of prominent higher education institutions in Jamaica, the Commission was advised that some of the challenges experienced in job-seeking were due to the failure of institutions to adequately prepare students for expectations in the job market. According to the students, some programmes at the tertiary level are highly theoretical and do not provide students with the necessary practical exposure or experience required to provide value in the employment context. For many students, university programmes are grounded on the regurgitation of content. Further to that, students argued that programmes at the tertiary level do not reflect demands of the labour market and are dated or no longer relevant. Tertiary institutions were also criticised for not equipping students with soft and social skills needed in the workplace. Some of the issues identified testified to the inequitable primary and secondary school system, which affords some students, from some communities and backgrounds better access to resources than others. This also translated to poor preparation for the tertiary level, and later on for the world of work.

Also mentioned during the consultation with tertiary student leaders, as well as in in other public forums, was the difficulty faced finding jobs while pursuing studies as a means to offset the cost of education. Part time jobs offered on campuses do not fill the real demand.[294] The work and

[293] Jamaica Gleaner. Edna Manley moves to review sexual harassment policy. August 2, 2019. URL : https://jamaica-gleaner.com/article/lead-stories/20190802/edna-manley-moves-review-sexual-harassment-policy
[294] Jamaica Observer. "UWI, UTech students lament limited part-time job opportunities". January 26, 2020.

travel programme, which gives students an opportunity to work in US-based companies during the summer break is one option that has been pursued by students to raise funds for tuition and miscellaneous expenses, but pales in comparison to the value of related experience in one's field. Lack of experience during the period of higher education contributes to students being inexperienced and ill-prepared upon completion of tertiary studies.

While several local organisations offer tertiary internship programmes, these still do not fill the demand for work experience for continuing students, and are typically allocated based on merit. In some other countries or international institutions, there is a formalised internship that is incorporated into the structure of the programme of study and is mandatory for all participating students. This would require greater collaboration between the tertiary institutions and the private sector to address this ongoing issue.

4. Key Recommendations

Subsequent to the conclusion of consultations with key stakeholders and a review of existing data, the committee used the World Bank's SABER Tertiary Education Scoring Rubric that provides a framework for assessing tertiary education systems against global best practice (see Appendix 3 for the results of this scoring for Jamaica). The SABER Rubric assess tertiary systems along six policy dimensions: vision for tertiary education; regulatory framework; governance framework; finance; accreditation and quality assurance; the relevance of tertiary education for economic and social needs.

The review of the tertiary sector using this rubric showed significant deficiencies in the framework as most areas were rated as being at a latent or emergent state which means that the policy framework was not in existence or was only minimally implemented. The area of greatest achievement was in relation to accreditation and quality assurance.

The committee was able to use the results of the SABER Assessment as well as the extensive consultations to develop a suite of recommendations that if implemented could set the stage for a more effective and efficient sector that provides more equitable access to Jamaicans. The key recommendations from are contained below.

a. Streamlined Governance Framework

There is urgent need for more cohesive oversight of the tertiary sector, to include quality assurance, data collection and analysis, and evidence-based decision-making (short term)

There is currently limited strategic oversight of the tertiary sector. Data is often non-existent and as such policy decisions are being taken within a context of limited data and analysis. There is urgent need for a comprehensive Higher Education Policy that not only establishes the funding model for institutions, but also sets the strategic framework for the development of the sector. In this vein the Committee recommends that:

- **The Higher Education Act and Policy to be finalized and passed into law.**

Currently, there is no one piece of legislation governing the sector. There are references to teacher training institutions in the Education Act and some limited reference to tertiary institutions therein. Tertiary institutions are very different from primary and secondary institutions and should have a separate legislation to treat with this complex area.

The Act and regulations should be developed through a process of consensus building among all stakeholders. There have already been several rounds of consultation over many years on the direction of the tertiary sector. As with so many other elements of the education system, these draft policies have been at an advanced state of completion since 2015 without any urgent attempt at finalization. The committee therefore recommends that the draft Act and policies should be finalized in short order. Some key considerations for the finalization process include:

- The policy should be based on consensus around the relevant issues as well as the role of the various stakeholders including the positioning of this sector within the national education system given the social and economic imperatives.
- Consideration must be given to the changing profile of the tertiary student who is increasingly female, mature, seeking upskilling for upward mobility in the job market. In addition, the global context of tertiary education must be highlighted and considered. Attention should also be given to mechanisms to attract more males to tertiary programmes.
- Ensure that skills are in line with current and future work place needs, coherent with strategic economic policies (Vision 2030) and considerations around cultural and intellectual capital. In addition, funding mechanisms must reflect/promote these priorities.
- Exploring the creation of a tertiary education **system** which is coherent and emphasises the complementarities between institutions.
- The requirement of the portability of tertiary credentials and hence, the benchmarking of quality against comparable internationally recognized institutions should also be a primary consideration.
- The policy should speak to the synergies between public educational institutions and the role and expectations of private sector and cross-border delivery channels.
- There should be enhanced facilitation of vertical and lateral movement of students between institutions.
- All institutions - private sector, public sector and cross-border actors- must fall within the framework of the tertiary governance arrangements.
- For each institutional type, there must be explicit rules, regulations and requirements including performance targets.
- Issues such as institutional and academic autonomy must be articulated clearly.

- **J-TEC should be fully established as the Higher Education Authorit**y and should be responsible for the following:
  - Development of a higher education policy
  - Development and maintenance of a Tertiary Education Management System that tracks all data across institutions and students so as to inform strategic decision-making
  - Development of funding agreements with publicly funded tertiary institutions as well as the monitoring of performance targets (see recommendations regarding funding)
  - Development of three year strategic framework for tertiary institutions aligned with the GOJ's strategic priorities.

- Comprehensive research on all aspects of the tertiary system as well as periodic assessments of the rate of return on the investment in tertiary education.

- Given the proposed mandate of J-TEC and in an effort to streamline governance and avoid duplications, **the Ministry's Tertiary unit should be rolled into J-TEC** and all oversight and research relating to the sector would take place in that body. See Table below for the proposed distinction between JTEC and UCJ.

Table 19: Proposed role of the Jamaica Tertiary Education Commission (JTEC) and the University Council of Jamaica (UCJ).

Proposed function of Jamaica tertiary Education Commission (JTEC)	Proposed function of University Council of Jamaica (UCJ)
1. Regulate and oversee the operations of the higher education sector	1. Accredit higher education programmes against established Standards.
2. Advise the Minister and the Ministry as required on any aspect of higher education at the request of the Minister.	2. Accredit technical vocational programmes (at the approved levels) against established Standards. a. Transfer of responsibility from the NCTVET.
3. Strengthen, develop and enhance quality assurance systems in higher education and training in order to drive Jamaica's economic competitiveness.	3. Accredit higher education institutions operating in Jamaica.
4. Conduct and commission research to keep the sector relevant and the graduates competitive in the national, regional and international marketplaces.	4. Undertake accreditation and/or the recognition of programmes in collaboration with approved/ registered accrediting bodies in the execution of its mandates.
5. Maintain Jamaica's national higher education information system.	5. Recognise the programmes and the qualifications offered by foreign higher education institutions operating in Jamaica.
6. Forge and maintain working partnerships with multi-lateral, regional and other international organisations to facilitate mutually beneficial global linkages, and mobility for Jamaican higher education stakeholders.	6. Monitor accredited and/or recognised programmes and their qualifications, and accredited institutions to ensure that the terms and conditions associated with their accreditation and/or recognition are implemented and being adhered to.
7. Establish relationships with the business community/ private sector and national planning bodies to ascertain timely information on the dynamics of the labour market which will be fed into the higher education planning and research processes.	7. Publish reports on critical status of accredited and/or recognised programmes and qualifications, and institutions.
8. Facilitate an independent and insulated Appeals Framework to adjudicate on concerns regarding the actions and/or decisions of J-TEC, or any other agency operating within the higher education sector in Jamaica.	8. Deny or recommend the removal of accreditation.

- **Development of a Consortium arrangement for teachers colleges similar to what has been done for CCCJ.**

This consortium would facilitate greater collaboration between institutions and would allow for greater synergies and efficiencies in the allocation of resources. As has been pointed out in other elements of the report, teachers colleges are critical to the development and reform of the education system and the governance framework should be adjusted to better facilitate this role.

b. Ensuring Quality

Enhance the ability of UCJ to continue its quality assurance in a changing tertiary market (short/medium term)

Quality assurance is central to any attempt to improve the relevance and confidence in our tertiary sector. Currently, registration and accreditation are voluntary activities, but the impetus to have quality programmes in the country would necessitate a move to more focus on world class quality assurance. The committee therefore recommends that:

- ***The UCJ Act should be amended to better reflect its mandate and core functions; regulations should also be drafted as a corollary to the Act.***
- ***All tertiary institutions should be registered and accredited with the UCJ so as to better ensure quality in the system.***

This requirement would have to be phased in as the process for accreditation of programmes or institutions is a lengthy one. All tertiary institutions would therefore need to be registered within two years and all institutions should be on the path to the accreditation of the most popular programmes with a goal to eventually have institutional accreditation. This does not preclude two or more institutions from collaborating in sharing one internal quality assurance function.

The UCJ's role is therefore central to the continued development of the tertiary sector and its legislation should be amended to better reflect its core functions. It is also important that the regulations governing the UCJ also be developed.

c. Block Grant Funding

- ***Funding for tertiary institutions should be based on the principles of equity and access and should be aligned to the government's strategic priorities (short term).***

Currently, funding is far too arbitrary and lacking in transparency. The per student allocation is not consistent across institutions and there is no discernible basis for some allocations. This is seen in for example the University of Technology receiving per student allocations commensurate to that of a high school and significantly below that of other institutions. The Committee therefore recommends:

- ***Funding should be allocated in a more transparent manner using the following formula: BASE GRANT + RESEARCH GRANT + Special Alignment Grant (short term)***
  - Basic allocation – Based on the number of students taught (consideration will have to be given as to how tertiary institutions will cover overhead costs and other indirect costs)

- Research allocation – For institutions designated as research institutions (to cover overheads and salaries associated with research). This grant would be a premium on top of the per student grant (e.g. 10% more)
- Allocation for Strategic Priorities – For teaching and research in areas determined to be strategically important by the GOJ. The Strategic Alignment grant would be provided to institutions that are aligned with the priorities of the government. It is proposed that every three years the JTEC would, based on research, determine the key priority areas for study. There will be an additional grant on top of the per student grant allocated to these institutions. It should be noted that special allocations should be made for programmes where the economic calculus may not be as positive, for example programmes in history or the wider arts given their social importance.
- It is further recommended that institutions have autonomy in how they use their funds and for the setting of students' tuition fees. This movement to a block grant will provide greater autonomy to the institutions to prioritize programs and to structure their administration as necessary. It would remove the current practice of funding specified positions even in cases where the teacher student ratio is low.

- Appropriate transitional arrangements will have to be agreed on, with adequate timelines to allow institutions to adjust to this arrangement.

Accountability Measures

A small percentage of funds allocated to tertiary institutions should be linked to some performance criteria. This is commonly practiced globally and would add to the accountability of these institutions. Some accountability measures include:

- ***Submission of key data on students and graduates including, inter alia, enrolment and attrition rates, completion times, etc. this will assist in ensuring that the appropriate data is provided to the Higher Education Authority.***
- ***Graduation rate. Many countries reserve a portion of funds for achievement of agreed graduation rates.*** This can create perverse incentives and as such it is important to having ongoing reviews to ensure that standards are not lowered.
- ***Institutions should be required in their annual reports to submit information on areas such as enrolment, retention etc. Collections and submission of this information should be a condition and funding.***

d. Re-examine the functioning of government entities established to provide funding support for tertiary education (short term)

While it may appear that tertiary institutions are overfunded, the contrary is actually the case. It is clear that the infrastructure in many institutions is not fit for purpose and these institutions are often sacrificing quality in a bid to enrol as many students as possible to cover overheads.

With the increased importance of technology, it is critical for students to have access to such resources and it also provides an opportunity to gain efficiency in expenditure (discussed in other

recommendations). This funding need not only come from direct grants from the GOJ budget, but instead could be garnered from existing structures such as the SLB and the NET.

Students' Loan Bureau

One issue precluding access to tertiary education is a lack of private funding to pursue tertiary studies. This was evident in the dropout rates as well as the consultations with representatives from the student body. There was overwhelming consensus that the SLB was not a preferred option for many students. This has led to students attempting to work full time and study full time and also to the inability of many students to remain in their programmes. The 2019 CaPRI study of the cost of a tertiary education also showed that non-tuition expenses such as travel expenses, meals, housing (whether on or off campus) were an important element of the costs faced by students and was one of the reasons for students dropping out of programmes.

- SLB to be examined to ascertain whether loan criteria can be adjusted to better facilitate increased demand by students, with particular attention placed on students from low income families (possibly greater focus on means testing in lieu of having a guarantor).
- Focus also to be placed on more stringent means of collection/enforcement (e.g. arrangements with local and foreign credit bureaus). The idea is if the SLB can tighten up on collection at the back end, then maybe it can relax lending criteria particularly for low income borrowers.
- Consideration could also be given to lengthening the loan repayment period.
- The SLB also factor non-tuition expenses into the overall allocation of loans (add 10% premium to assist in non-tuition expenses)
- Explore possibility of SLB packaging debt in a manner that will allow for private sector involvement in providing finance.
- Explore a repayment model based on income upon graduation. This would lessen the burden on students who have not been able to find employment after graduating. This approach would also allow for greater equity where payments are made on a sliding scale based on income after graduation.

National Education Trust

- ***The role and functioning of the NET should be examined to assist in the identification of additional funds for the tertiary sector especially in relation to the execution of capital projects.***

Although the NET is not exclusively focused on tertiary education, it is included here because of its potential to raise non-governmental sources of finance for capital investment in education. Such capital investment is also urgently needed at the tertiary level.

e. Means-tested Scholarships

- ***Most government scholarships at the tertiary level should be provided via needs testing (short term)***

Currently, most scholarships are based solely on academic achievement, but given the need to improve equitable access, the GOJ should allocate most scholarships on a means-tested basis. In alignment with the general shift toward models that pursue equity, education systems have tended to prioritise the use of means-testing, specifically in the financing of tertiary education.

Awards of scholarships, grants, and bourses though historically primarily merit-based, have shifted to employing mechanisms that assess not only student performance, but also the student's capacity to cover the cost of study.

One of the considerations in deliberations on means testing is the concept of family responsibility, where governments must determine at what point are parents no longer responsible for the financial costs of their off-spring's education. Given that most means-testing mechanisms measure household/family income, measures also need to be in place for students who are estranged from their parents, or whose parents opt not to provide financial support. In France, "special aid" may be awarded to a student estranged from their parents, or in another unusual situation following provision of adequate justification, and usually an interview, and/or a home visit.[295] Consideration must also be made of the percentage of household or family income that should be dedicated to funding the education of each child, and the non-tuition related expenses that come with sending a child to school.

A questionnaire to be completed by the student and the student's family is the standard mechanism for collecting information to test the capacity of that student to pay the cost of tuition and related expenses. This includes questions related to the family assets, occupation, level of education of parents, home location, and number of dependents in a household (including children, persons with disabilities, and elderly persons). This model is used in the Philippines and is accompanied by harsh penalties for cheating or submitting fraudulent responses. Measures to verify the information presented in the questionnaire typically include triangulation with data captured in the government's taxation system and other public databases.[296]

Another mechanism is through the use of social indicators, which includes a qualitative assessment of a household's standard of living and level of expenditure, typically through home visits. This mechanism has however been criticised for its subjectivity and costliness, both in terms of the time and the human resources required to carry out such visits.[297]

The model in France is one which includes a similar verified means test to be completed annually by students and their guardians. It includes the completion of a Student Benefits Application (Dossier Social Etudiant) and the provision of support documents to include letters from employers, bank statements, and status letters in order to apply for financial aid and subsidised boarding. The analysis of the needs-based testing places students in one of seven echelons, which determines how much government funding students are eligible for, as well as their eligibility for a space in a public boarding facility. The contributions typically ranges from 1000 to 5000 euro, matched with per student contributions to institutions of roughly 7000 to 8000 euro per year.[298]

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[295]"Aides Specifiques". https://www.etudiant.gouv.fr/fr/aides-specifiques-1306
[296]Thomas Wolanin. "Means Testing in Developing Countries", in International Higher Education
[297]Thomas Wolanin. "Means Testing in Developing Countries", in International Higher Education
[298]European Centre of Service-Learning in Higher Education. "Higher Education Framework in France". URL: https://www.eoslhe.eu/higher-education-framework-in-france/

f. Child Opportunity Fund

- ***A voluntary saving scheme should be established through a public-private partnership wherein parents (up to a prescribed income level) are allowed tax free saving toward their children's tertiary education (medium term).***

Tertiary education is not inexpensive and it is important that parents be encouraged to save for these expenses when children are young. In this regard, the government should establish a tertiary fund that would be delivered through a public-private partnership. The GOJ would fund each student at the birth of each child. Parents would then have the ability to add to the fund on a monthly basis up to age 18 when the funds could be used to supplement tertiary education. In developing this fund, it is imperative that mechanisms are added to ensure that lower income households receive the support needed so as to enhance equity in access to tertiary education. The details of this programme should be developed by J-TEC in collaboration with other public and private sector stakeholders. Key elements of the programme should include:

- For parents who contribute to the scheme, the GOJ will make a specified contribution into the child's account.
- The funds will be managed/invested by private financial institutions and administered (possibly by the NET).
- Funds will only be made available once the child reaches tertiary age and can only be used for pre-determined purposes (e.g. tuition fee for tertiary entity; post-secondary education; skills training; entrepreneurial ventures; etc.)
- For children on the PATH programme, the GOJ will make the parental contribution, along with the specified governmental contribution.

g. <u>Tertiary Education Management Information System</u>

A functioning Tertiary Education Management Information System (TEMIS) should be developed (short term)

This report has highlighted significant data gaps across all dimensions of the tertiary system. These data gaps are seen in the Ministry, J-TEC, and the tertiary institutions. There is an urgent need to enact a TEMIS to track all aspects of data related to tertiary institutions. These include enrolment and dropout data, tracer studies after graduation, as well as allocations to institutions and scholarships and grants awarded.

The current policy development environment is sub-optimal given the dearth of data on the sector. It is difficult to see how policies can be developed in such a vacuum of relevant data. The TEMIS would provide the framework for collecting and analysing data that can better inform policy decisions in the sector. This system would facilitate decision-making not only at the government level, but could also be the basis for decision-making on programmes and initiatives in the tertiary institutions.

h. <u>Flexible Learning Pathways: Focus on Microcredits and Stackable Degrees (short term)</u>

- ***Development of a framework for micro-credentialing aligned with the National Qualifications Framework.*** The UCJ is currently exploring a quality assurance framework to treat with these emerging trends and this effort should be accelerated.

Micro credentialing is a relatively new phenomenon in the higher education sector. One key development in this area is the rise of Massive Open Online Courses (MOOCs) which includes programmes such as Coursera, LinkedIn learning, and Google Garage.[299] Several major universities and colleges globally have partnered with these platforms to boost their online divisions and generate revenue through the provision of corporate training for example.[300] Micro credentials provide numerous advantages over traditional university programs, especially for busy professionals. These include reduced number of courses, a shorter completion time, increased affordability, more relevance to the learner's career, and greater flexibility of learning options.[301] This is an area that should be more closely tapped in facilitating ongoing tertiary training as well as providing other revenue streams for institutions.

Stackable Degrees

Aligned to the trend relating to MOOCs, is the trend of stackable degrees. This phenomenon is not linked solely to online offerings, but is also seen in universities and colleges globally. This trend is expected to accelerate with individuals preferring certifications instead of full degrees due to costs and time constraints. As such, many tertiary institutions globally are moving towards more stackable degrees which provide greater flexibility to students to pursue smaller programmes and certificates while building towards a final degree.

Operationalising the National Qualifications Framework (NQF)

The National Qualifications Framework was launched in 2017, but it is not enshrined in law. At a minimum, there should be an NQF guiding its implementation. Given the importance of this Framework it is recommended that:

- ***The NQF should be enshrined in policy (short-term) and legislation (long term) and establishing the structures for the Framework to operate***
- ***All institutions should be required to operate according to the NQF through a mapping of their programmes on to the Framework***
- ***It should be a statutory requirement for all institutions to function within this Framework, thus institutionalizing the alternative pathways for lateral and vertical movements within the tertiary system.***
- ***Embedding within the functioning of the NQF the recognition of prior learning***
- ***Empirical research must be done around the creation of tertiary system with different institutions offering different programmes but with complementarity between the entities. This research must also explore the level of shared services that would be possible between the entities.***

Public Private Partnership

- ***The tertiary sector especially community colleges and some universities should partner more effectively with private sector entities to provide on the job training in learning hubs in the organizations.*** This would allow employees of these entities to access tertiary training that is relevant to their jobs and would further facilitate access by a broader group of

[299]Ralston, S.J. Higher education's micro credentialing craze: A post digital-Deweyan critique. Postdigit Sci Educ 3, 83–101 (2021). https://doi.org/10.1007/s42438-020-00121-8

[300]Bogdan, R., Holotescu, C., One, D., & Grosseck, G. (2017). How MOOCs are being used for corporate training? Retrieved from https://www.researchgate.net/publication/316076362_HOW_MOOCS_ARE_BEING_USED_FOR_CORPORATE_TRAINING.

[301]Moroder, K. (2014). Micro-credentials: empowering lifelong learners. Retrieved from https://www.edutopia.org/blog/micro-credentials-empowering-lifelong-learners-krista-moroder.

citizens. This approach could also serve to address the tertiary deficit where graduates are not adequately equipped with the skills required by the private sector.

Co-operation across institutions

- Empirical research must be done around the creation of tertiary system with different institutions offering different programmes but with complementarity between the entities. This research must also explore the level of shared services that would be possible between the entities. This should be linked to the NQF that allows for the movement of students within the tertiary system.

i. Eliminating Information Asymmetries

- ***Steps should be taken to improve the provision of critical information to prospective students on labour market trends, strategic priority areas, and tertiary options available to them (short term)***

Information asymmetries are an important deficiency that leads to sub-optimal selection of tertiary programmes. There are significant information asymmetries seen in the selection of concentration areas by students. For example, students are sometimes not aware of national priorities and are also often unaware of special funding and other concessions for degrees in particular areas.

This often results in students selecting programmes that are not suited to their real interests and strengths or for which there are limited labour market prospects. This issue is especially acute for students from backgrounds where parents are not equipped to assist in directing students in their choice of tertiary studies in terms of what to study and where to study (OECD Knowledge Study).

Guidance counsellors in secondary schools do try to assist in this regard through the provision of some career guidance, but there is need for improved availability of public information on areas of strategic importance and areas of opportunity based on labour market assessments.

It must be noted again that a key component of this work is the effective completion of tracer studies by the Higher Education Authority to determine not just the employment status of graduates, but also to ascertain the alignment of employment to achieved qualifications and the levels of underemployment seen vis-à-vis graduates. All this data should be readily available on a website for students and parents to review.

In the UK, for example, results of student satisfaction surveys are readily available to assist prospective students in better understanding the school environment of various institutions and ultimately assist in choosing where to study. J-TEC currently does these student satisfaction studies periodically and the data from these studies should be more readily available.[302]

[302]These surveys are also useful in the strategic decision making relating to the sector as they can signal issues in institutions that should be addressed.

j. Eliminate Inefficiencies

Eliminate sources of inefficiencies such as under-enrolment and duplication of programmes across tertiary institutions (medium term)

Some specific recommendations include:

- ***Operational review of tertiary institutions to more clearly identify areas of inefficiencies***
- ***Return to the policy of specialization in teachers colleges where programmes/subjects with lower enrolment numbers are offered by a maximum of two institution.***
- ***Support and encourage collaboration between institutions to jointly deliver programmes.***

As seen in the data on tertiary inefficiencies earlier in this report, there appears to be significant inefficiencies in the tertiary sector when compared to other jurisdictions. There is therefore a need for a comprehensive operational review of the institutions that are publicly funded to unearth whether there are significant inefficiencies in the sector.

The analysis of most of the institutions (in particular those that responded to the Commission's survey) showed significant duplication of courses. This duplication is not only seen in the areas of Management type courses, but also is linked to programmes such as law and engineering. The significant duplication in efforts results in sub-optimal allocation of the scarce resources available to the sector. It should be noted that many institutions emphasise management courses because they are in high demand by students and they assist in subsidizing less popular programmes.



Not only are several institutions offering similar programmes, tertiary institutions have very complex and very bureaucratic back office setups with significant numbers of staff in administration. There is need to mandate greater collaboration in these institutions through the merger of some back office operations, sharing of labs and other facilities, and the provision of joint programmes. This approach is being contemplated by the community colleges and the teachers colleges, but this must be accelerated.

It should also be noted, however, that there is a potential trade-off between mandating specialization and maintaining competitiveness and access in the public tertiary system. Competition should be encouraged, but it should not be at the expense of an already constrained public purse.

A more worrying concern for the committee relates to under-enrolment in programmes across many institutions. This leads to questions of the sustainability of the relevant programmes and also the institutions themselves. There were several programmes where enrolment numbers did not support the number of teachers on the Establishment. This demonstrated the lack of adequate monitoring of programmes. Institutions should be encouraged to co-ordinate in the provision of these low enrolment programmes or to eliminate them entirely. This can often be stymied by the current approach that funds institutions based on the posts on the Establishment instead of on the basis of block grants. A move to block grants would therefore provide universities with greater flexibility to address some of these concerns.

In the teacher training institutions for example, there are limited numbers of students in subjects such as history, languages, etc. There is value in identifying specialization across the institutions as had been mandated before. Some institutions would focus on teacher training vis-à-vis mathematics and STEM while others would focus on the arts. This approach was stymied in the past by geographical concerns as there was not enough consideration given to having more than one institution responsible for a particular subject area. In addition, the continued reduction in support from the government mean that institutions had to focus on maintaining enrolment numbers in order to remain viable. As such, the attempt at specialization was not successful.

One way to spur efficiencies in teacher training institutions is to implement a consortium of teachers colleges where they work together to deliver programmes and to grant teaching degrees. This would be similar to the current structure of the CCCCJ.

k. Increased Capital Investment

A capital investment fund should be created to fund investments in necessary upgrading projects throughout the tertiary sector (short/medium term).

Capital investments in the tertiary sector has been extremely low for several decades. it is imperative that funds be injected into institutions to spur the level of technological improvement necessary to facilitate the delivery of world-class programmes. In addition, the goal of increased access would necessitate the expansion in the plant of some institutions. It is therefore recommended that:

- A capital fund should be established and seeded with $2billion to be distributed through a competition where institutions can submit capital projects that are aligned with the strategic priorities of the GOJ and can revolutionize course delivery especially in technical areas.

- There should also be enhanced use of online learning platforms to not only widen local access, but to also tap into international student markets.

A key feature of all the discussions of the Committee has been the need to modernize both the institutions and the pedagogy employed in these institutions. The committee concluded that any attempt to improve outcomes in the sector will be linked to significant revolutionary changes in the use of technology in the administration of the institutions as well as the delivery of programmes.

This type of change would however necessitate significant capital expenditure. Covid-19 and the move to the online provision of services has accelerated the impetus to rethink both mode of delivery as well as unearthing new ways to improve access and to add new dimensions to the business model of some institutions through the provision of services to an international student body.

The discussions have also pointed to the criticality of properly resourcing the technology focused university. A technology university cannot adequately function with an analogue plant and methods.

I. Measures to address brain drain (short term)

As noted earlier in this report, a significant proportion of tertiary graduates leave the island. It is not clear that the remittances that come from such graduates compensate for the lost income-earning potential. We anticipate that this emigration trend will continue given concerns relating to the absorptive capacity of the country. Key areas for exploration should include:

- Measures to bond the beneficiaries of any government support for an appropriate length of time (for example, scholarship and SLB recipients)

- Longer moratorium period for SLB loans for graduates who remain in Jamaica.

Table 20. Per-Capita Annual GoJ Allocations to Tertiary Institutions ('000s)

Year	2019/20				2020/21			
Iinstitution	Salary	Total	Enrolment	2019 per Capita	Salary	Total	Salary	Total
Shortwood Teachers College	$302,503.00	$325,047.00	703	$462.37	$333,763.00	$365,748.00	$357,346.00	$389,331.00
G.C Foster College of Physical Education and Sports	$190,864.00	$213,451.00	620	$344.28	$285,735.00	$318,059.00	$292,878.00	$325,202.00
Bethlehem Community College	$249,212.00	$285,243.00	322	$885.85	$298,373.00	$338,858.00	$305,832.00	$344,930.00
College of Agriculture, Science and Education (CASE)	$467,787.00	$510,060.00	1025	$497.62	$518,774.00	$573,639.00	$508,774.00	$554,599.00
Edna Manley College of Visual and Performing Arts	$457,911.00	$490,681.00	497	$987.29	$506,181.00	$554,163.00	$500,181.00	$543,948.00
University of the West Indies	$ -	$8,730,134.00	17382	$502.25	$ -	$9,195,264.00	$ -	$9,195,264.00
Sam Sharpe Teachers College	$217,251.00	$243,384.00	208	$1,170.12	$284,157.00	$313,461.00	$291,260.00	$320,564.00
St. Joseph Teachers College	$167,029.00	$186,822.00	507	$368.49	$190,010.00	$213,898.00	$206,701.00	$230,589.00
The Mico University College	$381,107.00	$427,239.00	1544	$276.71	$561,709.00	$611,318.00	$561,709.00	$608,305.00
Church Teachers College	$225,055.00	$240,870.00	899	$267.93	$323,107.00	$347,963.00	$324,630.00	$349,486.00
Brown's Town Community College	$229,071.00	$235,016.00	469	$501.10	$340,843.00	$354,323.00	$340,843.00	$357,557.00
Knox Community College	$399,680.00	$417,112.00	1419	$293.95	$453,976.00	$479,654.00	$464,976.00	$490,654.00
Moneague College	$289,941.00	$329,828.00	1317	$250.44	$396,117.00	$429,004.00	$380,513.00	$413,400.00
University of Technology	$ -	$1,871,826.00	12583	$148.76	$ -	$2,871,826.00	$ -	$2,921,826.00
Montego Bay Community College	$281,798.00	$293,726.00	2030	$144.69	$333,083.00	$351,607.00	$341,410.00	$359,934.00
Excelsior Community College	$466,549.00	$482,306.00	2958	$163.05	$621,835.00	$652,414.00	$621,835.00	$652,414.00
Portmore Community College	$254,987.00	$264,183.00	2462	$107.30	$334,870.00	$353,419.00	$334,870.00	$353,419.00
The Caribbean Maritime University	$ -	$240,910.00	3356	$71.78	$ -	$840,910.00	$ -	$840,910.00
Knockalva Polytechnic			26	$ -	$218,197.00	$229,980.00	$105,197.00	$122,304.00

TVET IN JAMAICA

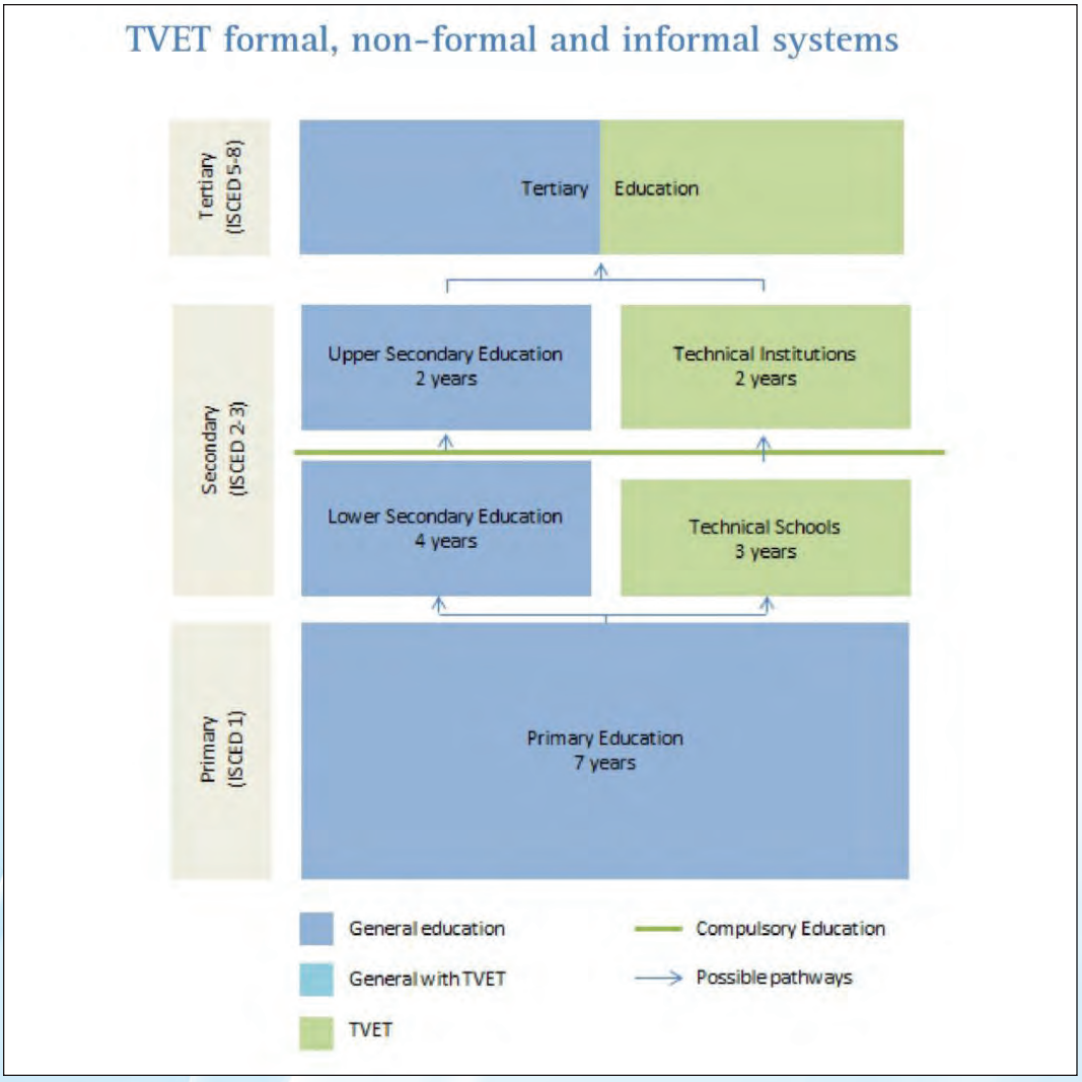
To many, technical vocational education and training (TVET) is not well understood. According to UNESCO and the International Labor Organization (ILO), TVET refers to "aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life"[303] TVET, the UNESCO_ILO team notes in another document, suffers from a status problem which accounts for a paradox in the difference between its potential and practice: "A high proportion of the population of poor countries remains unskilled, richer countries are struggling to meet the human capital demands of rapidly changing work environments and, almost universally, TVET remains the "poor relative" of education systems both in terms of perception and attention." [304]

Jamaica has a great need for TVET education. The country is at an intermediate stage of demographic transition with its youth, 15-29, representing 29 percent of the total population and 42 percent of its working age population. In spite of recent declining unemployment, the youth population still experiences high rates of un- and under-employment. Those youth who are employed are mainly in informal jobs, only a quarter in formal work. At the same time, the economy is greatly in need of skilled labor. This mis-match is a major brake on economic development. One obvious solution is the provision of technical and vocational training. As UNESCO- ILO notes: "The potential of technical and vocational education and training (TVET) to drive progress and transform societies is widely acknowledged. The European Union (EU) refers to it as the "engine of economic development and international competitiveness."[305]

Jamaica has long been engaged with the problem of technical training of its youth, and exhibits the same prejudices against TVET in comparison with traditional academic subjects. The Human Employment and Resource Training/National Service Training Agency Trust (HEART/NSTA Trust was established in 1982 and is the main institutional support for TVET training. With the recognition that TVET should become an integral part of the traditional school system, there is the need to re-consider further the relationship between HEART and the schools, including the possible re-allocation of resources between the two systems, a re-allocation, it should be noted, that has already begun with HEART's $400 Million funding of the MOEY's CAP program. Such a review is a major undertaking and the Honorable Prime Minister, Andrew Holness, has announced that, following this Commission, another will be appointed to conduct a thorough institutional appraisal of HEART and make recommendations for its reform, including its relationship with the schools in the provision of TVET. For this reason, we will not be reviewing the HEART program directly in this report, although it will be mentioned in consideration of TVET training that depends on it. We will focus instead on the present provision of TVET education in the schools and what should be done to improve and enhance its stature.

[303]UNESCO and ILO 2002. Technical and vocational education and training for the twenty-first century. UNESCO and ILO recommendations.
[304]Joint ILO-UNESCO Committee of Experts, A Global Overview of TVET Teaching and Training:
Current Issues, Trends and Recommendations.2018
[305]Ibid

Formal, non-formal and informal modes of TVET in Jamaica



Sources: Scheme compiled by UNESCO-UNEVOC from UNESCO-IBE (2010). World Data on Education VII . World TVET Database Jamaica, 2012

The UNESCO-TVET diagram above provides a useful framework for summarizing the situation in Jamaica.[306] TVET Training may be formal(provided by an education or training institution and leading to certification), nonformal (training occurring outside the formal system) or informal (learning resulting from daily life activities related to work, family or leisure)."[307] Our focus will be on the secondary and post-secondary levels although, it should be noted, some digital programs have already been introduced at the primary level and the Commission will recommend a digital playground curriculum starting at the pre-primary level in its early childhood education section.

[306]The diagram was used in UNESCO's pamphlet, World TVET Database Jamaica, 2012. While the diagram is still useful, the materials presented there are now dated.

[307]Joint ILO-UNESCO Committee of Experts, A Global Overview of TVET Teaching and Training: Current Issues, Trends and Recommendations 2018

The **formal** TVET system presently includes the 15 secondary schools devoted to technical training as an integral part of their educational programs, the oldest of which, Kingston Technical, was founded over a hundred and twenty-five years ago. Dinthill Technical High, founded in 1938 as a center for training in agriculture and related skills, is today a thriving center of TVET and formal academic learning with an enrolment of 1400 students. The school recently upgraded its ICT (Information and Communications Technology) by moving up to full digitization with fibre-optic technology in a partnership with the Digicel Foundation under its Build Jamaica Grant Programme. Dinthill ranks first among non-traditional high schools in the island, evaluated with the Commission's new composite value added ranking metric, and is a model of what can be done with well trained, highly motivated teachers and proper resources. Formal TVET training also includes programs under the supervision of the Technical and vocational Education Unit of MOEY which operates in five areas: Agriculture, Business Education, Home Economics, Industrial Education and Visual Arts. It also partly supervises the Technical and Vocational Work Experience Program, Technical and the Vocational Education and Training Rationalization in Secondary Schools Project and the Career Advancement Program (CAP). At the tertiary level, the University of Technology (UTECH) has played a major role in the training of higher level technical specialists, as have the growing number of community colleges such as the Knox Community College and Montego Bay Community College, in addition to more advanced Institutions such as the Caribbean Maritime University and Northern Caribbean University. However, as a recent labor market assessment of Jamaica points out, some of these programs may be either too theoretical or too specialized: "gaps in knowledge between programs and in the specializations that these institutions offer prevent Jamaica from being competitive" in the all-important tourist industry and in other sectors.[308]

The Career Advancement Program (CAP) is one of the more ambitious recent attempts by the government to integrate TVET into the formal education system and we will focus on it. The government created it to provide skills and career options for the growing number of students who complete their secondary education without any formal certification and have not entered post-secondary education or work. The programme "is focused on providing opportunities for all learners (ages 16-18) to identify, understand, choose, and prepare for careers and occupations of their choices"

Number of CAP Centers by Region and Parish

Regions	Parishes	Number of CAP Centers
1	Kingston and St. Andrew	24
2	St. Thomas, Portland, and St. Mary	15
3	St. Ann and Trelawny	20
4	St. James, Hanover and Westmoreland	20
5	St. Elizabeth and Manchester	24
6	Clarendon and St. Catherine	30

Adapted from CAP Listing Document

[308]USAID, LAC Regional Workforce Development Program, 1918: Jamaica: Labor Market Sector Assessment.

The Coronavirus pandemic, and related lockdown and physical distancing measures, created a disruption in the provision of education and training but also brought about the innovation of distance learning. TVET managers, trainers, and learners were not adequately prepared for this pandemic, and the transition to remote learning in some instances were impeded by lack of general and technological infrastructure such as electricity, internet connectivity. In spite of the government's efforts there remains a lack of effective and user friendly distance -learning platforms. In any event, for most TVET programs, practical training is not easily delivered through remote modalities. The delivery of work based learning, for example apprenticeships, faced serious disruptions from lockdowns imposed on enterprises and the continuous curfews. Despite the challenges, however, the crisis has accelerated the transition towards the digitalization of training centers and programmes.

Non-formal vocational training has rapidly developed in the island. There are many privately run centers such as the Vocational Training Development Institute College in Kingston, the Black River Vocational Training Center and the Caribbean Aviation Center, a flight school. Many of these are so-called External Training Providers (ETPs), contracted by HEART to train its recruits. However, the Auditor General in her 2020 review of HEART[309] found troubling deficiencies in HEART'S monitoring and oversight of these skills-training programmes, especially their low certification rates and other 'unfulfilled objectives," even though HEART spent more than $8.3 billion over the previous five years in subventions to these skills training centers.

Other **non-formal** TVET training include a few apprenticeship programs run by business, and commercial community TVET training. Prominent among the latter are the Community Training Interventions (CTI) which are specially aimed at unattached youth. One typical such program is the Abilities Foundation of Jamaica, which offers two-year programs in Data operations, housekeeping and furniture making as well as shorter customized training courses in subjects such as cosmetology, 'nails technology' and makeup artistry. Like most of these training centers, the Abilities Foundation also works under contract with HEART which has arrangements with 142 such CTIs, to which a total of $2.9 billion in subventions were disbursed between 2004-15 and 2018-19, according to the Auditor General, which also found poor evaluations and monitoring by HEART. There has been low attendance, and certification rates of only 54 percent, over the five year period from 2014.

The Government of Jamaica, independent of the MOEYI, has attempted, through JAMPRO, the promotion non-formal skills training programs such as the Global Services Sector (GSS) Apprenticeship Programme, launched in early 2020 with a $15 million loan from IADB. This is an innovative 12-month training program to run for 4 years, aimed at the upskilling of 100 apprentices per year. With participating employers, employees in the program receive 80 percent on the job training and 20 percent of theoretical training off-site. It will be interesting to see how this initiative works out. Another joint government-private sector collaboration, with the initiative coming from the private sector, is the Amber Group's 6-month's training of students in software development, at the end of which trainees join a software development firm as interns where they work with senior developers. The developer of this program, Dushyant Savadia, has promised jobs for all trainees at the end of their training.

[309]Auditor General Jamaica. Capacity of Skills Training Programme: HEART/National Service Training Agency (NSTA), Performance Audit Report, September 2020.

Informal TVET training is usually neglected in discussions of TVET but, ironically, it may be the most common mode of such training in the island. Jamaica has a vibrant informal sector, estimated at 40 percent of total GDP output, having tripled in size between 1991 and 2000.[310] "Participants in the informal sector," writes one observer, 'include individual workers such as small-farm workers, retail salespeople, street vendors, domestic helpers, taxi drivers and owners of small businesses and microenterprises. *There are low entry barriers into the informal sector in terms of skill, capital, and organization.* A large portion of the agriculture sector is performed by informal operations; in Jamaica, for example, it is 45%"[311] (emphasis added). Another study reports that "this growing sector represents a diverse group of enterprises and workers, ranging from local peddlers to sophisticated small entrepreneurs."[312] This sector of the economy is serviced by thousands of technicians, many of them highly skilled, though uncertified, because they learned their craft as apprentices in the islands vast number of small-scale, often backyard operations. Thus most of the skilled auto mechanics in the island were trained in this each-one-teach-one manner. Anyone who owns an automobile in Jamaica will know the level of skill that many of these 'mechanics' command. Many also work in the formal sector, although under special arrangements with certified skilled persons. For example, a skilled but uncertified mechanic may work under the cover of one that is certified and pay him a part of his earnings almost as a kind of rent. These relationship can sometimes be exploitative, which explains why many prefer to remain unemployed most of the time until they can find a reasonably paying job in the informal sector, or an employer who is willing to turn a blind eye to the laws regulating skilled work. Many highly skilled but uncertified persons also work in the underground economy. For example, a substantial amount of electricity is stolen from the national grid. It clearly takes a considerable amount of skill to steal repeatedly form the national electric grid without getting fried. What all this means is that the official statistics on skill shortage and unemployment must be considered in light of its informal sector. However, this should in no way lead us to underestimate the problem of certified skilled labor, especially for the 60 percent of the economy that constitutes the formal sector that is the island's hope to accelerate growth and prepare for the fourth industrial revolution.

Clearly, then, there is no shortage of TVET institutions and initiatives in the island, but they seem to have made little impact so far on the country's acute shortage of certified skilled labor. According to the Statistical Institute of Jamaica, between 2014 and 2018 some 61 percent of the labor force held neither "a professional or vocational certification nor has been exposed to any formal skills, apprenticeship or on the job training."[313] The problem is in good part due to the fact that TVEC training is not well aligned with the needs of the private sector. Employers complain that TVEC graduates are often too specialized and seem incapable of, or unwilling to acquire the more general skills, including soft skills, that make for well-rounded and adept workers. According to one study, employers claim that "many students receive trainings that give them a skill in only one area, leaving the employer to provide additional necessary trainings internally. As a result, employers select students based on one general skill, and train from there. One employer reported, for example, that engineers are needed for their technical mechanical knowledge, but

[310]C. Wedderburn, E.Chiang and R. Rhodd, "The Informal Economy in Jamaica: Is it feasible to tax this sector?," Journal of International Business and Cultural Studies,

[311]Chantal Wedderburn, The Impact of the Informal Economy on GDP Growth in Latin Amrica and the Caribbean. MSc. Thesis, Barry Kaye College of Business, 2009.

[312]M. Torero, M. Hernandez and J. Roca, 2006. "The Informal Sector in Jamaica, eport number: Economic & Sector Study Series RE3-06010. IADB

[313]Statistical Institute of Jamaica, cited in Auditor General, Capacity of Skills Training Programe, 2020.

lack any knowledge relevant to manufacturing in general or applied concepts like lean manufacturing. In another instance, an employer is paying for a production supervisor with an engineering degree to go back and get an MBA to develop more business-oriented skills." Another more basic problem is the functional illiteracy and innumeracy of graduates from the primary schools and even the lower division of the high schools, which prevents on-site training, even if employers are willing to take on this task: "One senior executive," we learn, "noted that many applicants are illiterate because high schools in Jamaica allow students to graduate having completed, but not passed, their courses. This low standard is extremely problematic as basic factory signs about operation and safety require the ability to read."[314]

Recommendations

Recommendation #1

TVET should be fully integrated into the secondary school curriculum and rebranded in a well-coordinated and aggressive marketing strategy to effectively promote TVET programs as a viable career path for national development.

Historically, TVET has been positioned as an alternative education for those who perform poorly in academics. However, this is not specific to Jamaica. Improving the social status of TVET is important for its development and acceptance by youth. A vigorous marketing strategy is needed to inform potential students of the program's availability and its value for the acquisition of like skills and career advancement. Presently, there seems to be poor investment in promotional activities. The marketing strategy must contain clear messages that are well articulated, simple and targeted to a specific audience via the appropriate channels. In addition, while designing a marketing strategy, the positioning of the benefits of joining TVET should communicate opportunities that are available to prospective students. Presently in Jamaica, the main channel used to communicate with stakeholders have been through radio and television and some form of print material used in secondary schools in particular. The use of social media to promote the program would be a valuable addition.

Recommendation #2

Improving the Quality of Training Delivery

(Retooling and retraining of teachers and instructors)

Highly competent, qualified, motivated, flexible and creative teachers are the backbone of the TVET system. To implement a successful change in vocational education, instructors must be at the heart of the reforms. The UNESCO-ILO report on TVET points out that TVET teachers face special challenges that do not confront other teachers: "Demands for close collaboration with business and industry partners, the need to maintain up-to-date knowledge of rapidly changing work environments and the call for dual expertise in practical and pedagogical skills add complexity to the role of TVET professionals."[315] Teachers should not only have the technical skills but must also understand their new role as a facilitator of learning, as opposed to an instructor. Vocational teachers must also ensure that they are familiar with developments in industries and keep their teaching relevant to meeting the needs of employers as well as the

[314]USAID, LAC Regional Workforce Development Program, 1918: Jamaica: Labor Market Sector Assessment, p.51
[315]Joint ILO-UNESCO Committee of Experts, A Global Overview of TVET Teaching and Training: Current Issues, Trends and Recommendations.2018

developmental needs of the country. As a short term measure, graduates from TVET programs and skilled practitioners from the world of work should be able to undergo occupational assessments as a precondition to entering TVET teachers' training. Priority must be placed on developing training programs for continuously upgrading the competencies of existing TVET teachers, and to facilitate lifelong learning and the pursuit of advanced qualifications.

Recommendation #3

Reposition TVET to facilitate and strengthen capacities for entrepreneurial development.

Entrepreneurship education is believed to contribute significantly to economic performance through job creation, which in turn leads to a decrease in unemployment. There is the need for careful planning for entrepreneurship teaching in TVET in order to equip students with the knowledge and skills necessary to plan, start and run businesses in either formal or informal settings. The role of entrepreneurship education is mainly to build an entrepreneurial culture among young people who in turn would improve their career choice towards entrepreneurship (Deakins, Glancey et al 2005). Entrepreneurship training in TVET at this time is very theoretical and very little practical component. The target should be to produce entrepreneurs who are able to create their own jobs rather than seek jobs in the formal sector. The ground for such practical entrepreneurial training already exists in Jamaica with its large informal sector containing many self-taught entrepreneurs.

Recommendation # 4

Human and financial resources must be increased for distance learning in TVET.

Jamaica must develop human and financial resources not only to respond to the current pandemic but to create long term impacts in creating effective learning environments for all Jamaicans. Increased investments must be made in digital technologies and related skills. This is critical for the sustainability of the system. The experience of this crisis points towards the need to invest in developing new learning methods that can cater to the practical aspects of most skills training in TVET.

Recommendation #5

Strengthening of the framework for measuring performance in TVET institutions.

Measures of performance play a dual role in educational environments. They are used to assess whether the initiative implemented meet the desired outcomes or used to examine processes and foster an environment of continuous improvement . There should be the development of standardized performance indications. such as:

a) Successful completion of courses
b) Students progression to higher levels of study allow program designers to identify non performing institutions or the disconnect between policy intention and reality. In addition, it can highlight areas that need to be addressed.

In this regard, **we strongly endorse the complete set of recommendations made by the Auditor General in her recent critical appraisal of the HEART Programme.**

Recommendation #6

Implementation of formal initiatives for agricultural vocational training especially in rural areas.

Eighteen percent of the active population is employed in agriculture and 46% of the total population lives in rural areas. Agriculture remains at the economic base for the majority of the poor in rural areas. At the same time, the role of agriculture in addressing food security and poverty alleviation, and as the basis for sustainable socio economic growth cannot be over emphasized. The USAID study notes that "Jamaica's agro-processing sector has become an increasingly important contributor to the country's economic performance and employment. The sector has grown in strength alongside global demand for processed foods and numerous other trends in the global market."[316]

Education, skills development and technical training are important for the development of agricultural production and rural employment in Jamaica. Vocational training in this area, however, has received marginal allocation.

Leaders and trainers must have practical pedagogical skills, technology knowledge and competency to develop appropriate curricula.

1. There must be linkages between private and public efforts and also between TVET and agricultural research at the University of The West Indies.
2. Install incentives that encourage private sector participation in training and skills development.
3. Support the role of farmer organizations in assessing training needs, sensitize rural youths, and havine youth platforms and councils determine training and capacity building needs.

Recommendation #7

Inclusion of students with disabilities in formal vocational education programs.

Individuals with disabilities who can have access to education and vocational training are better poised to progress in all aspects of life. Technical education and training in Jamaica should seek to create codependent and self reliant citizens to contribute to the economic and social development of the country. First, physical accessibility is an imperative. So are changes in false cultural belief regrding the potential and capacity of persons with disabilities in vocational training programmes. Proper screening and needs assessment tools concerning the type of impairment and special training needed are required, in addition to adaptive training material and equipment. There is also the need for curricular and vocational counselling. Persistent effort is needed, especially at the community level, not only to shape the attitude of people but to combat harmful practices.

Recommendation #8

Establishment of a National Skills Council

- By widening the portfolio of an existing body (eg. the apprenticeship board) to oversee education and training at all levels of technical and vocational education.
- Help entities to achieve greater policy coherence, better overall management and oversight, efficiency, and equity.
- The establishment of such an entity for Jamaica's TVET should involve public, as well as private, providers and other stakeholders such as donor committees and government ministries.

[316]USAID, LAC Regional Workforce Development Program, 1918: Jamaica: Labor Market Sector Assessment, p.49



Roles and Responsibilities of such an entity

1. The body would have as its role resource allocation, information sharing, monitoring and education of the systems performance. In addition, this entity should be able to reduce the skills gap, build the image of the sector, enable employers direct influence on training packages and policy.
2. Influence how training is delivered to reduce the skills gap
3. Improve TVET supplies through providing directives to enhance relevance and quality
4. Build the image of the sector
5. Enable employers direct influence on training
6. Set national competency standards

Recommendation #9

Facilitating the collaboration of TVET institutions with business and industry.

Analyzing the labor market to inform the TVET system should be a continuous process to track changes in demand and requirements for qualifications and to make adjustments. This would allow the TVET system to react by measuring occupational standards and developing new ones, changing training plans, curricula, courses material and building appropriate teaching capacities.

TVET institutions must be encouraged and empowered to develop closer relationships with employers of large, medium, small and micro enterprises in their districts. It should:

1. Encourage business and industry to engage in dual training programs.
2. Design and review curriculum in collaboration with industry and commerce to meet their needs.
3. Incentivise the private sector through tax mechanisms.

Recommendation #10
Following on Recommendation #9, TVET training and certifying institutions should seek out and attempt to provide formal certification to informally trained practitioners who demonstrate full mastery of their skill.

As noted above, there are thousands of highly proficient skilled persons operating in the Jamaican informal economy who are just as qualified, and in many cases far more proficient, than formally trained persons. These persons are not only underpaid for their skills but ae often exploited by rent-seeking certified persons. TVET training institutions should actively seek out such skilled and uncertified persons and, after a thorough examination and proof their proficiency, provide them with certification without requiring any further theoretical knowledge or unnecessary book learning which may not be well developed because they are victims of the nation's learning crisis.

Recommendation # 11. Above all, TVET should be understood and vigorously promoted as a lifelong learning (LLL)process.
Individuals should be provided with the opportunity to develop, along with other educational programs, the hard and soft skills that will improve their life chances and enhance Jamaica's development. UNESCO-ILO strongly advocates this position, an adds that: " This means structured, purposeful learning throughout the lifespan of an individual, covering formal and informal, work and leisure. The discourse surrounding LLL frames it as essential, in different measures, in fostering "human capital (economic growth), social capital (social justice) and identity capital (personal fulfilment)"

INFRASTRUCTURE AND TECHNOLOGY

This section focuses on three core areas, namely the quality and adequacy of infrastructure facilitating student learning; internet penetration; and the quality of technology infrastructure to support the digitization of education. Designing and implementing a solid plan for infrastructure and technology is foundational to support the Prime Minister of Jamaica's vision for a successful implementation of all the components of Education 4.0. Educational facilities of the future must be built on a strong technological foundation to support asset management, student and teacher engagement and quality Internet accessibility for All. The digital transformation of Jamaica's education has been accelerated by the pandemic, with the sector being forced to leapfrog in adjusting to the new realities.

1.0 Infrastructure Transformation Safety and Asset Management

The breakdown of schools in operation at each level includes: 49 Infant Schools, 585 Primary Schools (with approximately 95 having an Infant section), 97 All Age Schools, 78 Primary and Junior High Schools and 170 Secondary High Schools. The schools that are in operation have

an average age of 109 years old but there is no data regarding the value of current school infrastructure, or a sustainable plan to continuously upgrade, and expand the lifespan of these institutions. However, it is purported that the current physical infrastructure is not sufficient to cover the needs of the education system. It is detailed that capital expenses have averaged 2 percent of education expenditure over the last six years.[317]

Additionally, the World Bank Group and UNICEF (2021) estimate in their 'Public Expenditure Review of the Education Sector in Jamaica' Draft Report that "during 2018/19, about 18 percent of students in secondary high schools, 11 percent in Primary schools and 5 percent in All Age schools were impacted by double shifts".[318] Additionally, they found that at the secondary level, "students in shift schools have 9 and 7 percent less probability of attaining basic levels in Mathematics and English respectively, compared to students in secondary schools that operate on only one shift". Their findings also point to a great degree of variability (17 percent) between enrolment and total school capacity within schools. This is especially common within Primary and Secondary schools, which are overcrowded. What is also noteworthy is the fact that while "capital spending has the lowest execution rate in the budget, and 23 percent of the budget on capital spending was not used in 2019".[319] The report also states that the MOEYI is responsible for school infrastructure planning and categorization, according to the Education Act. It is also purported that an examination of the criteria used to allocate capital spending, as well as the causes for under-execution, might be useful.

1.1. Maintenance of school infrastructure

Money allocated to maintenance is woefully insufficient. There are also outdated maintenance management systems and severe staff shortages. In addition this is irregular awarding of building & repair contracts and long wait times in getting some of the resources where needed.

Currently approximately 1% of the overall budget for education is allocated to maintenance annually and as such each school receives $500,000 for maintenance. This can be reallocated, as necessary. However, schools complain that this is inadequate to provide proper maintenance of schools. The process in place used to determine maintenance schedule is by way of a report from a school, followed by an arranged site visit by the Regional Building Officer to assess and submit an estimate to carry out the related works.

The Ministry informed the sub-committee that it now has access to a recent Jamaica Safe School Project database done in 2019, which provides access to critical information to initiate the process of further assessment, budgeting, and execution of the related works. The database developed by UTECH nonetheless requires further development. Upon receipt of the budget for maintenance activities and further prioritization as previously stated, the relevant procurement process is followed in keeping with the Procurement Act, where bidding process is carried out and an evaluation report is submitted for approval by the respective Procurements based on the threshold value of the proposed maintenance activity.

[317]The World Bank Group and UNICEF (2021). Public Expenditure Review of the Education Sector in Jamaica.
[318]Double shift schools operate in two shifts, with one group of students attending school early in the day and a second group of students later in the day.
[319]The World Bank Group and UNICEF (2021). Public Expenditure Review of the Education Sector in Jamaica.

The goal of proper maintenance & asset management is to achieve clean, safe, orderly cost-effective and supportive schools for students, faculty, and staff. Therefore, it is imperative that proper management and maintenance of educational assets be attained with transparency. Every education organization must proactively develop and implement plans for dealing with these inevitabilities. Many schools lack key infrastructure such as modern laboratories and equipment and social development assets such as athletic and cultural facilities while there is waste in other areas such as textbooks, desks and other resources.

Facilities maintenance produces savings by:
1. decreasing equipment and physical plant replacement costs over time
2. decreasing large-scale and emergency projects
3. decreasing overhead costs due to increased system automation and efficiency

At the Tertiary level, institutions lament the poor quality of infrastructure, which, in many cases, has seen few upgrades since construction. Quality education at this level is hampered by crumbling resources and obsolete equipment and laboratories (particularly for institutions with STEAM focus).

Furthermore, there is a lack of collaborative arrangements to leverage technology resources across the institutions operating in the sector. It was noted that limited resources have been spent on ensuring that the technology and infrastructure at the tertiary level is kept current.

Recommendations
- Increase the budgetary allocation for maintenance from 1% to 3% of annual budget
- Deploy an information system for management of school buildings and equipment, including registers of school buildings, assets and equipment as well as school maintenance visits, maintenance requests and intervention management
- Implement service level agreements between MOEYI Maintenance and Schools to ensure service level delivery
- Review and replace outdated equipment
- Better coordination between procurement and stock management is urgently required. Simplify, centralize and automate the maintenance request and approval process
- Introduce a special purpose fund for tertiary infrastructure improvement labs and other education assets

1.2 Providing a holistic education

Exposure to culture and sports within the education system can broaden children's horizons and extend opportunities. Cultural and sporting participation can help to deliver formal educational outcomes, including raised attainment and greater likelihood of going on to further and higher education.[320] Schools should take account of pupils' cultural development, understanding and skills, attained through both the curriculum and extra-curricular opportunities.[321] The use of sport for educational purposes is not new. It is well known that sports can, and have played a

[320]Department for Culture, Media and Sport The Culture White Paper March 2016, Cultural Learning Alliance [SCS0171] para 3, Society of Authors [SCS0240], A New Direction [SCS0071] para 5, Q229, Q236

[321]How to improve the school results: not extra maths but music, loads of it | Music | The Guardian

transformative role in the lives of children and young people. Moreover, a growing body of evidence shows access to green space — which includes parks, trees, shrubs and grass — is linked to children's healthy development. Research conducted internationally[322] suggests greenness surrounding schools can lead to better cognitive development in primary school-aged children. There is little attention placed on for maintenance and upgrade of assets related to social, athletic and psycho-social well-being, including green spaces, and facilities to support sports, theatre, arts and musical development.

Recommendations

- Renew commitment to prioritising and investing in infrastructure to support cultural, athletic and social growth and development including more green spaces, athletic fields and equipment, music and theatre assets
- Establish a special purpose fund to upgrade assets related to cultural, athletic and psycho-social development
- Regularly assess and meet specific infrastructure needs of specialized institutions including sports institutions, STEAM and special education institutions across all levels

1.3. School safety and security

There have been several cases of assault against the teachers, assaults between children onto the other, and breaches of the existing fences or school gates. Schools have complained of nefarious individuals running across school campuses, violent activities taking place in sight or earshot of students, and security breaches resulting in the injury or death of teachers. There is a clear, urgent need to improve the safety and security of students, teachers and staff using the school facilities before, during and after school. This has heightened the need for curtailing access to the schools through perimeter fencing. Though there is an ongoing project by the MOEYI to build perimeter fences at schools in need, the project is constrained by its financial limitations.[323] In the mean time, it is feared that the risks posed to the school plants outpaces the rate of construction. In 2020, the MOEYI conducted a complete island wide assessment of the perimeter fences and the problem of being able to access schools. 20 schools were earmarked to be properly fenced to kick-start additional security measures that would be put in place following a spike in altercations in schools across the island. This was an initial measure projected to cost approximately JMD$5 billion.[324]

Recommendations

- Procure additional security cameras and on-site security personnel to enhance safety & security on school campuses
- Continue the implementation of security fencing programme
- Continue to encourage and seek external funding to support the roll out of the security fencing programme, through the National Education Trust, or otherwise

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[322]Associations of traffic-related air pollution and greenery with academic outcomes among primary schoolchildren https://www.sciencedirect.com/science/article/abs/pii/S0013935121006198?dgcid=author

[323]Jamaica Observer (2020). 20 schools to be 'properly fenced,' Samuda says. Retrieved from https://www.jamaicaobserver.com/latestnews/20_schools_to_be_%26%238216%3Bproperly_fenced

[324]Jamaica Observer (2020). 20 schools to be 'properly fenced,' Samuda says. Retrieved from https://www.jamaicaobserver.com/latestnews/20_schools_to_be_%26%238216%3Bproperly_fenced

- Negotiate group bulk procurement of fences and other required material for wider and faster roll-out of the programme

1.4 Implement Green Building Strategy including solar energy and water conservation systems
A 'green' building is a "building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on our climate and natural environment. Green buildings preserve precious natural resources and improve our quality of life" (World Green Building Council, 2021).[325]

There are a number of features which can make a building 'green'. These include:
- Efficient use of energy, water and other resources
- Use of renewable energy, such as solar energy
- Pollution and waste reduction measures, and the enabling of re-use and recycling
- Good indoor environmental air quality
- Use of materials that are non-toxic, ethical and sustainable
- Consideration of the environment in design, construction and operation
- Consideration of the quality of life of occupants in design, construction and operation
- A design that enables adaptation to a changing environment [326]

The MOEYI and a few schools have adopted some of these features and have seen improvements in their energy consumption patterns and energy cost through the utilization of renewable, or alternative sources of energy in the form of solar UPV panels and light-emitting diodes (LED) lighting fixers. Sixteen (16) schools have been retrofitted with these alternative sources through the Tourism Enhancement Project, forty-five (45) under the PCJ MOEYI Project and a total of ten (10) under the GOJ Energy Management and Efficiency Programme including eight (8) which have received solar and another two (2) which have been retrofitted with energy efficient lighting solutions.

Initiatives such as these are especially important for rural schools and those in predominantly lower socioeconomic communities which have always struggled with high electricity costs. The cost of energy and other resources are burdensome for schools, which, as highlighted in the Finance section of this report, is a challenge faced most notably by poor performing schools located in disadvantaged communities. Anecdotal evidence suggests that residents of such communities consider the resources (water/electricity) of schools as public resources, and use them as such.

It is purported that "solar-powered schools would reduce the heavy expenses school administrations face and would make it easier on parents' pockets in the process" (The Gleaner, 2021). However, it costs a lump sum to procure such electricity-generating facilities and as such it would be ideal for the government to develop a funding mechanism. One proposed mechanism is the provision of loans to schools through the Jamaica Development Bank (JDB).[327]

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[325]World Green Building Council (2021). About Green Building. Retrieved from https://www.worldgbc.org/what-green-building
[326]World Green Building Council (2021). About Green Building. Retrieved from https://www.worldgbc.org/what-green-building
[327]Campbell, C. (2021). High electricity costs stifling rural schools. Retrieved from https://jamaica-gleaner.com/article/news/20210719/high-electricity-costs-stifling-rural-schools

Additionally, the GOJ has received financial support from the Inter-American Development Bank (IDB), Japan International Cooperation Agency (JICA), and the European Union Caribbean Investment Facility (EU-CIF) for Energy Management and Efficiency Programme (EMEP) in Jamaica. EMEP aims at reducing energy consumption and associated CO2 emissions in government facilities across Jamaica. The Ministry of Science Energy & Technology (MSET) is the implementing agency for the EMEP.

A total of 14 facilities are currently being considered to benefit from the EMEP Lighting Retrofit Project, where all the inefficient lighting systems will be changed out to LED lighting, and where applicable, the appropriate control mechanisms would be installed to ensure that their full energy saving potentials are realized. These facilities include schools at various levels as well as the MOEYI's Caenwood Centre.

It is the hope that the Green Building Concept will be fully utilized for STEAM schools. However, these will be more costly than the current standards. Nonetheless, there are plans in place to retrofit and include in the Ministry's school expansion and construction projects sustainable building features.

Recommendations

- New standards for buildings- making buildings more energy efficient by mandating all new buildings to be built with energy and water conservation technologies implemented
- Undertake further investment in the roll-out of solar panels for school and Ministry-owned buildings to gradually reduce energy costs
- Design buildings with audit meters for each department so each unit can manage their network – areas that are being utilised.
- Recommend a community partnership in safeguarding the schools' property.
- Develop specialized labs at the secondary level to be used as a way for lower level students to have exposure to different STEAM areas, through visits to various technology centres by parish

2. Technology

Internet Penetration

Access to the internet is fundamental to supporting a variety of learning models. At the start of the of 2020/21 academic year, 239 schools were identified by the MOEYI as not having internet connection. At the same time, 35 percent of students were estimated by the MOEYI to be without internet access during the COVID-19 pandemic, with limited access to the remote learning strategies established by schools. While the Internet is being used as the primary tool to access education, not every child has access to broadband internet. Though throughout the pandemic and prior to then, efforts have been put in place to improve access to internet in schools, students and staff alike continue to bemoan the poor quality and reliability of the vital resource. The pandemic has merely made obvious the deficiencies in digital infrastructure and internet access, particularly the inequalities in access and the overall digital divide. While mention has been made of partnerships to be established between the Ministry of Science and the Ministry of Education to create a public education intranet, nothing has yet been realised.

The Ministry has indicated that a partnership exists with telecommunications provider FLOW to provide an offline way for students to access information regardless of location. This capability also allows students to stream content just as how they would via the internet. Funding had been set aside in the 2018/2019 Estimates of Expenditure, for an ICT project which would provide broadband and Wi-Fi connectivity to 90 schools. Subsequently, there have been plans presented in 2020/21 Sectoral Debate for the connection of 196 public schools to the existing island wide broadband network to enable access to high-speed Internet. This is expected to be completed in the new school term, which starts in September 2021 and is the first phase of the overall US$237-million National Broadband Initiative, which aims to have every household and every community connected to the Internet by 2025.

Recommendations:

- MOEYI should continue to deploy broadband infrastructure to increase penetration across the island including WiFi and other access points.
- Improve school connectivity and ensure availability of minimum IT equipment in all public schools (with priority given to infant and primary schools).
- Complete the project to have the 196 public schools added to the broadband network and provide provision for the 43 schools without broadband.

Technology Infrastructure to Support the Digitization of Education

Digital Transformation involves adopting digital technologies to improve core business processes and to effectively fulfil customer expectations through data and technology leveraging. The strategic imperative for digital transformation has taken on new meaning and heightened importance for the education sector during the COVID-19 pandemic. Virtually, all schools from March 2019 have transitioned to offering all or most classes online in order to safeguard public health. The adoption of digital technologies both in the classroom and in the management and organisation of schools has accelerated from what was a sluggish process of digital transformation.

On the level of education management and oversight, the Committee observed that paper-based processes were still prevalent and heavily used in schools, regional offices, and central ministry. Bursary and human resource operations at the school level are cut off from the region and paper-based reports and/or emails are normally used to transfer information leading to governance issues, non-accountability, inefficiencies, and lack of timely and informed decision-making.

Key Recommendations

- Investment in new software platforms should be made to enhance governance, accountability and improve productivity and efficiency to the school level. This includes financial software and education and information management system
- Ensure that efforts are in place to upskill public sector workers that will be responsible for managing and operating new software
- Appoint a Chief Information Officer to manage the digital transformation processes of the education sector, and routinely provide reports on this process and areas for improvement.

1.2. School learning infrastructure

Prior to the pandemic (and even during), several schools lamented challenges with lack of internet access, and access to computers and other devices on school grounds. It was found that not all public schools have working basic ICT equipment such as computers (particularly in infant and primary schools). Schools were, and continue to use technology at different levels both in the classroom and for back-end-processes. Since the start of the pandemic, schools have experimented with various platforms for online learning, to include software such as Google Classroom, Blackboard and Schoology. Few schools engaged in contracts with some online learning software before, but most have transitioned or begun using the Google Classroom Learning Management Platform, which was procured by the MoEYI for use in public, and some eligible private education institutions. The Ministry indicated that over 400,000 accounts were provisioned for used by students, teachers, and lecturers to facilitate practicum. While the MOEYI has purchased Learning Management System Google Classroom licenses for the 2019/2020 and 2020/2021, the service should continue to be managed by the MOEYI and procured in bulk to save costs. This strategy of bulk procurement of licenses should also extend to the tertiary sector. Tertiary sector is responsible for procuring their own LMS licenses and are not collaboratively procuring these products.

In 2012, The University Council of Jamaica established standards the for the design, management, and delivery of programmes by distance education at the tertiary level. These standards serve to guide institutions that wish to develop new programmes or improve existing programmes being delivered at a distance and identify the minimum acceptable requirements for distance education programmes. The distance education standards are arranged under nine criteria, namely: 1. Governance 2. Academic Programmes, Curricula and Materials 3. Learner Services and Support 4. Learner Assessment, Achievement and Satisfaction 5. Technology Services 6. Human Resource Management 7. Financial Management 8. Advertising and Promotion and 9. Research and Development.

At the same time, the various local tertiary institutions have personalized software for distance learning and content management. For example, the UWI utilizes OurVLE (Our Virtual Learning Environment), while Utech has the “Moodle” software. Some institutions also utilize the Blackboard Collaborate software and the Zoom platform in addition to their personalized software.

Given the sudden prompt to greater digitisation of the teaching and learning process and in the management of the education system, greater attention must be paid to the steps and resources required to achieve the intended outcomes. The digital transformation of Jamaica’s Education system should include:

1. Internet access for all in urban and regional areas.
2. Appropriate hardware and software resources for all students from early childhood through to tertiary levels.
3. Appropriate hardware and software resources for all employees of the MOEYI to aid in the execution of their daily responsibilities.

4. Investment in automated systems to replace paper-based processes with modern cloud-based backup and storage systems.
5. Providing digital resources to improve learning outcomes at every level of the education system such as learning management and content management systems.

We have been told that radio and TV are being also deployed to help with the learning challenge. Licensing for the digital spectrum is carried out by the Broadcasting Commission however when asked they were unable to provide information as to the number of stations which are authorised for student learning.

Recommendations

- Require that the Broadcasting Commission of Jamaica dedicate a number of bands on the digital spectrum for education
- Develop guidelines for the safe and secure use of online learning platforms, including guidance for schools on discipline and decorum in the online learning space
- Continue rigorous upskilling and training for teachers who may be technophobic or less technologically savvy
- Deploy technology in the cloud or virtualized environments to save costs of system deployment
- Ensure implementation of strong cybersecurity software and hardware systems acquire licenses in bulk to minimize costs

FINANCE

Financing the Transformation of Education in Jamaica

The underlying principles of adequacy, efficiency and equity will guide the overarching broad-based proposals for education finance that are raised in this report.

Transformation of education in Jamaica requires careful consideration of how this transformation will be financed. This section of the report of the Jamaica Education Transformation Commission Report (the JETC Report) has two purposes. It sets out the financial principles or frameworks that should guide the prioritisation of the detailed recommendations of the overall JETC Report, wherever those recommendations have material cost or revenue implications. It also sets out recommendations for major changes to the way that Jamaican education is financed.

Our main conclusions are that by some important measures, the adequacy of our educational finance – relative to our GDP – is appropriately aligned with that of our peers, particularly when private contributions to our educational system are considered. The proportional overall spend at the secondary and tertiary level is particularly aligned with our peer countries and some of our role models.

Obviously, richer countries are able to spend more per-student on education and that too is observed, but given our resource constraints, our overall spending is adequate. Unfortunately, by many important measures, we do not compare favourably with our peers in respect of the efficiency or equity of our education finance. In particular, some of our peers are achieving

superior educational outcomes for the same proportional spend. Moreover, although public funding of primary education in Jamaica can be described as "pro-poor" our system's reliance on private funding at the primary level allows for large disparities in the education finance available to different students with better privately financed students achieving better performance.

At the secondary level, disparate levels of parental contributions to the public school system also lead to outcomes where better performing schools benefit from higher parental contributions. Schools are able to apply these parental contributions more flexibly by than funds made available from the state under the current funding structure and in so doing, these funds are able to drive educational performance. There is an opportunity for the state to construct bold policies to (a) require or incentivise compliance of parental contributions from those with the means to contribute, (b) provide comparable levels of support through PATH for students that are able to demonstrate need.

At the tertiary level, we observe markedly different levels of public financing across institutions. There is an opportunity to re-balance and rationalise public spending per-student across tertiary institutions. This report aligns with the specific recommendations in this regard in the sections related to Tertiary Education.

The World Bank Public Expenditure Review recommends reduced public spending on Tertiary Education with a reallocation to pre-primary education. In the immediate term and during the period of rationalising and re-balancing public spending across tertiary institutions, it is recommended that policies be put in place to materially increase the level of private financing for tertiary education through (a) student loans, and (b) to the extent practicable, from amounts that can be harvested from household savings if there is increased public funding at the pre-primary and primary levels and more efficient organisation of household expenditure on school transport and school feeding. The gradualism recommended relates to the fact that notwithstanding the relatively high level of public expenditure on tertiary education in Jamaica, enrolment remains relatively low. As such, measures to increase the level of private funding for tertiary education are seen as an important pre-condition to an overall reduced public commitment.

Importantly, Jamaica is also an outlier relative to its peers and role models in the public commitment to different levels of education. Of note is the fact the Jamaica's commitment of organised public finances to pre-primary education is markedly lower than its peers and role models and Jamaica's devotion of public funds to vocational and technical training (and related remedial education) exceeds that of its peers and role models in proportional terms. These insights inform many of our specific recommendations. Put simply, there is an important opportunity for Jamaica to boldly re-balance its commitment of public finances towards pre-primary and primary education.

We propose that all recommendations for be assessed with respect to the adequacy, efficiency and importantly the equity of the financing arrangements. In addition, we propose that for each recommendation, there be some consideration as the whether the educational opportunity ought to be provided to a greater or lesser extent as a public good (financed from taxes) or as a private good (financed by households in line with their preferences and ability to pay). Finally, we propose

that recommendations be viewed in a comparative light, and some effort be made to benchmark the proposal against international best practices.

We have applied these frameworks to assess key aspects of the overall financial structure of Jamaica's education system. This overarching assessment has led to the following conclusions:

- Relative to its peers, Jamaica makes an adequate financial contribution to education. That is, Jamaica's public contribution to education as a share of its GDP and as a share of its budget is in line with international norms and higher than its regional peers.

- Jamaica's public commitment of financing to pre-primary education appears to be inadequate, relative to its peers. Jamaica can benefit from a systematic and programmed re-allocation of public funds from other levels of education to pre-primary education.

- Jamaica can improve educational outcomes at the primary education level with more public funding. There are also opportunities for a more efficient application of household and public spending on primary education to emphasize better staffing and staff compensation and possibly to more efficiently organise school meals and transportation.

- Jamaica's public contribution to tertiary education exceeds that of its peers, notwithstanding lower enrolment. Jamaica's tertiary education system can be enhanced with an increased focus on attracting private spending which can, in turn be generated from more productive use of the capital allocated to the Student Loan Bureau. Jamaica's public spending on tertiary education can also be rationalised to more equitably support a broader range of institutions, and this in turn can address issues of enrolment.

- Jamaica's public financial commitment to Technical and Vocational Education, through direct taxes for HEART Trust NSTA (HEART) significantly exceeds that of its peers and appears to exceed its capacity to effectively use the funds to certify enrolees. Jamaica could benefit by taking legal measures to re-deploy funds earmarked for HEART to the more formative levels of the education system. Jamaica's funding commitment to capital expenditure on education appears to be inadequate. It is proposed that a detailed review of the utilisation of educational assets be undertaken with a view to repurposing or divesting under-utilised assets to fund capital investment. In line with increased prioritisation of capital expenditure, traditional multilateral and donor sources should also be tapped.

- The system of parental contributions should involve a progressive system of school fees, wherein middle and high-income households are required to contribute to financing the cost of their children's education, while poor households that cannot afford such contributions are exempt (but are the beneficiary of a comparable level of per student state support). The parental contributions will not necessarily be expended on the schools to which their children attend, but rather will be allocated to all schools on a per-student basis. The penalty for non-compliance and the enforcement arrangements for collection of non-payments will never include prohibitions on student enrolment or attendance, but may involve adverse credit reporting, penalty and interest charges and other civil remedies.

- Jamaica must accept the reality of educational setbacks due to the COVID 19 pandemic and the reduced school attendance and student engagement that resulted from curfews and quarantines. Proactive one-off budget allocations over the next two years will need to be made to mitigate against these recent challenges to the educational system and aggressively seek to remedy learning loss arising from COVID This initiative should also seek to maintain and lock in some of the technological advances in education (such as national on-line but in school teaching options) that arose and are now available as a result of COVID to allow for long term cost and efficiency benefits.

The Framework of Adequacy, Efficiency and Equity

An effective education finance system is based on the fulfilment of three key objectives: adequacy, efficiency, and equity. Adequacy and equity dictate the provision of the amount of resources for all students to learn, irrespective of their background. Efficiency requires an examination as to whether the funds that are available for education are used to the fullest extent possible. These underlying concepts were used as the basis upon which this review of the financing of education in Jamaica was conducted. This analysis relies heavily on the June 2021 Public Expenditure Review of the Education Sector in Jamaica by the World Bank and UNICEF and memo #3 and memo #7, Orlando Patterson is best read in connection with this review. Supplemental primary data were collected and analysed by the JETC and executive level interviews were conducted with the major institutions responsible for administering the funding of Jamaican education, including the Ministry of Education, the Students' Loan Bureau and the HEART/NSTA Trust.

The underlying principles of adequacy, efficiency and equity will be guided the overarching broad-based proposals for education finance that are raised in this section of the report. It is recommended that these principles also be used to guide the prioritization of the several specific transformational initiatives suggested in the other sections of this report. Any reallocation of resources to facilitate the implementation of the individual educational programmes that the JETC recommends should be ultimately informed by this important framework.

The Public Goods and Private Goods Framework

Alongside adequacy, efficiency and equity is a related framework that also deserves policy attention. At each level of the education system – be it pre-primary, primary, secondary, tertiary, or technical and vocational training – a share of the overall education spend can and should be generated from private resources (including student loans) and a share of the overall spend can and should be generated from public resources, including dedicated taxes and the consolidated fund. Naturally, the share of the education spend that comes from private funds will need to have a more direct relationship to informed individual private preferences and the varied resource endowments of different individuals. The share that must be organised and controlled through the power of the state would most naturally be the parts of the education system that have the attributes of a public good and/or represent the delivery of the core educational products that we generally believe are linked to the fundamental rights of all Jamaicans.

The Comparative Framework

Another perspective from which the financing of education should be considered is a comparative framework. Where appropriate, the outcomes in respect of the adequacy, efficiency and equity

of our system of financing education are benchmarked against the performance of our geographic and economic peers as well as those countries that have successfully achieved results that accord with our long-term national goals. Similarly, we are able to draw on comparative insights from national peers and role models about which aspects of the education system might benefit from relatively higher contributions from public finance or, conversely, be able to allow for higher reliance on private financing.

Adequacy of Jamaica's Education Funding

It has been well-established empirically that while the availability of financial resources does not guarantee a quality education, it is impossible to achieve a quality education without adequate resources. Adequacy can be viewed as ensuring the minimum level of funding needed for every school to teach its students to sufficiently guarantee to every student a minimum set of educational outcomes.

The World Bank (2013) notes that 'an overarching goal of all countries should be that education finance systems provide sufficient resources to develop a citizenry capable of making informed decisions as well as acquiring the skills and knowledge to succeed in work and life.'

Many countries, including Jamaica, are challenged to raise adequate revenue to expand enrolment while simultaneously raising the quality of education. Schools in Jamaica primarily receive two types of funds (Table 22):

(i) government transfers and PATH grants (i.e. needs-based contributions made by the government to provide meals for eligible PATH students); and

(ii) parental or household contributions.

Table 21. Sources of School Funding in Jamaica

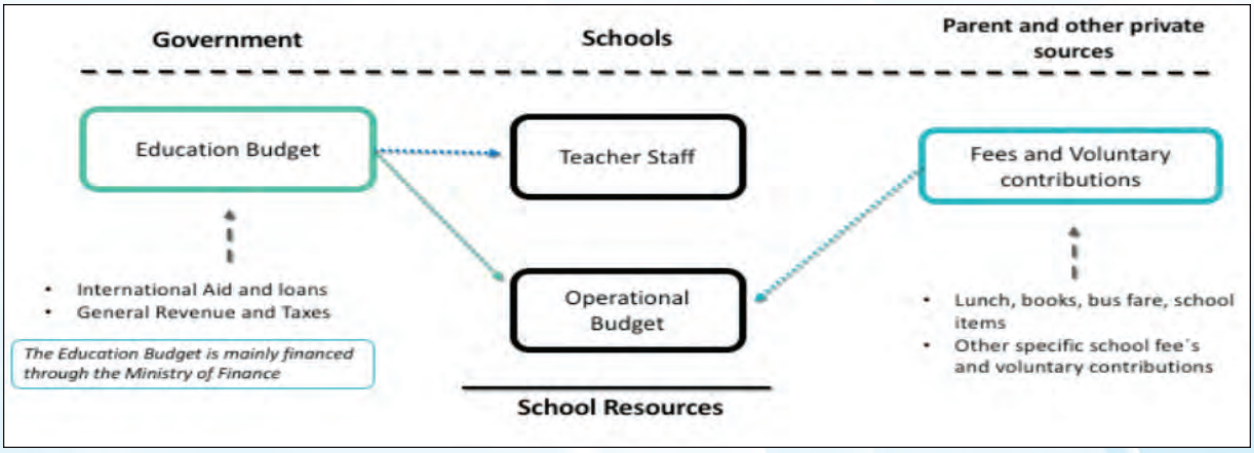
SOURCES OF INCOME	
Government Transfers	Government Transfers PATH Grant Others: Maintenance, Materials, Administrative salaries, operational expenditure, utilities
Parental Contributions	School Support Contribution
Other Sources of Income	Investments (Returns) Interest Bearing Accounts International Assistance/Grant Fund Raising Alumni Private Sector Donations/Grants School Supplies Farm/Agriculture Produce Canteen/Tuck Shop (Rent/Sales)

Source: Chegwin, Hobbs and Thailinger (2021)

Contributions from private agents, other voluntary contributions, donations or returns from fundraising activities by schools provide other sources of income.

Figure 32 indicates how these resources are allocated to schools. The MoEYI is responsible for assigning and transferring funds to schools for maintenance and operations, approving the hiring of teachers and transferring salaries directly to the accounts of teachers. Monetary transfers are based primarily on a per-student quota.

Figure 32. Allocation of School Finances in Jamaica



Source: Chegwin, Hobbs and Thailinger (2021)

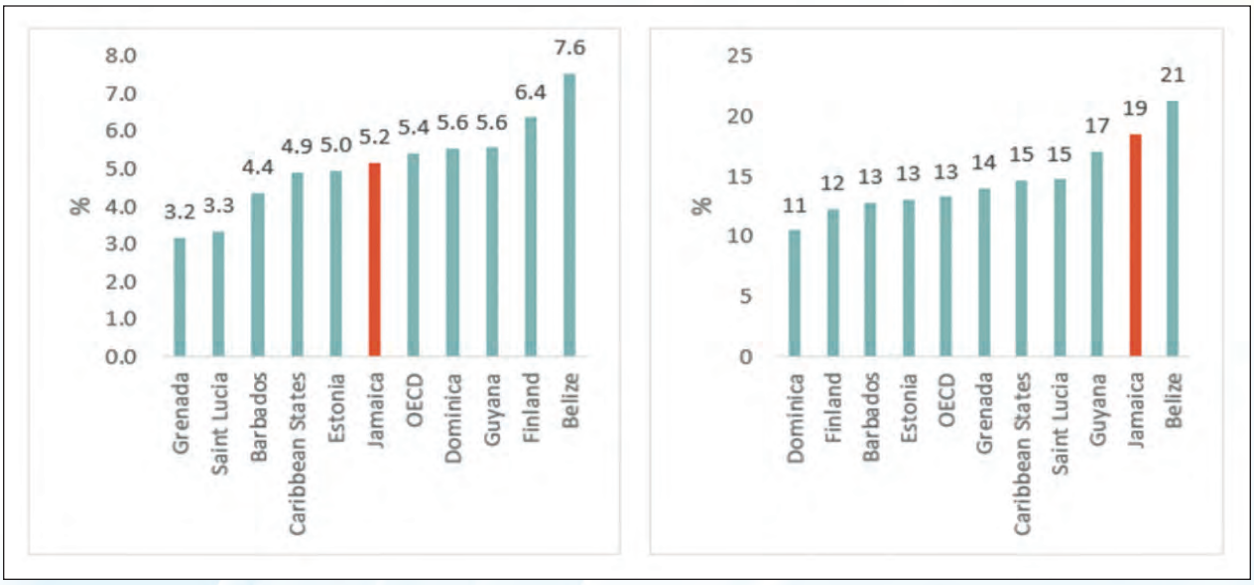
The Education Budget is mainly financed through the ministry of Finance. Funding from parents and other private sources are used to supplement the schools' operational budgets.

Adequacy of GOJ Expenditure on Education

Empirical research indicates that, in general, for less developed countries, more spending on education can result in improved educational performance. There is a threshold beyond which more educational spending makes little difference.

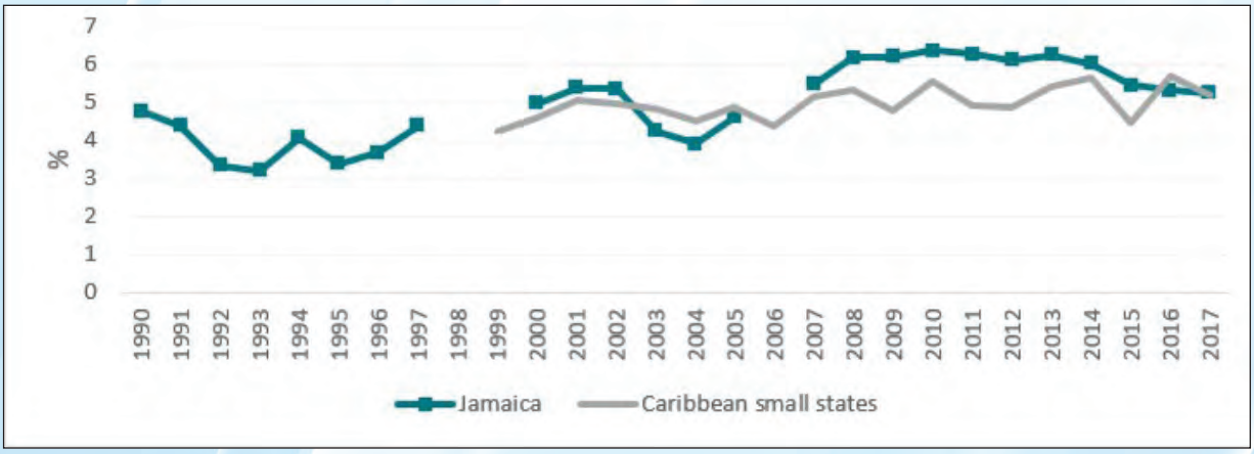
Figure 33 indicates that spending by the GOJ on education, relative to GDP and as a percentage of total spending, is relatively high and has been consistent over the past decade. Spending is, however, constrained by the country's low and intransigent GDP growth, and tight budgetary constraints. So, whereas it can be concluded that the GOJ has adequately prioritized educational spending based on available resources relative to the comparator countries (Figure 34), this does not address whether the actual expenditure is adequate to provide the quality education that is desired.

Figure 33. Government expenditure on education as a share of the GDP (%), 2017 or latest



Source: World Bank/UNICEF PER – Education in Jamaica

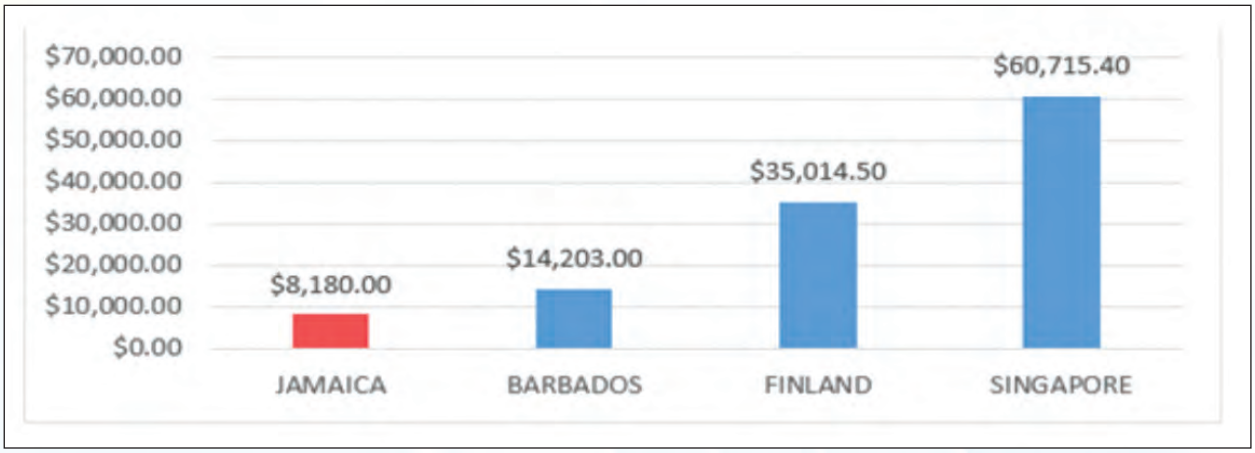
Figure 34. Jamaica and benchmark countries: Government expenditure on education as a share of the GDP (%), 1990-2017



Source: World Bank/UNICEF PER – Education in Jamaica

A useful comparison is the total per student expenditure (including primary, secondary and tertiary levels) using PPP dollars shown in Figure 35. The available data indicate that the GOJ spends $8,180 per student, relative to $14,203, $35,014.50 and $60,715.40 for Barbados, Finland and Singapore, respectively. The education systems in these countries represent aspirational targets for Jamaica and, as such, we must consider whether Jamaica can best reach its educational targets by (a) incentivising the supply of supplemental funds for education from non-governmental or private sources, (b) increasing the commitment of public funds from the Jamaican government, or (c) reallocating public funds to certain levels of the education system and supporting the availability of private funds to other levels.

Figure 35. Total Per Student Expenditure Comparisons



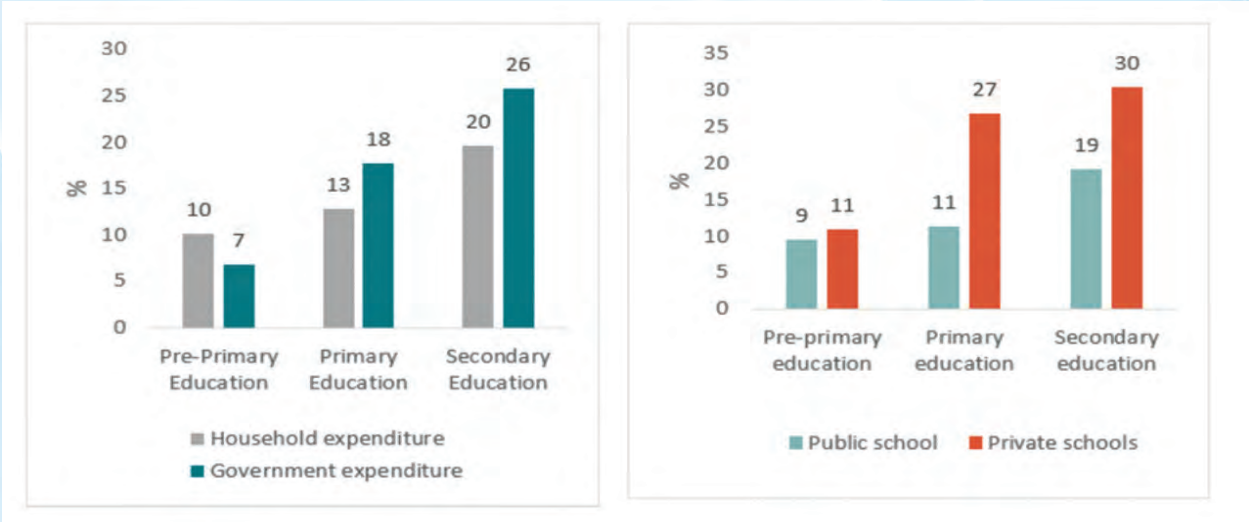
Source: Patterson (2021) Memo #3

Adequacy of Household Expenditure on Education in Jamaica

In Jamaica, government expenditure on education is heavily supplemented by private household expenditure. Importantly, for pre-primary education, household per-student expenditure exceeds government expenditure. This indicates that Jamaica's system of financing education requires significant supplementation of the government's expenditure on education by parents and other care givers – based on private ability to pay -- at this important formative stage in the educational cycle.

Household per-student expenditure on education as a share of the GDP per-capita, for primary and secondary education in Jamaica, is only approximately five percentage points below government per-student expenditure (Figures 6 & 7).

Figure 36. Household and Government per- student expenditure on education as a share of the GDP per-capita by level of education, 2017



Note: (i) Household expenditure: 2017; Government expenditure: 2018/19

Source: World Bank calculations based on Statement of Expenditure of the Jamaica's MOEYI (2020) and Survey of Living conditions (2017)

The underlying principles of adequacy, efficiency and equity will guide the overarching broad-based proposals for education finance that are raised in this section of the report. It is recommended that these principles also be used to guide the prioritization of the several specific transformational initiatives suggested in the other sections of this report. Any reallocation of resources to facilitate the implementation of the individual educational programmes that the JETC recommends should be ultimately informed by this important framework.

In light of (a) the heavy reliance on private expenditure at the most formative stages of Jamaican education, and (b) the fact that Jamaica is an outlier relative to its global peers in its limits on public funding of pre-primary education, the specific uses of Jamaican household educational expenditure must be considered. Relatively consistent, irrespective of education level or type of school, is the large proportion of households' education expenditure that is spent on lunch and snacks at school and on transportation. For public schools, irrespective of education level, these items are substantially larger than any other areas of expenditure. It is only for private schools at the primary level that Tuition Fees exceed expenditure on lunch and snacks and transportation. This is an important finding in two respects:

If, through greater government coordination and support, economies of scale could be garnered in the provision of more affordable meal options for children at school, households would have significantly more funds available to them to support other aspects of the teaching and learning process. A successful policy would also target health benefits from better organised meals, and the economic benefits to more organised or efficient enterprises within the local farming and agro-processing industry.

A related matter is the funding for public school education that must be generated from school canteens and tuck shops that retail school meals and snacks. Chegwin, Hobbs and Thailinger (2021) note that in a 2016 survey of primary schools, canteens and tuck shops represented 16% of the schools' total income. The necessary emphasis on supplementing limited public school funding by fund raising -- through these sources that ultimately draw from household funds -- presents challenges for public school governance and may be at odds with the objective of delivering the best value for the overall educational spend. A similar point can be made in respect of transportation expenditure, which consumes between a fifth and a quarter of households' expenditure on education. Initiatives to reduce the cost of public transportation for school children could make household funds available for other aspects of the educational system.

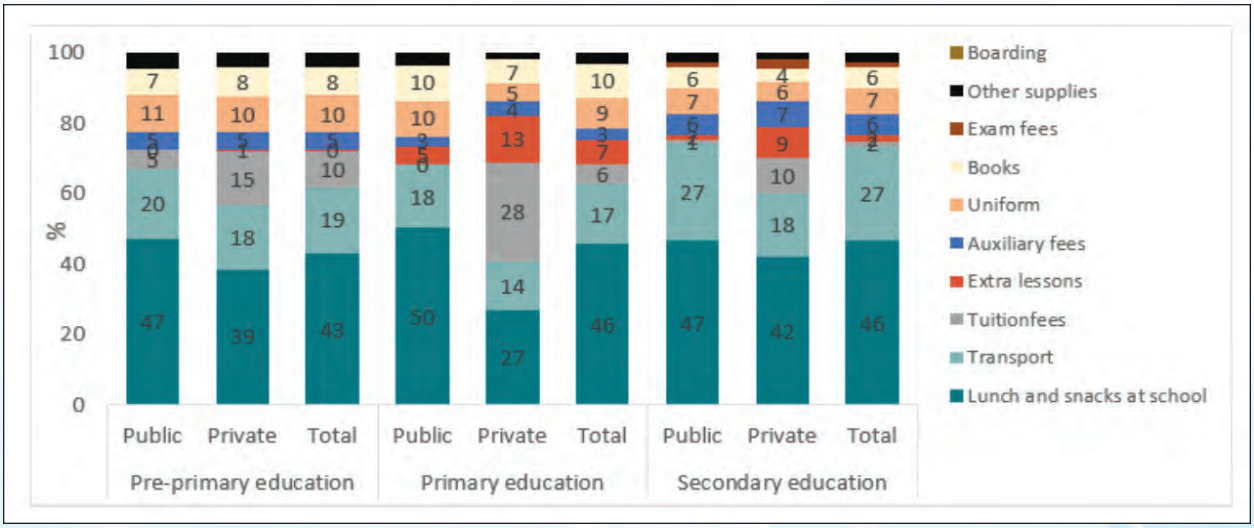
The transformational impact of cost-saving initiatives around school feeding and/or transport will of course depend on the willingness of households to maintain their education budget for other important aspects of education and/or the capacity of the State to mandate or incentivise households to deploy this increased available spending capacity towards education.

Adequacy of Financing: Differences Between Public Schools and Private Schools

Figure 37 highlights the significant difference in per-student expenditure on education on public schools, relative to private schools in households. The household expenditure for students in private schools (as a share of GDP) is much larger than household expenditure on public schools at the primary and secondary levels. The existence of this difference is not surprising because

households that rely on public schools will naturally be required to spend less private household funds directly on education. The difference is, however, interesting because it provides guidance on the appetite of some households for education spending and, importantly, their decision to elect private primary school education for a materially higher cost even where a public option is made available.

Figure 37: Distribution of household expenditure on education (%), 2017



Source: World Bank calculations based on the Survey of Living conditions, 2017

Figure 37 also details how households distribute the money expended. This varies significantly by education level, and whether the school is public or private. The distinctions are most stark at the primary level, with 41% of households' education expenditure in connection with private schools going towards tuition fees (28%) and extra lessons (13%). This is in comparison to 5% of household education expenditure being applied to tuition fees and extra lessons in connection with public primary schools.

The magnitude of this difference – when combined with preliminary insights about the performance of well-funded private primary schools relative to underperforming public primary schools with markedly less funding – may however, point to issues of adequacy of funding in the public school system, particularly at the primary school level where the discrepancy is greatest.

Adequacy of Financing: Assessment of the Education Financing Gap in Jamaica

It is unambiguous that there are significant differences in education spending by households at different levels of Jamaica's education system and by type of institution (whether a school is public or private). Less clear from the available research is whether these differences are ultimately reflected in different educational outcomes, and importantly whether superior educational outcomes are achieved with increased educational spending. Clearly, if educational outcomes are improved wherever more resources are placed, an important goal for Jamaica would be to provide more financing to under-funded institutions. The World Bank (2013) notes that an effective means by which these funding requirements (the 'financing gap') can be



estimated is by benchmarking current school expenditures against the inputs used by a successful school or subnational division.

Such a gap analysis was conducted on a preliminary basis using primary data collated by the JETC. A sample of primary and secondary schools was surveyed to ascertain, inter alia, their annual expenditures and sources of funds. Fourteen primary schools and 21 secondary schools provided the requisite information. Although small, the sample allowed for useful categorizations of different types of primary and secondary schools by performance, which provided instructive results.

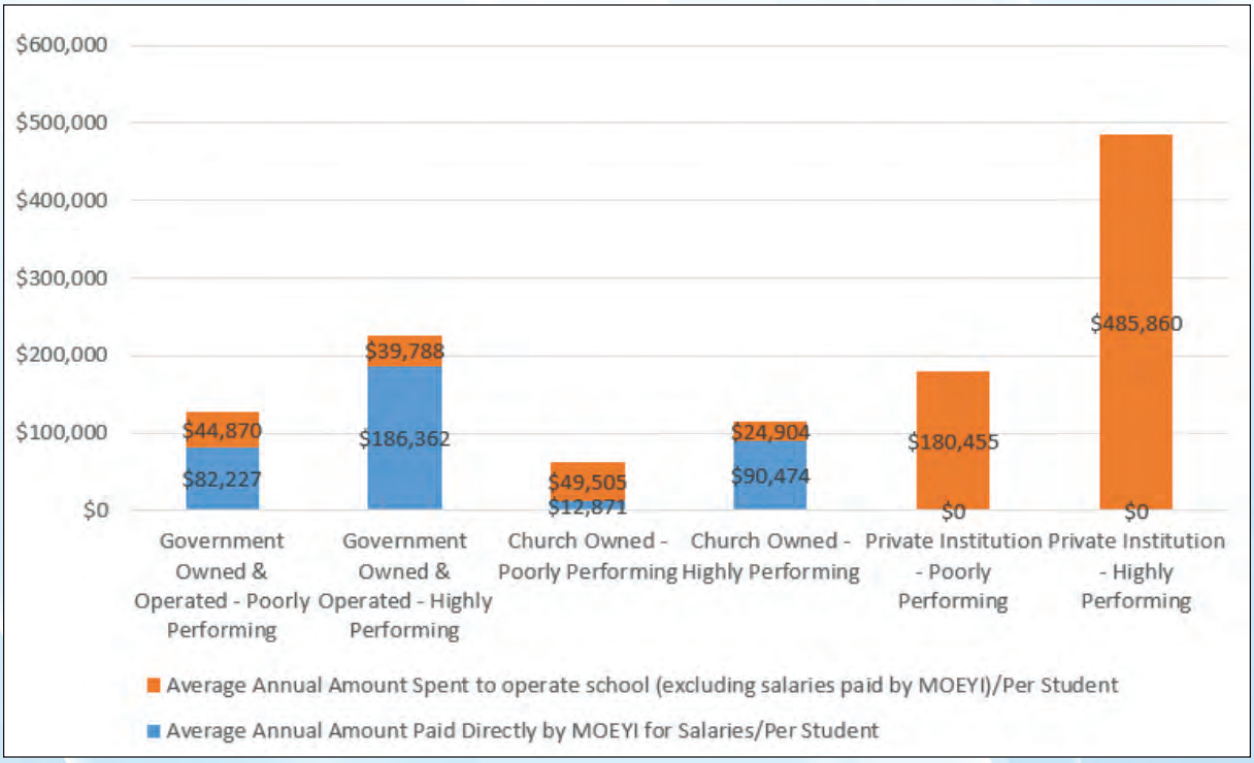
Surveys were initially distributed to 20 high schools, selected by stratified sampling from a list of secondary schools ranked by value added performance. Four schools were randomly selected from each of four quintiles of excellent to poor performing schools. The sample size was then expanded to roughly 95 secondary schools, randomly selected across all quintiles, of which 21 responses were received. The sample was also expanded to include primary schools, with an initial sample selected via stratified sampling of well and poor performing schools in rural and urban areas. The sample was created using a list of average placement scores for the 2019 staging of the Primary Exit Profile (PEP). The sample was expanded following a low response

rate and widely distributed after a random selection from all schools, with 16 responses eventually collected from public and private schools, including special education institutions.

Adequacy of Financing: Evidence of a Financing Gap at the Primary Level

The results of the survey highlight a significant gap in expenditure between highly performing private primary schools and all other primary schools sampled. If the highly performing private primary schools were taken as the aspirational target, a large financing gap appears evident. Even when similar types of primary schools were compared, expenditures for highly performing primary schools were significantly higher than amounts expended for poorly performing primary schools. For both government and church-owned primary schools, the average annual per student amount paid directly by the MOEYI for salaries is significantly higher for highly performing schools relative to their poorly-performing counterparts. This is a clear indication of a gap in public financing at the primary level.

Figure 38: Average Annual per Student Expenditures by Type



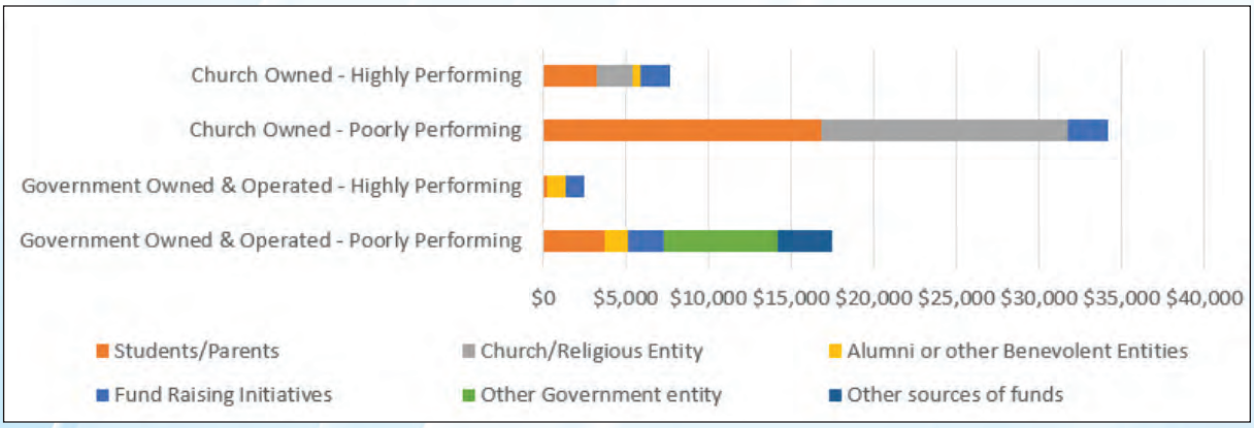
Source: Survey (JETC), School Funding

The preliminary evidence that there is a gap in the adequacy of financing made available at the primary school level in Jamaica, raises questions about: (a) how that gap should be financed, and (b) how that financing should be applied to improve primary education. This report admits that there is further room for study on these matters but concludes that Jamaica should plan to finance a material share of the gap in funding at the primary level from public sources. This implies that if the overall level of financing for public education in Jamaica is adequate, that public financing be drawn from other levels in the educational system. This report also concludes that

staff salaries are likely to be an important use of increased public funds if the primary education system is to be improved.

The preliminary evidence indicates that Jamaica is unlikely to be able to effectively rely on private funds to close the financing gap at the primary school level. Figure 39 presents data on the sources of funds for government and church-owned primary schools, their sources of funds outside of the allocation from the MOEYI. Highly- performing government and church schools at the primary level rely on private external funds to a significantly lesser extent than the schools which perform poorly. These schools rely almost exclusively on the MoEYI for funding. This helps them to avoid the issues with unreliability of funds from other sources, as was highlighted by some of the respondents. Increased stability of funding, along with the lessened need to divert attention to fund-raising activities, seem to lead to enhanced teaching and learning outcomes.

Figure 39: Average annual sources of non-MoEYI funds

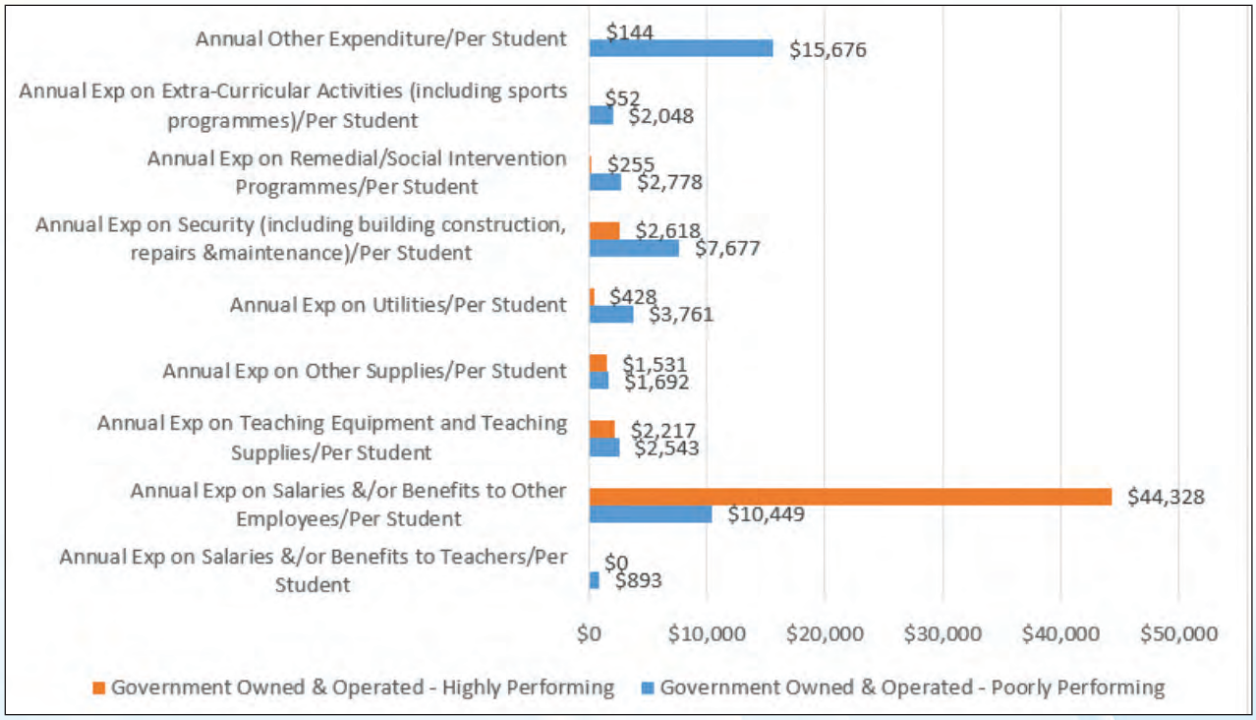


Source: Survey (JETC), School Funding

This report accepts that its preliminary observations require further review but in light of the overall importance of primary education that was established throughout the work of the JETC. and the obvious limits on household spending capacity for persons that now make use of the public system, the report concludes that increased public funding may be required to adequately meet the needs of Jamaican primary education.

Comparison of the allocation of expenditures by government-owned primary schools, presented in Figure 40, highlights critical differences in the spending patterns of highly and poorly-performing primary schools. Expenditures on salaries and benefits for employees other than teachers was the only area on which highly-performing primary schools expended significantly more money relative to the poorly-performing schools. This, when considered along with the fact that the amounts paid directly by the MOEYI for salaries for highly-performing primary schools was substantially higher than that for poorly-performing schools, indicates that the highly performing primary schools prioritized expenditure on staff salaries and benefits. This seems to have incentivized better teaching and learning outcomes.

Figure 40: Allocation of average annual per student expenditures

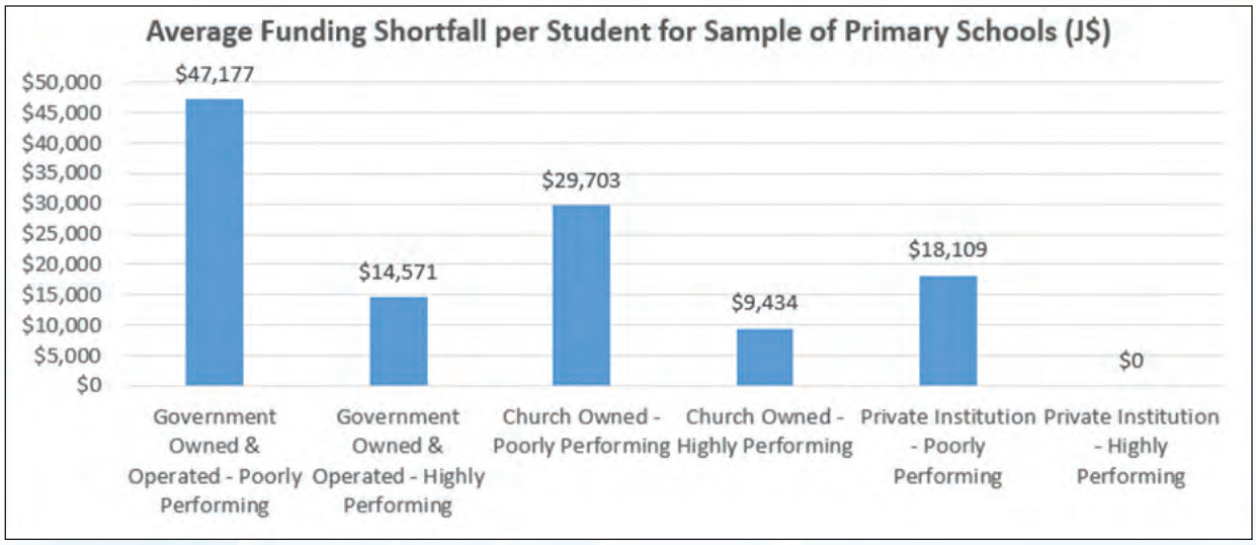


Source: Survey (JETC), School Funding

By contrast, the results indicate that relative to their highly-performing counterparts, poorly-performing primary schools spent significantly more money per student on utilities, security, remedial/social intervention programmes, extra-curricular activities and expenditures classified as 'other'. Expenditures on security, utilities, and remedial/social intervention programmes, in particular, tend to be dictated by the social context within which the schools operate, and are typically intractable. The fact that they are relatively high in poorly-performing schools for which overall expenditure tends to be lower, further exacerbates the financing gap at this level.

It is not surprising that when asked to compare the cost of offering a good education to their students, with the total sum of money received from all their funding sources, almost all respondents opined that their school is inadequately funded. More instructive, as illustrated in Figure 41, is the fact that the average funding shortfall identified by poorly-performing institutions is consistently and considerably higher than that of the highly-performing primary schools

Figure 41: Average funding shortfall per student



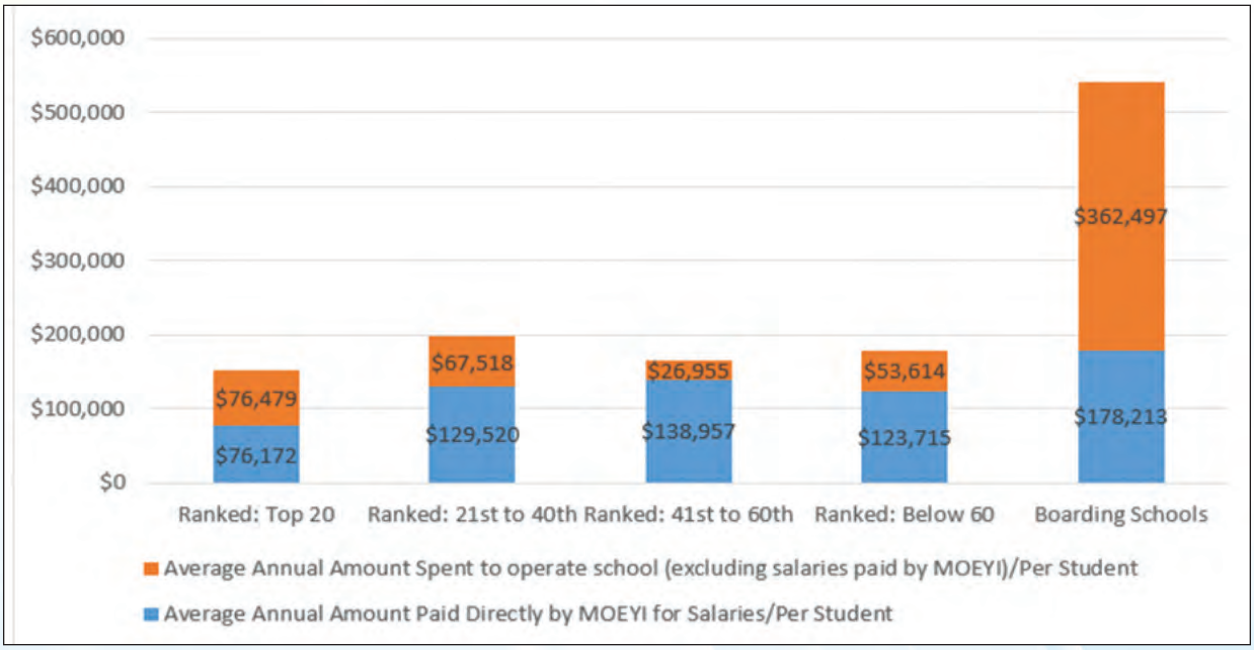
Source: Survey (JETC), School Funding

Adequacy of Financing at the Secondary Level: Inconclusive Evidence of a Significant Gap

The sample of secondary schools was categorized utilizing a ranking of performance based on a composite index of value-added and exit-examination scores. Boarding schools were examined separately due to the unique nature of their operations. As with primary schools, respondents were asked to estimate the annual amount of money paid directly by the MOEYI on salaries for people employed at their school, if applicable, and the total amount of money spent each year to operate the school, excluding the aforementioned salaries paid directly by the Ministry.

The results presented in Figure 42 indicate that the top-twenty ranked schools have lower average annual per student expenditures than any of the other groups of schools. This is because the most highly-ranked secondary schools have a significantly lower average annual per student amounts paid directly by the MOEYI for salaries. All the other groupings (categorized by rank) have broadly similar average per student allocations from the Ministry for salaries.

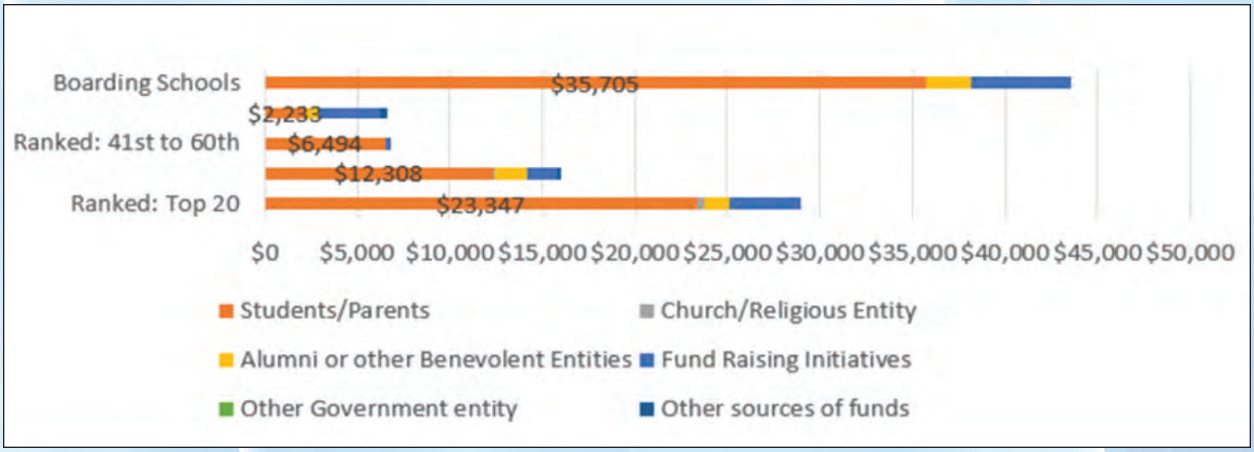
Figure 42. Average annual per student expenditures



Source: Survey (JETC), School Funding

Although the average annual per student spending to operate the top-ranked schools is higher than that of other rank-based categories of schools, this did not compensate for the lower amount paid by the Ministry for salaries. This is a preliminary indication that there may not be a significant financing gap at the secondary level. This is however contradicted in figure 41 which shows that outside of boarding schools, the average funding shortfall estimated by lowest ranked secondary schools is almost double the average estimated shortfall of the top 20 ranked secondary schools. Furthermore, with the exception of the schools in the 41st to 60th rank, there clear trend of increasing shortfall when categorized by the decreasing performance rank of the schools. These assumptions are nevertheless based on this survey data which should be investigated further.

Figure 43. Average annual sources of non-MoEYI funds



Source: Survey (JETC), School Funding

When secondary schools' sources of funds outside of the allocation from the MoEYI is examined (Figure 43), a remarkably clear trend is exhibited. There is clearly a strong positive relationship between funds provided by parents and the performance-based ranking of the schools.

The top-ranked schools received parental contributions in excess of ten times larger than those received by the bottom-ranked schools. This is highly likely to be a function of the inability of lower-income parents in the bottom-ranked schools to afford the contributions made, on average, by parents in the top-ranked schools. This is substantiated by the previously-shown fact that the bottom-ranked schools have had to spend substantially more than the top-ranked schools on socially-linked areas such as remedial/social intervention programmes, utilities, and security.

Adequacy of Expenditure: Increasing

Capital Expenditure on Education

The World Bank (2021) notes that current physical infrastructure is insufficient to cover the needs of the education system. This is evidenced in Figure 44, which shows that expenditure on capital was only 2 percent of total government education expenditure, which is very low relative to the regional and international comparators, which had capital expenditure as a share of total education expenditure ranging from 4 percent to 11 percent. The average share of capital expenditure for Caribbean states is in line with that of the OECD, which is more than triple that of Jamaica.

Figure 45 further shows that there has been consistent under-allocation of funds to capital projects in the education sector for at least the past six years. This is exacerbated by the fact that capital spending has the lowest execution rate in the budget, with 23 percent of the budget on capital spending not being used in 2019.

Figure 44. Jamaica and benchmark countries. Expenditure composition by economic classification, 2016 or latest

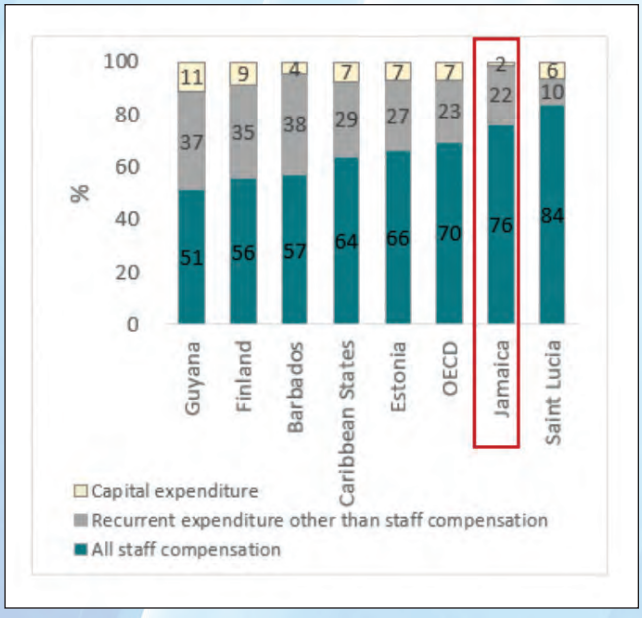
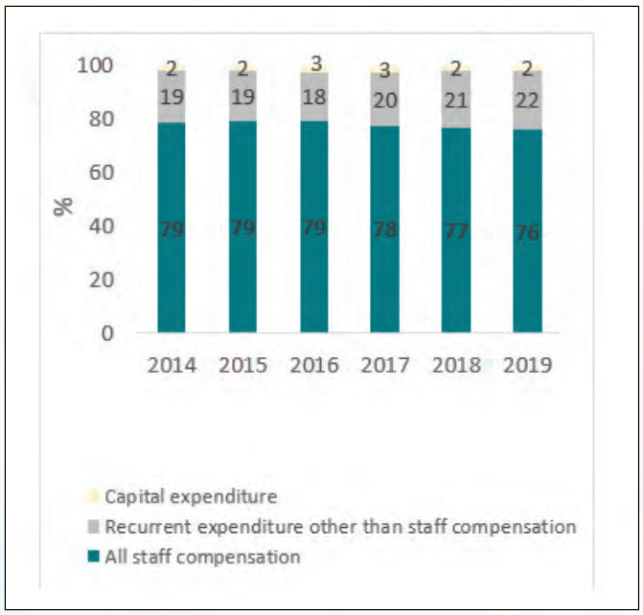


Figure 45: Jamaica. Expenditure composition by economic classification, 2018/19 and 2019/20 or latest



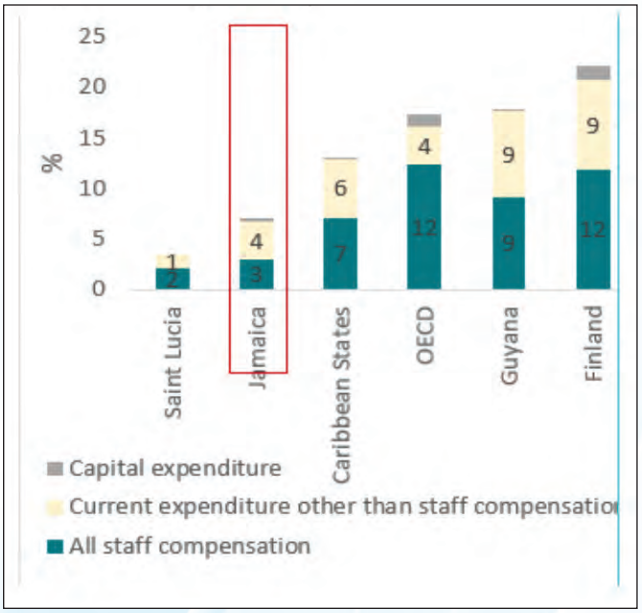
Note: (i) Caribbean small states average excludes Jamaica and includes: Guyana, Barbados and Saint Lucia (ii) For Jamaica and comparators, the spending distribution do not consider subventions and grants (iii) Jamaica: Excluding grants to university education, which makes up about 12 percent of the total education budget (2019/20). If grants to universities are included as recurrent expenses excluding salaries, the total expenditure on staff compensation would be 67 percent and recurrent expenditures other than staff compensation 32 percent.

Source: World Bank/UNICEF PER – Education in Jamaica

Figures 46 and 47 further indicate that the under-spending on capital projects in the education sector is consistent across all levels of the education system. One result has been no significant increase in the physical infrastructure to adequately accommodate increased numbers of students. The World Bank (2021) thus notes that lack of space has caused 18% of secondary schools, 11% of primary schools and 5% of All Age schools to utilize double shifts during 2018/19. This has negatively impacted learning outcomes.

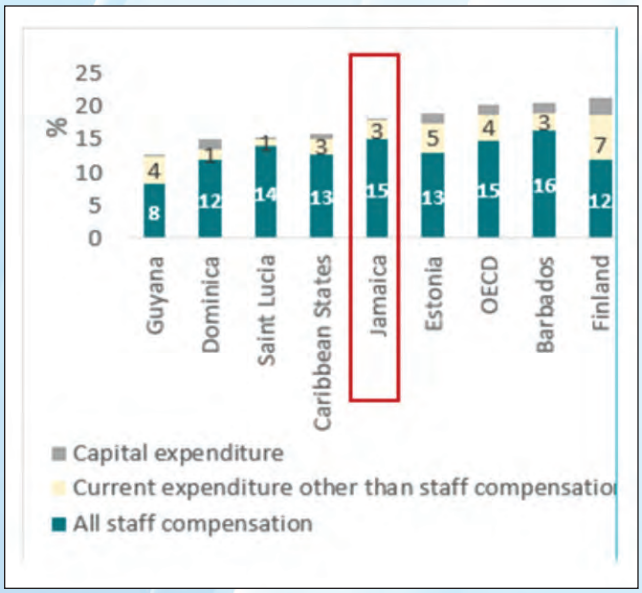
It is also noted that 0.67% of the total education budget in 2019/20 was devoted to Rehabilitation and Maintenance Works. Whereas inefficiencies in maintenance expenditure have been reported, it is nonetheless, however, quite unlikely that such a budget (recorded as a recurrent expense) is able to cover much other than the bare minimum maintenance needs of schools across all levels of the education system. Critical investments to upgrade the facilities and equipment of schools to enable higher levels of teaching and learning are undoubtedly being overlooked.

Figure 46: Jamaica and benchmark countries. Distribution of the per-student expenditure as a share of GDP per capita by economic classification in early childhood, 2017 or latest



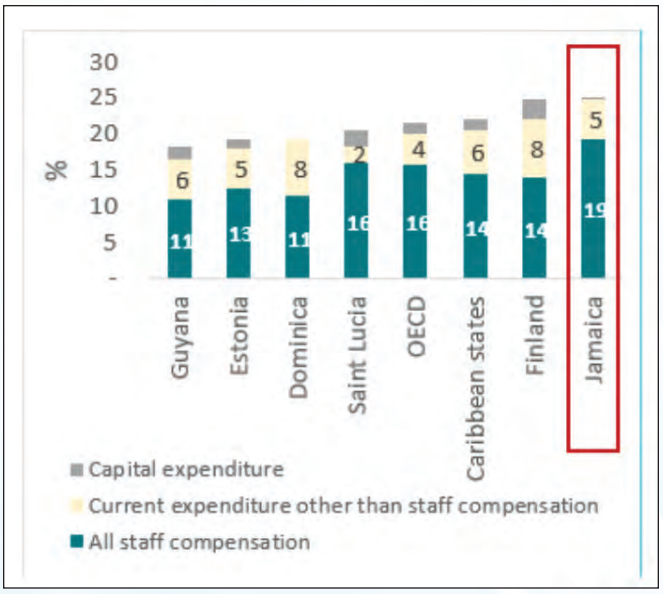
Source: World Bank/UNICEF PER – Education in Jamaica

Figure 47: Jamaica and benchmark countries. Distribution of the per-student expenditure as a share of GDP per capita by economic classification in primary, 2017 or latest



Source: World Bank/UNICEF PER – Education in Jamaica

Figure 48: Jamaica and comparators. Distribution of the per-student expenditure as a share of GDP per capita by economic classification in secondary, 2017 or latest



Note: Figures Including the school feeding program as a recurrent expenditure other than staff compensation
(for international comparison).

Source: World Bank/UNICEF PER – Education in Jamaica

The World Bank (2021) notes that during 2019/20, capital expenditure on education totalled J$1.5 billion. Only about 59 percent of this was financed through the GOJ's sources for construction, renovation, improvement and maintenance of buildings. Multilateral/bilateral funding accounted for about 41 percent of the total financing for capital expenditure. As indicated in the table below, two key projects for the financing of education capital expenditures were the World Bank/IDB Education System Transformation Programme and the USAID Partnership for Improved Safety and Security in Schools.

Table 22: Jamaica: Main projects in capital expenditure by source of financing (%), 2018/19 and 2019/20

	2018/19	2019/20
International Cooperation		
Construction of Early Childhood Institutions Project	2.3	0.3
Early Childhood Development Project (IBRD)	3.7	0.0
Education System Transformation Programme (IBRD/IADB)	20.0	22.9
Partnership for Improve Safety and Security in Schools (USAID)	11.8	11.1
Promoting Quality Education and Advancing the Reality of a Child Friendly Environment	0.8	0.4
School Renovation and Construction – Japanese Grassroots Project	9.2	5.2
Support for Sustainability of Education Sector Reform (IADB)	1.1	1.6
Total International cooperation	49.0	41.4
Jamaica's Government		
Construction, Renovation, and Improvements	30.9	36.6
Maintenance of Buildings and Equipment	20.1	22.0
Total Jamaica government	51.0	58.6
Total	**100**	**100**

Recommendation

Recommendations for infrastructural and other capital investments have been highlighted in other sections of this report. We believe that it is critical to the long-term future of education in Jamaica that the GOJ makes increased and consistent budgetary allocations to capital investment in education. The amount of such resources will vary from year to year based on the specific projects being prioritized, and the extent to which external support can be garnered. This should be guided by the development of a long-term vision and plan for capital investment in education.

In light of budgetary constraints, it is proposed that in the first instance, where possible, underutilised capital – particularly real estate assets -- be identified for (a) re-purposing within education and the wider public service, (b) increased utilisation (including across the educational system) or (c) divestment (to raise funds for further re-investment). A detailed review of the utilisation of national educational assets and the market values for underutilised assets and opportunities for divestment would be an important first step in this regard. It is suggested that further multilateral/ bilateral partnerships be explored to facilitate both project management and capital investment. Additionally, the role and functioning of the National Education Trust needs to be more closely examined to ascertain whether and how more can be done to leverage private capital for such purposes.

Adequacy of Finance: The Role and Functioning of the National Education Trust

The National Education Trust (NET) is an agency of the Government of Jamaica (GOJ) that is responsible for the mobilization of financial and quality resource investments for schools in

Jamaica. The Trust was established as a recommendation by the Task Force on Educational Reform in 2004 as a means through which parents, guardians and other stakeholders could make long term investments in the education system which would supplement the cost of education as well as improve infrastructure in schools. Over the span of its existence since its establishment in 2009, its mandate has progressively transitioned more toward an infrastructural arm of the MoEYI, carrying out several capital projects, and not having met the objective of becoming a self-financing entity. It currently receives donations from larger private and international donors, and acts as a clearing house for persons wishing to import resources to be donated to students. Since the covid-19 pandemic, the NET has seen an increase in kind donations and funds, and has been pivotal in the mobilization of such funds and resources to facilitate the transition to remote learning.

Adequacy of Education Financing: Recovery from COVID-19

Significant resources will have to be allocated to facilitate the reduction of learning losses, as Jamaica seeks to quickly recover from COVID-19. The World Bank (2021) estimates that the mitigation of learning losses due to the pandemic could cost between J$2.4 billon to J$3.9 billion annually for one to two years. This would involve both getting school facilities ready to meet health and hygiene protocols, and planning for learning remediation.

Recommendation

Relatively large sums are needed in the short-term. Possible means of financing include:

- Reallocation of funds to education from other parts of the budget; and/or
- Seek emergency funding from international development partners

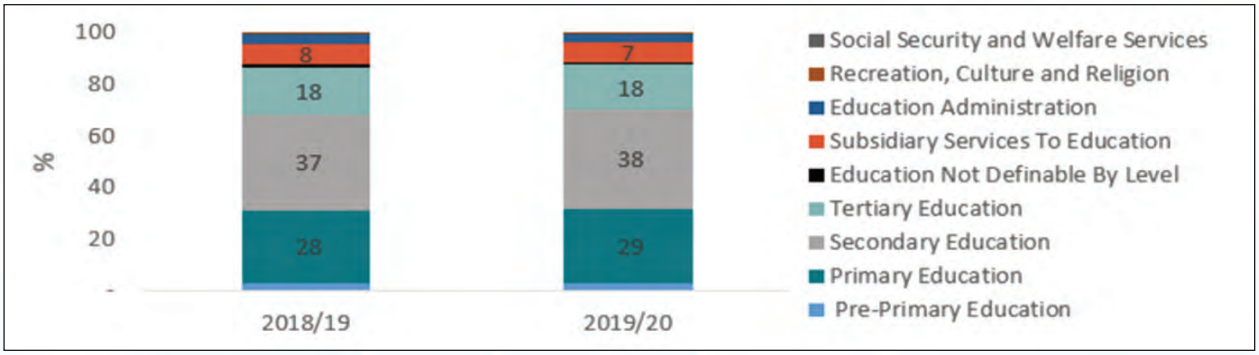
A reallocation within the education budget is also possible. This, however, is not a recommended option if it would necessitate delayed capital investments, and/or reduced training and supervision budgets. Based on the magnitude of funds required, any shifting of resources from these areas would need to avoid the significant long- term adverse impact in areas already identified as important to education outcomes.

Efficiency in the Allocation of Education Resources

Efficiency Gains from Allocating Public Funds to Early-Childhood Education

In 2019/20, over two-thirds of total GOJ education expenditure was allocated to the primary (29%) and secondary (38%) levels (Figure 49). An additional 18 % of government expenditure was allocated to the tertiary level. This amount excludes additional funds that fall outside of the Ministry of Education that are targeted to HEART/NSTA Trust for technical and vocational training. By contrast, only 3% of total education expenditure was allocated to pre-primary education (i.e., early childhood education), and 1% on special education. The World Bank (2021) notes that the share of public expenditure allocated by the GOJ to secondary education is higher than that of the OECD (which was 33 %). The share for tertiary education also closely approaches that of the OECD.

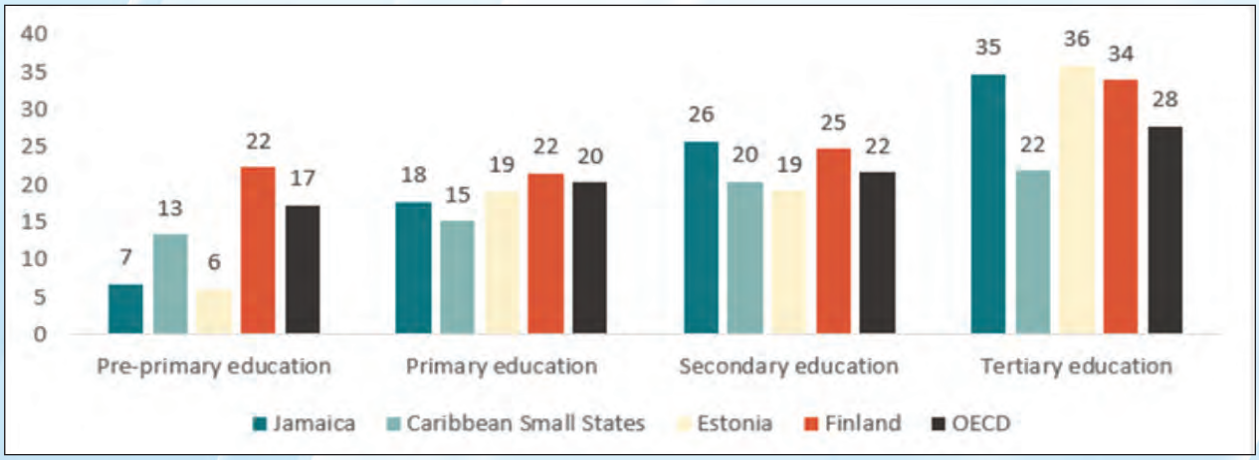
Figure 49: Jamaica: Distribution of Education expenditure by main functions and sub-functions (%)



Source: World Bank calculations based on Statements of Expenditure of the Jamaica's MOEYI (2020)

Figure 50 shows that Jamaica's public per-student expenditure is also high in secondary and tertiary education and low in early childhood education, compared to benchmark countries (World Bank 2021). The per-student expenditure in secondary education was 26 percent of the per capita GDP, which is relatively high compared to other Caribbean countries and top performing education systems.

Figure 50: Jamaica and benchmark countries. Per-student expenditure as a share of GDP per capita



Note: Jamaica: Adding the school feeding program. Caribbean small states average excludes Jamaica.

Source: UNESCO UIS (2020) and World Bank calculations based on Statements of Expenditure of the Jamaica's MOEYI (2020)

At the tertiary level, the expenditure per student as a fraction of per capita GDP, is significantly higher than other Caribbean countries and the OECD average, and is at the level of aspirational comparators such as Estonia and Finland. In stark contrast, at 7 % per-student GOJ expenditure as a share of per capita GDP, is relatively low in early childhood education; only about half the average for Caribbean Small States.

Recommendations

Previous sections of this report have discussed the importance of early-childhood education to the overall performance of the country's education system. The relative underfunding of this level of education in the Jamaican context is clear from the data presented. This is likely to have perpetuated inefficiencies in the system as additional resources have to be expended at each of the higher levels on remedial measures. It is therefore recommended that the GOJ gradually increases the allocation of budgetary resources to the early-childhood level to an initial target of 10 percent of per capita GDP. The recommendations provided in the Early-Childhood section of this report, along with the frameworks presented, should guide the targeted allocation amounts.

Cascade Public Resources from Vocational Training towards Primary and Early-Childhood Education

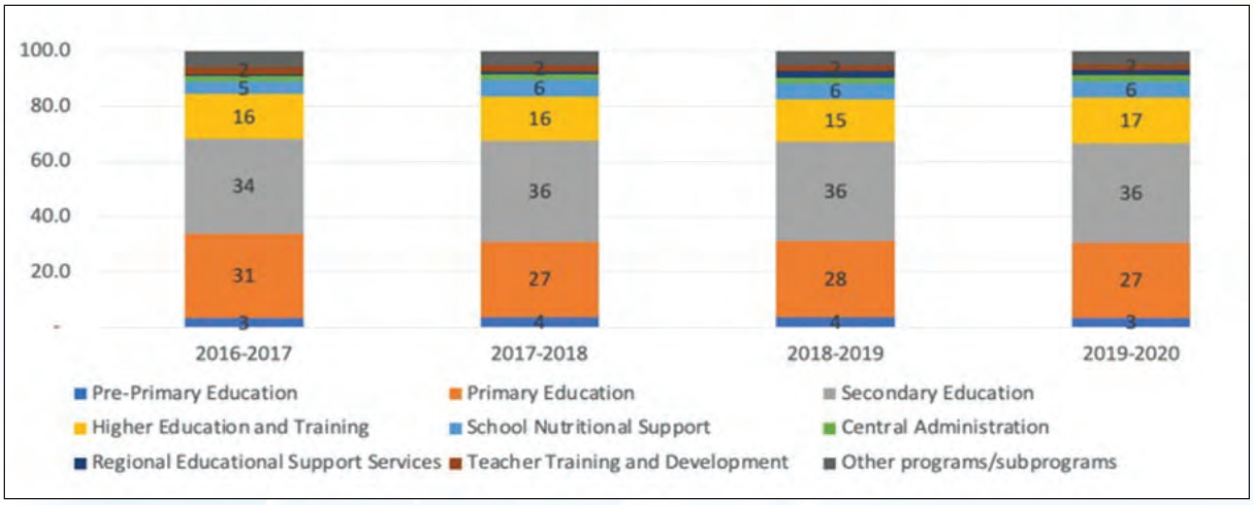
While Jamaica's overall spending on education as a share of GDP and as a share of government expenditure is comparable to its peers, Jamaica is experiencing subpar educational quality and output. Jamaica spends 5.2 percent of its GDP on education, which is in line with international best practice, and slightly higher than the average of 4.9 percent for the Caribbean Small States. The gap is wider when considering the share of total government expenditure: public expenditure on education in Jamaica represents 19 percent of total government expenditure, while in the Caribbean Small States the share is 15 percent.

There are several possible explanations for this but a general misallocation of public expenditure on education cannot be ruled out. This observation is supported by the fact that the core economic policies that underpin major specific aspects of Jamaica's educational program are starkly different from many of its peers that are achieving superior educational outcomes.

Importantly, Jamaica largely relies on a pool of semi-regulated small-scale private enterprises to fund and organize its pre-primary education system. The quality of education offered – more than any other part of the Jamaican educational system -- is heavily determined by the ability of individual households to identify a good educational product and to pay for it. The willingness and capacity of private educational interests to offer education as a service in exchange for a market determined fee makes this possible.

Accordingly, for the cohort of persons enrolled across 2,800 entities in the pre-primary education system, the total allocation of public funds amounts to $4.5 billion or 3% of the educational budget. This compares with a commitment of x% of the public educational budget – on average for the CARICOM and y% for the OECD. The Jamaican government spends approximately 17% of its education budget (Figure 51) on higher education and training, not inclusive of technical and vocational training the HEART/NSTA Trust which represents a further [$14 billion] in annual expenditure.

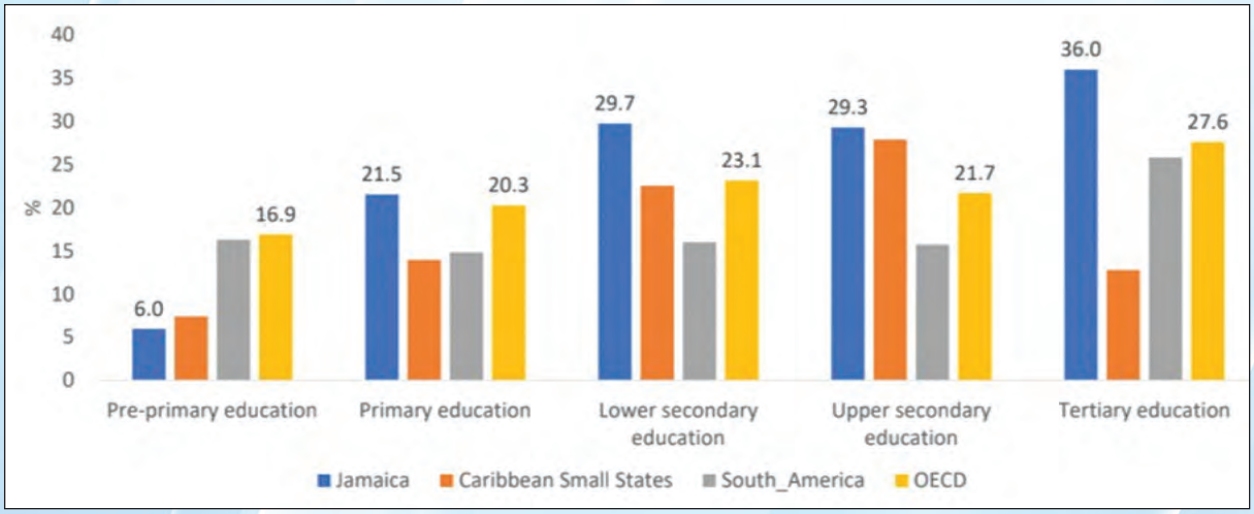
Figure 51: Jamaica Expenditure Distribution by Main Programs, 2016-2019



Source: World Bank Calculations Based of MoF Jamaica, 2020

Jamaica has the lowest per-student expenditure as a share of GDP per-capita for the pre-primary level (Figure 52) when compared with other Caribbean nations and international counterparts. However, the country boasts the highest per-student expenditure at the tertiary level.

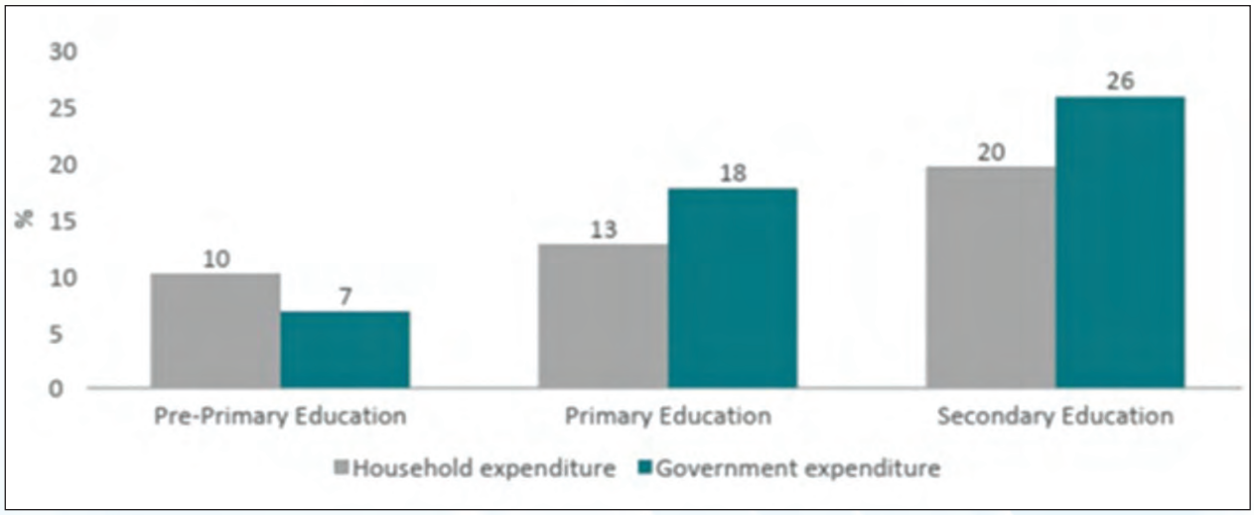
Figure 52: Per-student Expenditure as a Share of GDP Per Capita (%), 2017 or Latest



Source: UNESCO UIS, 2020

Jamaica is an outlier in this regard (Figure 52). Figure 52 indicates that Jamaica has the highest percentage of student enrolment in private pre-primary institutions and that households bear more of the per-student expenditure as a share of GDP per-capita at the pre-primary level.

Figure 53: Household and Government Per-student Expenditure on Education as a Share of the GDP Per-capita by Level of Education, 2017



Source: World Bank Calculations based on Statement of Expenditure of Jamaica's Ministry of Education (2020) and Survey of Living conditions (2017)

At the other end of the continuum is the HEART/NSTA Trust. This single public vocational educational institution is funded with annual public expenditure in the amount of $15 billion, funded by a direct compulsory payroll tax of 3%. The funds collected under this tax are by law segregated from the consolidated fund of tax proceeds and explicitly earmarked for technical and vocational training. The funds so earmarked represent 13% of the annual educational budget and are targeted to persons over 17 years of age.

It is well established that both Vocational Training and Early Childhood Education are critically important parts of the overall education offering. There are, however, meaningful differences between the two. First, is the obvious fact that one is an important pre- condition for the other. That is, students who are able to take full advantage of Jamaica's system of vocational training will, in general, have received an effective early childhood education. Conversely, students without the benefit of an effective early childhood education will tend to experience disadvantages throughout the remainder of their educational experience.

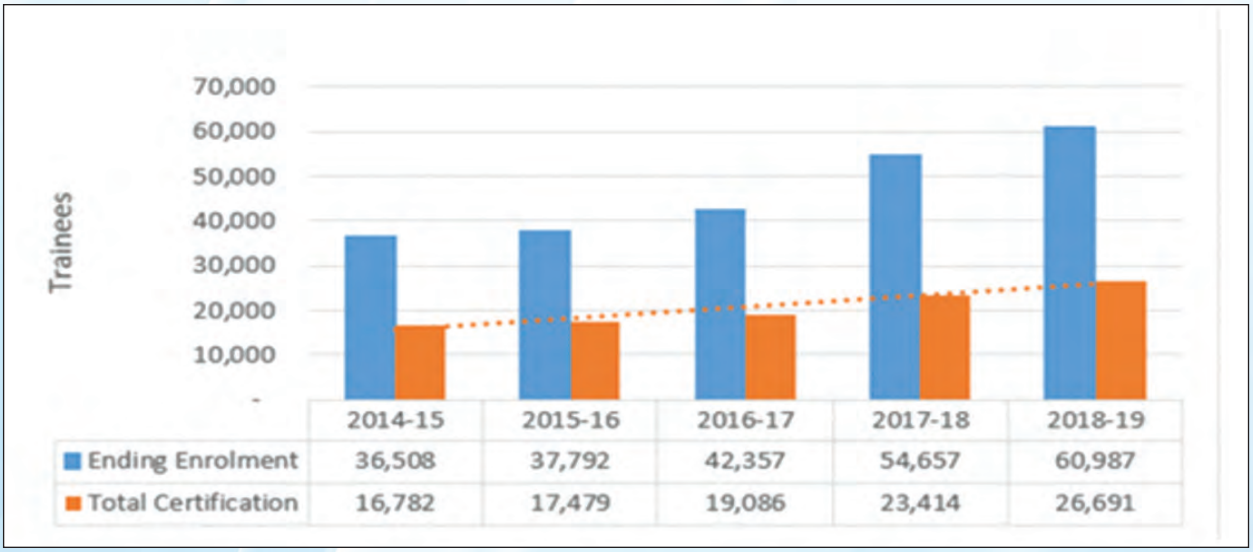
Another important difference between early childhood education and vocational training (that should inform public policy applicable to the financing of education) is that early childhood education has more of the important characteristics of a public good than vocational training. One attribute of a public good is that its overall economic value cannot readily be captured by an individual economic actor. In the case of a classic public good, the benefit to society as a whole is much more than the amount of that good that any individual could effectively capture and use for herself and in addition, no private individual or enterprise is able to organize the resources that are necessary to underwrite the cost of producing the good. As a consequence, if public action is absent, no-one pays and the good is not produced and society is worse-off.

In the practical case of early childhood education, the most obvious private benefits are simply unknowable to the most direct potential beneficiaries--the children themselves. This is starkly

different to vocational training in which the average age of the cohort is above the age of majority. The benefit or payback from early childhood education is also long-term in nature, certainly relative to the other aspects of the overall educational system, and in particular vocational training. Relative to effective and well targeted vocational training, an early childhood education is also obviously hard to immediately commercialize. It is recommended that these differences, should have a much greater influence on the way in which both early childhood education and technical and vocational training in Jamaica are funded.

Publicly funded vocational training clearly has its place in national development; however, in the specific case of HEART/NSTA Trust, there appear to be significant constraints on Jamaica's ability to harvest the full benefit of the public investment. The 2020 Performance Audit report tabled by the Auditor General's Department of Jamaica noted that of the 232,301 trainees whose programmes were to be completed between the 2014/15 and 2018/19 academic years, only 103,453 students were certified. This reflects an average certification rate of 45% as at June, 2020.

Figure 54: HEART's overall certification rate



	2014-15	2015-16	2016-17	2017-18	2018-19
Ending Enrolment	36,508	37,792	42,357	54,657	60,987
Total Certification	16,782	17,479	19,086	23,414	26,691

Source: AuGD's analysis of HEART's enrolment and certification data

During the same period, HEART disbursed a total of $8.3 billion to External Training Providers (ETPs) that administered its training programmes. These training programmes included the Community Training Interventions (CTIs), Jamaica Defence Force and Citizen's Security and Justice Programme (JDF CSJP), Career Advancement Programme (CAP), Joint Community for Tertiary Education Programmes Absorptive Capacity (JCTEP AC), Career Advancement Programme - Youth Empowerment Solutions (CAP-YES), National Unattached Youth Programme (NUYP) and UTECH Future Jamaica. Collectively, these programmes only managed to produce a 38% certification rate. This can be attributed to the inadequate oversight of HEART to ensure that the ETPs achieve adequate levels of certification.



In the context of limited public resources and constrained educational outcomes, Jamaica must decide the priority in public expenditure on education. Jamaica has elected to allocate public funding for vocational education at a rate much higher than its global peers.[328] and to allocate public funding for early childhood education at a rate that is much lower than its global peers. Put simply, Jamaica has privatized the part of its education system that has the most attributes of a public good and as a consequence it is under resourced. In turn, direct compulsory public funding at a high rate is used for the very part of the educational system that could accommodate a greater share of private funding.

The basic recommendation of this report is the implementation over time of a series of bold public policy measures:

1. To publicly fund a greater share of early childhood education
2. To increase private funding and private engagement in the provision of vocational training.

An extremely important premise for the overall understanding of this recommendation is that the certifications provided by HEART/NSTA Trust do have significant value to Jamaican industry and

[328]See Figure 57

the certification are of value to the persons being certified. The recommendation should not be construed in a light that fails to appreciate the value of the certification. Quite the contrary. The view is that the same or a higher number of certifications can be achieved with fewer enrolees, a higher percentage of certifications relative to the number of enrolees and the reallocation of resources now targeted to HEART/NSTA Trust to lower levels of the educational system.

The specific objectives that should underpin any substantive policy changes are as follows:

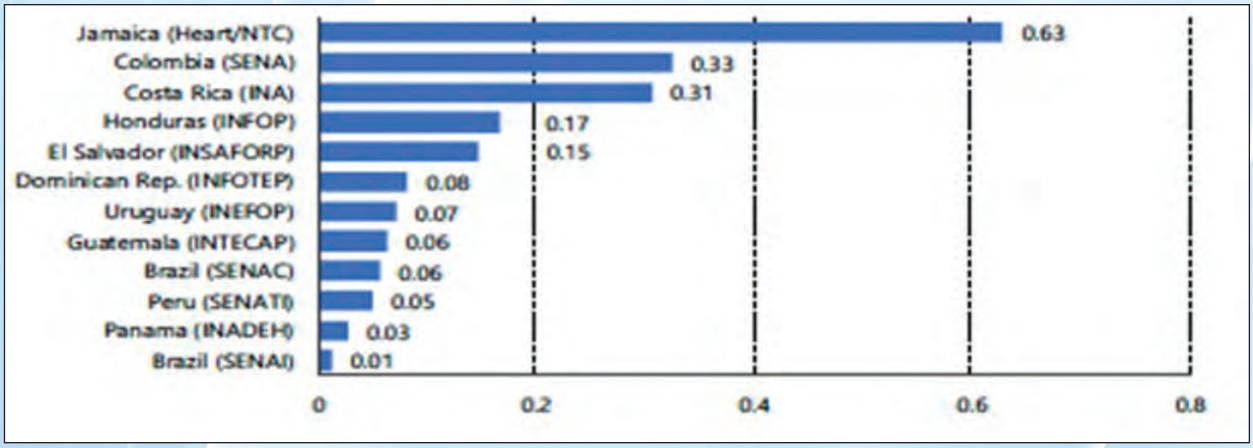
- Complete a specific study to refine HEART's the institution's understanding of the job market and, in particular, the preferred entry-level skill sets for growth sectors. This exercise could allow for the determination of skills sets that can be integrated into a core secondary school curriculum and certified at the secondary school level and within the capital assets of the secondary school system, and skill sets that require certification outside of the secondary school setting.

- Identify a range of marketable vocational skill sets that can benefit from more intensive private sector engagement with a view to (a) shifting towards a cost-sharing model with industry in relation to these skill sets, and (b) shifting towards a contributory model (based entirely on loans) for a small subset of marketable skills.

- Shift resources now located within HEART for at-risk youth to the secondary school level to allow for the earliest stage intervention possible, with a corresponding cascading of resources to primary and pre-primary education.

- Greater emphasis on increasing the certification rate (in part by devolving the focus on remediation to other levels of the education system) to maintain the overall level of certifications by the institution.

Figure 55: TVET initial financing by national training institutions



Address Allocative Inefficiencies within the Tertiary Sector

The World Bank (2021) notes that there is scope for input efficiency gains within the tertiary sector with a better distribution of resources across institutions. This is because of the large differences

in per-student expenditure across institutions at this level. The Tertiary Committee of this Commission similarly concluded that funding at this level is far too arbitrary and lacking in transparency. The per student allocation is not consistent across institutions and there is no discernible basis for some allocations.

The Tertiary Sub-Committee has provided extensive details on the issues related to the financing of tertiary education in Jamaica, and has put forward detailed recommendations for correcting these extant issues and inequalities in the sector. Among the issues include highlighted are: inadequate investments in infrastructure at the tertiary level, unequal funding of publicly owned institutions or students at that level, resulting in funding challenges of several institutions, inefficiencies in the operations of these institutions, and misalignment of institutional offerings with the demands of the labour market.

The main recommendations include revision of the legislation governing higher education institutions, creation of a capital investment fund to be accessed by tertiary institutions, and the establishment of a transparent funding mechanism through the use of grant funding. This would be underpinned by specific criteria to be met by institutions, including performance-based criteria. It also recommends the establishment of a voluntary saving scheme for the benefit of tertiary students, and a review of the National Education Trust. The report also suggests that funding institutions such as the Students' Loan Bureau should improve their loan offerings and develop a more rigorous debt recollection mechanism. Improvement in the Bureau's improvement in their loan apparatus could lead to a greater number of students utilizing it and would provide consistent funding for tertiary institutions.

It is further proposed that appropriate transitional arrangements be agreed on, with adequate timelines that fall within the overall implementation timeframe of this report to allow institutions to adjust to this arrangement. During this transitional period, the GOJ's current budgetary allocation to the tertiary sector should not decrease. Adequate time needs to be given to ensure that the efficiency gains from this fundamental shift in the funding arrangements for tertiary institutions can be garnered. Any simultaneous reallocation of resources away from the tertiary sector could undermine the overall sector before efficiency gains are realized.

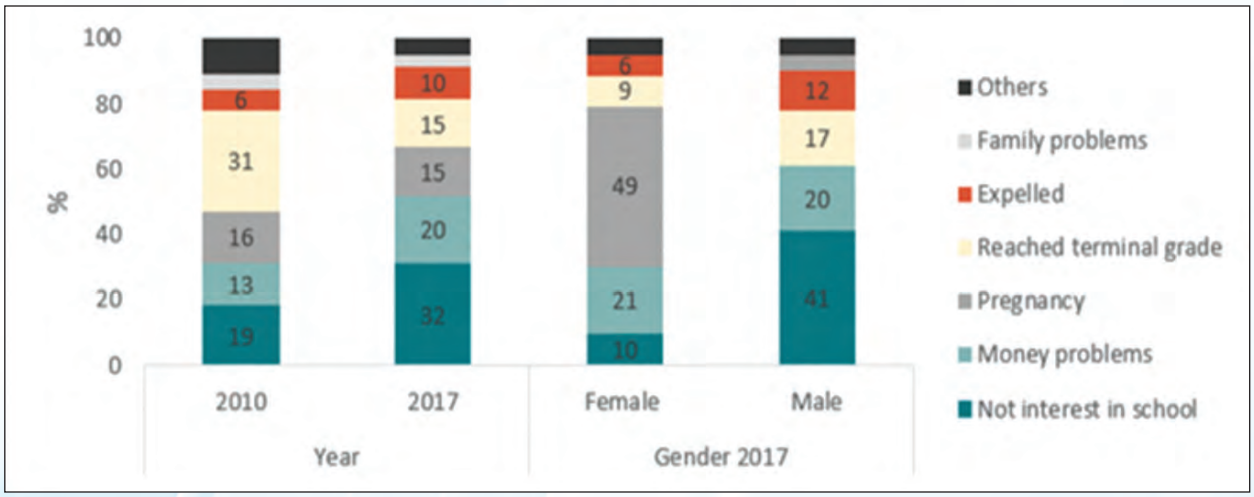
Equity in Financing Education

An important goal of education finance systems is to promote equity in educational opportunity. Access to quality education should not depend on a student's socio- economic background, gender, race or ethnicity. These factors, however, influence student learning to varying degrees in different countries. Reducing income and social inequality by improving education outcomes for students from low-income households, reducing achievement gaps between students from advantaged and disadvantaged backgrounds, and between girls and boys, is the responsibility of the government. In this regard, vertical equity, that is, progressive spending to facilitate the unequal treatment of unequal, can be used as a winning strategy.

Although education is, in principle, free, the cost of attending school is still significant for households. Figure 56 highlights the fact that 'money problems' is one of the top two reasons cited for why male and female students stop attending school, with more students indicating

such problems in 2017 than in 2010. Secondary high schools are impacted by this to a greater extent than all-age schools and primary and junior high schools (Figure 57). Not surprisingly, this varies with socioeconomic level, with the poorest being disproportionately affected (Figure 58).

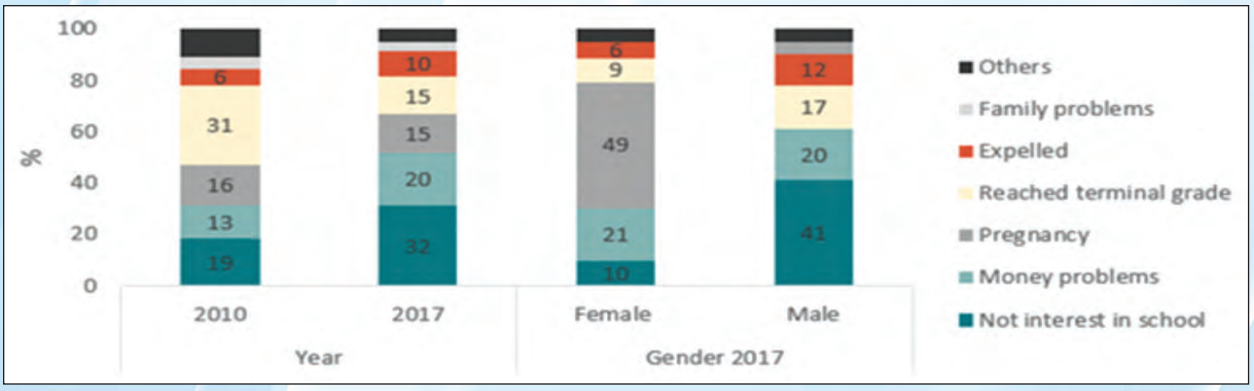
Figure 56: Reasons given for dropping out before grade 11, 2010 and 2017



Note: Not attending school; Drop-out before grade 11; 17-21 years old

Source: World Bank based on Jamaica Survey of Living Conditions, 2017

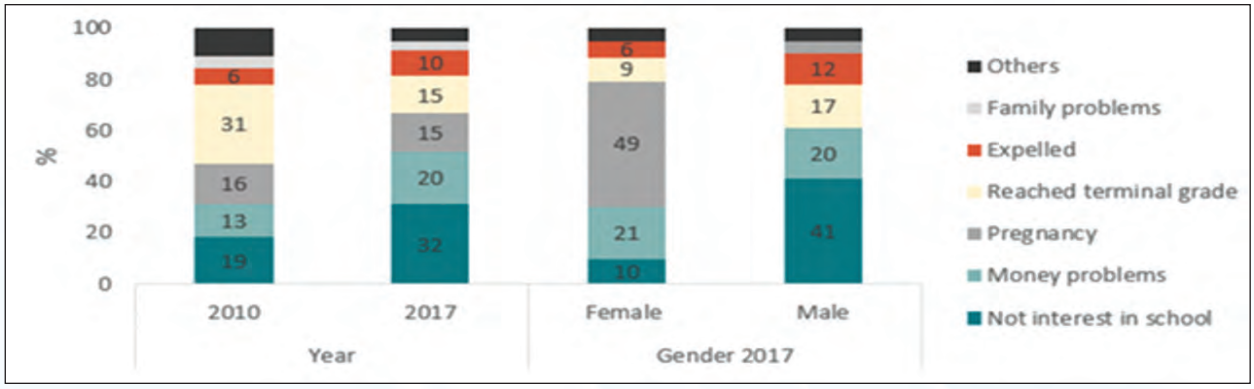
Figure 57: Reasons given for dropping out before grade 11 by school type, 2017



Note: Not attending school; Drop-out before grade 11; 17-21 years old

Source: World Bank based on Jamaica Survey of Living Conditions, 2017

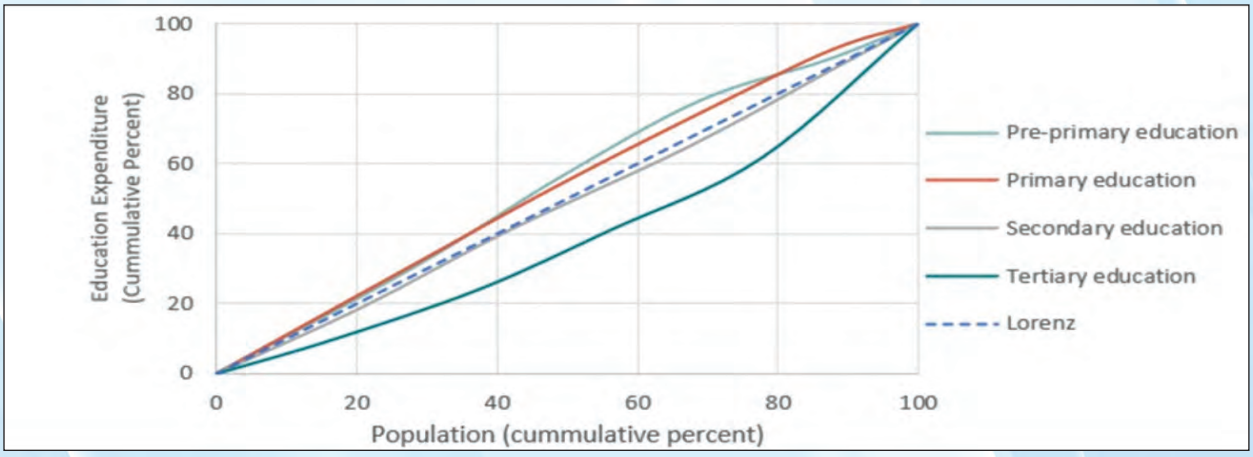
Figure 58: Percentage of students that do not attend school for five days or more in a month due to money problems by Level of education and quintile groups, 2017



Source: World Bank based on the Survey of Living conditions, 2017

The World Bank (2021) notes that the Jamaican educational system is equitable in terms of access to early childhood and primary education, but not at the secondary and tertiary levels (Figure 59). It further notes that government expenditure in early childhood and primary education is pro-poor, neutral to poverty in secondary education, and regressive in tertiary education. Interesting observations are that the male, rural and socioeconomically disadvantaged populations are less likely to attend secondary and post-secondary tertiary education.

Figure 59: Jamaica: Lorenz curve of the Education Expenditure, 2017



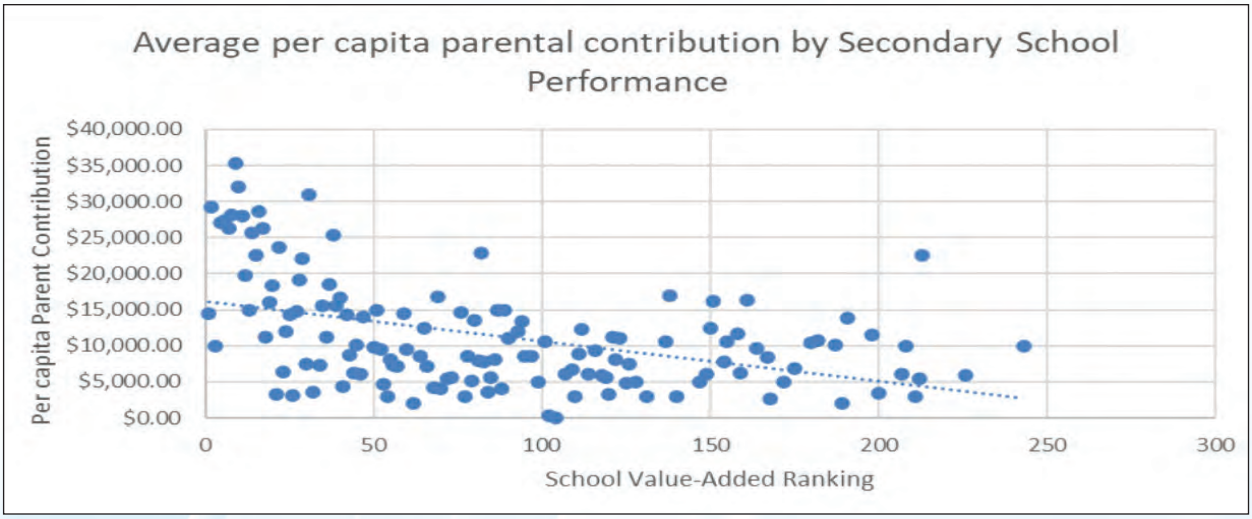
Source: World Bank staff calculations based on Survey of living conditions, 2017

Increase support to the poor at the secondary level

Based on the aforementioned findings by the World Bank it is important to implement measures that will increase the progressivity of government expenditure in secondary education. Recall the findings from the survey of secondary schools which showed that the top-ranked schools received parental contributions in excess of ten times larger than those received by the bottom-ranked schools. In Figure 60, the clear positive relationship between funds provided by parents

and the performance-based ranking of secondary schools is evidenced for a much larger sample of such schools, using MOEYI data.

Figure 60: Average per capita parental contribution



While the direction of causation in this relationship has not been empirically proven, it is quite plausible to argue that the parents in the bottom-ranked schools were on average unable to afford the contributions made by parents in the top-ranked schools. This is because most of the bottom-ranked schools are located in economically disadvantaged communities, which are predominantly attended by children of lower-income households. This was substantiated in the sample survey by the fact that the bottom-ranked schools have had to spend substantially more than the top-ranked schools to correct social and contextual problems through remedial/social intervention programmes and security measures.

If there is bi-directional causality, it could further be argued that schools which have a larger proportion of lower income households that cannot afford to contribute as much to their children's education will continue to be disadvantaged, perpetuating the vicious cycle. Issues of equity at the secondary level must therefore be addressed.

Enhance and Expand Support to Low-Income

Households to meet Non-Fee Education Expenses

Although students at the secondary level are not required to pay school fees, the cost of education is still substantial, particularly for low-income households. It was previously shown that:

- Money problems are the second most cited reason for students dropping out of secondary school;
- Household per-student expenditure on secondary education as a share of per capita GDP is only 6 percentage points below government per-student expenditure; and
- A significant proportion of household expenditure on secondary education is for lunch and snacks at school and transportation to and from school.

Recommendations

- It is recommended that the school feeding and PATH programmes be re-examined with a view towards expanded and enhanced support to low-income households to meet the costs associated with sending their children to secondary school.
- The MoEYI administers two school feeding programmes: a snack and drink programme and a cooked meal programme. The World Bank (2021), however, notes that 'the school feeding programme is to some extent progressive but does not reach all vulnerable students…. None of the students in the lowest socioeconomic quintile that do not attend school for five or more days in a month, get free school meals in early childhood and secondary education. Given that missing school days is correlated with economic challenges, the findings suggest that these students might be in the most immediate need of the programme and the programme should be reoriented to cover them.'
- According to The World Bank (2021), Jamaica spends more in school feeding per student than other reference and aspirational countries. It asserts that reducing the current cost to international levels could translate to savings of about J$277 million to J$1.2 billion. Given that school feeding programmes are highly decentralized and often operated at the school level, the World Bank believes that one option to reduce cost may be to standardize the programmes within parishes; thus, possibly realizing benefits from economies of scale.
- It is expected that the savings garnered, along with enhanced contributions to be collected from the measure suggested below, will provide the financing needed for the recommended revision of the PATH and school feeding programmes. This will enable the provision of expanded and enhanced support to low-income households to meet the costs associated with sending their children to secondary school. This requires further study, and it is recommended that technical assistance be sought from one of the international development partners.

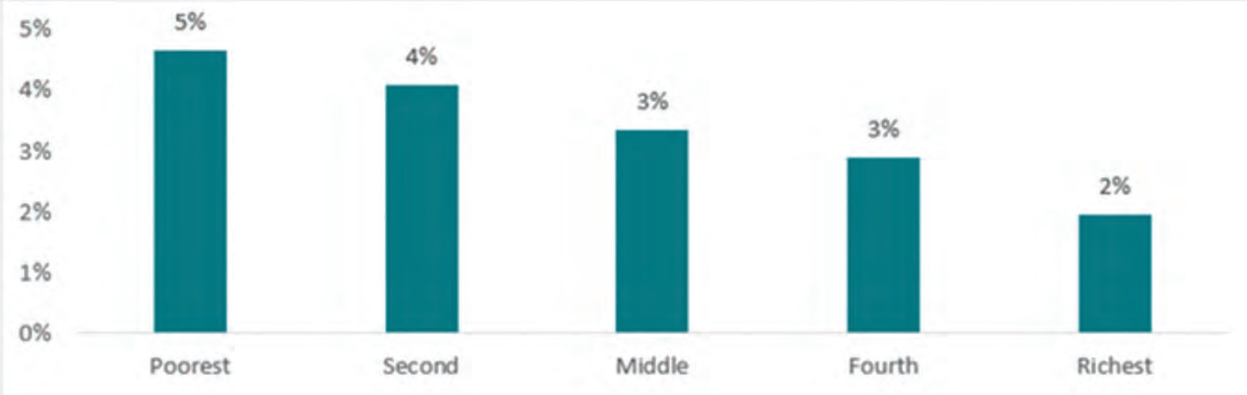
Revisit aspects of the No-Fee Policy at the Secondary Level

To ensure a Progressive System, wherein Middle and High-Income Households are required to contribute and Low-Income Households are subsidized, aspects of the No- Fee Policy need to be revisited.

In 2016, the GOJ introduced the no-fee policy for public secondary schools, which removed both tuition and auxiliary fees. Since 2017, the GOJ has allocated J$17,000 per student to secondary schools in lieu of the fees. Notwithstanding this, schools still cite the inadequacy of public resources to cover their expenses, and auxiliary fees continue to be used to supplement the operational budget of secondary schools. The World Bank (2021) notes that in 2017, parents contributed J$1.5 billion a year in auxiliary fees, while the GOJ transferred J$3.7 billion to compensate for tuition fees.

Figure 61 shows that under this system, the poorest students pay proportionally more of these voluntary fees relative to per capita consumption. The fact that they do so may suggest that the fees are perceived as required, or that there is some pressure being applied for them to pay (whether by the school or by their peers).

Figure 61: Auxiliary fees in secondary education as a share of annual household per capita consumption, 2017



Source: World Bank calculations based on the Survey of Living conditions, 2017

The recommendations of this report are very much aligned with the underlying policy insights that appear to have given rise to the 2016 no-fee policy and the 2017 per-student allocation from public funds. In particular, the principles of (a) removing any limits on admittance of children to school as a penalty for non-compliance or non-payment of auxiliary fees, and (b) removing general obligations on low-income households to pay auxiliary fees (particularly as the non-fee costs of attending school consume a relatively high proportion of their budget), and replacing this obligation with state support, are both supported. That said, this report holds that even if these principles are strictly adhered to, the GOJ may consider constructive policy options that (a) allow for greater enforcement of auxiliary fees by households that can pay, and (b) provide increased targeted support to schools to substitute for amounts that would otherwise be due as auxiliary fees from low-income households.

This policy prescription is informed by the observation that additional resources will be needed if the bottom-ranked secondary schools are to be put in a position where they can adopt the best practices of the top-ranked schools (by, inter alia, incentivizing teaching through enhanced salaries and/or benefits to staff and increased provision of teaching equipment and teaching supplies), while at the same time maintaining the relatively high but necessary expenditures on security and remedial and intervention programmes.

School finance systems, to compensate for disadvantages, often provide additional resources to schools that teach disadvantaged students so that they can offer targeted services, such as additional teachers or specialized learning materials (The World Bank, 2013). While the GOJ has facilitated some such transfers, through, for example, the Social Premium, TVET Equipment and the Apprenticeship Programme, the resources provided have clearly not had the desired compensatory effect. The policy of cost-sharing should, therefore, be revisited.

It is noted with great interest that even with its acknowledgement of the Government's commitment to phase out cost sharing in secondary schools by 2005/06, the 2004 Task Force on Educational Reform strongly recommended that the cost-sharing scheme be retained, and secondary schools be allowed to continue to charge fees. Several reasons were provided to justify this recommendation, all of which remain relevant in the current context:

- Some parents are in a position to fund a significant portion of the cost of their children's education, as evidenced by the level of expenditure on extra lessons.

- Limiting funding to what the government is capable of providing diminishes the quality of education.
- The requirements of the system are greater than what the Government alone can reasonably be expected to fund.
- Parents who are required to meet a greater proportion of the cost of their children's education will feel more committed to ensuring that they derive the best value for money.
- Mechanisms are available through the PATH programme to ensure that children of parents who cannot afford to pay will not be denied space in the secondary system.

Recommendations

- Additional resources should be provided through a progressive system of school fees, wherein middle and high-income households are required to monetarily contribute to financing the cost of their children's education, while poor households that cannot afford such contributions are exempt without penalty. The parental contributions will not necessarily be expended on the schools to which their children attend, but rather will be allocated in a redistributive manner to the schools which serve a larger proportion of economically disadvantaged youth.
- Alternatively, if it is found that parental contributions are adversely impacted by this manner of redistribution, measures could be implemented to reallocate GOJ resources from secondary schools which collect higher tuition fees from parents, to those for which little or no such fees are collectible.

This recommendation is clearly being made at a conceptual level. Its feasibility and the specifics needed for implementation in the current context should be the subject of further study. This could be the focus of a technical assistance partnership with one of the international development partners.

Increase Access to Tertiary Education for the Poor

The World Bank (2021) notes that improving equitable access to tertiary education is imperative, particularly for the socioeconomically disadvantaged, male and the rural population. Increasing access to tertiary education for the poor will necessitate, inter alia, the implementation of short-term and long-term measures to ensure that low- income households are able to access sources of financing for tuition fees.

Re-examine the functioning of the Student Loan Bureau

To address demand-side constraints and enable significantly increased capital deployment, The role and function of the SLB should be re-examined in the context of ensuring equity in financing education in Jamaica.

The Student Loan Bureau (SLB) is an outlier in Jamaica's education financial system. It has accumulated a capital base of approximately J$30 billion and the combined funding generally available to it from the education tax and loan repayments have allowed it to maintain a surplus to such an extent that the most recent GOJ budget provided for a suspension of the allocation that would have otherwise been made available to it under the Education Tax regime.

In line with the findings of the World Bank's Public Expenditure Review on Jamaica, this report observes that Jamaica's publicly financed contribution to tertiary education as a share of per capita GDP is high relative to its peers, notwithstanding the fact that these other jurisdictions have comparable or superior educational outcomes and higher tertiary enrolment levels. We also note that other levels of Jamaican education (particularly pre-primary education) receive

proportionately lower levels of public support. Accordingly, among other things, this paper expressly recommends that, over time, the share of private funding for tertiary education should be increased to allow for the re-allocation of public funds to other levels.

The justification for this proposal is absolutely not based on an initial assumption that households that can benefit from a tertiary education generally have the private funds readily available to finance it. It is also not the view that tertiary education should be more exclusive or even that current arrangements for the financing of tertiary education are sufficiently progressive. To the contrary: tertiary enrolment is of such value to the society and to the individual that it should be more widely available. Tertiary education almost definitionally provides a bankable return over time to a student who is able to source the funds up-front to invest in this education, even if the student must pay back the funds over time with interest. Widened availability, importantly, will be of positive net present value to the student.

The principles and insights set out above form the impetus for several specific preliminary policy recommendations to allow Jamaica to effectively increase its utilisation of the SLB This will allow for an increase in the share of private funding available for tertiary education and, ultimately, facilitate the movement of public funds to other levels of education. The specific policy proposals are set out below:

- Complete an assessment to quantify and demonstrate the net financial returns from investment in tertiary education, by profession and by tertiary institution. This tool would be applied both to enhance students' acceptance of the student loan product and, importantly, as an underwriting tool to determine the payback potential of specific fields of study.
- Improve the availability of Student Loans by relaxing certain requirements on the basis of need. The particular requirement for review is the maximum loan amount as well as the guarantee requirement. Student loans that cover tuition only do not allow for sufficient resources to cover the full requirement of transport, accommodation and school supplies. Needs based lending for these funding requirements can possibly improve school performance and repayment potential. The loan guarantee requirement is another area that should be reviewed.
- Improve the enforcement of collections. This should include emphasizing credit reporting, both locally and internationally, and the engagement of private financial services to handle origination and data management. There are private institutions now engaged in student lending. A goal of the SLB should be the engagement of the systems and facilities of these institutions while offering some underwriting support.
- Establish a 'brokerage' or 'referral' function within SLB in which referrals are made to private institutions that are able to offer credit on comparable or competitive terms.
- Improve the systems necessary to increase the disbursement rate, including by supporting private financial services firms in loan disbursement based on pre-agreed criteria and agreed rates of interest.
- Realise loan assets by mobilising private sector resources to acquire performing loans from the SLB on commercial terms to allow for increased capacity for further loans.

Child Opportunity Fund

The Tertiary Committee of this Commission has recommended the establishment of a voluntary saving scheme through a public-private partnership wherein parents (up to a prescribed income level) are allowed tax free saving toward their children's tertiary education. The details are provided in the Tertiary section of this report.

Conclusions

Our main conclusions are that by some important measures, the adequacy of our educational finance – relative to our GDP – is appropriately aligned with that of our peers, particularly when private contributions to our educational system are considered. The proportional overall spend at the secondary and tertiary level is particularly aligned with our peer countries and some of our role models.

Obviously, richer countries are able to spend more per-student on education and that too is observed, but given our resource constraints, our overall spending is adequate. Unfortunately, by many important measures, we do not compare favourably with our peers in respect of the efficiency or equity of our education finance. In particular, some of our peers are achieving superior educational outcomes for the same proportional spend. Moreover, although public funding of primary education in Jamaica can be described as "pro-poor" our system's reliance on private funding at the primary level allows for large disparities in the education finance available to different students with better privately financed students achieving better performance.

At the secondary level, disparate levels of parental contributions to the public school system also lead to outcomes where better performing schools benefit from higher parental contributions. Schools are able to apply these parental contributions more flexibly by than funds made available from the state under the current funding structure and in so doing, these funds are able to drive educational performance. There is an opportunity for the state to construct bold policies to (a) require or incentivise compliance of parental contributions from those with the means to contribute, (b) provide comparable levels of support through PATH for students that are able to demonstrate need.

At the tertiary level, we observe markedly different levels of public financing across institutions. There is an opportunity to re-balance and rationalise public spending per-student across tertiary institutions. This report aligns with the specific recommendations in this regard in the sections related to Tertiary Education.

The World Bank Public Expenditure Review recommends reduced public spending on Tertiary Education with a reallocation to pre-primary education. In the immediate term and during the period of rationalising and re-balancing public spending across tertiary institutions, it is recommended that policies be put in place to materially increase the level of private financing for tertiary education through (a) student loans, and (b) to the extent practicable, from amounts that can be harvested from household savings if there is increased public funding at the pre-primary and primary levels and more efficient organisation of household expenditure on school transport and school feeding.

The gradualism recommended relates to the fact that notwithstanding the relatively high level of public expenditure on tertiary education in Jamaica, enrolment remains relatively low. As such, measures to increase the level of private funding for tertiary education are seen as an important pre-condition to an overall reduced public commitment.

Importantly, Jamaica is also an outlier relative to its peers and role models in the public commitment to different levels of education. Of note is the fact the Jamaica's commitment of organised public finances to pre-primary education is markedly lower than its peers and role models and Jamaica's devotion of public funds to vocational and technical training (and related remedial education) exceeds that of its peers and role models in proportional terms. These insights inform many of our specific recommendations. Put simply, there is an important opportunity for Jamaica to boldly re-balance its commitment of public finances towards pre-primary and primary education.


TARRANT PRIMARY SCHOOL

APPENDICES

Appendix 1 –
GOJ Allocation Formulas for the Primary and Secondary Levels

Schools are mainly funded by transfers from the central government through different grants and programmes. As provided by the World Bank (2021), the tables below outline the grants utilized to support infant and primary schools and secondary schools, respectively. A description of each of the grants is also provided in the Box.

The World Bank (2021) has noted that improvements could be made to the allocation formulas used. This was not investigated in this report, but has been highlighted as an area that the MOEYI should investigate further.

Table 23: Grants to support infant and primary schools (outside staff compensation), 2019/20

Support	2019/20	%
Social Premium	3,484,000	0.1
Regular Grants (Tuition)	54,162,000	1.6
Janitorial	3,500,000	5.7
Water	2,330,000	1.0
Internet	49,140,000	1.4
Security	10,875,864	0.3
Special Feeding Grant	900,000	0.0
PATH Feeding Grant	1,984,540,140	58.3
Maintenance Grants	124,700,000	3.7
Canteen Grant	100,000,000	2.9
Staffing (Cooks) Support	324,900,000	9.5
Infrastructure/Maintenance	295,537,408	8.7
STEM Support	3,500,000	0.1
ICT Support	5,000,000	0.1
Environmental Wardens	22,000,000	0.6
Maintenance Officer	42,680,000	1.3
School Support Officer	100,800,000	3.0
Transportation (Rural Bus Pilot)	54,460,000	1.6
Total	3,402,509,412	100.00

Note: Including All Age schools and Primary and Junior high schools

Source: Extracted from the World Bank (2021)

Table 24: Grants to support secondary high schools (outside staff compensations), 2019/20

Support	2019/20	%
Regular Grants (Tuition) (17,000 per student)	4,061,292,650	57.58
Social Premium	146,298,000	2.07
Infrastructure	345,265,234	4.89
Maintenance	87,000,000	1.23
TVET Equipment	64,828,000	0.92
STEM	87,500,000	1.24
Science	4,500,000	0.06
ICT	87,500,000	1.24
Apprenticeship:		
Computer Lab Tech	38,280,000	0.54
Industrial Technology	45,320,000	0.64
Home Economics	42,720,000	0.61
School Support Officer	28,400,000	0.40
Science Lab Tech	12,320,000	0.17
Agriculture Lab	16,280,000	0.23
Transportation (Rural Bus Pilot)	255,420,000	3.62
PATH Feeding Grant	1,727,426,250	24.49
Miscellaneous Support	3,300,000	0.05
Total	7,053,650,134	100.00

Source: World Bank (2021)

Appendix 2.

A New Evaluation and Ranking of Jamaica's Secondary Schools

Table 25: Rankings of Average and Value-Added Scores for CSEC & CAPE Exams + Base % Average Results (Traditional Schools – 2001-2018)

Secondary School Name	OVERALL RANKING Based on Average of All Other Rankings	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (% CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma)	Ranking based on Average Result (VA CAPE and CAPE Diploma)	Average CSEC % Certificate	Average CAPE % Diploma
GLENMUIR HIGH SCHOOL	1	3	16	1	4	3	4	72.04%	46.55%
WOLMERS HIGH SCHOOL FOR GIRLS	2	6	24	9	3	2	2	69.86%	52.01%
ST JAGO HIGH SCHOOL	3	15	12	7	8	5	7	62.13%	38.87%
ST ANDREW HIGH SCHOOL FOR GIRLS	4	5	17	3	11	15	12	71.42%	34.32%
IMMACULATE CONCEPTION	4	2	35	16	2	4	3	72.89%	54.26%
CAMPION COLLEGE	6	1	41	22	1	1	1	73.64%	64.15%
WOLMERS BOYS HIGH	7	8	30	17	6	7	7	68.81%	43.43%
CONVENT OF MERCY	8	22	11	13	12	9	9	58.69%	31.26%
HAMPTON HIGH	9	4	37	30	5	6	5	71.50%	45.86%
QUEENS HIGH SCHOOL	10	28	8	15	15	8	10	52.76%	28.90%
ST HUGHS HIGH SCHOOL	11	23	5	8	20	14	16	57.21%	27.47%
ARDENNE HIGH SCHOOL	12	7	33	19	7	13	8	69.17%	39.66%
CLARENDON COLLEGE	13	32	3	14	23	11	16	48.02%	26.88%
MEADOWBROOK HIGH	14	25	6	10	21	19	19	56.30%	27.14%
KINGSTON COLLEGE	15	19	14	13	19	20	18	61.32%	27.78%
HOLY CHILDHOOD HIGH	16	17	9	6	26	23	26	61.88%	26.12%
WESTWOOD HIGH	17	10	22	11	13	31	22	68.22%	30.88%
ST HILDAS DIOCEAN	18	13	13	6	26	23	26	63.63%	26.15%
KNOX COLLEGE	19	18	4	3	29	29	31	61.47%	24.00%
DECARTERET	20	16	29	25	17	16	14	61.89%	28.66%
ST MARY HIGH SCHOOL	21	31	19	32	16	10	12	51.79%	28.71%
MERL GROVE HIGH SCHOOL	22	24	1	4	32	27	32	56.37%	21.02%
MANNINGS SCHOOL	23	11	36	30	14	25	18	64.56%	30.57%
ST CATHERINE HIGH SCHOOL	24	38	7	25	31	12	21	40.97%	21.27%
MUNRO COLLEGE	25	20	39	36	9	18	13	61.22%	36.23%
MORANT BAY HIGH SCHOOL	26	27	15	21.5	28	21	26	53.49%	24.96%
MONTEGO BAY HIGH SCHOOL	27	9	38	30	10	32	20	68.62%	34.73%
MOUNT ALVERNIA HIGH SCHOOL	28	12	27	18	22	34	29	63.74%	27.05%
ST GEORGES COLLEGE	29	26	20	27.5	24	22	23	56.08%	26.19%
CHARLEMONT HIGH SCHOOL	30	41	2	23	37	17	28	31.87%	17.12%
BISHOP GIBSON HIGH SCHOOL	31	21	26	30	18	30	24	59.27%	27.95%
MARYMOUNT HIGH SCHOOL	32	35	10	25	35	26	33	44.07%	18.01%
MANCHESTER HIGH SCHOOL	33	14	32	27.5	27	35	34	63.05%	25.49%
TITCHFIELD HIGH SCHOOL	34	33	21	33.5	33	24	30	46.88%	18.96%
CAMPERDOWN HIGH SCHOOL	35	36	18	33.5	39	33	36	43.59%	16.64%
YORK CASTLE HIGH SCHOOL	36	30	25	35	36	37	38	52.09%	17.47%
CORNWALL COLLEGE	37	29	40	41	30	41	35	52.56%	21.50%
JAMAICA COLLEGE	38	34	34	39.5	34	39	38	45.16%	18.28%
EXCELSIOR HIGH SCHOOL	39	39	28	38	41	36	40	38.11%	13.38%
CALABAR HIGH SCHOOL	40	37	31	39.5	38	38	39	42.57%	16.87%
FERNCOURT HIGH SCHOOL	41	42	23	37	42	42	42	30.43%	7.26%
RUSEAS HIGH SCHOOL	42	40	42	42	40	40	41	33.95%	13.42%

Table 26: Rankings of Average and Value-Added Scores for CSEC & CAPE + Base % Average Results

Secondary School Name	Ranking based on Average Result (All rankings)	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma): 2SLS	Ranking based on Average Result (VA CAPE and % CAPE Diploma)	Average %CSEC Certificate	Average % CAPE Diploma
DINTHILL TECHNICAL SCHOOL	1	7	4	1.5	4	3	2	31.90%	13.16%
DENBIGH HIGH SCHOOL	2	2	9	1.5	3	16	5	41.10%	14.71%
EDWIN ALLEN HIGH SCHOOL	3	9	11	5	5	12	4	27.40%	11.74%
ST MARYS COLLEGE	4	15	1	4	11	11	6	23.64%	9.02%
OLD HARBOUR HIGH SCHOOL	5	13	2	3	15	19	9	25.36%	8.01%
THE CEDAR GROVE ACADEMY	6	12	15	7				25.54%	
HOLMWOOD TECHNICAL HIGH SCHOOL	7	27	6	10	25	6	8	18.83%	4.51%
JONATHAN GRANT HIGH	8	11	18	8	13	24	10	26.31%	8.19%
JOSE MARTI TECHNICAL SCHOOL	9	28	27	20	9	4	3	18.60%	10.13%
MACGRATH HIGH SCHOOL	10	40	5	13.5	18	10	7	13.24%	6.26%
OBERLIN HIGH SCHOOL	11	16	16	9	14	28	12	23.55%	8.05%
GUYS HILL HIGH SCHOOL	12	33	12	13.5	21	17	11	15.63%	5.68%
VERE TECHNICAL HIGH SCHOOL	13	20	3	6	20	51	14	21.56%	5.75%
GARVEY MACEO HIGH SCHOOL	14	17	17	11	12	75	18	23.28%	8.64%
HOLLAND HIGH SCHOOL	15	18	31	17	17	59	16	22.75%	7.49%
MICO PRACTISING PRIMARY AND JUNIOR HIGH	16	51	10	23	43	30	15	10.43%	2.47%
CENTRAL HIGH SCHOOL	17	42	23	26	32	46	17	12.54%	3.54%
SPALDINGS HIGH SCHOOL	18	19	20	12	22	94	26	21.99%	5.17%
BLUEFIELDS HIGH / BELMONT ACADEMY	19	14	144	69	1	1	1	24.48%	16.34%
BOG WALK HIGH SCHOOL	20	75	42	40	31	31	13	6.41%	3.64%
WINDWARD ROAD PRIMARY AND JUNIOR HIGH	21	64	8	28	69	42	23.5	7.91%	1.04%
ST MARY TECHNICAL HIGH	22	25	37	24.5	24	101	28	19.30%	4.70%
BRIDGEPORT HIGH SCHOOL	23	21	41	24.5	16	119	34.5	21.29%	7.62%
MAY DAY HIGH SCHOOL	24	10	36	15	19	137	48.5	26.67%	5.83%
SYDNEY PAGON AGRICULTURAL HIGH SCHOOL	25	90	7	36				4.68%	
ANNOTTO BAY HIGH SCHOOL	26	32	19	18	44	113	50	16.09%	2.23%
MILE GULLY HIGH SCHOOL	27	35	54	33	30	99	30	14.42%	3.73%
LENNON HIGH SCHOOL	28	45	26	27	36	109	40	11.52%	2.97%
NEW DAY PRIMARY AND JUNIOR HIGH	29	113	14	45	105	2	21	2.83%	0.48%
CLAUDE MCKAY HIGH SCHOOL	30	56	38	34	38	102	37	9.56%	2.69%
ST THOMAS TECHNICAL HIGH SCHOOL	31	29	24	19	26	155	69	18.22%	4.47%
CONSTANT SPRING PRIMARY AND JUNIOR HIGH	32	114	30	56.5	97	7	20	2.77%	0.57%
IONA HIGH SCHOOL	33	26	48	29	28	138	56	19.25%	4.16%
TIVOLI GARDENS HIGH SCHOOL	34	77	61	50.5	57	60	27	5.95%	1.56%

Secondary School Name	Ranking based on Average Result (All rankings)	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma): 2SLS	Ranking based on Average Result (VA CAPE and % CAPE Diploma)	Average %CSEC Certificate	Average % CAPE Diploma
MAVIS BANK VOCATIONAL SCHOOL	35	95	28	44	90	45	34.5	4.35%	0.66%
AABUTHNOTT GALLIMORE HIGH SCHOOL	36	37	49	31	48	118	56	13.80%	1.98%
BUFF BAY HIGH SCHOOL	37	50	59	37	52	98	44	10.54%	1.76%
HOLY TRINITY HIGH SCHOOL	38	100	52	63	77	33	22	4.14%	0.83%
TACKY HIGH SCHOOL	39	66	64	47	65	73	36	7.76%	1.21%
ST ANDREW TECHNICAL HIGH SCHOOL	40	38	117	65.5	27	84	23.5	13.60%	4.30%
WATERFORD HIGH SCHOOL	41	92	46	50.5	72	62	33	4.62%	0.95%
PORT ANTONIO HIGH SCHOOL	42	36	45	30	49	132	69	13.82%	1.95%
DENHAM TOWN HIGH SCHOOL	43	131	40	76	76	25	19	2.15%	0.84%
PORUS HIGH SCHOOL	44	48	63	38	40	127	58	10.77%	2.61%
GREEN POND HIGH SCHOOL	45	52	70	43	33	125	51.5	10.13%	3.08%
HAPPY GROVE HIGH SCHOOL	46	30	29	22	29	177	97	17.55%	3.87%
BLACK RIVER HIGH SCHOOL	47	5	113	41	8	164	60	33.15%	10.45%
TACIUS GOLDING HIGH SCHOOL	48	85	35	42	93	80	61.5	5.35%	0.61%
TRENCH TOWN HIGH SCHOOL	49	110	32	54	134	21	46	3.22%	0.24%
HIGHGATE PRIMARY AND JUNIOR HIGH	50	74	90	72	64	67	31.5	6.45%	1.23%
FROME TECHNICAL HIGH SCHOOL	51	8	149	67	7	141	42	28.35%	10.68%
BELLEFIELD HIGH SCHOOL	52	22	25	16	39	190	122.5	20.63%	2.66%
WILLIAM KNIBB MEMORIAL HIGH SCHOOL	53	6	82	32	10	193	93	32.40%	9.18%
COCKBURN GARDENS PRIMARY AND JUNIOR HIGH	54	120	51	76	114	29	38.5	2.62%	0.37%
ST ELIZABETH TECHNICAL HIGH SCHOOL	55	3	129	48	6	180	77	38.42%	11.63%
GORDON TOWN / LOUISE BENNETT COVERLEY ALL AGE	56	93	101	93.5	84	47	31.5	4.58%	0.75%
DONALD QUARRIE HIGH SCHOOL	57	103	68	76	109	49	51.5	4.05%	0.42%
CLONMEL PRIMARY AND JUNIOR HIGH	58	62	75	49	181.5	8	82	8.00%	0.00%
FOGA ROAD HIGH SCHOOL	59	43	13	21	37	206	139	12.23%	2.82%
OCHO RIOS HIGH SCHOOL	60	31	65	35	41	179	109.5	16.83%	2.53%
BALCOMBE DRIVE PRIMARY AND JUNIOR HIGH	61	164	21	88	138	9	41	0.88%	0.22%
HERBERT MORRISON TECHNICAL SCHOOL	62	1	140	53	2	186	80.5	48.72%	16.13%
MANDEVILLE PRIMARY AND JUNIOR HIGH	63	53	99	63	59	124	71.5	10.02%	1.52%
CALABAR PRIMARY AND JUNIOR HIGH AND INFANT	64	108	80	89	87	68	46	3.51%	0.71%
CHARLIE SMITH HIGH SCHOOL	65	125	43	73	153	23	65.5	2.32%	0.06%
CENTRAL BRANCH ALL AGE	66	124	109	116	79	35	25	12.54%	3.54%
CARRON HALL HIGH SCHOOL	67	89	74	71	92	92	73	4.79%	0.62%
BROWNS TOWN HIGH SCHOOL	68	63	89	63	61	133	85.5	7.96%	1.34%
MARCUS GARVEY TECHNICAL HIGH SCHOOL	69	76	103	81	83	93	65.5	5.98%	0.77%
HAILE SELASSIE HIGH SCHOOL	70	160	34	93.5	136	26	54	1.08%	0.22%
MELROSE PRIMARY AND JUNIOR HIGH	71	129	87	108.5	104	39	38.5	2.22%	0.48%
EWARTON HIGH SCHOOL	72	83	72	65.5	62	135	89	5.76%	1.33%
IRWIN HIGH SCHOOL	73	23	121	56.5	23	192	101	20.57%	5.05%
SEAFORTH HIGH SCHOOL	74	47	69	39	51	185	130.5	10.89%	1.89%

Secondary School Name	Ranking based on Average Result (All rankings)	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma): 2SLS	Ranking based on Average Result (VA CAPE and % CAPE Diploma)	Average %CSEC Certificate	Average % CAPE Diploma
ALLMAN HILL PRIMARY AND JUNIOR HIGH	75	122	47	74	181.5	13	87	2.52%	0.00%
KEMPS HILL HIGH SCHOOL	76	71	76	58.5	66	152	103	6.89%	1.15%
KELLITS HIGH SCHOOL	77	72	71	55	74	146	109.5	6.74%	0.89%
ORACABESSA HIGH SCHOOL	78	61	79	52	127	96	114.5	8.10%	0.26%
CUMBERLAND HIGH SCHOOL	79	128	22	61	140	79	106	2.28%	0.21%
CHRISTIANA HIGH SCHOOL	80.5	59	120	81	50	143	84	8.57%	1.90%
B B COKE HIGH SCHOOL	80.5	55	169	112	45	110	46	9.85%	2.18%
SWALLOWFIELD PRIMARY AND JUNIOR HIGH	82	143	53	97	145	34	67	1.68%	0.15%
ISLINGTON / HORACE CLARKE HIGH	83	99	78	78	126	72	90	4.15%	0.27%
STEER TOWN HIGH MANSFIEL	84	79	50	46	68	170	134	5.95%	1.04%
ST JOSEPHS HIGH	85	57	125	86	123	71	85.5	9.01%	0.30%
SPOT VALLEY HIGH SCHOOL	86	97	122	111	47	121	59	4.33%	2.11%
SHORTWOOD PRACTISING PRIMARY AND JUNIOR HIGH AND INFANT	87	106	55	70	181.5	38	107	3.68%	0.00%
ALBERT TOWN HIGH SCHOOL	88	41	106	58.5	56	174	124	12.79%	1.64%
BRIMMER VALE HIGH SCHOOL	89	88	92	83.5	135	69	95	5.07%	0.24%
JOHN MILLS PRIMARY AND JUNIOR HIGH AND INFANT	90.5	137	66	100.5	150	36	77	1.91%	0.12%
TROJA PRIMARY JUNIOR HIGH	90.5	176	73	125.5	88	61	43	0.70%	0.70%
NEW FOREST PRIMARY AND JUNIOR HIGH AND INFANT	92	70	108	79	55	156	99	7.01%	1.69%
BELAIR SCHOOL	93	4	189	91				34.42%	
SEAWARD PRIMARY AND JUNIOR HIGH	94	174	58	115	152	14	56	0.71%	0.08%
GODFREY STEWART HIGH SCHOOL	95	46	102	60	54	182	130.5	11.48%	1.71%
MAGGOTTY HIGH SCHOOL	96	39	172	104.5	35	150	74.5	13.55%	3.00%
MAVERLEY PRIMARY AND JUNIOR HIGH	97	139	104	122	142	18	53	1.84%	0.16%
THOMPSON TOWN HIGH SCHOOL	98	96	98	93.5	71	129	91	4.34%	0.98%
INSTITUTE OF HIGHER LEARNING / ST ANDREW COLLEGE	99	82	126	102.5	110	78	80.5	5.77%	0.41%
ABERDEEN PRIMARY AND JUNIOR HIGH	100	123	93	108.5	131	54	74.5	2.48%	0.25%
MOUNT ANGUS PRIMARY JUNIOR HIGH	101	153	128	148	94.5	32	29	1.20%	0.60%
STONY HILL PRIMARY AND JUNIOR HIGH AND INFANT	102	150	67	110	146	40	77	1.47%	0.15%
LINSTEAD PRIMARY AND JUNIOR HIGH	103	170	44	107	143	48	83	0.80%	0.16%
MOUNT SAINT JOSEPH CATHOLIC HIGH SCHOOL	104	24	179	100.5				19.48%	
GLENGOFFE HIGH SCHOOL	105	118.5	81	99	181.5	37	105	2.63%	0.00%
LISTER MAIR GILBY HIGH SCHOOL FOR THE DEAF ANDREW	106.5	118.5	39	68	181.5	74	152	2.63%	0.00%
ALSTON HIGH SCHOOL	106.5	80	114	93.5	100	126	119.5	5.87%	0.51%
ST JAMES HIGH SCHOOL	108	68	111	81	81	158	137	7.43%	0.80%
LACOVIA HIGH SCHOOL	109	44	167	104.5	46	172	103	11.66%	2.14%
RENNOCK LODGE ALL AGE	110	189	60	125.5	181.5	5	79	0.49%	0.00%
GREENWICH ALL AGE	111	197	83	147	121	52	61.5	0.33%	0.33%
CROSS KEYS HIGH SCHOOL	112	73	110	87	101	153	150.5	0.83%	0.00%
ANCHOVY HIGH SCHOOL	113	34	163	98	42	202	140	14.44%	2.53%

Secondary School Name	Ranking based on Average Result (All rankings)	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma): 2SLS	Ranking based on Average Result (VA CAPE and % CAPE Diploma)	Average %CSEC Certificate	Average % CAPE Diploma
ST ANNES HIGH SCHOOL	114	200	57	134	181.5	20	92	0.25%	0.00%
ACCOMPONG PRIMARY AND JUNIOR HIGH	115	98	187	151	67	114	69	4.26%	1.06%
GREEN ISLAND HIGH SCHOOL	116	60	177	118	34	189	114.5	8.46%	3.00%
PETERSFIELD HIGH SCHOOL	117	54	159	106	53	196	146	9.90%	1.75%
ROSEMOUNT PRIMARY AND JUNIOR HIGH	118.5	161	85	123	147	81	121	1.06%	0.14%
WINSTON JONES HIGH SCHOOL	118.5	58	132	90	86	187	165	8.79%	0.73%
GARLOGIE PRIMARY AND JUNIOR HIGH	120	107	142	125.5	106	120	119.5	3.56%	0.44%
ALBION PRIMARY AND JUNIOR HIGH	121	179	151	186	129	27	48.5	0.68%	0.26%
MUSCHETTE HIGH SCHOOL	122	69	171	121	58	175	127	7.11%	1.52%
BAMBOO PRIMARY AND JUNIOR HIGH	123	156	153	176	111	63	63	1.16%	0.39%
HATFIELD PRIMARY AND JUNIOR HIGH	124	78	198	144.5	63	145	98	5.95%	1.28%
TROY HIGH SCHOOL	125	49	131	83.5	85	203	176	10.66%	0.74%
YALLAHS HIGH SCHOOL	126	87	94	85	122	168	180	5.08%	0.32%
BRAETON PRIMARY AND JUNIOR HIGH	127	195	77	140	155	65	109.5	0.38%	0.05%
RETREAT PRIMARY AND JUNIOR HIGH	128.5	178	115	158.5	181.5	22	94	0.69%	0.00%
MONEAGUE PRIMARY AND JUNIOR HIGH	128.5	135	139	142	151	70	112	2.01%	0.12%
MALDON HIGH SCHOOL	130	94	157	128.5	116	122	134	4.52%	0.36%
FOUR PATHS PRIMARY AND JUNIOR HIGH	131	155	133	154	125	88	100	1.17%	0.28%
HIGGINS LAND PRIMARY AND JUNIOR HIGH	132	134	141	143	181.5	43	116	2.05%	0.00%
CAMBRIDGE HIGH SCHOOL	133	81	168	125.5	80	166	142	5.85%	0.81%
NEW GREEN PRIMARY AND JUNIOR HIGH	134	133	193	183	96	87	71.5	2.09%	0.60%
DALLAS PRIMARY JUNIOR HIGH	135	208.5	97	175	181.5	15	88	0.00%	0.00%
KITSON TOWN ALL AGE	136	168	105	141	117	112	122.5	0.83%	0.36%
DISCOVERY BAY ALL AGE	137	148	152	167	102	103	96	1.49%	0.50%
BALACLAVA / ROGER CLARKE HIGH	138	84	183	138	70	165	129	5.51%	1.00%
TREDEGAR PARK ALL AGE	139	201	62	137	181.5	57	136	0.25%	0.00%
NEWELL HIGH SCHOOL	140	104	181	151	91	134	117	4.01%	0.65%
HAYES PRIMARY AND JUNIOR HIGH	141	169	127	161.5	141	77	103	0.82%	0.16%
NORMAN GARDENS PRIMARY AND JUNIOR HIGH	142.5	183	95	146	181.5	50	125	0.58%	0.00%
CASTLETON PRIMARY AND JUNIOR HIGH	142.5	126	130	133	181.5	66	144	2.31%	0.00%
MUIRHOUSE PRIMARY AND JUNIOR HIGH	144	177	174	192	119	56	64	2.31%	0.00%
MAUD MCLEOD HIGH SCHOOL	145	65	165	113	75	199	166	7.80%	0.87%
POINT HILL LEASED PRIMARY AND JUNIOR HIGH	146	198	96	160	144	76	109.5	0.31%	0.16%
BUSTAMANTE HIGH SCHOOL	147	109	86	96	112	198	187	3.41%	0.38%
SPRING GARDENS ALL AGE	148	185	91	144.5	149	89	134	0.50%	0.13%
MERLENE OTTEY HIGH SCHOOL VOCATIONAL	149	67	164	114	78	205	171	7.63%	0.83%
BULL BAY ALL AGE	150	180	56	117	181.5	97	169	0.63%	0.00%
OSBOURNE STORE PRIMARY AND JUNIOR HIGH	151	149	119	139	154	95	146	1.49%	0.06%
BETHABARA PRIMARY JUNIOR HIGH	152	130	124	131.5	115	149	155	2.16%	0.36%

Secondary School Name	Ranking based on Average Result (All rankings)	Ranking based on Average Result (% CSEC Certificate)	Ranking based on Added Value (%CSEC Certificate)	Ranking based on Average Result (VA CSEC and % CSEC Certificate)	Ranking based on Average Result (% CAPE Diploma)	Ranking based on Added Value (% CAPE Diploma): 2SLS	Ranking based on Average Result (VA CAPE and % CAPE Diploma)	Average %CSEC Certificate	Average % CAPE Diploma
CROSS PRIMARY AND JUNIOR HIGH	153	167	84	128.5	181.5	90	161	0.83%	0.00%
STEPHNEY / BOB MARLEY PRIMARY JUNIOR HIGH	154	152	137	155	181.5	55	132	1.21%	0.00%
GRANVILLE ALL AGE	155	158	100	135	181.5	83	156	1.14%	0.00%
FAIR PROSPECT HIGH SCHOOL	156	91	147	119	137	148	172	4.66%	0.22%
NAIN PRIMARY JUNIOR HIGH	157	127	160	153	118	131	146	2.29%	0.35%
KNOCKALVA TECHNICAL SCHOOL	158	86	173	136	82	194	167	5.10%	0.80%
ENFIELD PRIMARY AND JUNIOR HIGH	159	173	143	181	181.5	44	118	0.74%	0.00%
AENON TOWN ALL AGE	160	151	145	161.5	103	144	143	1.45%	0.48%
REST PRIMARY AND JUNIOR HIGH	161	162	123	151	181.5	85	158	1.02%	0.00%
VILLA ROAD PRIMARY AND JUNIOR HIGH	162	112	209	182	128	104	126	3.11%	0.26%
CLAREMONT ALL AGE ST ANN	163	140	150	156	181.5	82	154	1.81%	0.00%
PORT MORANT PRIMARY AND JUNIOR HIGH	164	145	138	149	113	159	162.5	1.60%	0.37%
LITTLE LONDON HIGH SCHOOL	165	101	197	164.5	73	181	150.5	4.13%	0.94%
LEWISVILLE HIGH VOCATIONAL SCHOOL	166	102	200	172	89	161	148.5	4.08%	0.70%
CEDAR VALLEY PRIMARY JUNIOR HIGH AND INFANT	167	165	88	130	181.5	130	188	0.85%	0.00%
GARLANDS PRIMARY AND JUNIOR HIGH	168	202	154	193	181.5	41	113	0.24%	0.00%
RHODES HALL ORANGE BAY HIGH	169	117	185	172	60	201	153	2.67%	1.38%
ROBERT LIGHTBOURNE HIGH SCHOOL	170	142	112	131.5	181.5	139	191	1.68%	0.00%
CEDRIC TITUS HIGH SCHOOL	171	115	190	174	108	157	157	2.73%	0.43%
RUNAWAY BAY ALL AGE	172	154	148	172	181.5	86	160	1.18%	0.00%
WHITE MARL PRIMARY AND JUNIOR HIGH	173	193	107	167	181.5	91	164	0.42%	0.00%
PAUL BOGLE HIGH SCHOOL	174	105	134	120	148	197	200	3.69%	0.14%
LEICESTERFIELD PRIMARY AND JUNIOR HIGH AND INFANT	175	136	161	163	94.5	183	168	2.01%	0.60%
EBONY GROVE ACADEMY	176	175	33	102.5	181.5	207	207	0.71%	0.00%
BATH PRIMARY AND JUNIOR HIGH	177	199	116	180	130	142	162.5	0.25%	0.25%
CHAPLETON ALL AGE	178	146	155	169.5	99	188	174	1.55%	0.52%
GREEN PARK PRIMARY AND JUNIOR HIGH	179	166	135	169.5	181.5	106	175	0.84%	0.00%
CROFTS HILL PRIMARY AND JUNIOR HIGH	180	192	156	191	139	111	148.5	0.44%	0.22%
MOUNT SALEM PRIMARY AND JUNIOR HIGH	181	205	176	198	181.5	53	128	0.09%	0.00%
AVOCAT PRIMARY AND JUNIOR HIGH	182	138	162	167	181.5	116	182	1.85%	0.00%
JOHN AUSTIN ALL AGE	183	157	136	158.5	181.5	128	186	1.16%	0.00%
GRANGE HILL HIGH SCHOOL	184	116	196	177.5	98	191	178	2.67%	0.56%
FARM PRIMARY AND JUNIOR HIGH	185	204	180	199.5	181.5	58	138	0.18%	0.00%
BEULAH ALL AGE	186	132	166	164.5	120	195	189	2.14%	0.34%
HOPEWELL SANDY BAY HIGH	187	121	170	157	124	204	193	2.56%	0.29%
MOUNT MORELAND PRIMARY AND JUNIOR HIGH	188	196	118	179	181.5	117	183	0.36%	0.00%
ELDERSLIE PRIMARY AND JUNIOR HIGH	189	144	184	184	181.5	108	179	1.65%	0.00%
LOWE RIVER PRIMARY AND JUNIOR HIGH	190	159	211	196	107	160	159	1.09%	0.44%

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CATADUPA PRIMARY AND JUNIOR HIGH	191	208.5	192	208	181.5	64	141	0.00%	0.00%
MOUNT HERMON PRIMARY AND JUNIOR HIGH	192	171.5	175	190	181.5	105	173	0.77%	0.00%
FLANKERS PRIMARY AND JUNIOR HIGH	193	184	195	197	181.5	100	170	0.51%	0.00%
EXCHANGE ALL AGE	194	141	191	187.5	181.5	140	192	1.76%	0.00%
FELLOWSHIP PRIMARY AND JUNIOR HIGH	195	181	186	195	181.5	115	181	0.61%	0.00%
CHANDLERS PEN PRIMARY AND JUNIOR HIGH	196	186	146	187.5	181.5	151	195	0.50%	0.00%
WALKERSWOOD ALL AGE	197	171.5	158	185	181.5	162	198	0.77%	0.00%
SANTA CRUZ PRIMARY AND JUNIOR HIGH	198	190	199	202	181.5	107	177	0.48%	0.00%
GOSHEN ALL AGE	199	111	201	177.5	181.5	184	206	3.21%	0.00%
NEW HOPE PRIMARY AND JUNIOR HIGH	200	163	203	194	181.5	147	194	0.95%	0.00%
HOPE BAY ALL AGE	201.5	208.5	182	203	181.5	123	185	0.00%	0.00%
MOUNT GRACE PRIMARY AND JUNIOR HIGH	201.5	187	207	204	132	169	184	0.49%	0.24%
WINDSOR CASTLE ALL AGE	203	147	188	189	181.5	178	205	1.52%	0.00%
BETHEL PRIMARY AND JUNIOR HIGH	204	208.5	178	201	181.5	154	197	0.00%	0.00%
SALEM PRIMARY AND JUNIOR HIGH	205	208.5	205	211	181.5	136	190	0.00%	0.00%
FALMOUTH ALL AGE	206	188	210	206.5	133	200	196	0.49%	0.24%
CALEDONIA ALL AGE AND INFANT	207	182	202	199.5	181.5	176	204	0.58%	0.00%
STRAWBERRY PRIMARY AND JUNIOR HIGH	208	194	204	206.5	181.5	163	199	0.39%	0.00%
BELLEVUE PRIMARY AND JUNIOR HIGH / PERTH TOWN ACADEMY	209	191	206	205	181.5	171	202	0.47%	0.00%
SANDY BAY PRIMARY AND JUNIOR HIGH	210	208.5	194	209	181.5	173	203	2.56%	0.29%
MIDDLE QUARTERS ALL AGE	211	203	208	210	181.5	167	201	0.22%	0.00%

Table 27. Schools dropped due to zero scores, assignment & compliance issues.

Secondary School Name	Ranking based on Average Result (% CSEC Certificate)	Average % CSEC Certificate	Ranking based on Average Result (% CAPE Diploma)	Average % CAPE Diploma
MONA HIGH SCHOOL	2	33.52%	1	9.05%
LIBERTY ACADEMY AT THE PRIORY	1	38.46%	4	5.17%
THE SALVATION ARMY SCHOOL FOR THE BLIND	4	23.53%	2	5.88%
GAYNSTEAD HIGH SCHOOL	3	28.48%	3	5.77%
TARRANT HIGH SCHOOL	10	9.90%	5	4.01%
DUNOON PARK TECHNICAL HIGH SCHOOL	7	13.10%	8	2.75%
KINGSTON TECHNICAL HIGH SCHOOL	6	13.35%	9	2.71%
VAUXHALL HIGH SCHOOL	8	11.25%	10	2.57%
ELTHAM HIGH SCHOOL	15	7.64%	6	3.29%
ASCOTT HIGH SCHOOL	14	7.93%	7	3.28%
SOLID BASE COMPUTER INSTITUTE	5	15.06%	18	1.20%
NORMAN MANLEY HIGH SCHOOL	13	8.41%	15	1.56%
PAPINE HIGH SCHOOL	9	10.48%	19	1.19%
PEMBROKE HALL HIGH SCHOOL	12	8.77%	16	1.33%
SPANISH TOWN HIGH SCHOOL	16	7.16%	12	2.00%
CLAN CARTHY HIGH SCHOOL	19	6.37%	13	1.92%
ST THERESAS ALL AGE	22	5.00%	14	1.67%
EDITH DALTON JAMES HIGH SCHOOL	20	6.32%	17	1.26%
GREATER PORTMORE HIGH SCHOOL	18	6.37%	23	0.89%
WEST AVENUE INSTITUTE	11	8.88%	31	0.59%
KINGSTON HIGH SCHOOL	23	4.66%	26	0.69%
ST JOHNS COLLEGE GROUP OF SCHOOLS	28	3.67%	22	1.04%
ROCK HALL ALL AGE ST ANDREW	21	5.64%	30	0.59%
LLUIDAS VALE ALL AGE	43	2.44%	11	2.44%
ST MARYS ALL AGE	27	3.68%	28.5	0.61%
CRAIGHEAD ALL AGE	32	3.43%	24	0.86%
WARSOP ALL AGE	24	4.19%	32	0.52%
CROOKED RIVER ALL AGE	33	3.38%	27	0.68%
MIZPAH ALL AGE	31	3.54%	33	0.51%
HARRY WATCH ALL AGE	46.5	2.33%	20	1.16%
STEER TOWN PRIMARY AND JUNIOR HIGH	35	3.26%	37	0.34%
PIKE ALL AGE	49	2.07%	25	0.83%
ROCK RIVER ALL AGE	40	2.56%	35	0.43%
RED HILLS ALL AGE ST ANDREW	42	2.47%	34	0.45%
BETHESDA ALL AGE	55	1.14%	21	1.14%
DRAPERS ALL AGE	41	2.51%	36	0.36%

Secondary School Name	Ranking based on Average Result (% CSEC Certificate)	Average % CSEC Certificate	Ranking based on Average Result (% CAPE Diploma)	Average % CAPE Diploma
PENWOOD HIGH SCHOOL	38	2.94%	40	0.17%
BOYS TOWN ALL AGE	50	1.84%	28.5	0.61%
INNSWOOD HIGH SCHOOL	48	2.18%	38	0.28%
MADRAS ALL AGE	17	7.14%	70.5	0.00%
DEVON ALL AGE	25	3.94%	70.5	0.00%
BRANDON HILL PRIMARY AND JUNIOR HIGH SCHOOL	26	3.92%	70.5	0.00%
PAISLEY ALL AGE	29	3.64%	70.5	0.00%
PATRICK TOWN ALL AGE	30	3.57%	70.5	0.00%
TROUT HALL ALL AGE	64	0.53%	39	0.26%
ST MARGARETS BAY ALL AGE	34	3.30%	70.5	0.00%
ANNOTTO BAY ALL AGE	36	3.26%	70.5	0.00%
CLARKSONVILLE ALL AGE	37	3.20%	70.5	0.00%
MCNIE ALL AGE	39	2.60%	70.5	0.00%
SUDBURY ALL AGE	44	2.41%	70.5	0.00%
LOWER BUXTON ALL AGE	45	2.38%	70.5	0.00%
MOORE TOWN PRIMARY AND JUNIOR HIGH	46.5	2.33%	70.5	0.00%
SUNBURY ALL AGE	51	1.77%	70.5	0.00%
WATT TOWN ALL AGE	52	1.30%	70.5	0.00%
KENDAL ALL AGE	53	1.27%	70.5	0.00%
SHEFFIELD ALL AGE	54	1.26%	70.5	0.00%
KENTUCKY PRIMARY AND JUNIOR HIGH	56	1.08%	70.5	0.00%
GIBRALTAR ALL AGE	57.5	1.04%	70.5	0.00%
HALLS DELIGHT PRIMARY JUNIOR HIGH	57.5	1.04%	70.5	0.00%
BOHEMIA ALL AGE	59	0.95%	70.5	0.00%
WILLIAMSFIELD ALL AGE	60	0.82%	70.5	0.00%
NEGRIL ALL AGE	61	0.75%	70.5	0.00%
BETHEL TOWN ALL AGE	62	0.70%	70.5	0.00%
MANCHIONEAL ALL AGE	63	0.53%	70.5	0.00%
COMFORT HALL ALL AGE	65	0.49%	70.5	0.00%
CHESTER CASTLE ALL AGE	66	0.40%	70.5	0.00%
DUNCANS ALL AGE AND INFANT	67	0.37%	70.5	0.00%
PLANTERS HALL ALL AGE AND INFANT	68	0.33%	70.5	0.00%
GLENDEVON PRIMARY AND JUNIOR HIGH	69	0.22%	70.5	0.00%
SUCCESS PRIMARY AND JUNIOR HIGH	85	0.00%	70.5	0.00%
CARIBBEAN CHRISTIAN CENTRE FOR THE DEAF KNOCKPATRICK	85	0.00%	70.5	0.00%
CASCADE PRIMARY JUNIOR HIGH	85	0.00%	70.5	0.00%
JACKSON PRIMARY JUNIOR HIGH	85	0.00%	70.5	0.00%
CORNWALL MOUNTAIN ALL AGE	85	0.00%	70.5	0.00%
LETHE ALL AGE	85	0.00%	70.5	0.00%
MOORES PRIMARY JUNIOR HIGH	85	0.00%	70.5	0.00%
THE WINDSOR SCHOOL OF SPECIAL EDUCATION	85	0.00%	70.5	0.00%
CAVE VALLEY ALL AGE	85	0.00%	70.5	0.00%

Secondary School Name	Ranking based on Average Result (% CSEC Certificate)	Average % CSEC Certificate	Ranking based on Average Result (% CAPE Diploma)	Average % CAPE Diploma
COMFORT CASTLE PRIMARY JUNIOR HIGH	**85**	0.00%	**70.5**	0.00%
RETRIEVE ALL AGE	**85**	0.00%	**70.5**	0.00%
RIVERSIDE ALL AGE	**85**	0.00%	**70.5**	0.00%
JOHNS HALL ALL AGE	**85**	0.00%	**70.5**	0.00%
WALTHAM ABBEY ALL AGE	**85**	0.00%	**70.5**	0.00%
BARRETT TOWN ALL AGE	**85**	0.00%	**70.5**	0.00%
UPPER ROCK SPRING ALL AGE AND INFANT	**85**	0.00%	**70.5**	0.00%
ST GEORGES ALL AGE	**85**	0.00%	**70.5**	0.00%
GENESIS ACADEMY	**85**	0.00%	**70.5**	0.00%
HYDEL GROUP OF SCHOOLS ST ANDREW	**85**	0.00%	**70.5**	0.00%
CHALKY HILL ALL AGE	**85**	0.00%	**70.5**	0.00%
CAVALIERS ALL AGE	**85**	0.00%	**70.5**	0.00%
LISTER MAIR GILBY HIGH SCHOOL FOR THE DEAF MAY PEN	**85**	0.00%	**70.5**	0.00%
REVIVAL ALL AGE	**85**	0.00%	**70.5**	0.00%
NEW ROADS ALL AGE	**85**	0.00%	**70.5**	0.00%
THE RANDOLPH LOPEZ SCHOOL OF HOPE	**85**	0.00%	**70.5**	0.00%
DUNDEE ALL AGE	**85**	0.00%	**70.5**	0.00%
WHITFIELD ALL AGE	**85**	0.00%	**70.5**	0.00%
TEAMWORK PREPARATORY HIGH DEPT	**85**	0.00%	**70.5**	0.00%
LINTON PARK ALL AGE	**85**	0.00%	**70.5**	0.00%
GRANVILLE PRIMARY	**85**	0.00%	**70.5**	0.00%
THE WOODLAWN SCHOOL OF SPECIAL EDUCATION	**85**	0.00%	**70.5**	0.00%

Appendix 3

Table 28: Percentage Staffing Within the Central Office of the Ministry of Education, Youth and Information

Department	Total Number of Available Posts	Number of Staff Employed	Excess Staff
Core Curriculum	39	34	-
Corporate Communications & Public Relations	9	1	-
Curriculum and Support Services Branch	3	3	-
Direction and Administration Division	10	8	-
Early Childhood Section	6	5	-
Division of Schools Services	5	4	-
Facilities and Utilities	73	69	-
Finance and Accounts	145	114	-
Guidance and Counselling Section	5	4	-
Professional Development Unit	34	16	-
Human Resource Management and Development Branch	7	7	-
Human Resource Management and Administrative Branch	25	24	-
ICT Division	27	13	-
Independent Schools' Unit	4	4	-
Industrial Relations Unit	3	3	-
Information Division	12	10	-
Internal Audit Division	42	33	-
JARD	53	50	2
Legal Affairs Division	2	2	-
Media Services Division	24	20	4
Planning and Development Division	37	36	-
Procurement Branch	12	10	-
Project Management and Technical Services Branch	26	16	-
Regional Guidance & Counselling Branch	34	32	
School Assessment Section	52	48	-
School Feeding	7	6	-
Schools' Improvement Service Branch	14	11	-
Schools' Operations Branch	7	7	-
Schools Personnel and Administrative Services	30	28	-
Strategic Reform Division	2	2	-
Special Education Section	8	6	-
Curriculum & Support Services Branch- Technical & Vocational Section	18	15	-
Tertiary Branch	32	15	-
Youth Division	30	17	-
Totals	**837**	**673**	**6**
	843	**679**	
Percentage (%)	–	**~81**	

Table 29: Percentage Staffing Within the Regional Offices of the Ministry of Education, Youth and Information

Region	Total Number of Available Posts	Number of Staff Employed	Excess Staff
Region 1	45	43	1
Region 2	38	36	1
Region 3	39	30	-
Region 4	45	42	2
Region 5	41	40	-
Region 6	33	33	1
Region 7	34	19	-
Totals	275	243	5
	280	**248**	
Percentage (%)	-	**~89**	

Table 30. Number of Education Officers (vacant + non-vacant) and Schools per Region with the Resulting Ratio

Region	Total Education Officers (#)	No. of Schools in Region	Ratio (Total Education Officers: Schools)
1	18	210	1:12
2	12	179	1:15
3	16	132	1:8
4	18	187	1:10
5	16	183	1:11
6	9	137	1:15
7	10	124	1:12

Appendix 4 -
SABER Tertiary Education Scoring Rubric

Table 31: SABER-TE (Tertiary Education) SCORING RUBRIC ANALYSED FOR JAMAICA

Policy Dimension 1: Vision for Tertiary Education					Dimension Score:
Policy lever 1.1: Clear vision					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
The country/state has a fully developed vision/plan for tertiary education that serves as a guide for steering the system.	There is no stated vision/plan for tertiary education	There is a partially developed vision/plan for tertiary education	There is a fully developed vision/plan for tertiary education	There is a fully developed vision/strategic plan for tertiary education created within the last 10 years.	1
The creation of the tertiary education vision/ strategic plan is relevant and representative, and includes input from key stakeholders and considers key societal factors.	The creation of the vision/strategic plan did not include key stakeholders.	The creation of the vision/strategic plan included some key stakeholders, but no clear considerations of key societal trends.	The creation of the vision/strategic plan included some key stakeholders and some considerations of key societal trends.	The creation of the vision/strategic plan included varied key stakeholders and clear considerations of key societal trends.	1
Policy Dimension 2: Regulatory Framework for Tertiary Education					Dimension Score:
Policy lever 2.1: Steering the system					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
The country has an explicitly stated tertiary education law for steering the system towards optimal performance.	No tertiary education law exists and there are no concrete plans to establish one.	No tertiary education law exists, but there are concrete plans to establish one.	A tertiary education law exists, but it has not been revised in 10+ years.	A tertiary law is in place as has been revised in the past 10 years.	1
The regulatory framework includes provisions to adequately regulate the market entry and operation of public tertiary education providers.	There are no regulations for either the market entry or operation of public providers.	There are regulations in place only for the market entry of public providers, but not for monitoring their operations.	There are regulations in place for both the market entry and to monitor the performance of public institutions, and they were reviewed more than 10 years ago.	There are regulations in place for both the market entry and to monitor the performance of all public institutions, and they were reviewed less than 10 years ago.	1
The regulatory framework includes provisions to adequately regulate the market entry and operation of private tertiary education providers.	There are no regulations for either market entry or operation of private providers.	There are regulations in place only for the market entry of private providers, but not for monitoring their operations.	There are regulations in place for both the market entry and operations of private providers, but without an explicit distinction between for-profit, not-for-profit, and cross-border private institutions.	There is a clear regulatory framework for the market entry and operations of private providers, with an explicit distinction between for-profit, not-for-profit, and cross-border private institutions.	1

The regulatory framework includes provisions that adequately regulate the market entry and operation of non-university institutions.	There is no regulation for the market entry and operations of new nonuniversity institutions.	There are regulations in place only for the market entry of new nonuniversity institutions, but not for monitoring their operations.	There are regulations in place for both the market entry and to monitor the performance of all tertiary institutions, and they were reviewed more than 10 years ago.	There are regulations in place for both the market entry and to monitor the performance of all tertiary institutions, and they were reviewed less than 10 years ago.	1
The regulatory framework includes provisions to adequately regulate the distance and online education.	There is no regulation for the market entry and operation of distance and online education.	There are regulations in place only for the market entry of distance and online education, but not for monitoring its operation.	There are regulations in place for both the market entry and to monitor distance and online education.	There are regulations in place for both the market entry and to monitor distance and online education, with explicit distinction between types of education providers.	1
The regulatory framework includes provisions to adequately regulate the independent agencies and buffer bodies.	Independent agencies or buffer bodies do not exist in the country.	The country does not regulate the activity of independent agencies or buffer bodies.	The country regulates the activity of independent agencies or buffer bodies, but does not monitor their operation.	The country regulates the activity of independent agencies or buffer bodies and monitors their operation.	1
Policy Dimension 3: Governance					Dimension Score:
Policy lever 3.1: Articulation					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
The regulatory framework establishes distinct functions for university and non-university institutions in contributing to systemwide goals.	The regulatory framework does not establish a formal distinction between the functions of university and non-university TEIs.	The regulatory framework hints at a formal distinction between the functions of university and non-university TEIs, but the possible functions of both organizational types are underspecified or not specified.	The regulatory framework establishes a formal distinction between the functions of university and non-university TEIs, but only the possible functions of universities are clearly specified.	The regulatory framework establishes a formal distinction between the functions of public and private TEIs, and the possible functions for both organizational types are clearly specified.	1
The regulatory framework provides incentives to strengthen the unique mission of different institutions.	The regulatory framework does not provide incentives to strengthen the unique mission of different institutions.	The regulatory framework provides some incentive to strengthen the unique mission of different institutions, but the incentives are unclear	The regulatory framework provides some incentive to strengthen the unique mission of different institutions, but the incentive is not accompanied by financial or regulatory consequences	The regulatory framework provides some incentive to strengthen the unique mission of different institutions, and the incentive is accompanied by financial and regulatory consequences	1
The tertiary system has an enabling governance structure that facilitates collaboration between institutions.	There are no system-wide incentives to promote	There are some incentives, but only for collaboration among the same organizational type of	There are some incentives for collaboration between the same organizational type	There are clear, formal, documented incentives and programs to promote	2

	collaboration between TEIs.	institution (e.g., universities).	of institution (e.g., universities) and between institutions of different types.	collaboration between the same type of institution (e.g., universities) and between different types of institutions.	
The tertiary system has an enabling governance structure that facilitates student transfer across institutions.	There is no formal structure or mechanism to facilitate student transfers.	There are some transfer structures or mechanisms, but only across the same type of institution (e.g., universities).	There are some structures or mechanisms to facilitate student transfer across the same (e.g. universities) as well as among different types of institutions.	There are clear, formal, documented structures or mechanisms to facilitate student transfer across the same (e.g. universities) as well as among different types of institutions.	1
The tertiary system has an enabling governance structure that facilitates collaboration and/or communication with other educational sectors (e.g., secondary education).	There is little to no significant collaboration with other educational levels.	Collaboration with other educational levels is done exclusively through centralized channels; institutions do not have the autonomy to seek or improve ties.	Some collaboration with other educational levels is done through centralized channels, and institutions have some autonomy to seek or improve ties.	Some collaboration with other educational levels is done through centralized channels, and there are clear, formal, documented incentives to promote collaborations across educational sectors.	3
Policy lever 3.2: Institutional autonomy					Sub-lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
Public TEIs are able to negotiate at least some performance targets with stakeholders, such as the government or tertiary education agencies (TEAs).	Performance targets do not exist for public TEIs.	Performance targets exist for public TEIs, but they are not open to negotiation.	At least some performance targets for public TEIs are open to negotiation, and they are negotiated on an ad-hoc basis.	At least some performance targets for public TEIs are open to negotiation, they are negotiated through an evidence-based transparent process.	1
The governance framework for public TEIs supports their academic autonomy.	The governance framework makes no explicit provisions regarding the academic autonomy of public TEIs.	The governance framework allows few forms of academic autonomy of public TEIs.	The governance framework allows some forms of academic autonomy of public TEIs.	Public TEIs can make academic decisions with few or no restrictions.	2
The governance framework for public TEIs supports their staffing autonomy.	The governance framework makes no explicit provisions regarding the staffing autonomy of public TEIs.	The governance framework allows few forms of staffing autonomy of public TEIs.	The governance framework allows some forms of staffing autonomy of public TEIs.	Public TEIs can make staffing decisions with few or no restrictions.	2

The regulatory framework for public TEIs supports their governance autonomy.	The regulatory framework makes no explicit provisions regarding the governance autonomy of public TEIs.	The regulatory framework allows few forms of governance autonomy of public TEIs.	The regulatory framework allows some forms of governance autonomy of public TEIs.	Public TEIs can make governance decisions with few or no restrictions.	1
The governance framework grants public TEIs significant freedom to diversify their sources of funding.	The governance framework makes no explicit provisions regarding the autonomy of public TEIs to diversify their sources of funding, or public TEIs have no autonomy to diversify revenue sources.	Public TEIs have limited autonomy to diversify their sources of funding.	Public TEIs have some autonomy to diversify their sources of funding.	Public TEIs have considerable autonomy to diversify their sources of funding.	1
Private TEIs are able to negotiate at least some performance targets with stakeholders, such as the government or TEAs.	Performance targets do not exist for private TEIs.	Performance targets exist for private TEIs, but they are not open to negotiation.	At least some performance targets for private TEIs are open to negotiation, and they are negotiated on an ad-hoc basis.	At least some performance targets for private TEIs are open to negotiation, they are negotiated through an evidence-based transparent process.	1
The governance framework for private TEIs supports their academic autonomy.	The governance framework makes no explicit provisions regarding the academic autonomy of private TEIs.	The governance framework allows for few forms of academic autonomy of private TEIs. .	The governance framework allows for some forms academic autonomy of private TEIs.	Private TEIs can make academic decisions with few or no restrictions.	4
The governance framework for private TEIs supports their staffing autonomy.	The governance framework makes no explicit provisions regarding the staffing autonomy of private TEIs.	The governance framework allows few forms of staffing autonomy of private TEIs.	The governance framework allows some forms of staffing autonomy of private TEIs.	Private TEIs can make staffing decisions with few or no restrictions.	4
The regulatory framework for private TEIs supports their governance autonomy.	The regulatory framework makes no explicit provisions regarding the governance autonomy of private TEIs.	The regulatory framework allows few forms of governance autonomy of private TEIs.	The regulatory framework allows some forms of governance autonomy of private TEIs.	Private TEIs can make governance decisions with few or no restrictions.	4
Private TEIs enjoy significant freedom to diversify their sources of funding.	The governance framework either makes no explicit provisions regarding the autonomy of private TEIs to diversify their sources of funding, or public TEIs have no autonomy to	Private TEIs have limited autonomy to diversify their sources of funding.	Private TEIs have some autonomy to diversify their sources of funding.	Private TEIs have considerable autonomy to diversify their sources of funding.	3

	diversify revenue sources.				
Policy Dimension 4: Finance					Dimension Score:
Policy lever 4.1: Coverage of resource allocation					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
Public funds are allocated to accredited public and private TEIs	Public funds are not allocated to TEIs.	Public funds cover either capital expenditure or recurrent expenditure only.	Public funds are allocated both to public and private TEIs.	Public funds are allocated only to accredited public and private TEIs	**2**
Public funds allocated to public TEIs cover recurrent expenditure and capital expenditure.	Public funds are not allocated to public TEIs.	Public funds cover either capital expenditure or recurrent expenditure only.	Public funds cover limited types of both capital expenditure and recurrent expenditure.	Public funds cover both capital expenditure and recurrent expenditure	**2**
Public funds are allocated to public TEIs to cover research expenditure.	Public research funds are not allocated to public TEIs.	Public funds cover research expenditure at public TEIs and are allocated through non-competitive processes.	Public funds cover research expenditure at public TEIs and are allocated through competitive processes.	Faculty, research centers, departments and schools/faculties at public TEIs are eligible to apply for and receive competitive public funds for research purposes.	**3**

Policy lever 4.2: Resource allocation					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
Public funds are allocated to TEIs through a stable and transparent process and using a block grant budget system	Public funds are not allocated to TEIs.	Public funds are not allocated through a stable process from one financial year to the next.	Public funds are allocated through a stable and transparent process from one financial year to the next using a line item budget system.	Public funds are allocated through a stable and transparent process from one financial year to the next using a block grant budget system.	2
There is a publicly known or accessible formula used to allocate public funds to TEIs, which specifies the amounts disbursed as fixed and variable funding.	No formula is used to allocate public funds to TEIs.	There is an explicit formula used to allocate public tertiary funds, but it is either not publicly accessible or only partially accessible.	There is a publicly known or publicly accessible formula used to allocate public funds to TEIs, which specifies the amounts disbursed as fixed and variable funding.	There is a publicly known or accessible formula used to allocate public funds to TEIs, which specifies the amounts disbursed as fixed and variable funding.	1
The stakeholders that contribute to determining the different parts of the funding allocation mechanism are clearly identified.	No stakeholders that contribute to determining the different parts of the funding allocation mechanism are explicitly identified.	Some stakeholders that contribute to determining the different parts of the funding allocation mechanism are identified, but the way they contribute towards its utilization is unclear.	All stakeholders that contribute to determining the different parts of the funding allocation mechanism are identified, but the way they contribute towards its utilization is unclear.	All stakeholders that contribute to determining the different parts of the funding allocation mechanism are identified, and the way they contribute towards the formula is clear.	1
Performance-based funding is used as part of the funding allocation mechanism.	Performance-based funding is not part of the funding allocation mechanism.	Performance-based funding is part of the funding allocation mechanism to a limited degree.	Performance-based funding is part of the funding allocation mechanism for various targets..	Performance-based funding is part of the funding allocation mechanism for a wide range of targets.	1
There is a mechanism which involves data collection for monitoring the progress of institutions toward performance targets.	There is no mechanism for monitoring the progress of institutions toward performance targets.	There is a mechanism for monitoring the progress of institutions toward performance targets, but the data is faulty or inconclusive.	Monitoring of progress toward performance targets takes place, with the data used to exclusively evaluate this progress.	Monitoring of progress toward performance targets takes place and the data are used to review both progress towards performance targets and the adequacy of the performance-based criteria themselves.	1
There is at least one competitive line of funding accessible to TEIs aimed at promoting innovation or to address national priorities.	There is no competitive line of funding available to TEIs.	There is at least one competitive line of funding accessible to TEIs aimed at promoting innovation or to address national priorities, but it is accessible only to public TEIs.	There is at least one competitive line of funding accessible to TEIs aimed at promoting innovation or to address national priorities, it is accessible only to both public and private TEIs.	There is at least one competitive line of funding accessible to TEIs aimed at promoting innovation or to address national priorities, it is accessible only to both public and private TEIs and faculty, research centers, departments and schools/faculties are eligible to apply for and receive such competitive public funds.	1

Policy lever 4.3: Resource utilization (Equity)					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
There are public programs in place to provide financial aid to students from disadvantaged backgrounds with the goal of advancing equity goals in access and retention.	There is no government-provided financial aid that promotes equity goals.	There is a government-backed student loan program, but no needs-based grants or scholarships.	The government provides needs-based scholarships or grants.	The government provides a combination of both loans and grant funding to promote equity goals.	4
The financial cost-sharing mechanisms available effectively serve the needs of targeted beneficiaries.	There are no financial cost-sharing mechanisms in place.	There are financial cost-sharing products available, but they do not specifically target underserved populations.	Loan products and repayment methods are tailored to individual needs as required (i.e., they are income contingent, offer a grace period, and use mortgage-style payments).	Loan products and repayment methods are tailored to individual needs as required, and there are mechanisms in place to monitor their effectiveness in serving the needs of targeted beneficiaries.	3
The outcomes of financial aid programs are adequately monitored.	The outcomes of financial aid programs are not monitored at all.	There is some monitoring of financial aid programs, but the data are unreliable or insufficient.	The outcomes of financial aid programs are adequately monitored, but the data are not used to make necessary changes to the programs.	The outcomes of financial aid programs are adequately monitored, and the data are used to make necessary changes to the programs in order to improve their performance.	2
There are financial incentives that reward institutions for meeting equity goals.	No financial incentives reward institutions for meeting equity goals.	Funding is offered without monitoring the performance of institutions on equity goals	Incentive funding is offered based on the progress of institutions on equity goals, and is not included in the public funding mechanism.	Incentive funding is offered based on the progress of institutions on equity goals and is officially included in the public funding mechanism.	1
Policy Dimension 5: Quality assurance					Dimension Score:
Policy lever 5.1. Accreditation and institutional quality standards					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
There is at least one institutional accreditation agency (IAA) or quality assurance agency (QAA) that oversees the quality of individual institutions in the country	There is no IAA or QAA operating in the country.	There is no IAA or QAA operating in the country, but one is in development.	There is at least one quality assurance agency in the country, but its legal status is uncertain.	There is at least one quality assurance agency in the country with a clearly defined legal status.	4
The IAA(s) or QAA(s) is/are independent agency/agencies from government.	There is no IAA or QAA operating in the country.	There is at least one IAA or QAA in the country and it has no independence from the government.	There is at least one IAA or QAA in the country and it has some independence from the government.	There is at least one IAA or QAA in the country and it has full independence from TEIs.	3

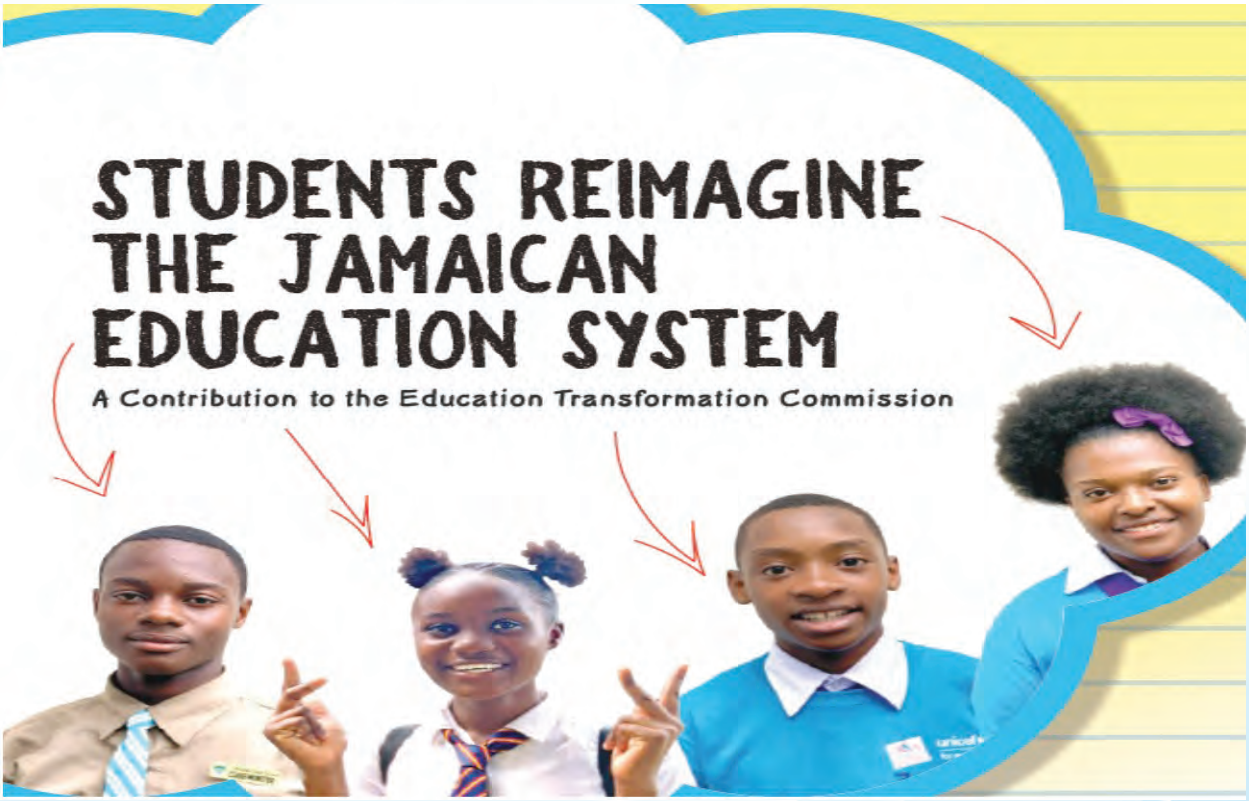
The IAA(s) or QAA(s) is/are independent agency/agencies from TEIs.	There is no IAA or QAA operating in the country.	There is at least one IAA or QAA in the country and it has no independence from TEIs	There is at least one IAA or QAA in the country and it has some independence from TEIs.	There is at least one IAA or QAA in the country and it has full independence from TEIs.	3
The IAA(s)'s or QAA(s)'s jurisdiction is nationwide.	There is no IAA or QAA operating in the country.	The IAA(s) or QAA(s) only cover certain regions in the country.	The IAA covers all institutions in the country with the exception of cross-border providers.	The IAA covers all institutions in the country, including cross-border providers.	4
The IAA(s)'s or QAA(s)'s jurisdiction includes both public and private TEIs.	There is no IAA(s) or QAA(s) operating in the country.	The IAA(s) or QAA(s) only has/have jurisdiction over private institutions.	The IAA(s) or QAA(s) only has/have jurisdiction over public institutions.	IAA(s) or QAA(s) cover both public and private TEIs.	4
The IAA(s)'s or QAA(s)'s jurisdiction includes both university and nonuniversity institutions.	There is no IAA or QAA operating in the country.	The IAA(s) or QAA(s) only has/have jurisdiction over nonuniversity institutions.	The IAA(s) or QAA(s) only has/have jurisdiction over university institutions.	IAA(s) or QAA(s) has/have jurisdiction over both university and nonuniversity TEIs.	4
The IAA(s)'s or QAA(s)'s jurisdiction includes full time, part time, on-site and online programs.	There is no IAA or QAA operating in the country.	The IAA(s) or QAA(s) only has/have jurisdiction over full time and on-site programs.	The IAA(s) or QAA(s) only has/have jurisdiction over full time and part-time on-site programs.	IAA(s) or QAA(s) has/have jurisdiction over full time and part time online and on-site programs.	4
The IAA(s) or QAA(s) has/have developed Institutional Quality Standards (IQAs) to apply in its/their evaluations.	There are no IQAs in place.	The IQAs in place to be compliant with the agency(ies) accreditation focus mostly on inputs.	The IQAs in place to be compliant with the agency(ies) accreditation focus mostly on processes and inputs.	The IQAs in place to be compliant with the agency(ies) accreditation focus mostly on outcomes..	3
The IAA(s) or QAA(s)has/have developedProgram Quality Standards (PQAs) toapply in its/their evaluations.	The IAA or QAA has not developed PQAs	The PQAs in place to be compliant with the agency(ies) accreditation focus mostly on inputs.	The PQAs in place to be compliant with the agency(ies) accreditation focus mostly on processes and inputs.	The PQAs in place to be compliant with the agency(ies) accreditation focus mostly on outcomes.	3
The IAA(s) or QAA(s) provides incentives for TEIs to create Management Information Systems (MIS) through IQAs or PQAs.	The IAA(s) or QAA(s) do not provide incentives for TEIs to create MIS.	The IAA(s) or QAA(s) do(es) provide incentives for TEIs to create an input focused MIS.	The IAA(s) or QAA(s) do(es) provide incentives for TEIs to create a process focused MIS.	The IAA(s) or QAA(s) do(es) provide incentives for TEIs to create a process focused MIS.	4
The IAA(s) or QAA(s) involve TEI stakeholders, including students, as part of their activities.	The IAA(s) or QAA(s) does not involve TEI stakeholders as part of their activities.	The IAA(s) or QAA(s) involve no more than one stakeholder in their activities.	The IAA(s) or QAA(s) involve no more than three stakeholders in their activities.	The IAA(s) or QAA(s) involve three or more stakeholders in their activities, including students.	3
There are practical consequences for programs/TEIs that do not meet the evaluation/accreditation standards.	There are no practical consequences for an institution/program not passing IAA(s) or QAA(s) accreditation/evaluation.	There are few practical consequences for an institution/program not passing IAA(s) or QAA(s) accreditation/evaluation.	There are significant practical consequences for an institution/program not passing IAA(s) or QAA(s) accreditation/evaluation, but institutions/programs are not offered the possibility to undergo the accreditation/evaluation process again.	There are significant practical consequences for an institution/program not passing IAA(s) or QAA(s) accreditation/evaluation, and institutions/programs are not offered the possibility to undergo the accreditation/evaluation process again	1

Policy Lever 5.2: Tertiary education management information system (TEMIS)					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
There is at least one national or regional TEMIS in operation.	There are no TEMIS in the country	The TEMIS collects and analyzes information of only some types of TEIs.	The TEMIS collects and analyzes information of most types of TEIs.	The TEMIS collects and analyzes information of all types of TEIs.	1
The TEMIS collects data on student enrollment, retention/dropout rates, graduation rates, and student transfer rates.	TEMIS does not collect this type of data.	The TEMIS collects data on only one of these indicators.	The TEMIS collects data on at least two of these indicators.	The TEMIS collects data on at least three of these indicators and information on demographics to inform equity-related reports and policymaking.	1
The TEMIS collects data on tuition levels, financial aid, grants, scholarships, and student loans.	TEMIS does not collect this type of data.	The TEMIS collects data on one of these indicators.	The TEMIS collects data on two indicators.	The TEMIS collects data on the two indicators and information on demographics to inform equity-related reports and policymaking.	1
The TEMIS collects data on students' academic readiness.	TEMIS does not collect this type of data.	The TEMIS collects data on not more than one indicator.	The TEMIS collects data on not more than two indicators.	The TEMIS collects data on several indicators, and collects information on demographics to inform equity-related reports and policymaking.	1
The TEMIS collects data on graduated outcomes.	TEMIS does not collect this type of data.	The TEMIS collects data on one of the indicators only.	The TEMIS collects data on no more than three indicators.	The TEMIS collects data on three or more of the indicators and collects information on demographics to inform equity-related reports and policymaking.	1
The TEMIS collects data on institutional contributions to local economic, social, or cultural development.	TEMIS does not collect this type of data.	The TEMIS collects data on one of these indicators.	The TEMIS collects data on two of these indicators.	The TEMIS collects data on all three indicators.	1
The TEMIS collects data on institutional RDI indicators.	TEMIS does not collect this type of data.	The TEMIS collects data on no more than one relevant indicators.	The TEMIS collects data on no more than three relevant indicators.	The TEMIS collects data on four or more relevant indicators.	1
The TEMIS collects data on faculty related indicators.	TEMIS does not collect this type of data.	The TEMIS collects data on no more than one relevant indicators.	The TEMIS collects data on no more than two relevant indicators.	The TEMIS collects data on three or more relevant indicators.	2
The TEMIS is used extensively for system evaluation and reform.	The TEMIS data is not utilized for system evaluation and reform.	The TEMIS data is utilized for system evaluation and reform ad hoc.	The TEMIS data is utilized for system evaluation and reform in a formalized and systematic process.	The TEMIS data is utilized for system evaluation and reform in a standardized process and the data collected as part of TEMIS is revised based on policy needs.	1

Policy Dimension 6: The relevance of Tertiary Education for economic and social needs					Dimension Score:
Policy lever 6.1: Economic development					Lever Score:
Best practice indicators	**Scoring**				
	Latent (1)	**Emergent (2)**	**Established (3)**	**Advanced (4)**	
There is a system-wide policy mandate or directive to strengthen the role of tertiary education in enhancing economic development.	There is no such policy directive.	There is a relevant policy directive, but it hasn't been translated into specific programs.	There is a relevant policy directive and it has been translated into specific programs, but their impact is largely unmonitored.	There is a relevant policy directive and it has been translated into specific programs with documented outcomes and monitoring mechanisms.	2
Policy lever 6.2: Fostering R&D and innovation					Lever Score:
Best practice indicators	**Scoring**				
	Latent (0)	**Emergent (1)**	**Established (2)**	**Advanced (3)**	
There is a system-wide or sector-specific policy mandate or decree to strengthen RDI activity in tertiary education.	There is no policy mandate or decree to strengthen RDI in TE.	There is a relevant policy mandate or decree but it has not been translated into specific programs.	There is a relevant policy mandate or decree, and it has been translated into specific programs but their impact is unmonitored.	There is a relevant policy mandate or decree and it has been translated into specific programs which are monitored and reviewed.	2
There are financial incentives to foster RDI activity across different tertiary sub-systems.	There are no financial incentives to foster RDI in TE.	There are at least some financial incentives to foster RDI in TE but they only target few institutional types (e.g. universities).	There are at least some financial incentives across more than one institutional type (e.g., universities and TVET institutions).	There are at least some financial incentives across more than one institutional type and the outcomes of the incentives are monitored on a regular basis.	1
There are system-wide programs and/or incentives to foster institutional autonomy and leadership with regards to RDI activity.	There are no programs to foster RDI-related autonomy and leadership.	There are at least some programs, but they only target a few institutions or only one institutional type (e.g. TVET).	There are at least some programs across more than one institutional type (e.g. universities and TVET institutions).	There are at least some programs across more than one institutional type and the outcomes of the incentives are monitored on a regular basis.	1
There are programs and/or incentives to enhance the capacity of local and regional actors to contribute to RDI activities in tertiary institutions.	There are no programs or incentives to foster the involvement of local and regional actors in RDI activities.	There are at least some programs, but they only target a few institutions or institutional types (e.g., universities).	There are at least some programs across more than one institutional type (e.g., universities and TVET institutions).	There are at least some programs across more than one institutional type and their impact is monitored.	1

ADDENDA

Addendum1: Students Reimagine the Jamaican Education System



The following is a summary of the views and recommendations of Jamaican Students on the education system, from a 2021 survey sponsored on behalf of the Commission by UNICEF

1. Equity and Inclusion

Students want an inclusive education system that caters for all types of learners

The 'one size fits all' mode of engagement is a recurring concern among students, causing some to lose interest in school and too many to be left behind. No child should be denied the opportunity to learn because of disability, gender, race or poverty. Every child has the right to go to school and to be included, regardless of their differences. All must feel a sense of belonging and benefit from the support of well-trained teachers and resources that best respond to their needs.

The Students Recommend:

- Plan lessons to include activities that will engage all types of learners. This requires effort, resources and support from school administration.
- Consider changing the current system which designates (as a result of perception) some schools superior to others and provide equal access to resources across all schools.
- Make provisions for the early detection and assessment of students with disabilities and sufficient training of teachers to identify and support their needs.
- Establish school to work transitions for students with disabilities in partnership with schools, families and communities

2. Relationships in Learning: Teacher-student collaboration for a better learning experience

An effective classroom environment promotes collaboration with teachers and students, as well as student-to-student engagement. Building these relationships has a direct impact on how deeply students engage in school and with learning. Students reported that the COVID-19 pandemic has presented an opportunity for them to support teachers in ways they have not been encouraged to do before.

The students recommend:

- Enlist students as co-designers and co-facilitators of learning by enabling exchanges for students to develop strategies alongside teachers that best suit their learning styles and needs.
- Design projects and group activities for students to interact with each other and express their opinions in face-to-face as well as remote teaching formats.
- Ensure teachers utilize constructivist theory, enquiry-based learning, reflective practice and collaborative learning approaches in classrooms in order to promote discovery and engagement in students.
- Prioritize self-reflection as a critical part of the learning experience for students and teachers and normalize the practice of receiving and providing feedback and support among peers

3. Students want empathy and compassion

Teachers and wider school administration must consider and appreciate the varying socioeconomic backgrounds of their students and take into consideration the circumstances that may influence student behaviour in the classroom. The issue of mental health was raised repeatedly during the consultations. Students expressed strong views about the value placed on their social and emotional well-being and shared openly about the prevalence of depression, anxiety, bullying and substance abuse among their peers.

The students recommend that teachers should:

- Be sensitive to special circumstances affecting students' lived experiences and be able touse their discretion when dealing with individual cases.
- Be supported and equipped with the relevant skill sets to know when to shift from empathy to compassion, actively making a difference in students' lives.

4. Students want parent and teacher motivation

There was overwhelming consensus among those interviewed that the words and actions of some adults communicated very low expectations of young people. They argued strongly for parents and teachers to be more conscious of the powerful impact their belief in their potential to achieve has on their self-confidence and performance in school. Students welcomed the increased engagement of parents in their children's education since the COVID-19 pandemic, as many have been forced to become co-teachers as a result of the move to online schooling. They underscored the importance of maintaining parent engagement post the pandemic.

The students recommend:

- Teachers should do more to solicit as much information as possible about students' families and find multiple ways to reach out to parents on their terms.
- Frequent two-way communication between parents and teachers in order to facilitate a welcoming environment in which parents can participate and help to motivate student learning. Such engagements should not happen only when students get in trouble.

- Teachers, parents and students must be partners in setting and monitoring goals for student learning, always ensuring the highest expectations for all.

5. Students want real-life experience in the classroom

Students want the opportunity to make sense of the world around them and desire real-life experiences as part of their education – including as they suggested, a new course on "adulting" to prepare them for experiences in their personal and professional lives. Many did not find that they were being given the tools to navigate the many challenges that they see ahead. They believe experiential learning outside of the classroom will allow them to encounter authentic problems and challenge them to solve and interact with real-life people and projects. "We want to learn the art of thinking big; putting goals on paper; communicating effectively and public speaking," explained one student. They want to learn more of what will enable them to be highly functional adults.

The students recommend:

- Include project-based learning and simulation-based learning and real-world experiences in the curriculum. This will be highly valuable to students. Giving them a chance to test their abilities while in school, through internships, is one way of preparing them for the future.
- Engage students in work that matters to them, their schools and the world outside of school. Allow opportunities for students to pursue their passions within the curriculum.
- Create partnerships with professionals from the local and global community who would enter the classroom space, whether virtually or face-to-face, to share experiences and mentor students while in school.
- Expose students to the world of entrepreneurship through career talks and real-world business leaders.
- Expose students to the world of entrepreneurship through career talks and real-world business leaders.

6. Students want a varied curriculum that caters to their interests

The "one size fits all" culture of education is a thing of the past, and schools must provide students with a broad curriculum which ensures that they are fully immersed in a wide array of experiences that are relevant to the changing world in which they live. Students are better able to enjoy all subjects when they are relatable to their everyday experiences and peak their interests. There are also benefits to expanding the curriculum to include more technical and vocational subjects, especially for children with disabilities. Students stressed the importance of teaching skills and content that prepare them for life, such as self-empowerment, self-management, rights and responsibilities of citizens.

The students recommend:

- Include an elective/option for 5th and or 6th formers with suggested options including driving lessons, parenting, entrepreneurship and investing.
- Expose teachers to best practices in project-based learning and infuse real-world examples in teaching.
- Provide a varied curriculum to include technical subjects for alternative careers.

7. Students want leadership skills and to be heard

Student leaders were appreciative and enthusiastic about the opportunity afforded them through these sessions, to engage their peers and shadow adults in leadership. Students in the

consultations also expressed a desire to be mentored in the area of their career choice as well as leadership. They believe effective leadership will allow both the student population and their schools to flourish.

As co-designers and co-facilitators of the consultations, NSSC student leaders reaffirmed the need for students to be included in charting a new, inclusive and innovative approach to education. They urged decision-makers to make space for student voice, to empower youth and give them agency.

The students recommend:

- Create a national mentorship programme to include peer to peer mentors, and adult to student mentors. Mentorship is critical to building and sustaining a pipeline of leaders.
- Require all principals to meet with the NSSC school-based executive regularly and be required to report back to the central NSSC.
- Task the NSSC to design and offer a course on leadership.
- Build leadership training into Guidance programmes.

8. Students want to be engaged in physical activity

Physical activity and a focus on healthy lifestyles and well-being are vital to the development and growth of children. It therefore should be prioritized and made a provision of every school environment.

The students recommend:

- Provide opportunities to move around classrooms and to engage in practical subjects that do not find them remaining in one place for prolonged periods. Participants in the consultations shared that activity levels often decline as students move into adolescence.
- Expand opportunities for physical activity, before, during and after school and build in a health and wellness programme that expands beyond the school into the communities in which they live.
- Support students to build healthy lifestyles – emphasizing this in Health and Family Life Education (HFLE) and in short courses offered for all students to take online

9. Students desire active engagement in the classroom

For students to be fully engaged or to "full-ticipate" in lessons, teachers must have high expectations for student learning and performance and create environments that encourage their full involvement. They desire to have a front row seat in their learning journey.

The students recommend:

- Incorporate a variety of hands-on-activities inclusive of experiments, projects and field trips that are relevant to studies and the real world.
- Shift classroom discussions from the passive listener culture, where students sit quietly in class for long periods of time, to an active learning environment that is challenging and stimulating.
- Allow students to take some control over their own learning. This means giving students the opportunity to make decisions about what they learn and how. Build in opportunities for self-reflection.

- Assist students in creating learning goals that are consistent with their interests, learning styles and future aspirations

10. Students want a blended learning environment

The COVID-19 pandemic has exacerbated Jamaica's educational and digital divide. It has pushed the majority of the nation's children outside of the classroom into homes and communities with little to no connectivity, limited access to devices and very little support and supervision for online learning. Online schooling has benefitted only few and created further learning losses for some who are already disadvantaged. The students who participated in the consultations were attuned to their own realities in this regard, as well as to the plight of many of their peers, and highlighted the urgent need to find appropriate solutions to bridge this gap. As students, parents and teachers adjust to this "new normal", some have embraced the new approaches to learning while online but are clear that nothing can replace being in school, interacting with teachers and peers.

The students recommend:

- Create a hybrid learning experience and blended classroom – utilizing synchronous and asynchronous approaches to teaching and learning. This might be part of the answer to a reimagined education system.
- Provide universal access to Wi-Fi and digital platforms to facilitate greater access to information.
- Infuse computer and media literacy across the curriculum.
- Train all teachers from early childhood to tertiary in the delivery of blended learning
- approaches.