

ROOT CAUSE ANALYSIS OF EDUCATION CONSTRAINT

Version 22.2.23

Belize Compact
Development Program

Abbreviations

ACE	Adult and Continuing Education
BBTE	Belize Board of Teacher Education
BCCI	Belize Chamber of Commerce and Industry
BEMIS	Belize Education Management Information System
BESPlan	Belize Education Sector Plan
BESRP	Belize Education Sector Reform Programme
BTEC	Belize Training and Employment Center
CPD	Continuing Professional Development
CSEC	Caribbean Secondary Education Certificate
DECs	District Education Centres
ELLs	English Language Learners
ETA	Education and Training Act
ETES	Employment Training and Education Services
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GGGI	Global Gender Gap Index
GOB	Government of Belize
GNI	Gross National Income
HDI	Human Development Index
IBE	International Bureau of Education
ICT	Information and Communications Technology
IDB	Inter-American Development Bank
ILO	International Labor Organization
ISCO	International Standard Classification of Occupations
ITVETs	Institutes for Technical and Vocational Education and Training
LAC	Latin American and Caribbean
MCC	Millennium Challenge Cooperation
MICS	Multiple Indicator Cluster Survey
MoECST	Ministry of Education, Culture, Science and Technology
NAC	National Accreditation Council
NaRCIE	National Resource Center for Inclusive Education
NCE	National Council for Education
NCFC	National Committee for Families and Children
NCTVET	National Council for Technical and Vocational Education and Training
NEMO	National Emergency Management Organization
NIPS	National Investment Policy and Strategy
OJT	On-the-Job Training
OOSCI	Out-of-School Children Initiative
PPRE	Policy, Planning, Research and Evaluation
PSE	Primary School Examination
SAN	Student Academic Need
SEA	Sexual Exploitation and Abuse
SEN	Student Economic Need
SIB	Statistical Institute of Belize

SIF	Social Investment Fund
SpED	Special Education
STR	Student-Teacher Ratio
TSC	Teaching Service Commission
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization

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I. Executive Summary

The Millennium Challenge Cooperation (MCC), a United States government organization, has selected Belize as a potential recipient of a grant to support economic development and reduce poverty. In accordance with MCC guidelines, a Constraints Analysis to identify the major constraints to economic development was conducted. Among the five constraints identified through the analysis, the Government of Belize (GOB) selected low quality of education as “the primary constraint to long-term inclusive and sustainable economic growth in Belize” and expects that, should the issue be addressed, the result “can lead to generational transformation of the Belizean economy and its people.” A Root Cause Analysis (RCA) of the education sector was subsequently conducted to identify the core problem and root causes of Belize’s low quality of education and its impact on the shortage of trained professionals in all industries. This report presents those findings. The RCA included an extensive literature review of statistical and research reports and other documents on the education sector, as well as consultations with key education stakeholders. The RCA is intended to inform the development of a concept note to determine the priority areas in the education sector to be covered by the compact as well as the design of specific interventions to address the identified problems.

Core Problem

The Belize Education system does not produce sufficient individuals with the types of competencies needed by the labour market. This problem is two-fold: 1) the percentage of persons in the labour force with post-primary education is below the level required for an increasingly technological and service-driven economy, and 2) the competencies being developed by post-primary institutions do not sufficiently match the knowledge, skills, values and attitudes needed by the labour market. Vulnerable populations, including the poor, persons with disabilities, rural and indigenous populations, immigrants and both genders at particular levels of education, are especially affected. The poor quality¹ of the current education system negatively affects development and productivity in key industries such as Agriculture, Agro-processing, Tourism, and Business Process Outsourcing, industries which the Government of Belize has identified as crucial for the country’s current and future economic growth.

Belize’s economy has experienced major shifts in productive sectors and employment patterns in recent decades. Data from the Statistical Institute of Belize show that the share of GDP from the service (tertiary) sector increased from 62% to 71% between 1997 and 2017, while the share from the primary and secondary sectors declined from 18% to 13% and 20% to 16% respectively. Likewise, during the same time period, the service sector’s share of employees increased from 56% to 65% of the labour force, while the primary and secondary sector’s share went from 28% to 18% and 16% to 17%, respectively. These shifts in the economic and employment landscape, due in part to technological advancements in all three productive sectors, have increased the demand for workers with higher levels of qualifications and skills. However, over half of Belize’s labour force, 52%, currently do not have any form of post-primary education and only 22% have a tertiary level qualification (SIB, 2021).

Beyond the shortage of post-primary graduates, there is also a shortage of skilled workers in key industries. Stakeholders interviewed during the development of the constraints analysis and RCA report a significant mismatch between labour force skills and labour market demands. Specific shortages were reported for the agriculture and agro-processing sectors and service sector industries, including tourism and in-demand jobs in the BPO sector such as computer programming. In addition to these technical and

¹ In this context, low quality is defined as a lack of ‘fitness for purpose’.

field-specific skills, basic and transversal skills such as communication, teamwork, leadership, interpersonal skills, original and strategic thinking, information technology and digital abilities and values such as responsibility, are not sufficiently being met (IDB, 2020; Garbutt, 2021). This mismatch serves to increase unemployment and lower productivity.

The RCA identified a total of 10 root causes and 34 contributing factors, 17 related to the low participation in post-primary education and 17 related to the low quality and relevance of post-primary education. The lack of affordable post-primary education, limitations in physical access to institutions, the lack of supportive legislative and policy instruments and discouraging social norms and values are prevalent root causes for non-participation in post-primary education. Average annual cost of school fees at the secondary level is roughly 10% of average GDP per capita, while fees at the TVET and tertiary levels are respectively equivalent to 15% and 25% of average GDP per capita (MoECST, 2022; World Bank, 2022). Such costs make post-primary education unaffordable or extremely difficult for low-income families and those with multiple school-aged children. Students with disabilities and those from rural areas, inhabited primarily by indigenous and immigrant communities, also face the challenge of limited access to post-primary institutions. Of the 6,772 secondary school spaces available for new entrants, only 31% are in rural areas (MoECST, 2020); this is even though 61% of the under-18 population reside in rural areas (SIB, 2021). Additionally, although the extent of the disparity is currently unknown, few schools make accommodations for students with disabilities. Access to post-secondary education is also affected by current legislation including a low compulsory education and minimum employment age of 14 and exclusionary school policies which contribute to high secondary school dropout rates (MoECST, 2021). Males are especially affected, with dropout rates of 12.5% compared to 8.4% for females and youth (14-24 years old) labour force participation rates of 61% compared to 37% for females (MoECST, 2021; SIB, 2021).

Another core issue is the mismatch between the competencies being developed by post-primary institutions and those needed by the labour market. Root causes include the poor level of communication and collaboration between institutions and employers in the development, review and evaluation of programs, limited engagement of students in practical and experiential learning and research and low student enrolment in high priority areas, especially among females (IDB, 2018 and 2019; MoECST, 2019 and 2020). In the agriculture sector these problems manifest in farmers and other workers lacking key competencies due to the limited availability of agricultural education and training at post-primary levels. Low financial literacy and capacity to use market information and modern and appropriate technologies also reduce the competitiveness of agriculture producers.

Achievement of education outcomes in all fields is also limited by the low quality of education and lack of support for challenged students. Less than half of final year primary school students receive satisfactory grades on the Primary School Examinations (MoECST, 2020). This means that a significant percentage of students enter post-primary education with poor academic foundation. The absence of screening for students with disabilities also contributes to this problem. School closures and distance learning during the COVID-19 pandemic, coupled with poor access to technology, have worsened learning gaps (IDB, 2022). Low entry into profession requirements, poor quality teacher preparation and inadequate teacher supervision, appraisal and reward systems and lack of quality teaching and learning resources make it difficult for students, especially those with challenges, to receive quality learning support and to develop the competencies needed for work and further education. The lack of quality assurance practices, effective use of data and failure to fully engage parents and other stakeholders in decision-making further contributes to the problem.

II. The System of Education

Belize's education system is governed by the Belize Education and Training Act 2010, the Education Rules 2000 (revised 2003) and the Education Amendment Rules, 2012. The majority of educational institutions are owned by religious denominations under a grant-in-aid system. Under this arrangement, proprietors establish Managing Authorities (individuals or boards) to manage the operations of schools and monitor the delivery of educational service under the oversight and with the financial support of the government through the Ministry of Education. Financial support is primarily in the form of direct payment of teachers' salaries or grants intended for such expenses.

The education system is divided into four levels—preprimary, primary, secondary and tertiary. Official ages are 3-4yrs for pre-primary, 5-12yrs for primary, 13-16yrs for secondary and 17-21yrs for tertiary; however, there are high rates of repetition both at the primary and secondary levels of education which leads to a significant number of overaged students at these levels of education. Five types of institutions serve the two post-primary levels of education: 1) secondary schools (also referred to as high schools or colleges), 2) Adult and Continuing Education (ACE) Institutions, 3) Institutes for Technical and Vocational Education and Training (ITVETs), 3) junior colleges, and 5) universities. Admission to secondary schools, ITVETS and ACE institutions requires a primary school certificate, while entry into junior colleges and universities requires a high school diploma.

High schools offer four-year programs of studies, with the first two “lower secondary” years typically devoted to foundational courses such as English, Mathematics, Science, Social Studies, and Spanish, as well as Religion, Life Skills, Technology and various VoTech or Art electives. At the end of lower secondary, students select or are placed in various streams such as Business, Science, or VoTech. These streams are usually comprised of three or more specialized courses based on Caribbean Secondary Education Certificate (CSEC)² syllabi, which are taken along with a few core courses such as English, Mathematics and Spanish. During the final year of study in high school, students normally take three or more CSEC Examinations including English and Math which, if successful, qualifies them for a tuition grant from the GOB for studies at local tertiary institutions. In the 2021-22 academic year there were 62 high schools, 18 government, 29 government-aided and 15 private, operating with 21,838 students enrolled.

Secondary level education is also available through ACE institutions, most of which are affiliated with an existing high school. ACE programs, which are considered high-school equivalency programs, range from 2-4 years of part-time study and target adolescents, 16 years and older, young adults and older persons who either started and did not complete high school or never got the opportunity to attend high school immediately after completing primary school. In the 2021-22 academic year there were 881 students enrolled in eleven ACE institutions (3 government, 6 government-aided and 2 private ACE institutions) country-wide. Institutes for Technical and Vocational Education and Training (ITVETs), although originally intended to serve as post-secondary institutions, also have a majority non-high school graduate enrollment. Both pre-vocational and vocational programs are offered. The former enrolls students who either have not completed high school or are below the minimum age requirement of 15 years to enter trade programs. These programs offer foundational academic subjects as well as an exploration of trade areas. Trade programs are typically of one-year duration in a specific technical or vocational field leading to a certificate from the ITVET. Most ITVET programs currently being offered are at Level I but some

² CSEC is a set of examinations offered by the Caribbean Examinations Council, a regional examining body. CSEC examinations are normally taken by students in their final year of high school.

programs are available at Level 2 and a few at Level 3. There are currently 6 ITVETs (5 government and 1 grant-aided), one in each of the six administrative districts, with 732 students enrolled in 2021-22.

High school graduates who pursue further studies locally enroll in either a junior college or university. Junior colleges offer mostly two-year Associate degree programs aimed at preparing studies for work or for further studies at university level. In 2021-22 there were eleven junior colleges in operation (2 government and 9 grant-aided) with 4,341 students enrolled. Studies at the university level include Associate, Bachelor's and a few Master's degrees. The University of Belize is the national public university and has the largest share, 80%, of the 5,032 students enrolled at the university level. The other local university is Galen University, is a small private institution. The regional University of the West Indies also has a local presence through its open campus.

The Education Act gives the Ministry of Education the responsibility to manage the system of education. It does so through the establishment and enforcement of standards, rules and policies, as well as monitoring and supporting education delivery. The Ministry is organized into central operational units responsible for management of human and financial resources, central technical units responsible for planning, curriculum development, student assessment, teacher education and development and various areas of education such as special education, early childhood education, technical and vocational education and student welfare and District Education Centres whose primary responsibility is school supervision. The legislation also allows for the establishment of various bodies to support the Ministry including a Teaching Service Commission (TSC), National Council for Education (NCE), National Council for Technical and Vocational Education and Training (NCTVET) and Belize Board of Teacher Education (BBTE).

III. Root Causes of the Constraint

The most recent labour force survey (SIB, September 2021) indicated that 71.7% of the country's population of 432,516 persons were working age (14 years and older). Of that number, 61.9% or 191,881 persons participated in the labour force. Participation rates were much higher for males, 78.1%, than for females, 48.2%. Males 14-24 years of age were far more likely to be in the labour force, participating at a rate of 61% compared to 37% of females in that age group. The unemployment rate was 9.2% overall. The majority of employed persons, 57%, were employed in the services sector, followed by 22% in primary industries and 20% in the secondary industries. The groups with the highest rates of unemployment were females, 13%, persons of Mayan ethnicity, 14.4% and youth ages 14-24, 18.6%.³

Belize's economy has experienced major shifts in the productive sectors and employment patterns in recent decades. Belize's primary sector includes agriculture and related activities, aquaculture, forestry, logging, milling, mining, and quarrying; secondary industries include manufacturing, construction, and supply of utilities; and the tertiary or service sector includes wholesale and retail trade, tourism, transportation, storage, communications, financial intermediation, real estate, government services, and community, social, and personal services. The share of GDP contributed by both the primary and secondary sectors declined between 1997 and 2017; the primary sector's share of the GDP declined from 18% to 13% and the secondary sector's share moved from 20% to 16%. During the same time period, the service (tertiary) sector increased from 62% to 71%. In terms of share of employment, the primary sector employed 28% of the labour force in 1997, but only 18% in 2017, while service sector's share increased

³ For comparison, the unemployment rate was 6.7% for males, 7.4% among Mestizos/Hispanics and 5.8% for 35-44-year-olds.

from 56% to 65% of the labour force. The secondary sector's share remained relatively constant from 16% in 1997 to 17% in 2017.

These transformational shifts in the economic and employment landscape, due in part to technological advancements in all three productive sectors, have changed the demands of the labour market. Employers need workers with higher qualifications and skills, which normally require completion of post-primary education. This is true even for the primary and secondary sectors. Whereas only 1% of workers in the primary sector had post-primary education in 2007, 16% did in 2018. Likewise, the percentage of workers with post-primary education increased from 7% to 34% in the secondary sector. The service sector demands the most skilled workers, with fields such as tourism and trade having 46% of workers with post-primary education in 2018. The percentage of employed persons with post-primary education were even higher for the transport and financial services (73%) and government services (83%). Still, the most recent Labour Force Survey (September, 2021), reported that over half of the labour force, 52%, did not have any form of post-primary education, only 26% had completed secondary education and only 22% had a post-secondary/tertiary level qualification.

The primary constraint, insufficient access to individuals with the competencies that are needed for high levels of economic development, appears to be two-fold, related to both the number and the quality of post-primary graduates available to the Belize labour market. The RCA identified ten root causes, five related to each of the two components, as shown below:

Component 1-The percentage of persons in the labour force with post-primary education is low

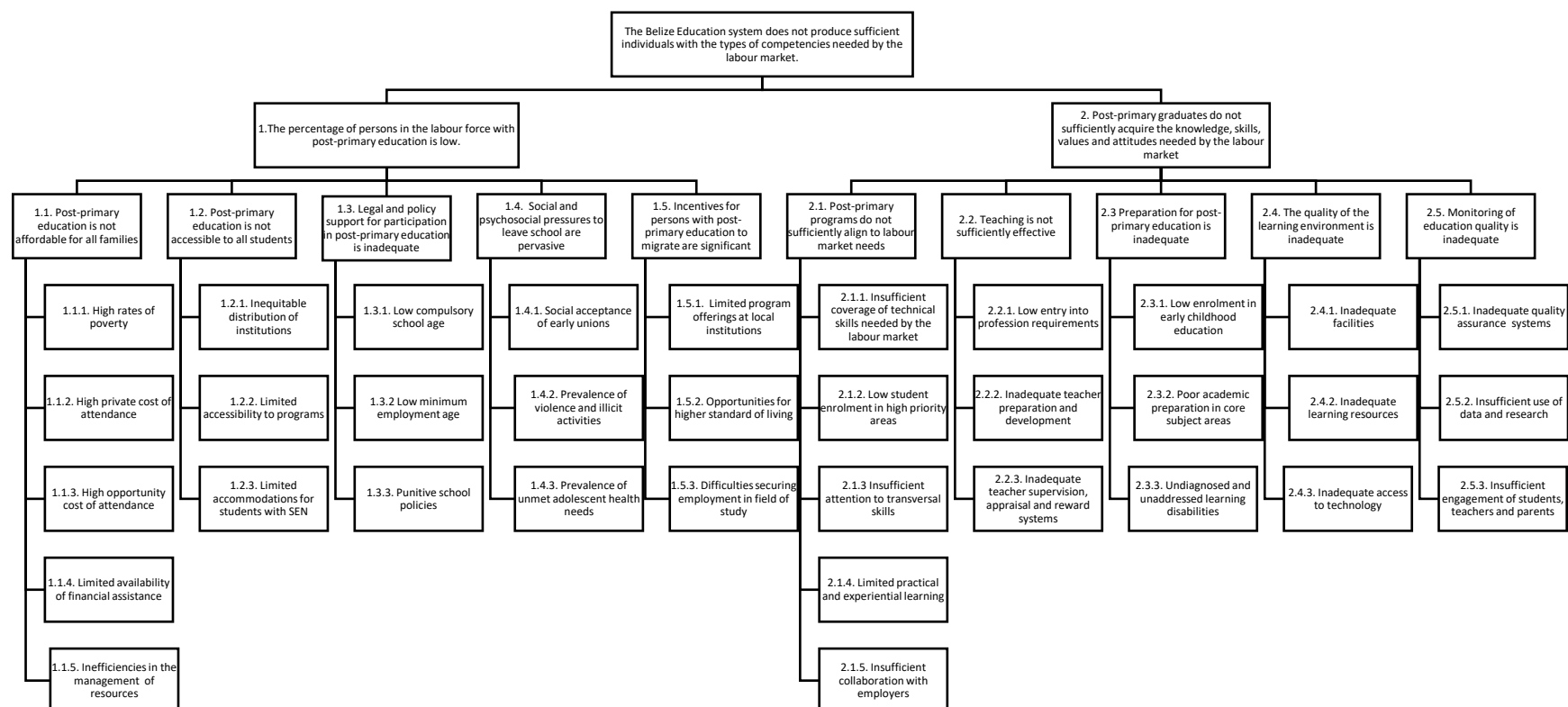
- *Root Cause 1.1-Post-primary education is not affordable for all families*
- *Root Cause 1.2-Post-primary education is not accessible to all students*
- *Root Cause 1.3-Legal and policy support for participation in post-primary education is inadequate*
- *Root Cause 1.4-Social and psychosocial pressures to leave school are pervasive*
- *Root Cause 1.5-There are strong incentives for persons with post-primary education to migrate*

Component 2-Post-primary graduates do not sufficiently acquire the knowledge, skills, values and attitudes needed by the labour market

- *Root Cause 2.1-Post-primary programs do not sufficiently align to labour market needs*
- *Root Cause 2.2-Teaching is not sufficiently effective*
- *Root Cause 2.3-Preparation for post-primary education is inadequate*
- *Root Cause 2.4-The quality of the learning environment is inadequate*
- *Root Cause 2.5-Monitoring and support of education delivery is inadequate*

Each of the ten root causes, along with their contributing factors, are discussed in the sections that follow.

Figure 1 Education Root Cause Analysis Problem Tree



1. The percentage of persons in the labour force with post-primary education is low

The Ministry of Education, Culture, Science and Technology (MoECST) reported a secondary Net Enrolment Rate (NER) of 56.5% overall, with 51.8% of males and 61.4% of females 13 to 16 years of age enrolled in secondary schools in the 2021-22 school year. Secondary Gross Enrolment Ratios (GER) were 69.4% overall with 65.3% for males and 73.5% for females. The difference between NER and GER reflects the large number of overaged students enrolled in secondary institutions as a result of high repetition rates at both the primary and secondary levels of education. Only a small number of children 13-16 years of age who are not in secondary schools are accessing alternative forms of education. Enrolment in Institutes for Technical and Vocational Education (ITVETs) is very low. The MoECST reported a total of 732 students enrolled in ITVETs for the 2021-22 school year, 602 males and 130 females. Additionally, a recent diagnosis of the sector (Gideon and Pech, 2019) found that program completion rates at some ITVETs were as low as 8% and 26%. Several institutions offer opportunities for persons 16 and older to complete a secondary diploma through evening adult continuing education (ACE) programs; however, enrolment in these programs is also low, and male enrollment is particularly low. During the 2021-22 school year enrolment in ACE programs totaled 881, with 335 males and 545 females enrolled. A total of 306 persons graduated in 2021. Approximately 30% of students who graduate from secondary schools subsequently enroll in tertiary institutions the following year.

The tertiary education sector graduated 1,961 students in 2021, including 681 males and almost twice the number of females, 1,280. There was a total enrolment of 9,373 students, 3,374 males and 5,999 females for the 2021-22 school year. The tertiary NER was 14.4% and the Gross Enrolment Ratio was 23.3% for 2021-22. The difference can be attributed to persons over 21 years of age who enter tertiary education several years after graduating from high school, those who take longer than 4-5 years to complete their studies and those who return at a later stage to complete their degrees or earn higher qualifications. A recent diagnosis of the tertiary sector found that only half of tertiary students completed their program on schedule and many ultimately drop out without completing their program (Pech and Gideon, 2020, p. 64).

The RCA identified five root causes for the low percentage of persons with post-primary education in the labour force: 1) Post-primary education is not affordable for all families; 2) Post-primary education is not accessible to all students; 3) Legal and policy support for participation in post-primary education is inadequate; 4) Social and psychosocial pressures to leave school are prevalent; and 5) The level of outward migration of persons with post-primary education is high. The following section explores each of these root causes, along with their contributing factors.

1.1. Post-primary education is not affordable for all families

Prevailing socio-economic conditions and education financing structures determine the level of affordability of education. Where poverty rates are high and social support for participation in education is low, education can be out of reach for poor families. Such is the case in Belize with post-primary education. The 2015 Multiple Indicator Cluster Survey (MICS) found that while 89% of children from the richest quintile attended secondary school, only 36.5% of those from the poorest quintile did. Despite major public investments in education, private (out-of-pocket) cost of attendance at post-primary education is high and there is not sufficient financial assistance provided for families who are unable to afford the cost. The high opportunity cost in terms of lost wages for those who choose to further their

education is also an important factor, as well as existing inefficiencies in the management of available human and financial resources.

1.2. High rates of poverty

The Statistical Institute of Belize estimated the national poverty rate in 2018 to be 52%. Within that group, 9% were considered indigent and another 11% were vulnerable to becoming poor. Rural areas have higher rates of poverty than urban areas, 59% compared to 43%. Notably, the increase in poverty between 2009 and 2018 was much more significant in urban areas where poverty rates increased by 15 percentage points compared to a 5 percentage points increase in rural areas. The lowest rates of poverty were found in the districts of Belize (45%), Corozal (45%) and Stann Creek (47%) and the highest rates in the districts of Cayo (52%), Orange Walk (57%) and Toledo (82%). Toledo, with the highest concentration of indigenous population (66%) and the highest poverty rate in 2019, experienced the largest increase in poverty rate, moving from 60% in 2009. Of all age groups, poverty rates were the highest among the youth population; 57.1% of persons 15 -24 years of age were classified as poor. This age group corresponds with the official school ages for TVET, upper secondary and tertiary education in Belize.

1.2.1. High private cost of attendance

Post-primary education is funded through a combination of public financing instruments and private costs. One such private cost comes in the form of school fees at the secondary and TVET levels and tuition and fees at the tertiary level. At the secondary level, the Government of Belize applies a per-capita formula to help secondary schools cover expenses such as salaries and operational expenses. Additional operational expenses and the cost of materials, supplies and services are covered through school fees that are charged to students. The average annual fee charged by secondary schools is BZ\$856.58. Government-owned schools generally have lower fees (BZ \$423.3) compared to Government-aided schools (BZ\$839.1) and Private Schools (\$1573.2) (MoECST School Fees Survey, 2022). The average fee charged is roughly equivalent to one month's income for families, such as those with a single income earner with incomplete secondary education. Families are normally required to pay a large portion or the entire amount at the start of the school year to secure a secondary school space for their child. Families with more than one child in post-secondary institutions have an especially difficult time. Below are two examples of the requirements:

Example 1:

In order to secure the space offered each child is asked to pay a non-refundable fee of \$20 by the end of the second week in June.

In order to confirm your child's attendance in August 2020, the registration payment of \$400 for 1st and 2nd form students and \$450 for 3rd and 4th form students must be received by the end of the second week in June. This covers all the amounts highlighted below and the monthly fee of \$40 for September. It is important that you meet the deadlines given.

Example 2:

Parents of Incoming First Form Students must pay a portion of their daughter's fee - \$500 – upon registration to secure their space at XXX. This payment is due in May. The remainder of the fee must be paid by 30 September. Parents will receive an invoice from the Accounts Office detailing the fee structure.

ITVETs and ACE institutions are even less affordable than secondary schools and unlike the secondary level there is no formal mechanism that guides public allocations to these institutions. (Gideon and Pech, 2019; 2022). The average annual fee for attendance is BZ\$1228.60, with government-owned ITVETs charging an average of BZ\$984.69 (MoECST School Fees Survey, 2022). The average fee charged by ACE institutions is \$1,531.67; however, government institutions charge considerably less on average (\$488.55) compared to government-aided (\$1032.87) and private institutions (\$3075.00) (MoECST School Fees Survey, 2022). Tertiary education is the most expensive. Public financing of junior colleges come in the form of grants to institutions covering 70% of salaries for teachers at government-aided schools and 100% of salaries at government-owned junior colleges. The University of Belize receives an annual subvention of approximately BZ\$10 million. Tertiary institutions charge both tuition and fees. The average annual cost of tuition and fees at tertiary institutions is BZ\$2,070.67. Government-owned junior colleges charge an average of BZ\$1,965.50, government-aided junior colleges are slightly more expensive at BZ\$2,175.84. and the University of Belize, which offers both Associate and more advanced degrees have an average of BZ\$3,123.8 (MoECST School Fees Survey, 2022).

Interviewees in the Out-of-School Children Initiative Study found that the inability to afford education was a primary reason for school dropout (Young, Macfarlane and Aldana, 2017). This is especially the case for post-primary education where the average fees charged are three or more times the maximum allowed charge for the primary level. Other private costs to families include uniforms which are required at all secondary schools, schoolbooks and supplies, meals and transportation in areas where school buses are not provided. The high cost of internet has also become a major burden on families in recent years, especially since the pandemic and the transition to more online learning.

1.2.2. High opportunity cost of attendance

The private cost of participating in four or more years of post-primary education not only carries a high out-of-pocket cost for students in their families, but also a high opportunity cost in the form of potential lost earnings for 14 to 21-year-olds who choose to pursue additional education rather than entering the workforce. As a result, teenagers and young adults face significant pressures to leave school and start earning an income to help their families (Young, Macfarlane and Aldana, 2017). As shown in Table 1, primary school graduates who pursue secondary education, rather than work, forgo \$46,176 in income on average over a four-year period; however, returns to secondary education are relatively low.

Table 1 Opportunity Cost of Engaging in Secondary and Tertiary Education

Level of Education	Secondary	Tertiary
Ave Annual Cost (fees only)	\$860	\$2,070
*Ave Annual Cost (other costs)	\$1,400	\$1,100
Potential Ave Annual Income (one level below)	\$11,544	\$15,096
Total Annual Cost	\$13,804	\$18,266
Number of years of schooling	4	4
Total Opportunity Cost	\$46,176	\$60,384
Average Annual Salary Differential	\$3,552	\$13,800
Number of Years to Recoup Cost	13.0	4.4

Source: MOECST School Fees Survey, SIB Data and BCDT member calculations

** includes estimated cost of uniforms, books and supplies and internet plan at secondary and books and supplies and internet plan at tertiary*

Once a student completes secondary education and enters the workforce—if that student is successful in becoming employed—the additional earnings are only \$3,552 per year higher than the earnings of an employee with a primary school education. This means it will take them 13 years to recoup the opportunity cost of attending secondary school. Secondary graduates who pursue tertiary education fare off much better, earning an additional \$13,800 per year and recouping opportunity costs in 4.4 years.

1.2.3. Limited availability of financial assistance

Given the high rates of poverty and the high cost of attendance, financial assistance from either the public or private sector is critical for ensuring participation and retention of students from low socio-economic backgrounds in post-primary education. This is important not only to increase the number of school graduates but also to reduce the rising enrolment gaps by wealth status. As indicated above, post-secondary education is subsidized by the Government of Belize to varying degrees. Most public assistance comes in the form of grants or subventions to assist with salaries and operation expenses. These contributions significantly lower the private cost to families but cover on average 50-75% of the cost of educating students, thus the significant private costs to families. Direct financial assistance is also provided to families. At the secondary level, there is a subsidy program that provides \$200 towards school fees for all students from rural areas and most impoverished districts (Toledo, Stann Creek, and Corozal), as well as students from urban areas in the other districts who apply and are approved for assistance. Students attending ITVETs also qualify for this assistance. In the 2022-23 academic year, approximately 12,000 students or 50% of the high school population were provided with subsidies. The subsidy is for the first two years of study at a high school; however, students who fail their first year and need to repeat do not receive the subsidy.

At the tertiary level, students who earn satisfactory grades on three or more CSEC examinations including Math and English are awarded a \$300 grant towards tuition and fees. Notably, the timing of examination results does not allow for students who qualify to be identified prior to the start of school and need to pay. As a result, many students are not able to start their studies on time. Tertiary students who earn a GPA of 2.5 or above in their first year of study also receive a grant which covers the total cost of tuition for their second year of study in Associate degree programs. Some students and families also benefit from an informal financial assistance program which is coordinated by the MoECST through the various political area representatives. Area representatives are provided with a budget for education assistance from the MoECST. Families normally approach the representative from their area, usually with a school bill, the area representative provides them with a letter of assistance and then the letter is provided to the MoECST for processing of payments to the relevant institutions. There is currently no established criteria or verification system to select recipients of the assistance and no proper database to track recipients. A small number of tertiary scholarships and grants are also available annually in areas such as nursing and teacher education and for studies at foreign universities such as in Cuba, Taiwan, Mexico, and the various campuses of the University of the West Indies.

Access to student loans is also limited. The Development Finance Corporation (DFC) is the only entity with a student loan program. Student loans account for 13% of the bank's portfolio (Central Bank of Belize, 2022). Several features of this program, however, make it inaccessible for poor students. Students are normally required to provide one guarantor for a \$10,000 loan, two for a \$20,000 loan and collateral for any amount above \$20,000. Interest rates are normally 9% and interest payments must be made during the period of study. These are conditions that most poor families are not able to meet.

The tertiary sector diagnosis (Pech and Gideon, 2020) found that about one in every four (23.3%) tertiary students worked part-time. Over half of them indicated that they are dependent on their parents as the primary source for financing their education. Another 15% reported that they benefited primarily from scholarships and grants and only 9% identified loans as their major source of funding. DFC loans are available for TVET and tertiary education but not for secondary education. Commercial banks have been offering “back-to-school” loans in recent years, but these are structured as regular loans with both principal and interest payments due immediately.

1.1.5. Inefficiencies in Management of Resources

Every year, the GOB allocates approximately 25% of its budget to education, amounting to over 7% of GDP and reaching as high as 8.7% in 2021. This level of spending is higher than the 6% on average spent by Caribbean Small States and much higher than the 4.1% on average spent by upper middle-income countries.⁴ Despite this high level of investment, education, especially at the post-primary level, remains unaffordable for many families. One of the primary reasons for this dilemma is the inefficient allocation of resources within the education system. The approved budget estimate for education in 2022/23 was \$258,7222,129, of which \$118,941,627 was allocated to personal emoluments for a staff of 4,845, primarily teachers in government and government-aided primary schools. Another \$96,656,634 was allotted to grants, mostly to secondary and tertiary government and grant-aided institutions, which is also primarily used to pay teacher salaries.⁵ Teacher salaries therefore make up over 80% of the education budget and factors that affect the teacher wage bill have a significant impact on the education budget. Over the last decade, these factors have included: 1) salary adjustments due to a 2014 Collective Bargaining Agreement between the GOB and trade unions, 2) significant increases in the number of trained teachers, 3) low student-teacher ratios, and 4) high repetition rates.

Salary adjustments were implemented in three tranches over a four-year period from 2015 to 2018 and resulted in an overall increase in salaries and wages for teachers and public officers of 25%.⁶ This resulted in a higher percentage of the education budget going to salaries, as there was not an equivalent increase in the education budget to account for the salary increase. The budget has also been affected by an increasingly trained teaching force. Over the last decade, enforcement of the teacher licensing regulations, along with increased availability of teacher education programs and financial support for enrolling in such programs increased the number of trained teachers across all levels of the system. As shown in Figure 1, between 2012/13 and 2021/22, the percentage of trained teachers increased from 24% to 72% at the preprimary level, from 56% to 88% at the primary level and from 27% to 71% at the secondary level.

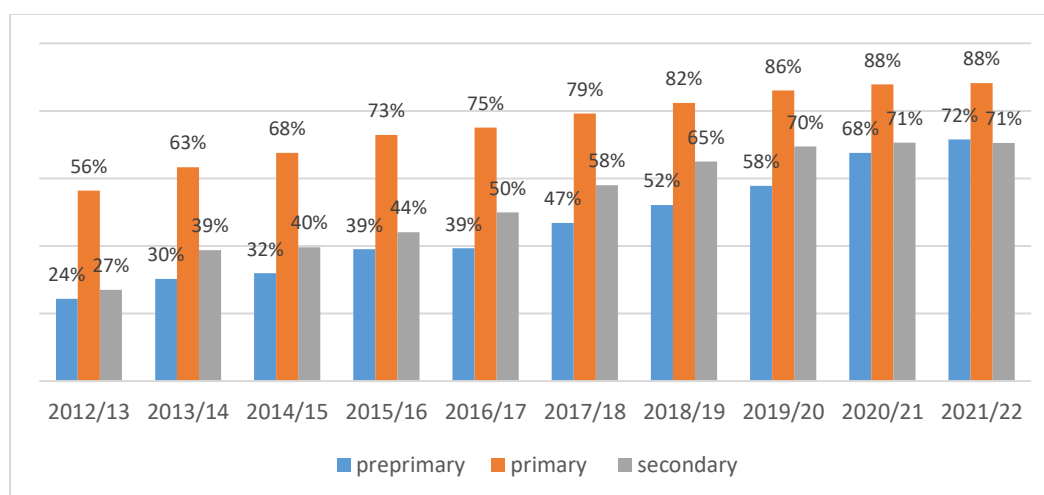
The improvement in trained teachers, while a desirable outcome, caused a significant increase in the wage bill. For example, an untrained primary school teacher with a high school diploma who earns an Associate degree in Teacher Education moves from pay scale 5 to pay scale 9, a 52% increase in salary; an untrained high school teacher with an Associate degree who earns a Bachelor’s Degree in Education moves from pay scale 8 to pay scale 16, a 54% increase in salary. Teachers at the preprimary and primary level who upgrade from an Associates to a Bachelor’s degree in Education are also moved to pay scale 16.

⁴ Source: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?locations=BZ>

⁵ Source: <https://www.mof.gov.bz/uploads/files/dwos1f4x.pdf>

⁶ Source: <http://www.nationalassembly.gov.bz/wp-content/uploads/2017/03/Budget-Speech-2017.pdf>

Figure 2 Percentage of Trained Teachers by Level, 2012/13-2021/22



Source: Ministry of Education, Abstract of Education Statistics 2012/13-2021/22

Low student teacher ratios also have a significant impact on the wage bill. Although a staffing schedule which allows for 30 students per teacher at the primary level exists in regulations, this is not adhered to. Moreover, teachers are replaced by the Teaching Service Commission on the request of Managing Authorities without due attention to the presence of overstaffing. Small, multi-grade schools, some in close proximity to each other, also contributes to the problem, as does the fact that current regulations do not allow for transfer of teachers from overstaffed to understaffed schools where schools are under different managing authorities. Table 2 shows the resulting student-teacher ratios (STR) at each level of basic education. Although the STR at secondary is similar to the Latin American and Caribbean (LAC) regional average of 16, the STR for both below the LAC averages of 20 at the preprimary level and 21 at the primary level.⁷ The differences in STR at the preprimary and primary levels amount to approximately \$3.4 million and \$5.3 million in salaries respectively.⁸ These are funds which could potentially be used to increase enrolment and financial support for the preprimary or secondary levels of education.

Table 2 Student Teacher Ratio by Level, 2021

Level	Total	Urban	Rural
Preprimary	13.9	14.8	13.0
Primary	19.8	20.2	19.4
Secondary	16.5	16.7	16.1

High rates of repetition have a similar impact on the wage bill. Primary and secondary school students who do not meet the academic criteria for grade promotion, either through overall grades or on specific subjects are made to repeat the school year. Repetition rates for the 2020/21 school year were 4.2% at the primary level and 10.4% at the secondary level. Table 3 shows the number of repeaters at the primary and secondary level in the 2020/21 school year, the number of teachers required to teach those number

⁷ Source: <https://data.worldbank.org/>

⁸ Figures based on midpoint of pay scale 9, \$28,700.

of students based on the current STR and the estimated cost based on the average salaries for trained teachers at the respective levels.⁹

Table 3 Impact of Repeaters on Wage Bill, 2020/21

Level	# of Repeaters	# of Teachers	Estimated Cost
Primary	2,654	134	\$3,845,804
Secondary	2,369	144	\$6,042,384

Source: Abstract of Statistics 2021/22, MoECST and BCDT calculations

An additional area of apparent inefficiency in the management of resources was the introduction of a Secondary Financing scheme in 2011. The scheme included a per capita School Services Grant as well as additional payments for Student Academic Need (SAN) and Student Economic Need (SEN).¹⁰ Implementation of the formula increased the budget for the secondary sector from \$54,589,969 in 2012/13 to \$85,030,045 in 2017/18, a 56% increase in just five years.¹¹ Notably, enrollment at the secondary level during the same time period only increased by 8.6%. The Ministry of Education subsequently suspended the SAN and SEN portions of the formula citing financial exigencies and the lack of accounting for SAN and SEN spending by schools. Per capita spending for the 2021/22 school year was \$1,737 at the primary level, \$3,207 at the secondary level and \$2,133 at the tertiary level; at the start of the financing reform in 2011/12 per capita spending was \$1,340 at primary, \$2,457 at secondary and \$3,176 at tertiary.

1.3. Post-primary education is not accessible to all students

Inequitable access to post-primary education institutions and programs is another cause of low participation in post-primary education. Although in most instances post-primary institutions are currently operating below their maximum enrollment capacity, their location, available program offerings and poor accommodations for students with special needs create barriers to participation.

1.3.1. Inequitable distribution of institutions

Education data collected for the 2021-22 school year indicate a total of 62 secondary schools, 6 ITVETs, 11 ACE institutions, 11 junior colleges and 2 local universities operating country wide. Calculations based on data collected by the MoECST show that there are sufficient secondary school spaces to accommodate an additional 4,352 students (School Readiness Study, 2020). In the TVET sector, most ITVETs are currently underutilized, with four out of six institutions not reaching the 200 full-time trainee capacity for which they were designed. Notably, one ITVET has adapted its facilities to add an additional floor for classroom spaces and can now accommodate over 200 full-time students. Institutions at the tertiary level are also not operating at their maximum capacity, especially with the decline in enrolment during the pandemic and the increasing transition to online learning since the pandemic. Physical capacity is also not a problem

⁹ Figures based on STR of 19.8 and midpoint of pay scale 9 (\$28,700) for primary level and STR of 16.5 and midpoint on pay scale 16 (\$41,161) for secondary level.

¹⁰ SAN was based on the number of students with PSE scores below 60%; SEN was based on the district poverty rate.

¹¹ For comparison, the budget at the primary and pre-primary levels increased by 28% and at the tertiary level by 2% during the same time period.

for most ACE institutions. Nine of eleven institutions are attached to high schools and thus have additional classrooms available to them for further expansion of programs.

It must be noted nonetheless, that while secondary schools reported their maximum intake for new entrants is 7,024, in that same year, there were 7,906 primary school graduates. This indicates that if the transition rate was 100%, there would have been need for almost 900 additional spaces. Moreover, the current capacity of secondary schools would not be able to accommodate the total number of 13–16-year-olds in the population. As noted in Table 4, an additional 4,910 spaces would be needed just to satisfy the number of secondary school-age children, not accounting for over-aged students and repeaters. This is equivalent to 164 classrooms or 10 medium-sized schools of 500 students. The districts with the greatest need for spaces would be Cayo and Orange Walk. Additionally, at maximum capacity, ITVETs, would still only be able to accommodate around 1,200-1,500 full-time trainees country wide.

Table 4 Estimate for Secondary School Spaces

District	# of Classrooms	# Spaces	Current Status		Universal Enrolment	
			# of Students Enrolled	# Spaces Surplus/ (Shortfall)	Secondary school-age population	# Spaces Surplus/ (Shortfall)
Belize	307	9,210	6,957	2,253	8,553	658
Cayo	195	5,850	5,208	642	8,086	(2,236)
Corozal	89	2,670	2,390	280	3,577	(907)
Orange Walk	88	2,640	2,409	231	3,888	(1,248)
Stann Creek	107	3,210	2,799	411	3,732	(522)
Toledo	87	2,610	2,075	535	3,266	(656)
Grand Total	873	26,190	21,838	4,352	31,100	(4,910)

Source: BCDT calculations based on MOECST data.

While at current participation rates there appears to be sufficient space as well as room for some growth in enrolment in post-primary education, the geographic distribution of institutions among Belize's small but widely dispersed population significantly reduces accessibility. Of the 62 existing secondary schools, 30 are in urban centers and 32 in rural areas. Despite the almost equal distribution of secondary schools, in 2021, the much larger urban schools accommodated 15,462 students while rural schools had only 6,376 enrolled. Additionally, of the 6,972 spaces available for first form students, only 31% are available in rural areas although 60.7% of the 5–17year-old population reside in rural areas. The result is that students from rural areas need to access schools in urban centers, which increases travel time as well as cost of attendance in areas where school buses are not provided. While secondary schools are not viable in some areas due to low population density, schools are not all strategically placed to reduce distance from rural communities to the nearest school and there are insufficient free buses for secondary school students. With poverty rates in rural areas being twice as high as that of urban areas, distance to school becomes a significant barrier to participation.

Even in cases where free transportation is provided, students face several hardships. For example, two of the six ITVETs, Corozal and Toledo ITVET, are in difficult-to-access areas. In the case of the Corozal ITVET, which is located on the outskirts of Corozal Town, trainees must share buses with secondary school students. The schedule matches that of the high schools and result in arrival and departure times that are inconvenient for trainees. In the case of the Toledo ITVET, which is in a remote area of the Toledo District, the poor condition of access roads makes access difficult, especially during the rainy season. Trainees

explained that sometimes the bus gets stuck in mud. Most parents are not able to visit the institution because of lack of public transportation in the area. Low population density and distance from schools also means that it is more difficult for rural students to access the country's few ACE and tertiary institutions. These two sectors are also affected by the lack of public transportation at night. Night classes are the only option for ACE students and for tertiary students who work. Of all 13 local tertiary institutions, only three are in rural areas. Additionally, some tertiary classes can only be offered at night because they are taught by adjunct faculty who work during the day. This is the case for the majority of ACE faculty as well. The low enrollment of males in ACE programs also suggests gendered dimensions of access and/or participation in these programs.

1.3.2. Limited accessibility to programs

The small size and wide geographic distribution of Belize's population also has an impact on the number of programs that institutions can offer. For example, TVET institutions are not able to offer a wide range of programs and so tend to focus on a few program offerings. This means that a student's program of interest may not be available at the institution in their district. For example, plumbing is only available at the Belize ITVET, masonry is only offered by the Orange Walk ITVET, and agriculture is only available at the Toledo ITVET. Space in particular programs is also an issue as there are limited number of workshops, most of which are designed to accommodate a maximum of 15 students at a time.

Access to tertiary programs is also an issue. Of all 13 local tertiary institutions, only 3 are in rural areas. Most undergraduate degree programs at the University of Belize are only available in Belize City and Belmopan. This means that students must travel long distances or relocate to access the programs of their choice. In cases where programs are not available in-country, as is the case in many fields, students would need to access foreign tertiary institutions to pursue their interest.¹² These options are not financially feasible for most students.

1.3.3. Limited accommodations for students with SEN

Education legislation and regulations identify the need for the education system to cater to students with special needs. Education Rule 110. (1) states that "No citizen or resident of Belize shall be refused admission to any school on account of race, ethnicity, language, political affiliation, region of the country of origin, special needs or because of perceived social and economic status." Rule 189 (1) further stipulates that "the education system shall take into account the special educational needs of students and shall provide schools with learning environments to address those needs." Persons living with disabilities, however, continue to face difficulties accessing all levels of education, especially post-primary education programs at the secondary, TVET, tertiary and ACE. Few school facilities are designed for universal access and educational support for such persons is equally lacking. Except for a few instances where secondary schools have provided sign language interpreters for hearing impaired students or accommodated students who are blind, most students with special needs would not be able to complete a post-primary education. There is no para-professional support and limited training and support for teachers in teaching students with various types of disabilities (OOSCI, 2017). Students with disabilities and their parents describe difficulties starting with inadequate referral and diagnostic processes, difficulty with gaining school entry, the lack of transportation services, and stigma and discrimination for students who do gain access (BESPlan, 2021).

¹² More information on this particular factor is provided in Section 1.5.

1.4. Legal and policy support for participation in post-primary education is inadequate

Several key aspects of Belize's legislative and policy framework do not favor continued education beyond the primary level. These include legal provisions for compulsory school age and minimum employment age, as well as school level policies that promote exclusion of students, especially at the secondary level. The result is that some primary school graduates do not transition to secondary and many of those who do transition do not complete due to a lack of legislation compelling them to stay in school, opportunities for legal employment at a young age and school policies that are punitive to the point of excluding students for minor infractions, academic performance and inability to pay fees.

1.4.1. Low compulsory school age

Children in Belize are required to attend primary school from age five until they either graduate or become fourteen years of age, whichever comes first. These requirements are laid out in Section 59 of the Education and Training Act, 2010 as follows:

Every person having control of a child, who is five years old by the first day of September and who has not exceeded the age of fourteen, shall cause the child to regularly and annually attend some public or nonpublic school for the entire term during which the public school in the district in which the person resides, or the school to which the child is assigned to attend, is in session, until the child reaches the age of fourteen years, unless the child has graduated or is excused as provided in sections 60 (2) (a) and 61 (2) (a), (b) and (c)." (Section 59, ETA, 2010)

The Education Act also includes provisions for 1) a school attendance order to be issued by the Chief Education Officer to parents who do not comply with their legal obligations, 2) legal procedures to address continued non-attendance following issue of the attendance order, and 3) penalties for parents found guilty of violating the law. The Act also calls for the appointment of School Community Liaison Officers to assist the Chief Education Officer in enforcing the attendance regulations. None of the legal provisions discussed above apply to children who have either reached the age of 14 or completed primary school prior to age 14. Therefore, there is no legal obligation for parents to send their children to secondary school, even those who have completed primary school prior to age 14. Furthermore, whereas students in primary school are guaranteed a space in a primary school, there are no guaranteed spaces for students at the secondary level. Students are accepted into secondary at the discretion of the secondary schools to which they apply. There is also no legal obligation on the part of the school or no system in place to re-engage students who drop-out of secondary school.

1.4.2. Low minimum employment age

The Education and Training Act defines child as "a person under the age of eighteen." The Labour Act, Chapter 297 of the laws of Belize, however, defines a child as "a person who is under the age of fourteen years." The Act also allows for employment of children as young as 12 years of age, with stipulations on type and hours of work for those under 18 years of age. Furthermore, under authorization by the Minister of Labour, children under 12 years of age may also be employed, specifically "by their parents or guardians in light agricultural or horticultural work in their parents' or guardians' lands or gardens" [Section 170 (1) (a)]. Since parents and students have no legal obligation to continue to post-primary education and children as young as 12 years old are legally allowed to work, there is little incentive for poor families to have their children remain in school. The April 2021 Labour Force Survey reported 6,098 persons between the ages of 14 to 17 years old employed with 68.1% being males and 68.4% being rural. The legal and

social acceptance of working children provides alternative options to post-primary education and exposes children to hazards. The International Labor Organization (ILO) defines the term “child labour” as “work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development.” Child labour is identified in two ways, 1) work that “is mentally, physically, socially or morally dangerous and harmful to children” and/or “interferes with their schooling.” Specifically, children who engage in child labour are either deprived of the opportunity to attend school, leave school prematurely, or must combine school attendance with work resulting in excessive hours and workload.

A 2020 report by the ILO concluded that “Children in Belize are subjected to the worst forms of child labor, including in commercial sexual exploitation, sometimes as a result of human trafficking. Children also engage in dangerous tasks in agriculture and construction.” (p. 1). Hazards included use of dangerous tools, having to carry heavy loads, exposure to loud noises and vibrations, contact with toxic chemicals, fumes and dust and working in areas with poor ventilation. A 2013 Child Activity Survey, also conducted by the ILO, found that 81.3% of child labour victims were boys. Other risk factors included coming from large families in rural areas and having parents with low education levels. Of note, The Ministry of Rural Transformation, Community Development, Labour and Local Government recently launched the Belize National Child Labour Policy and Strategy 2022-2025. The policy, which defines child as “a person under the age of eighteen years of age” calls for increasing the compulsory school age as well as minimum employment age to 16, addressing current legislative and information gaps to increase protection of children, and increasing compliance with labour laws. Reduction of existing barriers to education access and continuous attendance, including direct costs at secondary schools and ITVETs, and support for increased economic resilience of children and families, are necessary for the achievement of the policy.

1.4.3. Punitive school policies

In addition to low school compulsory age and employment age, school policies create another layer of barriers for some students. Many schools adopt policies that serve to deny students admission or prevent them from completing their education for academic, economic, or behavioral reasons. Among other responsibilities, Article 40 of the Education and Training Act provides the Managing Authority of schools with the responsibility for “the formulation of policies and internal regulations for the efficient and effective conduct of schooling, student discipline and behaviour, and student attire in accordance with Rules made under this Act.” The Rules, however, provide limited guidance on the development of school policies. Additionally, although the Rules call for District Education Councils to “review and make recommendations to the Chief Education Officer for the approval of rules and changes thereto for all government and government aided schools and institutions in the district,” in practice, this is rarely done. As a result, a wide range of school policies exist, some of which have come under legal scrutiny and litigation for violations of the Constitution of Belize.

Some policies limit participation from the point of admission by requiring certain academic or disciplinary criteria be met, in addition to the payment of fees mentioned earlier. Here are a few examples of high school admission policies:

Example 1:

- Complete & submit to the Accounts Office your Student Application and Recommendation forms.
- Provide evidence of good conduct and satisfactory academic performance through letters of recommendations from the principal and Standard VI/English/Math teacher of the appropriate primary or secondary school.

- All prospective applicants should have completed Std VI at primary school and have sat the Belize Primary School Examination.
- Attend an interview with the Academy's Principal and/or a team of faculty members if required to do so.
- Letters of Acceptance from the Principal's Office are sent to all qualifying students.
- Prospective applicants who applied but did not receive a Letter of Acceptance may request to be placed on the Academy's freshman class waiting list and may be accepted if a space becomes available.

Example 2:

- In order to be recognized for admission into XXX, a student must successfully complete primary school (STD VI) and likewise sat the Primary School Examination (PSE) obtaining a minimum average of 60%.
- Prospective applicants must complete and submit an Application for Admission form to the Principal's office no later than the last Friday in May within the same examination year along with their Standard V and VI report cards, a copy of their Birth Paper, a valid Social Security Card and a non-refundable application fee of \$10.00.
- Transferees are welcome providing that space is available. They should provide evidence of good conduct and satisfactory academic performance through letters of recommendation from the principal, school counsellor and homeroom teacher. The students and at least one of their parents/guardians should attend an interview with the Principal if required. (Bearing in mind that the school reserves the right to refuse admittance to any student who was dismissed because of misconduct or poor performance.)
- Letters of acceptance from the Principal's Office will be forwarded to all successful applicants.
- ALL students are required to register before the beginning of the new school year so as to secure their seat.
- Payment for fees is to be done at any Atlantic Bank branch. Parents/Guardian should present receipt to the school's business office to complete the registration process. Students are required to be accompanied by their parents/guardians for registration. A copy of the school rules, book list, badges and a sample of the school's uniform pattern will be made available to all new students.
- Students and parents of new intake including transferees must attend an orientation session in full XXX uniform prior to the commencement of classes to discuss school rules.

Prospective students will normally apply to one or two high schools seeking admission. As mentioned previously, there is no placement guarantee. Prospective students can be denied admission based on low grades or unfavorable recommendations from their primary school. Primary school graduates who are 15 years or older can enter trade programs at ITVETs. Some ITVETs also have prevocational programs for students who are between 13 and 15 years old. The only criteria are the age requirements and completion of primary school.

Once entry is gained, students must navigate several disciplinary and academic policies in order to remain in school. For example, all secondary schools and ITVETs require a uniform to be worn at school. Uniforms and other attire are detailed and strictly enforced. Here are a few examples of such policies:

Example 1:

Regular Uniform: These must be worn to and from school and to every official school function.

- White dress with short sleeves and a hem which extends below the knee
- Tie: colour of the class fastened with a school pin
- Socks: plain white, two inches above ankle bone to mid-calf
- Enclosed, black shoes

A student will not be allowed to enter her homeroom unless she has on the full uniform or if she has a uniform violation slip signed by the Dean of Discipline. Uniforms that are too short do not meet the requirements for being in uniform and the student will be required to lower the hem to the required length immediately and will receive a demerit...If a student reports to school out of uniform without a note, she will receive a demerit the first time and a demerit plus one hour of after school detention for each succeeding violation.

Example 2:

Personal Attire

- a. All students are required to be properly attired in school uniform for regular classes and at all designated official school functions.
- b. If a student must attend school/school functions without the required uniform or a component thereof, he/she must present a written note from parent/guardian and must be decently dressed.
- c. Students are NOT to play any games/sports or conduct agriculture practical while wearing their school uniform. They are to ensure the use of their Physical Education uniform and a T-shirt is worn for agriculture practical.
- d. Epaulets must be sewn on shoulder of shirts.
- e. A student, who shows up without proper uniform will, in the first and second instance, be excused on the strength of a legitimate note from parents. Thereafter the administration will intervene, communicate with parent (s) and make arrangements to resolve this issue as soon as possible.
- f. Students are not allowed to wear excessive jewelries. One chain, one ring, one bracelet, one pair of small earrings (girls) is allowed. No anklets nor chokers are allowed. Jewelries in excess of those mentioned will be confiscated and a minimum fine of \$5.00 will be charged to reclaim each piece of jewelry confiscated.
- g. Male students must be properly groomed, that is, beard must be neatly shaved/trimmed, hair neatly cut, of acceptable length, combed and without any mark, Mohawk or excessive style. They must not wear any earrings during regular school hours or during official school functions, if not it will be confiscated and the minimum fine above will be charged to reclaim each piece.
- h. Female students are not allowed to use acrylic or gel nails with or without colorful nail polish. Similarly, the use of colored lip gloss and any form of make up during school hours is not allowed. This includes excess beads in hair, hair dyes, and long extensions that do not match original hair color.
- i. No visible tattoos are encouraged/allowed. In a case where this may occur and the student is allowed to remain in school, the student will need to cover the tattoo with an acceptable apparel.

Secondary school policies normally also include prohibitions on attendance at clubs and dances and public displays of affection, both of which could result in suspension and expulsion from school. Another common policy in schools is exclusion of girls who become pregnant. Here are a couple of examples:

Example 1:

- a. A student who commits an abortion will be expelled immediately. If credible reports of a student surface regarding pregnancy and or abortion, the student is subject to a mandatory test that must be performed by a certified medical practitioner. Parents/Guardians will be invited to be present for such tests.
- b. Any student who becomes pregnant in the last semester of a school year will be allowed to complete all scholastic obligations leading up to promotion or obtaining her diploma. Attendance to school is restricted to where the pregnancy is not too noticeable and that the student is living with her parents.

Example 2:

- Any student who becomes pregnant while registered as a student may be excluded or expelled from school programs. This exclusion or expulsion, however, must be applied only after the entire case has been investigated.
- Any student who becomes pregnant while attending XXX may be allowed to finish her education at XXX, but the permission is not automatic. The consideration to re-admit a student after she has given birth to a child from a pregnancy will be at the discretion of the Principal in consultation with the XXX Board of Governors.
- A student who becomes pregnant must withdraw from school as soon as her condition is visible.
- A student who has had a child and is granted permission to return to school will attend several scheduled counseling sessions at least two weeks prior to the beginning of formal classes. Her name will be added to the counseling list and she will be required to attend counseling sessions periodically during the academic year.
- Individual consideration will be given to each student who becomes pregnant.
- A fourth former who is an expectant parent at the time of graduation will NOT be allowed to participate in the Graduation Exercises.
- Students who are parents are not allowed to bring their child to school or school functions.
- Students who are parents must not engage in continued intimate relations with the other parent.
- A student who becomes pregnant for the second time will not be allowed to return to XXX.
- A student who commits an abortion shall be expelled forthwith whenever the information surfaces provided that there is concrete proof of it.

Secondary schools use a demerit system with a certain number of demerits drawing a suspension and two or more suspensions resulting in expulsion from the institution. Suspensions usually involve a combination of exclusion from classes and engagement in some form of work on the school compound.

Academic performance is one of the most common reasons for expulsion from high schools. Students who fail to meet the minimum academic performance as stipulated in the policies of their school, are forced to either pay for and attend summer classes offered by the school, repeat an entire school year or are asked to withdraw. Here are examples of academic policies from two high schools:

Example 1:

- An academic failure is the result of not performing according to minimum norms and not applying reasonable effort. Students who fail the year at any level may be allowed to repeat that year in the first instance, provided that they have a good disciplinary record and there is evidence that they have made the necessary effort to pass. If the student fails a second time *in the same level*, she will be asked to withdraw.
- Repeating is NOT automatic. This matter needs to be discussed with the administrator. Students accompanied by parents/guardians must make an appointment to discuss repeating with the Principal.

Example 2:

A student may repeat twice during her/his time at our institution. The government of Belize will continue to pay tuition in full for a first-time repeater. If this student should fail again, the parent will be required to pay 35% of the cost to have her/his child repeat. For students in first and second form, the government of Belize does not pay subsidy for repeaters; thus, parents will need to cover this expense on their own once their child repeats.

Other punitive policies include financial charges for various violations such as unauthorized use of electronic devices and not wearing school identification cards. Students who are having financial difficulties keeping up with school expenses also face potential exclusion, usually in the form of withholding of report cards, diplomas, transcripts, and recommendations until arrears have been cleared.

1.5. Social and psychosocial pressures to leave school are pervasive

Belizean adolescents also face considerable social and psychosocial pressures to leave school early. Cohabitation or marriage at a young age is not widely discouraged and is even encouraged by some families as a means of reducing the financial burden of taking care of girls. In some communities. In addition to early marriage, many of Belize's adolescent population, especially boys in poor urban households are drawn into illicit activities and gangs, which keeps them from completing secondary education. High poverty and high crime rates also increase the prevalence of social and psychosocial issues that adolescents face, often with little support services available. Coupled with long-standing and deep-rooted stereotyping, stigma and discrimination, these pressures contribute to close to 10% of students dropping out of secondary school each year.

1.5.1. Social acceptance of early unions

While child labour is primarily a problem for boys' non-attendance in post-primary education, the practice of child marriage and early union has a greater impact on girls. The Marriage Amendment Act, 2005, establishes the legal age for marriage as 18 years of age; however, persons as young as 16 years of age can marry, with their parent's consent. The criminal code likewise sets the age of sexual consent at 16 years of age. In addition to child marriage, children and adolescents commonly engage in less formal and socially acceptable unions such as common-law marriages and visiting relationships. Results of the MICS 2015/16 showed that of persons 20-49 years of age, 29% of females and 16.3% of males had been in such relationships before the age of 18. Of the 15-19-year-old population, 20.8% of females and 10.7% of males reported that they were in marriages or other types of early unions at the time.

The highest rates of early unions for females 15-19 years of age were found among girls in Stann Creek, 35.6%; girls from the second lowest wealth index quintile, 30% (compared to 4.3% of those from the

highest wealth index quintile)’ and girls from Maya populations, 26.5%. Interestingly, while the rates of engagement in early unions decreases with increasing levels of education for females—26.1% of females with primary education, 19.6% with secondary education and 17.9% with post-secondary education compared to 8.1% of males with primary education, 10.5% with secondary education and 20.7% with post-secondary education. Early pregnancy is one of the direct impacts of early unions. Although adolescent fertility rates have declined significantly in recent years, from 97 per 1,000 girls in 2002 to 68 per 1,000 in 2019, the rate is still higher than the average of 61 for Latin America and the Caribbean (World Bank, 2022). A 2014 study conducted by the SIB on Sexual Behavior and HIV/AIDS reported on incidents of pregnancy resulting from sexual violence, cases where young girls and boys were pressured by parents to engage in sexual activities for economic benefits, and peer pressure and social norms that encourage engagement in early sexual activity, especially among males. The legal and social acceptance of both early unions and pregnancy contribute to lower participation in post-primary education.

1.5.2. Prevalence of violence and illicit activities

Belize ranks 47 out of 136 countries based on its crime index of 50.39 and is the country with the 7th highest homicide rate in the world at 37.8 murders per 100,000 population.¹³ Statistics from the Police Department for the year 2021 show a total of 883 major crimes in 2021, including 125 murders (up from 102 in 2020).¹⁴ There were also 249 shooting incidents and 234 firearm seizures. Drug-related crimes accounted for 908 arrests and included major drug busts for prohibited cannabis, cocaine and heroin. Most murder victims, 9 out of 10, were males and most were between the ages of 20-34. The Belizean criminal code also contains a number of offences such as vagrancy, carrying persons on handle bars of bikes, carrying gang paraphernalia, wearing gang insignia, burning rubbish and using threatening words, for which youth are prosecuted more often than adults. Gender-based violence, including domestic violence and rape are also common. According to the Belize Crime Observatory there were 859 domestic violence complaints in the first half of 2021 alone. Most victims are females between the ages of 18 and 45 years.¹⁵

The International Development Bank Belize City Community Gang Assessment (King, 2018) found a clear correlation between dropping out of school and joining a gang. The study reported that gang-involved individuals experienced high rates of school suspension, expulsion and drop-out, with 76% of gang-involved individuals dropping out of school at least once (King, 2018). The most common age range for first joining a gang was between 12-15 years old. Exposure to and involvement in violence and illicit activities may also lead to increased absenteeism and failure to acquire the literacy and other skills to remain in school or obtain a job. Stakeholders, including principals, teachers and students, who were consulted during the preparation of the RCA also confirmed that fear of being a victim of gang violence kept many students away from school. The inability of many youths to access secondary, higher and vocational education makes Belizean youth vulnerable to joining a gang and represses their long-term economic prospects. As a result, many remain trapped in a continuous cycle of poverty and violence.

¹³ Source: <https://worldpopulationreview.com/>

¹⁴ Source: <https://bco.gov.bz/crime-statistics/>

¹⁵ Source: https://bco.wimp.bz/file_directory/files/special_reports/202107InfoSeguraBelizeOnePagerAnalysis202106.pdf

1.5.3. Prevalence of unmet adolescent health needs

Parents and youth interviewed for the IDB Community Gang Assessment, cited several priority areas in which the support services are lacking: (1) mental health and grief counselling for trauma exposed youth, (2) socio-economic needs relating to nutrition, (3) lack of literacy programming and (4) lack of educational programs designed for at risk youth (King, 2018).

Adolescents face considerable challenges and their health is impacted by the environment in which they grow and develop. They are at risk of being exposed to the pervasive violence when they travel to and from school, frequent neighborhood shops, try to participate in sports, or spend time with friends. Survivors of fire-arm related injuries, including youth survivors may be at an increased risk of mental health conditions and substance use disorders. Exposure to such hostile environments lead to toxic stress and other mental conditions that can increase the rate of suicides, intentional and unintentional injuries. Suicide rates among adolescents aged 15-19 years has increased significantly in the past decade. According to Adolescent Health National Strategic Plan 2019-2030, 36% of attempted suicide are adolescents between ages 10-19. Ministry of Health administrative reports identify 3 causes related to mental health for the admission of adolescents: disorders due to psychoactive substance abuse, attempted suicide and mental health disorders due to anxiety and stress related disorders.

Adolescents experience rapid physical and psychosocial growth. This affects how they feel, think, make decisions and interact with the world around them. Despite being thought of as healthy stage of life, there is significant death, illness and injury in adolescent years. There is increasing research that proves that growing up amidst violence, poverty, chronic stress, or even chronic unpredictability affects the brains and bodies of children and adolescents in ways that can be permanent. These adverse childhood experiences put the body on high alert, engaging the flight-or-fight responses of the body in an ongoing way. This increases the risk of Post-Traumatic Stress Disorder, depression, anxiety and substance abuse.

Unfortunately, in Belize, there is a shortage of mental health professionals equipped to respond to psychosocial needs of students. Most primary schools do not have an assigned counsellor. Also, at the secondary level, where there is normally one school counselor for the entire student body, counselors are given teaching responsibilities which affects their abilities to act as frontline advocates in addressing the psycho-social concerns of the student body population. The school counselors from PDIA working groups indicated that the Education Amendment Rules 2012 have no clauses that reference “school counselor” as an official post within educational institutions (school counselors are hired under the status of Teacher with Counseling responsibilities).

This excerpt from the IDB Assessment underscores the need for accessible support programmes for high-risk youth as a means to disrupt youth participation in violence.

Youth grow up in a community that is full of violence and have many traumatic experiences. Mental health services such as grief and loss support and PTSD treatment are lacking. Youth with exposure to violence walk around angry. They witness a death in their family, are not given any support or coping strategies and feel that they need to retaliate. When we fail to address these issues, we are creating new shooters and new victims. (Adult service provider -IDB Community Gang Assessment, 2018)

Psychological stress also places stress on the body, increasing risk of childhood/adolescent obesity, heart disease, cancer, chronic diseases, pain, inflammation and may even shorten the lifespan. Obesity among children and adolescents is a growing problem, especially in areas where poverty and violence are highest. Such is the case in Southside Belize City where 9% of children are overweight-obese, the highest rate in the country.¹⁶ Poor families often lack knowledge about healthy diets and, even when available, healthy foods are more expensive than unhealthy items. Many Belizean homes also do not have sufficient space for children to play and move around, especially in poor neighborhoods where yards are usually occupied by several houses and extended families.

Food insecurity is an even more prevalent problem. A recent study, Prevalence of Food Insecurity in Belize-2021, by the Food and Agriculture Organization (FAO), found that a significant percentage of the Belize's population experiences moderate to severe food insecurity.

People experiencing moderate food insecurity face uncertainties about their ability to obtain food and have been forced to reduce, at times during the year, the quality and/or quantity of food they consume due to lack of money or other resources. It thus refers to a lack of consistent access to food, which diminishes dietary quality, disrupts normal eating patterns, and can have negative consequences for nutrition, health and well-being. People facing severe food insecurity, on the other hand, have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating, putting their health and well-being at grave risk. (FAO, 2021, p.3)

The study reported that 45.5% of Belizeans experienced moderate to severe food insecurity in 2021.¹⁷ Approximately 6% of the population fell into the severe food insecurity category. Unfortunately, there are very few free meals programs in schools. A 2020 survey conducted by the MoECST found that only 24% of primary schools and 22% of secondary schools have some form of free feeding program for students. These often consist of one meal per day and normally do not serve all students that are in need. Education is recognized as strong determinant of health but, clearly, health also influences educational attainment. The lack of access to food has a significant impact on education, as indicated in the following comment taken from the Out-Of-School Children Initiative Study, conducted in 2017:

"Sometime students are so poor they can't afford it. Many of the students come to school with no food, they come with their stomach empty. That is one of the reasons they get discouraged because you know when they must work and study with no food in the stomach it is so hard." (Secondary School Teacher in Toledo District)

The high level of poverty and violence and low level of psychosocial and economic support make it difficult for many students to persist through secondary and tertiary education. Social acceptance of alternatives other than school for adolescents also contributes to the problem. The end result is reduced numbers of persons with post-primary education available to the labour market.

¹⁶ Elsewhere in the country smaller towns are experiencing an increase. The childhood obesity rate in Cayo, Orange Walk and Toledo is 7%, Stann Creek is 6% and Corozal is 5%.

¹⁷ For comparison, the Latin American and Caribbean region prevalence rate for moderate to severe food insecurity was 40.9% and the World prevalence rate is 30.4%.

1.6 Incentives for persons with post-primary education to migrate are significant

According to the International Organization for migration, 15 percent of persons born in Belize currently live abroad and the majority of them live in the United States.¹⁸ Although information on the education profile of these immigrants is not readily available, it is likely that many of those who are migrating have some post-primary education, further reducing the availability of persons with post-primary education in the labor force. Several factors serve as drivers for this migration pattern: 1) the limited program offerings at the tertiary level, 2) opportunities for higher salaries and standard of living, and 3) inability to secure local employment in areas of study.

1.6.1 Limited program offerings at local institutions

The limited accessibility to programs due to geographic factors was already discussed in 1.2.2. This section presents a closer look at the availability of programs at the tertiary level, specifically programs at the undergraduate level or higher. Table 3 presents the programs that are available locally based on the International System for Classification of Education for areas of education and training (ISCED-F 2013).

Table 5 Availability of Undergraduate Programs at Local Tertiary Institutions

ISCED CODE	AREA	Available	Not Available
F01	Education	Teacher training without subject specialisation (Primary) Teacher training with subject specialisation (Biology, Business, English, Math, Science, Information Technology, Computer Science, Spanish Leadership)	Teacher training with subject specialisation (Early Childhood Education, Special Education, Curriculum and Instruction, Measurement and Evaluation)
F02	Arts and humanities	Humanities (History, Anthropology) Languages (English)	Arts (Audio-visual techniques and media production, Fashion, interior and industrial design, Fine arts, Handicrafts, Music and performing arts) Humanities (Religion and theology, Archaeology, Philosophy and ethics) Languages (Language acquisition, Literature and linguistics)

¹⁸ Source: <https://www.iom.int/countries/belize>

ISCED CODE	AREA	Available	Not Available
F03	Social sciences, journalism and information	Social and behavioural sciences (Economics)	Social and behavioural sciences (Political sciences and civics, Psychology, Sociology and cultural studies) Journalism and information (Journalism and reporting, Library, information and archival studies)
F04	Business, administration and law	Business and Administration (Management, Accounting Entrepreneurship, Finance, Marketing, Public Sector Management, International Business)	Business and administration (Taxation, Wholesale and retail sales) Law
F05	Natural sciences, mathematics and statistics	Biological and related sciences (Biology) Environment (Environmental sciences, Marine Biology, Natural Resource Management) Physical sciences (Chemistry) Mathematics and statistics (Mathematics, Statistics)	Biological and related sciences (Biochemistry) Physical sciences (Earth sciences)
F06	Information and Communication Technologies	Information and Communication Technologies (Information Technology, Computer Science)	Information and Communication Technologies (Database and network design and administration, software and applications development and analysis, Database and network design and administration, Software and applications development and analysis)

ISCED CODE	AREA	Available	Not Available
F07	Engineering, manufacturing and construction		Engineering and engineering trades (Chemical engineering and processes, Environmental protection technology, Electricity and energy, Electronics and automation, Mechanics and metal trades, Motor vehicles, ships and aircraft) Manufacturing and processing (Food processing, Materials, Textiles, Mining and extraction) Architecture and construction (Architecture and town planning, Building and civil engineering)
F08	Agriculture, forestry, fisheries and veterinary	Agriculture (Applied Agriculture, Veterinary Technology)	Agriculture (Horticulture) Forestry Fisheries
F09	Health and welfare	Health (Nursing, Medical Laboratory Science, Pharmacy) Welfare (Social Work)	Health (Dental studies, Medicine, therapy and rehabilitation, Traditional and complementary medicine and therapy) Welfare (Care of the elderly and of disabled adults, Child care and youth services, Counselling)

ISCED CODE	AREA	Available	Not Available
F10	Services	Personal services (Hospitality Management, Tourism Management) Security services (Criminal Justice)	Personal services (Domestic services, Hair and beauty services, Hotel, restaurants and catering, Sports, Travel and leisure) Hygiene and occupational health services (Community sanitation, Occupational health and safety) Security services (Military and defence, Protection of persons and property) Transport services

As can be observed, there is a diversity of programs available in areas such as Education, Business and administration and Natural sciences, mathematics and statistics but very limited offerings in other areas such as Arts and Humanities and Social Sciences, Journalism and Information. There are no programs in medicine, law, engineering, forestry or fisheries. Neither are there any available in Hygiene and Occupational Health nor Transport services. The result is that students who want to study in these fields, and can secure financial support to do so, must leave the country. Many of these students do not return after completing their studies, taking advantage of offers for scholarships to pursue higher degrees or to work in the country where they studied. Data from the World Bank indicate that, in 2018, there were 883 Belizean tertiary students studying in universities abroad.¹⁹ This number is equivalent to 9% of the 9,830 tertiary students that were enrolled in local institutions in the 2018/19 academic year. Even if half of those students do not return, it could result in a significant loss of human resources and reduced national capacity.

1.6.2 Opportunities for higher standard of living

Belize ranks 123rd in terms of the United Nations Human Development Index (HDI), a composite indicator that measures the overall level of health, education, and income of the world's economies. This places the country in the category of medium human development, however, the country's HDI has been falling consistently since 2016 mostly due to the struggling economy. According to the UN Human Development Reports (2022), Belize's Gross National Income (GNI) per Capita has fallen from US\$6,766 in constant PPP terms in 2016, to US\$6,309 at the end of 2021, a 6.8% decline over that time. In terms of the Gross Domestic Product (GDP) per Capita, the reduction over that period has been even worse, with the general populace being approximately 10.2% worse off compared to 2016. These metrics are commonly used for comparing the standard of living in different countries, with the HDI viewed as an optimal measurement of development, while income calculations are mostly used for financial considerations. The latter factors into wage differentials which is the main determinant of migrant workers that are deciding to leave their

¹⁹Source: <https://tradingeconomics.com/belize/total-outbound-internationally-mobile-tertiary-students-studying-abroad-all-countries-both-sexes-number-wb-data.html>

countries. The possibility of being able to earn higher salaries contributes to the reduced availability of people in the labor force with post-primary education in Belize.

Income differentials are large between Belize and other, more developed countries in the world with the country ranking 129th in GNI according to the United Nations rankings in 2022. The country with the highest GNI, Liechtenstein, has a per capita measure of US\$146,830, more than 23 times that of Belize. When reviewing the countries that Belizean migrants usually target like the United States, Canada, and the United Kingdom, the GNI difference is still significant with the countries having income levels of US\$64,765, US\$46,808, and US\$45,225 respectively (UN HDI, 2022). Most Belizean migrants are in the United States, which had a salary per full-time worker of approximately US\$71,456.00 at the end of 2020 (US Bureau of Labor Statistics, 2022) when compared to an average annual income of \$7,009 in Belize during the same period. Individuals with high school education in Belize make an average income of just above US\$6,847 per annum when compared to US\$37,488 (Calculated based on US BLS weekly income data) in the United States, a difference of about five times in salary for the same qualifications. Potential migrants have the incentive to leave Belize and enter a country like the United States when the opportunity presents itself, as all categories of jobs present a better opportunity than what is available at home.

The incentives for Belizeans to migrate go beyond the potential to earn higher salaries. HDI measures health in terms of life expectancy which is the result of various elements of well-being throughout one's life including nutrition, disease resistance, and healthcare provision available in the country among others. At the end of 2021, the life expectancy in Belize was 70.5 years old, while countries with "Very High" levels of human development averaged approximately 78.7 years. This category includes the countries that would be the target for migrants from Belize and are indicative of the fact that in those nations, one would have better opportunities to be more physically and mentally well-off. Additionally, by measuring the level of education in the various countries by expected years of schooling and average years of schooling, Belize is behind the more developed nations as well. The countries that are in the Very High and High Human Development in the HDI ranking average approximately 15.3 years of expected schooling at birth, in comparison to 13.0, while those same nations provide 11.0 years of schooling on average to their population while Belize lags at 8.8 years.

Improvements in education and health have a positive developmental impact on countries overall, as the citizens that benefit from this system can earn higher wages, make strides in nutrition and exercise, and are able to afford a higher standard of living. The more developed nations provide much better opportunities than Belize in terms of healthcare, education, and income which would make it more difficult for potential migrants to pass up the opportunity to leave for a 'better' life in these nations. While it may take considerable time for Belize to reach a high level of development, the Government of Belize has nonetheless acknowledged the need for attracting skilled Belizean nationals back into the country. The Belize National Investment Policy and Strategy (2022) includes plans for development of a Skilled Talent Diaspora Program which will include developing an updated database of nationals studying or working abroad and providing those with desired skills with set of incentives, concessions and exemptions to return home.

1.6.3 Difficulties securing employment in field of study

A recent diagnosis of the tertiary sector conducted by the MoECST found that approximately 12% of tertiary graduates who were unemployed indicated that it was due to limited opportunities in their field of study (Pech and Gideon, 2020). Researchers, industry, and educational stakeholders have attested to

the mismatch between the occupations available in the economy and what is being taught in the education sector in the country. The IDB (2020) noted that there is a skills gap in the Belizean economy given the growth in the importance of the services sector in the economy, and businesses trying to move on to 'basic and advanced IT skills, critical thinking skill, and socioemotional skills', which have not been the focus of the education sector in the past. The Belize Chamber of Commerce in conjunction with the ILO (2018) also elaborated that the 'policy focus on enrollment, higher completion rates, and stronger performance on standardized tests are necessary conditions; however, may not be sufficient if upon graduation at any level of schooling, employers find that hires are lacking in requisite technical and soft skills relevant for their industries'. The education and skill mismatch has resulted in a general increase in the number of unemployed individuals with post-primary education in Belize and has resulted in their migration as well.

Between 2009 and 2019, there was a general shift in the economy with the primary and secondary activities falling in importance from 30.9% of GDP to 23.7%, while the services sector simultaneously increased by about six percent of GDP (SIB, 2022). This move from a reliance on the relatively basic skills needed for growing crops, fishing, and manufacturing food products among other activities to the services industries meant that there would need for more soft skills and digital analytic capabilities in the workforce. IDB (2020) states that the communication of these priorities by the industry participants to the school system has not been effective because the avenues through which this is done are unsystematic and has resulted in a failure to implement the required changes. Even in institutions built for versatility and short-term training in nature, the ITVETs, have had issues keeping up with the changing demand. A few centers are doing better than others in gauging the needs of the industries. For example, the Cayo CET conducted a Labor Market Assessment (2021), which helped them to determine industry needs in their district and provided recommendations to improve their capacity to meet the demands. However, this is not a common practice and the results have been shown in the Labor Force Statistics.

In the time between 2013 and 2021, there's been a general increase in the unemployment levels in the Belizean economy, by 0.4% with that of males increasing at a faster rate (2.4%) than in females (1.8%). A deeper dive into the figures show that there is a larger increase (5.4%) in unemployment in the categories of individuals that have high school degrees or higher qualifications, while unemployment has been declining (-2.7%) in those that hold a primary school certificate or no qualifications at all. Furthermore, the rate of increase in unemployment levels among men and women has been relatively equivalent in the former field, though female unemployment levels are moving from a higher base. During 2021, there were more women that were unemployed at the higher levels of education at 6,991 than males at 3,084. These individuals with at least a high school diploma would more likely seek better wage opportunities abroad in more developed countries. In 2013, a Canadian company (ACTYL) conducted a recruitment exercise in the country which required at least a high school degree and received hundreds of applications to work for McDonald's and other fast-food chains for US\$10.00 an hour. This exhibited that the demand for jobs among individuals with high school diplomas and above was significant at that time, and the situation has not been getting any better over the years. Outward migration may be the key for individuals that haven't had the opportunity to get jobs in Belize because the education sector has not been providing them with the skills necessary to work in our markets.

Another aspect of the difficulty experienced by some skilled persons in securing employment in their field of study is the issue of persons who pursue specialized fields abroad and are not able to find employment on their return to Belize. There are numerous factors influencing this occurrence: (1) lack of proper career counselling, resulting in persons pursuing fields that are not aligned to the needs of the local labour market; (2) lack of recognition or appreciation by employers for new or emerging skills and fields; (3)

bureaucratic processes for establishment of posts in the public sector; and (4) political interference in the recruitment and selection of employees. Belizeans who study abroad also tend to do so through full or partial loans secured by their parents or other family members. If they are unable to secure employment at home with sufficient pay to cover their expenses and repay loans, they are likely to seek higher salaries elsewhere.

2. Post-primary graduates do not sufficiently acquire the knowledge, skills, values and attitudes needed by the labour market

This section of the RCA presents findings on the root causes and contributing factors for post-primary graduates not acquiring the knowledge, skills, values and attitudes needed by the labour market are presented below. Particular attention is given to the core components of an education system. These include the curriculum, which sets the foundation for the types of knowledge, skills, values and attitudes that are developed and the delivery of that curriculum through teaching practices that may or may not result in the desired level of student learning. These results can be impacted by the appropriateness of the curriculum itself, the level of preparation of students to engage in post-primary education and the competence of teachers to effectively guide learning in diverse settings. In addition to curriculum, teaching and learning, the appropriateness of the learning environment and the level of monitoring, support and accountability present to support the delivery of quality education are also considered.

2.1 Post-primary programs do not sufficiently align to labour market needs

There is no system in place currently to track labour market needs or the extent to which these needs are being met by the output of the education system. Nonetheless, recent studies indicate that there is a significant skills mismatch between the programs offered by post-primary institutions and the skills desired by employers. Skills gaps can result in lower productivity and higher unemployment rates, both of which reduce economic growth. Six root causes of this mismatch have been identified: 1) Insufficient alignment with the types and levels of skills required by the labour market, 2) Low student enrolment in high priority areas, 3) Insufficient attention to the development of transversal skills, 4) Limited meaningful engagement in practical and experiential learning, 5) Insufficient communication and collaboration with employers, and 6) Insufficient collection and use of labour market information.

2.1.1 Insufficient coverage of technical skills needed by the labour market

The National Investment Policy and Strategy, 2022, identifies six priority sectors that are key for Belize's current and future economic growth:

- Tourism and Leisure, including medical, cultural, nature-based, sun and beach, cruise and nautical and leisure/entertainment
- Agriculture, Agribusiness and Agro-processing
- Marine fisheries and aquaculture, blue economy
- Light Manufacturing
- Sustainable renewable energy, bio-fuels, and green infrastructures
- Information Technology and export services, including business process outsourcing (BPO), professional services, real estate, logistics, and Internet and communication services.

(NIPS, 2022, p.13)

Post-primary institutions do not offer courses and programs in many of the fields of study related to the sectors identified in the NIPS and where they do, two primary limitations are often present: 1) programs are only accessible at a few institutions, and 2) programs are offered at a level below what is required for competence in the field. Many of the identified priority growth areas call for some degree of technical skills, however very few formal training programs are available in these areas. For example, post-secondary degree programs in the area of engineering (building, civil, and electrical) are available at one tertiary institution in Belize City and only at the Associate degree level. Programs that support large economic sectors, such as Tourism, Agriculture, and the emerging field of Information and Communications Technology (ICT), are also not widely available, do not cover important skills required by employers, or are offered below the desired level of competency.

Data from the MoECST show that roughly half (52%) of government and government-aided high schools, including 12 of 18 government schools, offer an agriculture-related subject. These include agriculture studies, agriculture science, animal and crop science, and ornamental horticulture. There are two government high schools that specialize in Agriculture—the Agriculture and Natural Resource Institute in Stann Creek and the Belize High School of Agriculture in Orange Walk. All high schools offer some type of technology subject, either as required courses in the lower secondary level or as options in the final two years of studies. These courses are typically fundamental computer literacy courses or information technology courses covering software applications; however, a couple of schools have ventured into more advanced or specialized courses such as graphic design, systems analysis, and robotics. Around 58% of all government and government-aided schools, including all government schools, except for two institutions, also offer studies in areas that support the construction and manufacturing sectors. Subjects include building construction, woodwork, metal work/welding, electrical engineering, plumbing, and sewing, clothing and textiles. The area least covered by current secondary curriculum is tourism. Only 12 high schools, including four government schools, reported having a course in the area of tourism or hospitality. Only one ACE program currently incorporates technical course options in their program.

Except for the Orange Walk ITVET, all ITVETs offer one or two programs in tourism-related fields. Programs include hospitality, food preparation, and front office management. Only two ITVETs, Toledo and Corozal, offer an agriculture-related trade, agriculture and horticulture respectively, and only Orange Walk ITVET has programs in ICT, offering Computer Systems Repairs, Programming, and Web Design. Except for Cayo CET, which offers Level 2 programs in Front Office Management and Hospitality, and Orange Walk ITVET, which offers a Level 2 program in Computer Systems Repair, all other programs offered in the identified areas of Tourism, Agriculture, and Information Technology are at Level 1. Level 1 programs are designed to produce entry-level workers who require direct supervision; however, employers have expressed the need for workers with at least a Level 2 competency (Gideon and Pech, 2019).

At the tertiary level, Associate degree programs in Tourism are offered by six junior colleges (Corozal and Muffles in the north, Independence and Ecumenical in the south, San Pedro in the east and, Sacred Heart in the west). At the bachelor's degree level, Galen University has a degree in Hospitality and Tourism and the University of Belize offers one in Hospitality Management and another in Tourism Management. Only three junior colleges—Belize Adventist and Centro Escolar Mexico in Corozal and Independence in Stann Creek—offer Agriculture-related programs, in each case agribusiness. Students can also access Associate degrees in Agriculture and Applied Agriculture, but only at the Central Farm Campus of the University of Belize in Cayo. UB now offers a bachelor's degree in Applied Agriculture as well. Associate degree programs in Information Technology are more readily available, being offered by the University of Belize at its Belmopan campus and seven of the eleven junior colleges—Corozal, Belize Adventist, and Centro Escolar Mexico in the Corozal District; Wesley and St. John's in the Belize District; Sacred Heart in Cayo;

and Independence in Stann Creek. At the bachelor's degree level, the University of Belize offers a bachelor's degree in Information Technology and Galen offers a bachelor's degree in Computer Science.

The International Labour Organization's International Standard Classification of Occupations (ISCO-08) classifies most jobs in the ICT area as Skill Level 4. This means that the formal level of education required for competent performance of the tasks and duties involved is a bachelor's degree. Most typical jobs in Agriculture and Tourism require lower-level skills. For example, elementary occupations such as agricultural laborers and food preparation assistants only require a Skill Level 1 or primary level education; however, skilled agricultural, forestry and fisheries workers and personal service workers in the Tourism sector require at least some secondary or post-secondary education, Skill Level 2. Other service and sale workers, plant and machine operators and assemblers, craft and related trade workers, and clerical support workers are also classified at Skill Level 2. As mentioned previously, Belize has a large portion of its workers at Skill Level 1, the small number of persons available to the market with Skill Level 2 qualifications, however, could be a constraint to growth in these sectors. Notably, in addition to the ICT occupations, most service sector jobs, such as technicians, associate professionals and hospitality and retail services managers require a Skill Level 3, an Associate degree, while senior managers, officials and professionals require a Skill Level 4, Bachelor's degree and above.

Increasing the number of persons with higher level formal qualifications is only part of the problem. The education system also needs to make sure that persons with these qualifications have the technical skills to competently perform required duties and tasks. The Belize Chamber of Commerce and Industry (BCCI) conducted a series of skills gap analysis in 2018 and 2019 to determine the match between the content of programs offered by local institutions and those that employers in the Agriculture, Fisheries, Information and Communications Technology, Agro (Food) processing, and Tourism sectors.²⁰

In the Agriculture sector, the analysis (BCCI, 2018) determined that programs being offered by the two secondary institutions specializing in agriculture provide proper coverage in most areas related to gardening, horticulture, trees and shrub crops, and field and vegetable crops. Coverage of skills in poultry, livestock and dairy production was also high, with only a few areas with incomplete or no coverage of important skills. The areas that have the least coverage were mixed crop growing and apiculture (beekeeping) and sericulture (silk farming). Skills required in the fisheries and blue economy sector were largely not covered; these include deep sea fishing, inland and coastal fisheries, and aquaculture. There are no formal programs available in Agro (food) processing at post-primary institutions.

Despite the challenges facing the agricultural economy, it offers significant potential to reduce overdependence on tourism through investments that could sectors with high potential competitiveness such as agro-processing, beef cattle, poultry, eggs, pork, beans, rice, corn, soybeans, sorghum, papaya, peppers, cassava, plantains, peanuts, onions, coconuts, tree nuts, coffee, and aquaculture. This could also improve performance even in the better developed sugar, citrus, banana, and cocoa sectors. The shortage of programs and consequent lack of human capital in this area affects the agricultural economy in production, marketing, accessing finance, maintaining product standards, and in other business activities. It also undermines the ability of actors in the sector the benefit from innovation, reduces market connectivity, and undermines the ability to adapt to climate change – which is an especially severe problem in Belize.

²⁰ It is important to note that the BCCI analyses focused only on the coverage of relevant topics and skills in the curriculum and not to the quality of the content or its delivery.

In the ICT sector, IT programs at the bachelor's degree level were analyzed both at the University of Belize and Galen University. The skills gap analysis determined that programs covered skills associated with system analysis, applications programming and database design, and administration to a large extent; however, there was incomplete coverage of many of the key skills related to software development, networking, and web and multimedia development.

The analysis of the Tourism sector (BCCI, 2019) found a close match between the skills covered by tourism and hospitality programs at ITVETs, Belize Training and Employment Center (BTEC), and the University of Belize and those identified as important by employers. Job areas with moderately low to no significant gaps include waiters, domestic housekeepers, tour guides, hotel managers, cleaners, and bartenders. Jobs with moderately high gaps were restaurant workers and cooks. In the case of restaurant workers, the least covered skill was taking reservations and orders and greeting guests. Cooks had the highest mismatch of any of the analyzed jobs in the tourism sector. Very wide gaps were identified in planning, supervising, and coordinating the work of kitchen helpers and operating large-volume cooking equipment such as grills and deep-fat fryers and many other areas were deemed to have moderately wide gaps.

Results from a 2010 World Bank study of employers suggest that Belize's inadequately trained workforce may be impacting the manufacturing sector most. While 24% of service sector employers agreed that inadequate training was a major constraint in that sector; 40.5% of manufacturers agreed with the statement. Likewise, 29.4% of manufacturing firms reported that they offered training to their employees compared to only 10% of service sector firms. As noted previously, unemployment rates are higher for workers with secondary education than for those with primary education. It is likely, as suggested by the BCCI, that this may be a case of "waiting unemployment" as many of those unemployed indicated that they were expecting jobs in the service sector. Another issue could be that those with secondary education cannot access available jobs in the manufacturing sector because despite having the required level of education, such as a high school diploma, they do not possess the skills set needed by that sector.

The foregoing discussion highlights the need for post-primary institutions to provide two types of graduates, those who are able to access the labour market immediately after graduation and those who can move on to further studies, either at an ITVET, or more commonly, at a junior college or university. Therefore, post-primary education programs must be designed with these objectives in mind, preparing graduates with the skills to perform competently at Skill Level 2 and providing them with the foundation for further studies to access jobs where the Skill Level 3 and 4 are needed.

2.1.2 Low student enrolment in high priority areas

The foregoing discussion shows that, while there are some important gaps that need to be filled, post-primary institutions do offer programs that cover some of the content and skills required by high priority sectors. The typically low enrolment in such programs, however, further contributes to the lack of available skills in the labour market. At the secondary education level, government high schools tend to offer the widest range of technical and vocational subjects, however, they account for only 38% of student enrolment (MoECST, 2022). The low enrolment in ITVETs has already been discussed but a closer look at enrolment figures reveals that a large percentage of trainees are enrolled in prevocational, not trade, programs. For example, in the 2021-22 academic year, almost one out of every four trainees were enrolled in prevocational programs and enrolment in trade programs were as low as two trainees at three different institutions (BEMIS, 2021-22).

At the tertiary level, the most subscribed program by far, both at the associate and bachelor's degree levels, is Business. Business graduates made up 44% of the 2,111 graduates from local tertiary institutions in 2021, followed by natural science graduates, 14%, and teacher education graduates, 10%. Areas cited as high priority areas for economic growth have lower enrolments and graduates. For example, only 6% of 2021 graduates earned degrees in Agriculture, 6% in Information and Communications Technology, and 3% in Engineering. All STEM fields combined accounted for 29% of graduates. Notably, while 44% of male graduates earned degrees in STEM fields only 21% of female graduates did so.

The reasons for the low enrolment in high priority areas has not yet been fully examined, but there are likely multiple contributing factors. In addition to the gender stereotypes discussed earlier, the following factors may be influencing students' program choice:

- lack of awareness among students, teachers, and parents of the potential employment benefits
- institutional limitations on cohort sizes due to limited availability of human or material resources
- limited exposure of students to relevant subjects at lower levels of education
- Poor academic preparation, particularly in Mathematics
- Early streaming of students at the secondary level, which locks them into a particular pathway at an early age
- Admission criteria used by tertiary institutions, which limits program selection

Another contributing factor to the low number of graduates from priority fields is the low completion rates in all post-primary sectors. In 2020, 6.1% of students enrolled at the start of the school year dropped out of high school. Males dropped out at a rate of 7.3% and females at a rate of 4.9%. Dropout rates for the previous four years ranged from 3.3% to 5.7%, with a similar pattern of males having higher rates than females each year. Repetition rates at the secondary level are also high. In 2021, 10.4% of enrolled students were repeating their grade, 12.5% of male students and 8.4% of female students. Repetition is a major risk factor for school dropout.

Completion rates for students in ITVETs, ACE, and tertiary institutions is also concerning. Estimates for average on-time completion rates are 50% for the tertiary education sector (Pech and Gideon, 2020), 54% for TVET sector (Gideon and Pech, 2019) and 30% for ACE (Gideon and Pech, 2022). One of the major contributing factors for low completion rates at the tertiary level may be curriculum overload. Associate degree programs normally require between 72 and 80 credit hours to complete and undergraduate degrees are generally in the 150-160 credit hour range. These are well above the international standard of 60 and 120 credits hours for associate and undergraduate degrees respectively. The overload creates additional expenses and academic pressures on students, both of which could result in increased completion time and even dropout. Findings from these various studies on these sectors also indicate that students tend to drop out rather than repeat.

2.1.3 Insufficient attention to transversal skills

Recent studies with employers confirm that in addition to, and perhaps equally important to having technical skills, is the need for transversal skills. UNESCO IBE (2013) defines transversal skills as “skills that are typically considered as not specifically related to a particular job, task, academic discipline or area of knowledge and that can be used in a wide variety of situations and work settings.” Digital abilities are key in an increasingly data-driven future, in which the demand for workers with digital abilities will likely grow. Employers in a variety of industries mentioned information technology (IT) skills as among the most important technical skills that a worker in their firm should have. IT is often used by employers as an

umbrella concept that encompasses basic digital skills such as computer literacy and “tech savviness,” as well as highly specific and technical skills such as system management or computer maintenance. Other technical abilities demanded by employers include a range of hard or job-specific abilities, such as financial management skills and agrobusiness skills. Both technical and soft skills are identified by employers as key to developing new plans in their business, including future expansion.

In one recent study involving Belize’s major employers (IDB, 2020), the skills most in demand by employers were identified as follows:

- Teamwork
- Social skills
- Communication
- Responsibility
- Digital abilities

A similar study (Garbutt, 2021) conducted with employers in southern Belize, representing all three economic sectors, concluded that the following skills were most important to employers:

- Teamwork and interpersonal skills
- Information technology
- Original and strategic thinking
- Managerial and leadership skills

Transversal skills are commonly mentioned in the mission and vision statements, graduate profiles, course objectives and program outcomes of post-primary institutions. Below are a couple of examples.

Example 1:

In the next five years the XXX is dedicated to fostering Belize’s development by producing graduates who are socially and ecologically responsible, analytical, self-confident, disciplined, ethical, entrepreneurial, and skilled communicators and who are committed to using these skills and values for Belize’s enrichment.

Example 2:

Commercial Food Preparation Cooking level 1 will introduce trainees into the world of the Food and Beverage industry. Trainees will gain a good understanding of basic food preparation knowledge, skills, and techniques to meet the demands of the Hospitality Industry standards. Trainees will participate in hands-on practical sessions to develop their culinary/cooking skills by preparing a variety of local and international dishes; designing menus, costing dishes, understanding food safety. They will be instructed on the proper use and care of many kitchen tools and equipment needed in all kitchen operations. Trainees will also be engaged in developing their soft skills such as working in teams, proper communication skills, good work attitude, values, and ethics.

Clearly, post-primary institutions appreciate the importance of transversal skills; however, institutions do not put mechanisms in place to ensure that these skills are sufficiently developed by students. Institution-wide mechanisms to assess the extent to which these skills have been developed are lacking. The focus is on assessment of content knowledge or technical skills with little targeted or strategic attention to

assessment of soft skills. For example, although most high schools offer a life skills course at the lower secondary level, these courses are often non-credit, un-graded, and therefore not taken seriously by students or institutions.

Post-primary programs, particularly at the secondary and tertiary levels, are largely theoretical, with overloaded content. This environment makes deep learning and the development of transversal skills, such as reflective practice and critical thinking, difficult. It creates a situation where teachers are constantly racing to cover and assess content and students are trying to keep up.

2.1.4 Insufficient practical and experiential learning

All trade programs at ITVETs have an internship component, commonly referred to as on-the-job-training (OJT). Requirements for OJT vary among ITVETs but usually require trainees to engage with a place of work for one to two months towards the end of their training cycle.

Example 1:

On-The-Job Training (O-J-T)

To receive Certification, each trainee must participate in a mandatory eight-week on-the-job training session. This training occurs at a Business or Industry related to the Trainee's area of Study and will require an all-day work shift. No salary is required to be paid by the industry partner to the trainee for the O-J-T duration. Failure to perform required tasks to Centre Standards and those of the business or industry will result in loss of Certification.

Job Placement for employment

The Main Program Instructor and the Registrar will assist each Trainee in identifying a job placement for their O-J-T requirement, which best suits their individual abilities, skills, and personal circumstances to secure employment successfully.

Example 2:

Upon completion of the entire trade and support subject curriculums, and in order to receive certification, each trainee is required to participate in a mandatory four week On The Job Training session. This training occurs in a business or industry related to the Trainee's area of study and will require an all day work shift. Failure of trainee to perform required tasks to the institute's standard and those of the business or industry will result in loss of certification.

Although TVET graduates rate their OJT experience positively, in terms of its usefulness and relevance to the training they received (Gideon and Pech, 2019), the timing and duration of internships is a quality concern. Preparation for internships should start at the institution, however, according to the TVET diagnostic report (Gideon and Pech, 2019), both instructors and trainees need more exposure and practice in use of relevant equipment. Additionally, it appears that instructors often do not have sufficient knowledge of the practices and equipment in use at the businesses where they place interns.

Some institutions are now providing trainees with earlier industry exposure through an additional mechanism called industry attachments. This involves, in some instances, trainees being placed for two-day stints with a business within their community to practice skills learned during the training cycle. The young age and inexperience of trainees also create challenges, as employers are sometimes reluctant to

take on trainees for fear of potential injuries or damage to equipment (Gideon and Pech, 2019). At one ITVET, the decision was made to have Level 1 trainees perform their OJT on campus; only Level 2 trainees are allowed to do an external OTJ.

Some tertiary and secondary institutions also have students engage in internships, but only for selected programs and groups of students. These internships range from as little as two weeks at the secondary level to an entire semester or more for some programs at the tertiary level. Among tertiary level graduates interviewed for the tertiary sector diagnosis, 19% of those who were unemployed believed that it was because of their lack of experience (Pech and Gideon, 2020). Internships and other types of experiential learning built into programs would provide graduates who are new to the labour market with some experience to report.

Clearly, internships can be a valuable tool for building skills and preparing students for the labour market. Despite its prevalence, however, the practice remains largely unstructured, and the objectives are often unclear to employers and interns (IDB, 2020). Current internship practices also fall short of the key features of a quality apprenticeship program, which, according to the ILO's quality framework (ILO, 2019, pp. 7-8) would include the following components:

- a tripartite system of governance
- remuneration
- a written agreement
- social security coverage
- a legal framework
- a programme of learning
- both on-the-job and off-the-job learning
- formal assessment
- a recognized qualification

2.1.5 Insufficient collaboration with employers

Although there is some interaction between employers and training institutions, as evidenced by the foregoing discussion on internships, communication and collaboration remains limited, sporadic and unstructured (IDB, 2020). For example, one employer described the lack of communication as follows:

“A major challenge in the collaboration between the schools and the private sector is that the teachers in the schools don’t have any idea exactly what the business does where they send a student to on internship. For example, if the student studying food preparation is sent to the Radisson Hotel in Belize City, the teacher must know what dishes the Radisson prepares. What happens instead is that students go to resorts and they find it very different to what they learn at school, much higher than the level they are learning. They don’t know what the resort does beforehand. The teacher must visit the resort beforehand to understand the workings of the operation and get an idea of the types of food that is served there.”

(Interview with Restaurant Manager, date)

The result is that although almost half (48%) of Belize's employment firms report offering internships, neither interns nor employers get maximum benefits from the internship experience (IDB, 2020). There is no evidence to support the systematic or regular use of results from internships for any other purpose other than to determine whether interns met the minimum criteria for passing the internship.

Other common areas of interaction between training institutions and employment firms include firms contacting training institutions to request information on graduates to fill job openings (46%) and firms contacting training institutions to request specific training programs for their employees (38%). Thirty-nine percent of firms indicated that they have been contacted by institutions to provide feedback on graduates and 41% reported that they have been asked about their training needs, though sporadically. Likewise, only 27% of post-primary training institutions report having collected information from the private sector to identify skill needs. The information once collected, has not been shared among institutions (IDB, 2020).

There is also insufficient engagement between training institutions and employers in critical areas such as program development, program delivery, and skills assessment. There are no skills councils or other similar bodies in place to monitor the content and delivery of training programs. One of the major challenges to Belize adopting the Caribbean Vocational Qualifications scheme is the absence of trained external (industry) verifiers. Only 8% of firms have offered employees as instructors for training programs (IDB, 2020). The result is that curricula and programs at post-primary institutions are outdated and inadequate for preparing students to enter the workforce. The reasons for the lack of communication and collaboration between training institutions and employers, despite the acknowledgement of the importance of such interactions by both parties, are unclear.

2.2 Teaching is not sufficiently effective

Although personal and family factors tend to have the greatest impact on student achievement, research has shown that effective teaching practices can overcome such factors and reduce the achievement gap, for example, between students from low and high socio-economic backgrounds. Unfortunately, the dramatic increase in the percentage of trained teachers in Belize over the last two decades does not appear to have had a significant impact on student learning, at least as measured by examination results. Some of the most important factors which may be contributing to the problem are the low requirements for entry into the profession, the inadequate preparation and development of teachers and the lack of proper teacher supervision, appraisal and reward systems. Each of these factors is discussed below.

2.2.1 Low entry into profession requirements

Article 28 of the Belize Education and Training Act, 2010, stipulates that persons wishing to teach in an educational institution at the preprimary, primary, secondary and TVET levels in Belize must apply to the Chief Education Officer for an appropriate license to teach. Article 29 instructs further that “A person who does not possess a valid license to teach shall not be employed as a teacher.” Several forms of licenses are available, including provisional licenses, full licenses, special licenses and various types of teaching permits. The Education Amendment Rules, 2012, specifies the requirements for each type of license. General requirements for licenses include having “a good command of the English language for effective communication in the classroom,” demonstrating “personal and behavioural qualities to be a positive role model to students,” and meeting the prescribed “requirements for academic and professional qualification necessary to obtain a license to teach.” Provisions for full licenses state that persons must have the “necessary level of academic qualification in the subject area to ensure subject-matter competence for effective teaching at the specified level” and “have the necessary professional qualifications in the field of education” to effectively plan lessons, manage classrooms and teach, assess, and guide students.

These regulations are meant to ensure a quality teaching staff is provided in all schools; however, they fall short in terms of both standards and mechanisms for verifying the extent to which candidates for entry into the teaching profession meet the established criteria. For example, there is no English language or content knowledge tests as part of the requirements for licensing. Rather, persons possessing the required academic qualifications from a recognized tertiary institution are assumed to have acquired such knowledge and skills. There is also inadequate external validation of professional (teaching) competence. The Belize Board of Teacher Education (BBTE) conducts an external assessment of each student teacher enrolled in pre-primary and primary training program at the end of their internships; however, this assessment is comprised of a single lesson observation. Furthermore, scores from this assessment are combined with scores from other internship elements such as the teaching portfolio. The result is that a teacher can obtain overall passing score despite low performance on the external assessment. Although the legislation allows for it, there is no external assessment by the BBTE of student teachers in secondary level and TVET programs.

Standards for academic and professional qualifications for provisional licenses are also extremely low. For example, persons with a high school diploma and no teacher training or experience can obtain a provisional license, valid for up to five years, to teach at the pre-primary and primary levels. Likewise, persons with Associate degrees and no teacher professional qualifications or experience can qualify for a 5-year provisional license to teach at a secondary or TVET institution. Until recently, it was possible for teachers on provisional licenses to remain untrained for the full duration of their provisional licenses and to apply for a further extension of up to three years through a special permit. The MoECST now requires those with provisional licenses to enroll in appropriate teacher education programs and to provide proof of progress towards completing training. Special licenses may also be issued to persons with lower academic and professional qualifications in instances where the Chief Education Officer is satisfied that the availability of persons with the required level or type of qualifications is limited. Areas where special licenses are common include Physical Education, Arts, and STEM fields.

Academic qualifications for full licenses are also relatively low compared to requirements in more developed countries. Full licenses at the pre-primary, primary and TVET levels require only an Associate degree and those for the secondary level require only a Bachelor's degree. Still a significant percentage of teachers remain untrained and therefore do not meet the requirements for a full license. The primary level has the highest percentage of "trained teachers" at 88.2%, followed by pre-primary at 71.3 % and secondary at 69.1% (MoECST, 2021). Among ITVET instructors, 60% have less than a Bachelor's level qualification and most have not completed a Competency-based Education and Training (CBET) program required for full licenses at that level (Gideon and Pech, 2020). The Education Act does not make provisions for licensing at the tertiary level and so this is not a requirement for tertiary education faculty. There are also no established standards for academic qualifications at the tertiary level, with faculty teaching with qualifications that are the same or just one level above those of their students. For example, among junior college faculty teaching in Associate degree programs, 55% have a Bachelor's degree; at the university level which offer mostly Associate and Bachelor level programs and a few Master's degree programs, 17% of teaching faculty hold only a Bachelor's degree, roughly half, 49.6%, have a Master's degree and only 13% have a doctorate (Pech and Gideon, 2020).

2.2.2. Inadequate teacher preparation and development

Although significant gains have been made in increasing the percentage of trained teachers at the basic education levels, the quality of the output of such programs have come under scrutiny. Reasons for this poor output appear to be related to poor quality teacher educators, an inadequate teacher education

curriculum, insufficient availability of teaching and learning resources and poor quality of counselling and guidance and mentoring during internships. A recent evaluation of the Associate of Arts Degree in Primary Education (Thompson et al, 2019) found that among teacher educators only 23.9% were ideally qualified, having a master's degree level or higher with professional pedagogical training at the primary education level. The majority only had the academic qualifications in a relevant content area, 53.5% and a large percentage 21.1% held only a Bachelor's degree. Additionally, 52% were teaching courses that were outside of their area of expertise.

The study also found significant weaknesses in the design of the teacher education program. Problems identified included weaknesses in coherence and integration of course content, lack of alignment with the National Primary Curriculum and inadequate coverage of areas such as use of ICT in teaching-learning and use of assessments. Interns and graduates indicated that they needed more modelling of a variety of assessment strategies, better clinical support by their cooperating/mentor teachers and more opportunities for authentic teaching experience and exposure to multi-grade teaching. The absence of knowledge and guidance for planning lessons appropriate for students with special academic needs was also mentioned. Principals found newly qualified teachers to be lacking competence in planning, content delivery and assessment. Content and pedagogy in language arts was reported to be the greatest area of weakness. Notably, the academic requirements for entry into teacher education programs tends to be non-competitive. For example, at the University of Belize, the requirements for entry into the AAPE is a high school diploma with an overall GPA of 2.0 as well as a C in English and Mathematics, while for other programs the minimum GPA required is a 2.5 GPA.

The Ministry of Education, in recognition that these initial teacher training programs would most likely not result in development of the high level of competence needed to be effective in the classroom, started to implement an induction program for newly qualified teachers in _____. The program is designed to support teachers through mentorship, workshops and capacity building activities during their first year in the classroom and provides an incentive in the form of an increase from pay scale 9 to pay scale 12 for those who successfully complete the program. Enrolment in the program is voluntary and teachers must pay a fee of BZ\$_____ to enroll. Fewer than _____ teachers have completed the induction program since its inception.

Beyond teacher training and induction, education regulations require that teachers with full licenses complete 120 hours of continuing professional development (CPD) every five years. This legal requirement has never been fully enforced. Until recently, most available CPD hours have been provided through face-to-face workshops offered by the Ministry of Education or various NGOs. Teachers complained about the limited number and poor relevance of topics, especially for teachers at the secondary level. The Ministry has since established an online platform, the Teacher Learning Institute, which has made CPD courses more accessible to some teachers. Through MOU's with the Ministry, other organizations, such as Pathlight International, have also become established providers of CPDs. Teachers are also encouraged to seek out appropriate opportunities for CPDs that match their level and area of teaching. These are submitted to the Ministry for review and assignment of hours.

The quality and relevance of CPDs remain a challenge. Most CPDs are not the result of any formal needs assessments and many do not focus on research-based approaches to improving teaching and learning. The availability of CPDs in some areas, such as special education, and for some levels such as secondary and ITVETs, also remains limited. The poor preparation of teachers has led to several undesirable outcomes including insufficient attention to the diverse learning needs of students and use of punitive

rather than formative assessment strategies resulting in low achievement of literacy, numeracy and critical thinking skills in graduates.

2.2.3. Inadequate teacher supervision, appraisal and reward systems

Instruments to be used for the appraisal of teachers and principals are provided in the Education Amendment Rules, 2012. Separate instruments are provided for teachers, non-teaching principals, teaching principals, and teaching vice-principals/heads of department. Performance appraisals are to be conducted twice yearly, with the first between the third and fifth month of the academic calendar and the second between the seventh and ninth month. The ratings of the two appraisals are to be averaged to determine the final score.

Teachers are rated on two domains, a) Pedagogical Performance which includes criteria related to planning, preparation and record keeping, instruction and assessment and learning environment; and b) Professionalism which includes criteria such as cooperation, job attitude, attendance and punctuality, leadership professional growth and development and conduct. Appraisal criteria for principals similarly include two domains a) Leadership and Management, including strategic leadership, organizational leadership, instructional leadership and collaborative and ethical leadership, and b) Professionalism. Instruments for teaching principals and teaching vice-principals/heads of department include all three domains a) Leadership and Management, b) Pedagogical Performance and c) Professionalism. Teacher appraisals may be conducted by principals, vice-principals or heads of department while principal appraisals are appraised by the managing authority of the school, either a local manager or board chair. For all criteria the rating scale goes from 1-not at all, 2-a few times, 3-some of the time, 4-most of the time and 5-always. Teachers and non-teaching principals can earn a total possible score of 200 points. The total number of points is then converted to categories of performance by dividing the total score by 40. Teaching principals and teaching vice-principals/heads of department can earn a total possible score of 350 points which divided by 70 to determine the level of performance. Performance categories are as follows: Category 1-Ineffective (0-1.5), Category 2-Marginal (1.6-2.5), Category 3-Satisfactory (2.6-3.6), Category 4-Proficient (3.7-4.4), Category 5-Distinguished (4.5-5.0). Teachers and principals with performances rated as Category 3, 4, or 5 are approved for increments while those in Category 2 should have their increments withheld or deferred and increments for those in Category 1 are to be stopped. Given the low bar set by the rating scale, annually, few, if any, teachers or principals have their increments withheld or stopped. For example, teachers who meet the specified criteria for pedagogical performance and professionalism “some of the time” or “a few times” may still rate in the Category 3, satisfactory level. Appraisals are to be done in triplicate with one copy provided to the Teaching Service Commission; however, the form which is normally provided to the TSC is a separate form, an Increment Certificate, which has a different format and scoring formula than the appraisal forms. The extent to which principals actually conduct clinical supervision of teachers, complete the required bi-annual appraisals, complete appraisal forms and use the results to inform completion of the increment form is not known. Regulations also include teacher evaluation forms for secondary school students (Forms 1-4) and primary school students (Standards 4-6); however, there is no indication that schools actually use these instruments or regularly conduct any form of student evaluation of teachers.

The poor system of accountability for student and teacher performance results in an almost automatic approval of increments and a culture of complacency. The result is an increased wage bill without any improvements in education quality. There is no recognition or incentives provided for effective teaching and no career path other than administrative positions.

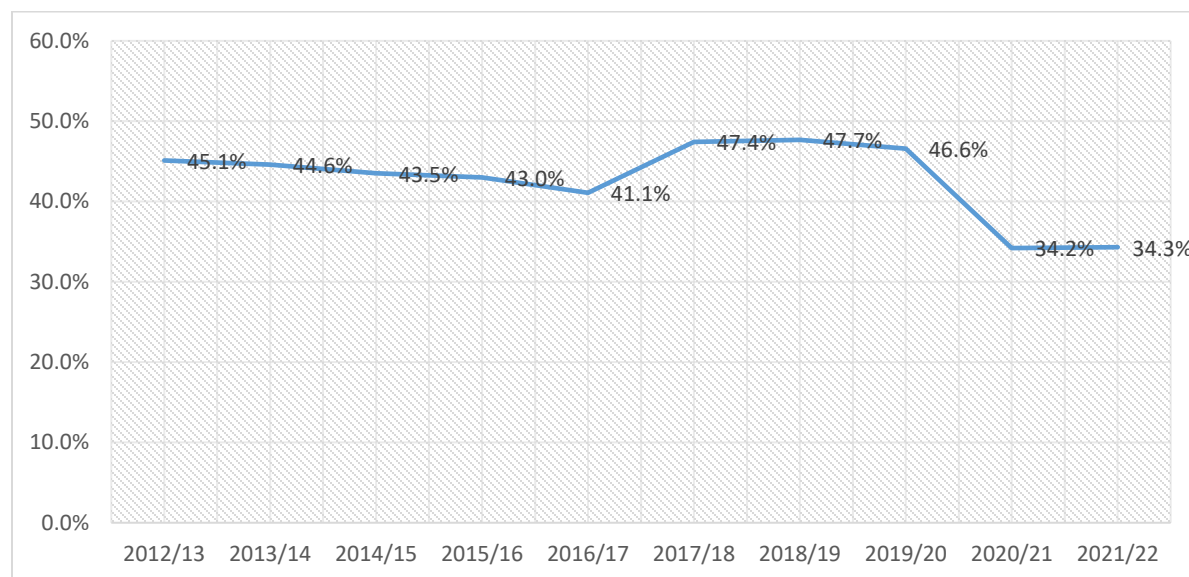
2.3 Preparation for post-primary education is inadequate

The problem with having inadequately prepared and supervised teachers in the classroom is further compounded by the fact that a large number of students who transition from one level of education to another are not adequately prepared to do so. This is true for students transitioning from the preprimary to primary level, most of whom enter primary without the recommended two years of quality early childhood education, as well as students transitioning from primary to secondary and from secondary to tertiary, a significant number of whom have weaknesses in core subject areas such as English and Mathematics. Additionally, the lack of an adequate system for identifying and addressing students with special education needs, potentially leaves a large number of students without the support that they need to be successful in school.

2.3.1 Low enrollment in early childhood education

Preprimary is officially recognized as the first level of education in Belize; however, it is neither free nor compulsory. Figure 2 shows that over the last decade, Belize has struggled to increase enrolment of 3 and 4-year-olds at the preprimary level to a Gross Enrollment Ratio (GER) above 50%.²¹ Furthermore, there was a significant decline in GER between 2019 and 2020, from 46.6% to 34.2%. Although this decrease in GER was mostly attributable to the prolonged school closures and fears resulting from the COVID-19 Pandemic, GER remained at 34% in 2021. This leaves Belize with one of the lowest preprimary GER in the region. For comparison, in 2020, average GER for Latin American and Caribbean Region was 76% and for Upper Middle-Income Countries, it was 78%.²²

Figure 3 Preprimary Gross Enrollment Ratio, 2012/13 to 2021/22



Source: PPRE Unit, MoECST

²¹ Preprimary GER is calculated by dividing the number of students enrolled in preprimary by the number of 3 and 4-year-olds in the population and multiplying by 100. In 2021 there were 5,426 students enrolled in preschools countrywide, and an estimated population of 3 and 4-year-olds of 15,800.

²² Source: <https://data.worldbank.org/indicator/SE.PRE.ENRR>; figures for LAC and Upper Middle-Income Countries were from 2020.

A recent study on the preschool sector (Ross, 2020), commissioned by the MoECST, explored the policies and legislation, human resources, financing, curriculum and its delivery, child assessment, teaching and learning environments, and parental and teacher attitudes and beliefs about preschool education in a comprehensive study of preschools country-wide. The study showed that preschools typically have a committed teaching staff and high levels of parent and community engagement. There were however systemic weaknesses in the preschool system and attitudes and beliefs that contribute to low attendance and poor outcomes.

Findings included lack of enforcement of policies and laws including requirements for licenses to operate, low levels of and inconsistencies in funding preschools, high school fees, and lack of financial accountability.²³ In the area of quality, although there has been a consistent increase in trained preschool teachers over the last decade, from 50.4% in 2011 to 71.5% in 2021, the report noted that "recruiting and maintaining a well-trained and professional ECE workforce with adequate ECE qualification for teaching at the preschool level is an ongoing challenge" (Ross, 2020, p. 24). Student teacher ratios range from 16 to 20 students per teacher, above the Ministry's recommended 15 student per teacher ratio. The study also found that there was need for improvements in instructional planning alignment with the national curriculum. Access and quality were also shown to be influenced by beliefs and attitudes. For example, enrolment of 4-year-olds is much higher than that of 3-year-olds, a result of parents deciding, either for financial reasons or personal beliefs, to keep their child at home until they turn four years of age. The study also pointed to the lack of understanding of "play" as an appropriate approach to learning at the preschool level among both parents and teachers.

The overall impact of the current status of the preprimary sector is that a large number of students do not attend preschool prior to entering primary. Additionally, those who do attend typically do so for only one year and may not be receiving the quality of preschool education that would lead to adequate preparation for primary school as well as longer term academic, social and economic benefits.

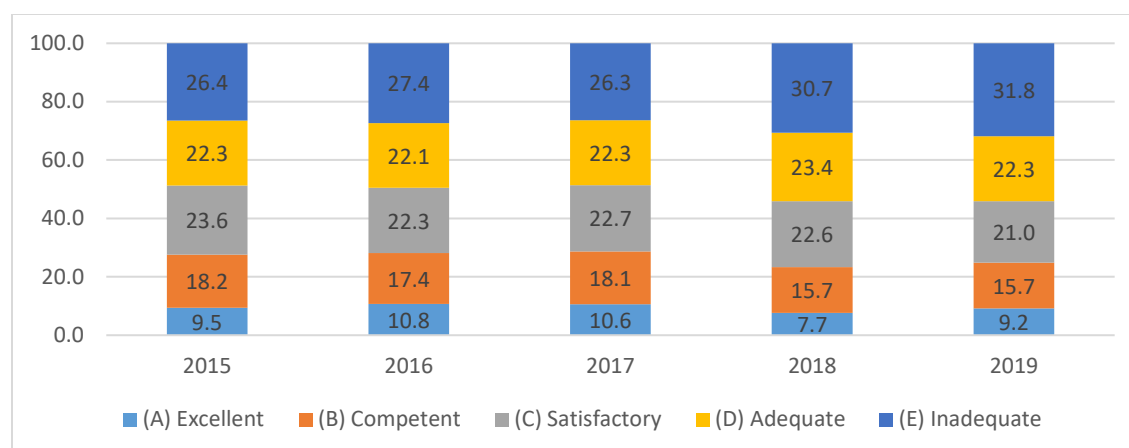
2.3.2 Poor academic preparation in core subject areas

Stakeholders point to poor academic preparation at lower levels of education as one of the primary factors for both dropout and poor outcomes in post-primary education. These include significant weaknesses in core subject areas such as English and Mathematics as well as skills such as critical thinking. Results of both the Primary School Examination (PSE), taken at the end of primary school, and CSEC examinations, taken at the end of high school, point to some of these deficiencies. The PSE covers four subjects—English, Mathematics, Science and Social Studies. Figure 2 shows overall results on the PSE from 2015-2019, the last year the exam was offered.²⁴ On average, approximately half of all students who sat the PSE in its last 5 sittings, earned less than satisfactory grades. In each year, the largest portion of students were found in the E or "Inadequate" grade band and only around 10% of students earned a grade of "A" or "Excellent".

²³ Only 37 of the 217 preschools operating in 2021 were government schools; there were 116 denominational schools, 48 private schools, and 16 community schools.

²⁴ On average, 96% of Standard VI students, a little over 7,000 students, sat the PSE annually. The exam was suspended in 2020 as a result of the COVID-19 Pandemic and has not been offered since.

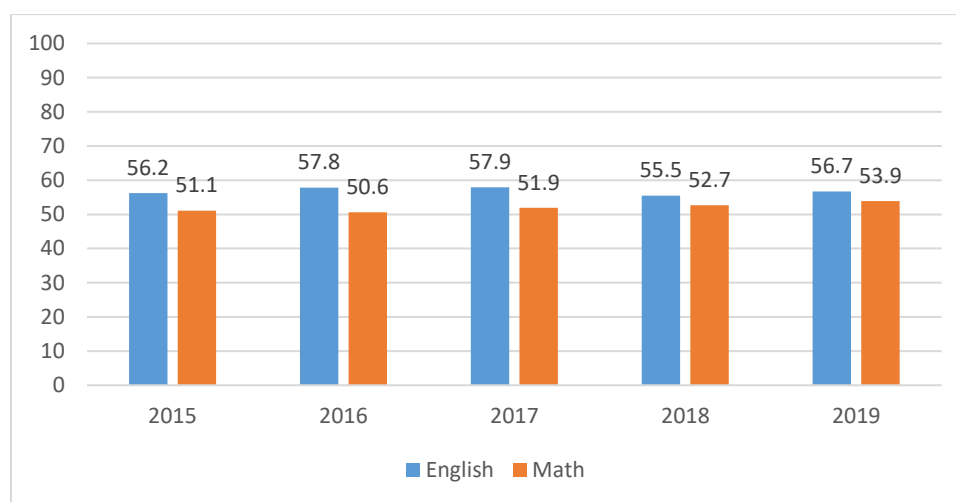
Figure 4 Percentage of Students with PSE scores by grade bands, 2015-2019



Source: Belize Ministry of Education

Figure 3 provides the mean scores out of a possible 100 points for the Math and English components of the PSE. It shows that mean scores have remained around 57 points in English and 52 points in Math.²⁵ Performance on the PSE is not used as an entrance requirement for secondary level. This means that a large portion of students entering the secondary level may not be adequately prepared in the basic skills needed to pursue further education.

Figure 5 Mean scores on PSE by subject, 2015-2019



Source: Belize Ministry of Education

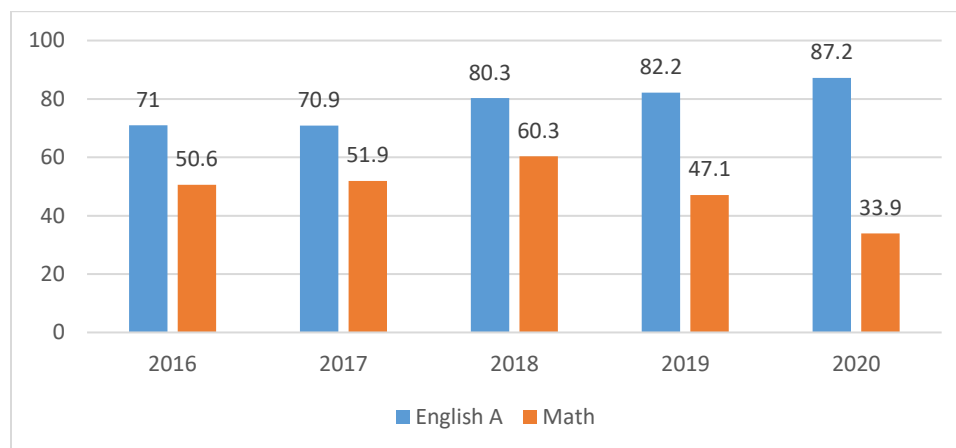
At the secondary level, prior to the COVID-19 pandemic, approximately 75% of students, over 3,000 students, sat one or more CSEC examinations in their final year of high school.²⁶ Grades I, II or II are considered satisfactory grades on the exam. Figure 4 shows the percentage of students with satisfactory grades on English and Mathematics from 2016 to 2020. It shows that while there was improvement in English over the five years, Mathematics experienced a decline over the five-year period. Notably, in 2021,

²⁵ A minimum score of 60 points is considered Satisfactory Level Performance on the PSE.

²⁶ The percentage of fourth form students sitting CSEC exams went down to 67% in 2020 and 37% in 2021.

fewer than 2000 student took these exams and only 71% earned satisfactory grades in English and 30% did so in Math.

Figure 6 Percentage of Sitters with Satisfactory Level Performance on CSEC by subject, 2016-2020



Source: Belize Ministry of Education

The poor preparation of students at both the primary and secondary levels and lack of adequate remedial support contributes to both dropout and poor learning outcomes for students.

2.3.3 Undiagnosed and unaddressed learning disabilities

The MOECST identified inadequate infrastructure, lack of training and human resources, and inefficient support services as some of the key challenges that need to be addressed “to improve the inclusion and experience of students with diverse needs in the education system” (BESPlan 2021-2025, p. 67). Current education policies and regulations pay minimal attention to students with special education needs, making only general references to the need for schools to cater to students with exceptionalities and special challenges. Likewise, systems for screening, diagnosis, and support of students with learning disabilities are either lacking or not sufficiently available or accessible.

The Ministry of Education provides special education services through a Special Education SpED Unit under which is the National Resource Center for Inclusive Education (NaRCIE). The unit has fifteen SpED Officers serving approximately 850 clients with a wide range of disabilities from Day Care, pre-school, primary, secondary, and tertiary education institutions, as well as home bound. In addition to the heavy workload due to the high client to officer ratio, there are issues with outdated battery tests and limits to how many clients can be visited per week due to lack of adequate transportation. Furthermore, not all students needing Special Education are referred for assessment. Some parents are in denial about their child’s special needs and refuse to give consent for screening and diagnosis to be conducted on their child. Furthermore, those who are referred may not be able to receive a proper diagnosis. There are currently only four diagnosticians operating in the country and the cost of such services is beyond the reach of many families.

The absence of explicit legal provisions for persons with disabilities results in both intentional and indirect exclusion from education and employment opportunities. Even trained teachers are poorly equipped to address students with special education needs. The Associate Degree and Certificate in Primary Education

and the Bachelor's Degree and Diploma in Secondary Education do not contain any Special Education courses and the Bachelor's in Primary Education only contains one such course. A cohort of 26 teachers and education officers recently completed a Master's Degree in Special Education through a Ministry of Education supported program with the University of the West Indies. The graduates represent an increased resource pool for delivering Special Education programs and services locally. The result is that students with learning disabilities, such as dyslexia, often remain undiagnosed and unsupported in schools. Such students may exhibit poor academic performance and behavioural problems, both of which increase their risk of dropping out of school.

2.4 The quality of the learning environment is inadequate

The quality of education and development of students also depends on having an adequate learning environment. The term learning environment has come to encompass a broad range of factors including physical elements such as access to culturally relevant and meaningful learning materials, clean drinking water, nutritious meals, and adequate sanitation facilities, as well as social and psychosocial elements such as health and nutrition and protection from violence, which were covered in previous sections of the RCA. The following sections of the RCA focus on three aspects of the learning environment which may be impacting education quality negatively in Belize: 1) the state of facilities, including buildings and equipment used in delivering courses; 2) availability and quality of learning resources, particularly textbooks; and 3) access to technology such as internet and electronic learning devices.

2.4.1. Inadequate facilities

The duties of Managing Authorities are outlined in Rule 32 of the Education Amendment Rules, 2012. Included among the responsibilities is the formulation of policies and internal regulations in respect to the learning environment including "procedures and protocols for ensuring the health, safety and security of staff and students including children with disabilities" and "physical plant use and maintenance including – (i) making provisions for the repair and maintenance of all property belonging to the school." The regulations go on further to state that a Managing Authority shall

"ensure for every school or institution under its management that – (a) proper physical conditions exist for the conduct of schooling through the regular maintenance of buildings and upkeep of the grounds of the school or institution; (b) the provision and maintenance of furniture, equipment and materials are sufficient for the number of students there enrolled; (c) the provision of conditions conducive to the health and safety of students and teachers is ensured; and (d) the provision of the necessary support for a quality learning environment for all children is maintained." (Education Amendment Rules, 2012, Rule 32)

The Education Rules 2000 also makes allowances for Managing Authorities to apply for grants for school construction and maintenance under Rule 106 by completing and submitting such requests along with their Application for Grant-In-Aid. Such requests should be accompanied by bill of quantities and/or plans and specifications for the proposed works. Resources, both financial and human, for honoring and

managing such requests are limited however, and most schools, including government schools, fund maintenance projects through fundraising efforts or school fees.²⁷

Comprehensive data on the condition of school facilities is limited; however, available information indicates widespread lack of maintenance and limited updating of facilities and equipment once installed. One source of available information is from the National Emergency Management Organization (NEMO). NEMO conducts an annual assessment of school buildings that are used as hurricane shelters in each community. The most recent report for the 2022 hurricane season highlighted the poor condition of some school facilities. These include major issues such as cracks in steps, leaking of water through walls, windows and doors, missing gutters, major leaks in roofs, bat infestation caused by unsealed eaves, loose nails and corrosion and ceilings that are uncased or in danger of falling. Issues with plumbing and electrical fixtures were also common in the report, including non-functional toilets, basins and urinals and blown lightbulbs. Most schools also had doors and windows that needed to be repaired.

Beyond basic infrastructure, equipment to provide quality and relevant education is also lacking. The results of ITVET audits conducted by the Ministry's Employment Training and Education Services (ETES) between in 2018 and 2020 confirms this claim. Each ITVET was audited to assess the availability of human, physical, financial, and safety resources in relation to those required to support quality training and assessment activities in two of their primary trade areas. In addition to problems with inadequate physical space and layout for workshops, the audit found that institutions generally lacked some of the major tools, equipment, and materials needed to conduct training and assessment effectively in the particular trade areas. Safety signage and equipment such as fire extinguishers were also generally lacking. Outdated and ill-equipped laboratories at the secondary and tertiary level are also the norm rather than the exception. Inaccessibility to persons using wheelchairs is also a common problem.

Prototypes for preprimary, primary and secondary schools were developed under the Belize Education Sector Reform Programme (BESRP), funded by the Caribbean Development Bank (CDB). The programme included the construction of 35 new schools based on a school mapping exercise conducted by the Ministry in 2013 (updated in 2016) to identify where there was need for additional schools. Nine schools (7 preprimary, 1 primary and 1 secondary) have been built so far under the BESRP. The Ministry and the CDB have since restructured the loan to reduce the number of new schools to 25, based on an updated needs assessment, and to include the renovation of 9 schools and 2 libraries that are in need of major repair. In recent years, most school construction projects have been funded by the CDB through the Basic Needs Trust Fund which is managed by the Belize Social Investment Fund (SIF).

2.4.2. Inadequate learning resources

Section 56 of the Belize Education and Training Act 2012 gives the Chief Education Officer the authority to "approve textbooks and other educational materials for use in government and government-aided pre-schools, primary schools, secondary schools and ITVETs." Rule 124 of the Education Rules 2000 also mandates that the Chief Education Officer publish and review biennially the list of books and other materials used at these levels of education. Textbooks are to be selected based on "relevance to the national curriculum" "appropriateness of teaching approaches and requirements, "user-friendliness" and

²⁷ The MoECST typically funds maintenance projects for schools and its own facilities through its Capital II budget. Works were previously managed by the Ministry's Building and Maintenance Unit but the Unit has been without any staff since November of 2021.

“cost-effectiveness.” The Rule also contains provisions for schools to collect and maintain a stock of used textbooks to provide to students who are unable to purchase books, for standardization of textbooks in core subject areas and for limiting the number of changes to textbooks to once every three years unless approved.

Despite the regulations, up until the introduction of the GOB’s free textbook program for primary schools in 2009, the choice of textbooks was left to the discretion of individual schools and their managing authorities. An official list of textbooks, which are provided by the GOB free of cost to students, is now in place at the primary level. These materials include textbooks and workbooks for the core subject areas at most grade level. Primary schools are also discouraged from requiring any additional textbooks and can only do so with the approval of the Chief Education Officer. A Textbook Committee was also established to make recommendations to the Chief Education Officer on the suitability of current and new textbooks and workbooks. The free textbook program has faced several challenges including: 1) lack of timely requisition of textbooks, 2) unreliable data on textbook needs, 3) budget cuts to the textbook program, 4) failure by some schools to distribute textbooks and workbooks to students, and 5) misalignment of current textbooks with national curriculum. These problems have reduced the potential positive impact the program could have on student learning.

Textbooks at the secondary level remain unregulated. Each school has its own list of required textbooks which are usually selected by subject teachers without sufficient consideration of the criteria specified in the regulations. There is also not free textbook program in place for the secondary level. The result is that a large portion of students at the secondary level do not have their required textbook. In a 2020 MoECST survey, only 16% of high schools reported that a large majority (80% or more) of their students normally have their required textbooks. The majority of schools, 65%, reported that between 40-79% of their students are without required textbooks and the remaining schools reported that fewer than 40% of their students normally had their required textbooks. The practice of copying pages out of textbooks to provide to students is also common at some schools. School libraries are typically non-existent or filled with outdated materials. Beyond textbooks and reading materials, many families also find it difficult to supply their children with learning materials such as stationery, calculators and materials for projects. In the MoECST survey, only 33% of primary schools and 16% of secondary schools reported that large majority (80% or more) of their students normally have their required school supplies.

2.4.3. Inadequate access to technology

A survey conducted by the MoECST in September 2021 found that, with the exception of a few schools in remote rural areas, the vast majority of schools in Belize have access to electricity. The supply is mostly through a connection to the national grid with a few schools (9% of primary and 2% of secondary schools) connected through a solar electricity system installed at the school.²⁸ The study also found that the majority of primary schools (76.5%) and secondary schools (92.2%) also have internet connections either through wireless, cable or satellite systems. Despite the high prevalence of internet connections in schools though, the quality of internet service is generally poor. School principals report problems with low speed, reliability and coverage. Access beyond the principal’s office is often limited. This makes it impossible for the internet to be used as a teaching tool during class time.

Most schools were also unable to switch to online learning during the COVID-19 Pandemic school closures due to students’ limited access to technology at home. The survey found that 8.6% of primary school

²⁸ Data on technology provided by a 2021 MoECST survey.

students and 3.4% of high school students did not have electricity at home. In Toledo, the district with the highest proportion of rural inhabitants, 32.1% of primary school students and 15.9% of secondary school students did not have any electricity at home. Table 4 shows the percentage of students and teachers at the primary and secondary level without home internet or a suitable electronic learning device (computer or tablet). The percentage of students and teachers at the secondary level without internet or devices at home, though high, was still significantly lower than the primary level. As was in the case with electricity, primary school students had far less access to both home internet (69.2% at primary and 24.2% at secondary without access) and electronic learning devices (71.1% at primary and 34.1% at secondary without devices).

Table 6 Percentage of Students and Teachers without Access to Technology by level, 2021

Level	Students		Teachers	
	No Internet	No Device	No Internet	No Device
Primary	39.8%	45.2%	13.4%	19.5%
Secondary	20.2%	25.1%	5.8%	10.3%

Source: MoECST Technology Survey, September 2021

2.5 Monitoring of education quality is inadequate

Belize has a legal framework and systems to monitor and support delivery of quality education; however, most of these systems are either not currently being implemented or not being implemented to the extent that ensures quality delivery and continuous improvement of education services. These include legislation and regulations regarding the supervision and accreditation of education institutions, provisions for democratic participation of education stakeholders in decision-making processes and the development of an integrated Education Management Information System. Failure to maximize the use of these systems have resulted in a largely unsupervised system of education, in which there is limited enforcement of existing standards, engagement of stakeholders or use of data.

2.5.1. Inadequate quality assurance systems

Section 3 of the Belize Education and Training act, 2010, gives the Ministry of Education the responsibility to do the following:

- establish and set national education goals and policies,
- set standards for the education system,
- issue licenses to schools and other educational institutions, provided that all prerequisites to licensing are met,
- issue licenses to teachers, provided that all the prerequisites to licensing are met,
- provide support systems for the effective delivery of appropriate and equitable educational services at all levels of the education system, and
- monitor the quality and effectiveness of education in the following levels and sectors of the education system: preschool, primary, secondary, TVET, post-secondary and tertiary.

The Ministry of Education has established several units to carry out its mandate. These include offices to manage financial and administrative matters, technical units that focus on areas such as education planning, curriculum development, student assessment and student support services, and central and district level units that supervise various levels and subsectors of education. District Education Centres (DECs) are the units with the primary responsibility for school supervision, however. In accordance with

Rule 8A of the Education Amendment Rules, 2012, DEC's are responsible for "planning and conducting regular school supervision to guide, support, and monitor school improvement and development guided by agreed standards for school quality and student achievement." Specifically, the rule mandates that DEC's carry out the following activities:

- regular school supervision to support and monitor school improvement and development by providing guidance and support for the development and conduct of school self assessment, and the development and implementation of school improvement plans;
- monitoring and providing support and feedback to managements, schools and teachers by identifying areas of weakness in quality of teaching including curriculum delivery, classroom practices and assessment; and
- monitoring and providing support and feedback to managements and administrators on the effectiveness of school leadership by identifying areas of weakness in the quality of management and administration of the school, the school organization, infrastructure, and effective use of resources.

In practice, however, the frequency with which DEC's carry out these activities and their overall effectiveness in accomplishing their mandate are limited by a number of factors. For one, school supervision is often side-lined by more urgent or routine matters for which DEC's are also responsible, such as responding to requests from central administration, attending meetings and assisting with the implementation of projects and programs. The availability of human and financial resources to effectively monitor schools is also limited. For example, school to supervisor ratios are extremely high, with most education officers having to supervise 25 or more schools. There is also only one vehicle assigned to each DEC. Capacity is also another issue as education officers, who are typically former school teachers or administrators, are not provided with sufficient training to be effective in their new roles as school supervisors.

Nonetheless, DEC's are not the only entities with legal responsibility for school monitoring and quality assurance. Between 2012 and 2020, the Ministry of Education also operated a School Inspectorate with the intention of complying with Section 42 (3) of the Act which mandates that "The Chief Education Officer shall carry out a triennial inspection of each school and continuance of permission to operate the said schools will be dependent on the results of the said evaluation." However, the Inspectorate was never provided with the resources to be able to reach the required number of schools and the results of inspections, though poor, were never used to deny any school permission to continue operating.

Other entities with legal responsibility for supervision and quality monitoring in the schools include District Education Councils and Managing Authorities. Each district has a District Education Council which is responsible for appointing several standing committees, one of which is "a Standards and Quality Committee to monitor the performance and quality of schools, curriculum and textbooks, teacher development, student performance in examinations, the adequacy of school facilities, and to review and make recommendations based on school inspection reports." **None of the 6 DEC's currently have a functioning committee of this nature.** Section 32 (1) of the Act which outlines the duties of Managing Authorities includes the formulation of policies and internal regulations in "quality assurance including school self evaluation and improvement planning, implementation and monitoring." That section of the legislation also requires that Managing Authorities ensure "the provision of the necessary support for a quality learning environment for all children is maintained" and mandates the following:

“A Managing Authority shall conduct ongoing school supervision, in collaboration with the respective District Education Councils and District Education Centres, in all schools and institutions for which it is responsible and shall submit triennial reports on each school or institution to the Chief Education Officer, the Council and TVET Council, as applicable, by the end of September of the school year immediately following the triennium to which it is applicable.” (BETA, 2010, Section 3 (6))

Unfortunately, there is no enforcement of these provisions and limited collaboration between Managing Authorities, District Education Councils and District Education Centres to regularly and systematically monitor and support schools.

The law also makes provisions for quality assurance at the national level. The BETA 2010 establishes several statutory bodies with responsibilities related to quality assurance. These include: (1) a National Council for Education (NCE) to inform and advise on “the quality of schooling at the different levels including issues of curriculum, textbooks and teacher performance” and “the effectiveness of management in the education system and schools”; (2) a National Council for Technical and Vocational Education and Training (NCTVET) to “assist in monitoring the quality and effectiveness of technical and vocational training at the post primary, secondary, and post-secondary levels of the education system”; and a Belize Board of Teacher Education (BBTE) “for the purpose of assuring the quality of teacher education in Belize.” The NCE and NCTVET have only operated sporadically since 2010, and although the BBTE has been more frequently in operation, given the poor state of teacher education and development discussed earlier, it clearly has not yet lived up to its mandate.

Belize also has a National Accreditation Council (NAC) Act which was passed in 2006, but never implemented. The NAC Act sets out the functions of the Council as follows:

The functions of the Council shall be to promote the advancement of education in Belize to ensure that the quality of education delivered in Belize meet the standards set by the Council for the qualifications and certificates conferred and that the appropriate standards are being maintained and improved; to protect the interests of students and potential students; and to promote the free movement of skills and knowledge across the region. (NAC Act, 2006, Section 12 (1))

The NAC was never operationalized, which has left the country with no means for accrediting local education institutions. A subsequent administration made efforts to amend the NAC Act to expand its functions beyond the tertiary level of education and incorporate a National Qualifications Framework, however, that never materialized. Nonetheless, in early 2022, the MOECST began consultations to review and revise the NAC Act with the intention of implementing a national external quality assurance system in the near future.

2.5.2 Insufficient use of data and research

Education Regulations include a number of provisions for the collection of data and information on schools, students and teachers. For example, Education Rule 32 states:

A Managing Authority shall be responsible for the proper maintenance of all records pertaining to staff, students, and inventories of school property in accordance with the Act and these rules and shall maintain a management information system for storing and retrieving information including information on students, staffing, finances and physical facilities and shall submit to the

Ministry such information as required by the Act or these Rules or as may be required from time to time by the Ministry. (Education Rules 2000, Rule 32(3))

Additionally, Rule 42 mandates that principals “be responsible for ensuring that all required records are maintained and that records are accurate and are kept current and up-to-date” and that they “produce the records for scrutiny by authorised personnel of the Ministry and the District Council whenever required to do so.” Records which must be kept include log books, admissions registers and pupil cumulative record sheets. Schools are also legally obligated to submit monthly returns and annual reports; however, these provisions are rarely or inconsistently enforced.

The MoECST has a Policy, Planning, Research and Evaluation (PPRE) Unit whose mission it is to enhance “the overall efficiency and effectiveness of the education system by providing relevant and timely data and analysis to guide policy formulation and strategic planning. The PPRE Unit produces an annual statistical report called the Abstract of Education Statistics, as well as several brochures which are posted on the MoECST website. Most of the information for the publications is obtained through the Belize Education Management Information System (BEMIS), an electronic data management system implemented in 2016 to replace the paper-based annual school census. BEMIS contains student and staff information on all schools at the preprimary, primary and secondary levels of education. The database is populated directly by school administrators and teachers, with the assistance of the PPRE Unit and, in some cases, officers from the District Education Centres. In addition to the collection, analysis and reporting of education data, the PPRE Unit conducts surveys and sector diagnostic studies and coordinates the development of education sector plans. The most recent education sector plan was produced in August of 2021. The PPRE Unit is also responsible for fulfilling data requests from local, regional and international bodies such as the Statistical Institute of Belize, CARICOM and UNESCO Institute of Statistics, as well as from local and international researchers.

Despite the organizational structures and systems in place for data, there are significant shortcomings in the availability of data as well as the utilization of available data. A recent analysis of the utilization of BEMIS (Castillo, 2022) found that although the large majority (84%) of primary school administrators were satisfied overall with BEMIS, only 25% of them used BEMIS on a regular basis and 6% of them reported never using BEMIS. Furthermore, although the majority of administrators used the adding new students, promotion and graduating features of BEMIS frequently, most of them never or seldom used other features such as attendance and special needs. The study also found that, on average, senior managers such as members of the Senior Management Team, Directors of Service Area and District Education Centre Managers only accessed BEMIS twice per month. Less than half of this group agreed that BEMIS was being used frequently for decision-making, strategic planning, monitoring and support of schools and policy development. Castillo’s findings on the factors contributing to the underutilization of BEMIS were as follows:

“...the factors affecting the utilization of BEMIS by Primary School Principals included the remote location of schools, time constraints, poor communication and support, human

resources, system features and processes and lack of training, monitoring and devices. Regarding the Management of the MoECST, some of the factors that affected their utilization of BEMIS included the unavailability of features, limited teacher data, issues with the reports such as filtering, data quality, student and staff tracking and processing, data dependency and system performance. Members of the Management of MoECST do not have access because of forgotten passwords or not logging in since being given the initial access.” (Castillo, 2022, pp. 3-4)

Beyond BEMIS and the MoECST, there is a general lack of a culture of data-based decision making and reliance on evidence to identify education problems and design and monitor suitable interventions. The result is that there is limited investment in and use of research. This is the case even at the tertiary level of education where faculty only infrequently engage in research.

2.5.3 Insufficient engagement of students, teachers and parents

Section 3 (1) of the Belize Education and Training Act, 2010, States that “The Ministry, under the general direction of the Minister, shall work in partnership, consultation and cooperation with churches, communities, voluntary and private organizations, and such other organizations and bodies which the Ministry may identify and recognize as education partners for the sufficient and efficient provision of education in Belize.” Section 32 of the Act further mandates that, in the formulation of policies and regulations, Managing Authorities are to do so “in consultation with the school administration, teachers and staff, parents, and students as the case may be...” Nonetheless, the level of engagement of teachers and staff, and more particularly, parents and students, in decision-making is generally minimal and appear to be closer correlated with leadership styles than with observance or enforcement of the regulations.

For example, although Education Rule 37(c) specifies that principals are to “involve parents and members of the general community in school activities, including the development of school rules and policies and school self evaluation and school improvement planning and implementation” it is more common for principals to just inform parents of new rules and changes to existing rules than to engage them in the formulation of such rules. Principals report that many parents do not show up for meetings; however, accommodations for working parents are not always considered. When parents and community members are engaged, it is usually related to requests for financial support. Information on the percentage of schools with Parent Teachers’ Associations (PTAs) in place and the level of functioning of such associations is not available; however, it appears that few schools, especially at the primary level, have active, functioning PTAs. No legislation, regulations or policies are currently in place to guide the establishment and operation of PTAs. The Education Act does make provisions for parents to be represented on statutory bodies such as the National Council for Education and the Belize Teaching Service Commission, however, the lack of regional and national coordinating bodies representing parents results in an ad hoc selection process to fill these roles.

Students are likewise rarely consulted on issues that affect them in schools. There is no regulation or policy mandating that organizations such as Student Councils be established and no standards, where they do exist, to guide their operation. Rather than being a representative of student voice, Student Councils are often used to represent the views of the administration to their fellow students. Another area where lack of genuine student engagement is common is in student evaluations of teachers. For example, although there is an official instrument for students in upper primary to evaluate their teachers, few, if any, primary schools have students evaluate their teachers. Student evaluation of teachers is much more

common at the secondary and tertiary levels; however, the results of these evaluations do not consistently lead to the improvements in teaching and school practices or changes in the employment status of individuals.

Poor communication and conflict among school administrators, teachers and staff is another common problem. The level at which teachers are engaged in policy-making, academic planning, budgeting, determination of professional development needs and other issues varies widely among schools and levels of education. Therefore, together with parents and students, teachers remain a largely untapped resource in policy-making and school improvement.

IV. Inclusion

According to research, student performance can be largely impacted by the educator/student “culture gap”- any systematic difference between cultures which hinders mutual understanding or relations. Belize is becoming more linguistically and ethnically diverse with about half of all students belonging to vulnerable minority groups. Not only are student bodies becoming less homogenous, but governing systems and school boards are ill-equipped to navigate the challenges related to language, ethnicity, gender and class. Unfamiliar groups, cultures, traditions and languages can produce hostilities, stereotyping, prejudices, stigmatizing and discriminatory behaviours among those who do not understand. As disparities in educational opportunities and outcomes among vulnerable minority groups continue to grow it can result in significant achievement gaps with negative personal, social and economic consequences.

Early due diligence research conducted by MCC-GSI initially identified four (4) groups that are broadly economically excluded in Belize: the poor; youth; ethnic populations; and women. Subsequent due diligence during RCA augmented groups and refined or expanded group attributes in the context of the education constraint, to include:

- **The poor;**
- **Indigenous populations** (the Yucatec, the Mopan, and the Q'eqchi Maya);
- **Immigrants** (Refugees and asylum seekers, migrants)
- **Gender** (boys and girls; women and men); and
- **Special educational needs** (mild-to-moderate; and moderate-to-severe).

Membership in multiple group categories may compound negative impacts related to the constraint—to illustrate, a poor, young, Maya girl with special needs faces significantly increased challenges to accessing and participating in quality educational opportunities in Belize.

While the economic constraint-to-growth is framed and understood in terms of poor *quality* of education, the exclusion of these groups, through limited access and/or participation, inevitably results in poor quality of education. Thus, in the current paradigm in Belize, membership in the above group(s) results in differential and adverse educational impacts in terms of: (1) access, (2) participation, and (3) quality.

1. The (Rural) Poor

The poor disproportionately suffer more from access to and participation in education. Poor families in the lowest wealth quintile reported the lowest enrollment for primary school aged children at 80 percent (compared to 86 percent for the second wealth quintile and 96 percent for the highest wealth quintile). Attendance rate at secondary schools is also lower among children from the poorest wealth quintile (54 percent compared to 93 percent in the highest wealth quintile). On average, households in Belize allocated approximately 10 percent of their total expenditure to education in 2009 (the most recent year for which data was available). The lowest level of household expenditure on education was observed in Toledo, Stann Creek, and Corozal districts, all of which also experience higher incidences of poverty. Additionally, low quality of education affects everyone, but the impact is much severe on poor students who have limited access to learning materials and are likely to have lower social capital and safety net to overcome some of the negative impacts of low-quality education in later life. Any education intervention in Belize has to incorporate designs to include children from financially disadvantaged backgrounds to have any meaningful and measurable impact on education.

Based on LFS 2019 data, 26 percent of the children/youth ages 5 to 24 years were not attending or never attended school for financial reasons. It is also the prime reason for dropping out after primary education for most poor students irrespective of their performance at school. An IDB study using 2009 data to assess returns to education suggested that there are only returns to education at the secondary level (whereas wages for individuals with a primary school education was no different than for individuals with no education). This suggests that students need secondary education to escape poverty. Overall, 73 percent of children of secondary school-going age are in school but there is a clear urban-rural divide: Secondary school attendance is much lower in rural areas (68 percent compared to 80 percent in urban areas). Across the districts, Belize City had the lowest share of unemployed persons with a tertiary level education (3.1 percent) while Corozal had the highest (13.1 percent). At all levels of education there is higher enrolment in private institutions than public institutions with households principally shouldering the direct costs of education.

Thus, poor children with only primary education remain stuck in poverty and are exposed to heightened risks of unemployment, poverty and social exclusion later in life. As one principal during the MCC field trip stated: “Funding does have a lot to do with preventing students from dropping out of school. There are children who have the capacity of excelling but due to financial issues they only get to complete their primary education.” Even if families can afford fees, there are additional costs of books and supplies, meals, transportation, and others that make it difficult for some families to afford secondary school or TVET for one or more of their children.

Children from financially disadvantaged backgrounds are also at a higher risk of getting involved in gangs, illicit drug business and falling victims to crime and violence as they are more concentrated in communities with high presence of gang violence. Lack of access to technology is another channel that hinders poor students' learning. During COVID-19 pandemic when in-person schools were closed, none of the secondary schools in Toledo (with 82 percent of poverty rate) could offer online instructions (in Orange Walk, 53 percent of secondary schools provided online instructions). The TVET Institution in Toledo did not offer any type of continued learning. Rural and students from remote locations are falling behind. Belize's economy is transitioning toward services and away from agriculture, manufacturing, and construction. In services and other emerging industries, digital skills are in high demand. Lack of access to technology by poor students and students in poor and remote locations will further increase the existing education and skills gap.

The Government of Belize made efforts to support children/youth from financially disadvantaged backgrounds. Secondary education is subsidized for limited grades (First and Second Form) and in some Districts (Stann Creek and Toledo). To support children who faced financial challenges with accessing secondary education, prior to COVID-19, the Government of Belize provided Socio-economic needs/socio-academic needs (SEN/SAN) grants of US\$650 per child. Secondary school costs, however, are much higher. Based on school reporting, cost of incidence to address needs such as fees payment, feeding programs, uniform, books, psychosocial activities at some schools were US\$1,300 per child. Without any alternative support, cancellation of SEN/SAN social service grants for education, and insufficient coordination of the few remaining social service programs/hardship grants for secondary education led to serious gaps in educational affordability, impacting the poor severely.

To reduce the gap in affordability, schools and districts often provide supplementary social services. However, not all schools with a high share of at-risk students are able to provide such support due to lack of funding and lack of coordination. School funded feeding programs, school-run textbook rental programs, and community funded scholarships are examples of school specific safety nets. To highlight the importance and usefulness of the MOEYSC-funded feeding program, a teacher in a Toledo secondary school stated: "Sometime students are so poor they can't afford it. Many of the students come to school with no food, they come with their stomach empty. That is one of the reasons they get discouraged because you know when they must work and study with no food in the stomach it is so hard.". There was also concern about the stigma associated with getting vouchers for the feeding program. Teacher training curricula need to cover how to identify support services for vulnerable student groups. Schools with higher income-earning parents have better facilities (such as air-conditioning, computer labs) than schools that reach out to more at-risk students. Such gap in facilities along with gap in services not only adversely affect poor children but also contributes to widen the inequality by economic status.

2. Indigenous Population

Indigenous people experience multi-dimensional barriers in accessing education and learning while at school. The largest minority ethnic group in Belize is of Mayan origin (the Yucatec, the Mopan, and the Q'eqchi Maya). Although Mayan communities are present in all six districts, they are primarily concentrated in the districts of Toledo, Cayo, and Stann Creek in Southern Belize. Toledo, the district with the highest concentration of Mayan households (66 percent) is also one of the poorest districts in Belize. Even within these districts, Mayan communities are often located in poorer, more rural areas. Rate of poverty in Mayan communities are twice that experienced by either Creoles or other ethnic groups. On average, indigenous families are larger than those of non-indigenous families, with the average indigenous woman giving birth to 8 children in her lifetime (as opposed to 6 for non-indigenous women), all factors which compound their vulnerability to poverty. The relationship between household size and vulnerability to poverty may impact educational attainment in rural minority households by: (1) limiting the number of children that can attend school due to competition or cost; (2) detract from the family value placed on education, and (3) place an increased family value and kin pressure on youth engagement in employment, formal or informal, rather than in education.

Secondary school attendance is also much lower among Maya families, with just 70 percent of eligible children attending secondary school (compared to 81 percent of Creole children, 77 percent of Garifuna children, and 70 percent of Mestizo/Spanish/Latino children) and among households in the poorest wealth quintile (54 percent compared to 93 percent in the highest wealth quintile). Indigenous youth, particularly women, in Orange Walk, Toledo and Stann Creek are especially absent from vocational/technical training

and from Adult Continuing Education (ACE) programs. Early marriage, childbearing, high family and kin pressure on joining the labor market and low perception about the benefits of education further discourages families from sending their children to acquire post-primary education. Introduction of relevant courses, awareness about available programs and their benefits, improving safety conditions, and removing cultural barriers through programs such as sensitization, promoting role models etc. are needed to include indigenous populations in TVET and ACE.

In addition to cultural and financial barriers, physical access to schools is also an issue as indigenous population live mostly in rural remote areas where access to secondary schools is difficult. Furthermore, indigenous children tend to have limited exposure to English (and Spanish) which puts them at a disadvantage when it comes to learning and staying in school. As a result, they are highly likely to acquire insufficient academic foundation and tend to be the least prepared for secondary education. In addition to that, their learning experience is hampered by less experienced teachers as schools located in rural isolated areas, where indigenous people are concentrated, tend to be staffed by younger and less experienced teachers. Hiring teachers who speak the local language and providing teacher professional development training to all teachers on how to teach students who do not speak English at home is imperative to enhance learning for indigenous children.

3. Gender

Gender disparities in access, participation, and quality of education in the Belize system differentially crosscut excluded groups. In the aggregate, in 2021, Belize ranked 81 out of 156 countries globally for *educational attainment*, according to the World Economic Forum's Global Gender Gap Index (GGGI). The majority of children of primary school age are attending primary school (96 percent), and 94 percent will eventually reach the last grade of primary school. While female and male enrolment in primary education was close to parity, there is a 27.5 % drop-off in participation of males from primary to secondary (21.6% drop off of females); and a subsequent 50% drop-off in enrollment of males from secondary to tertiary (42.9% drop off of females). Females outnumber men in tertiary institutions by 12 percentage points, but gender disparities exist in course selection in schools, TVET, and universities. Among unemployed youths, 12.5 percent had attained a tertiary level education. A higher share of women than men had obtained a tertiary level of education and were still unemployed (7.9 percent versus 3.6 percent).

TVET enrollment in the 2019/2020 school was 856, with 674 male youth and only 182 female youth enrolled. Males continue to outnumber females at a rate of 4 men to 1 woman, which has remained constant over the last ten years where women only comprise 20-26% of total enrolments. Indigenous and rural women in Orange Walk, Toledo and Stann Creek are especially absent from vocational/technical training and from the Adult Continuing Education (ACE) program (however, elsewhere this dynamic is reversed, with far more female enrollees in ACE programs than male). Even when females apply to TVETs they tend to enroll in female dominated courses rather than in non-traditional subject areas. Therefore, women remain underrepresented in TVET programs. An intervention that would provide special incentives to encourage women and girls to apply for TVET non-traditional subject areas would help to boost gender responsive visibility. Interventions that would allow for programs to become more demand driven that correspond to employers current and future needs, scaled up programs in which quality is improved and coverage increases for both men and women. This would be consistent with National Gender Policy campaigns to address stereotypes that hinder women from seeking training at TVETs in order to get jobs within non-traditional sectors.

Female youth tend to be more educated than men and are two times more likely than men to graduate from tertiary school (10 percent versus 5 percent, respectively). Thus, while female youth stay in the Belize educational system longer than men, their longer tenure is no guarantee of a higher level of employment. While young women between ages 14 and 24 demonstrate higher secondary school completion rates (65 percent) compared to young men (56 percent), they are more likely to be unemployed, with a 25.2 percent unemployment rate (compared to 14.5 percent for young men). The types of employment female youth obtain are typically in traditional 'female' positions, including as clerks, sales workers, or in service occupations. These gender disparities roughly continue into adulthood, where women participate in the labor force at commensurate ratios as youth (participation rate is 42.4 percent; compared to 68.7 percent for men) and report higher levels of unemployment, especially younger women, despite having higher education levels. Lack of meaningful employment or lower paid work may work as an incentive for female youth to stay in school longer than males.

In contrast, the decline of male youth participation through increasing levels of education may partly be explained by males leaving the system for the labor force. This difference is especially pronounced in Toledo, where more than 70 percent of students are female. Toledo has the highest poverty rate in Belize, and this difference (which is most pronounced in lower wealth quintiles) is attributed to the pressure young men, in contrast to young women, feel to enter the workforce rather than pursuing an education. At the national level, 37 percent of female youth (14 to 24 years of age) and 61 percent of male youth reported participation in the labor force in 2021. However, the youth unemployment rate in Belize is much higher than that of any other age group, with the next highest unemployment rate (among adults ages 25-34) reported to be 9 percent in 2021, suggesting other factors beyond participation in the labor force may lead to lower male educational attainment.

Recent analysis of crime and violence in Belize emphasizes the need to strengthen prevention and juvenile rehabilitation initiatives targeting "at-risk" youth. The vast majority of at-risk youth are male. The Belize Police estimate that there are about 1,300 gang members in the country, mainly in Southside Belize City, operating in about 21 identified groups, which increasingly include youth and juveniles. However, gang membership is a mostly urban phenomenon, and does not sufficiently explain high male drop-offs in educational attainment juxtaposed with a high youth unemployment rate. Rather, it is likely that some male youth are entering informal agricultural work, principally in rural communities. In some coastal communities where the parents' livelihoods are traditionally fishing, once the students are 14 years old, or once they completed primary school, they would drop out to take on the same trade as their fathers. Thus, the push and pull factors affecting the gendered disparities in educational attainment map differently in urban and varied rural areas. In many areas, programs to improve the safety of students on the way to school and in the school yard would also be helpful, including secure fencing and guarding of the schoolyard, community policing in place along the route to school, and bus transportation.

Sociocultural factors may also contribute to gender disparities in educational attainment. There are high rates of women married or in a union before the age of 18 (20.8 percent of women 15-19 years) and a high adolescent birth rate of 74 per 1,000 women in 2015. The minimum legal age for marriage in Belize was raised from 14 to 16 (with parental consent) in 2004. In 2020, Belize's National Committee for Families and Children (NCFC) collaborated with UNICEF and UNFPA to launch a five year 'Road Map to End Child Marriage and Early Unions in Belize.' Nearly eight percent of women aged 15-49 years reported that they had been subject to physical and/or sexual violence by a current or former intimate partner in the previous 12 months, which impacts participation in both education and the labor market.

Other cultural notions regarding gender roles may also impact children's decisions about whether or not to stay in school. One school administrator reflected on cultural issues that can impact school completion

rates in some communities: “especially with males they would be put to work since a man is the one to sustain the family, whereas with females they are to stay at home and do house chores. These issues are called “Machismo” in Spanish and it is still alive in many communities.”

There are also issues of sexual harassment and abuse. The operationalization of a sexual exploitation and abuse (SEA) and gender harassment policy at all education levels and TVET would serve as a safety net for all identified vulnerable groups. The lack of a clear policy and related action plan for addressing acts of gender harassment and sexual violence leads to unsafe learning environments, especially for women and girls.

Weak public transportation systems reduce the accessibility of education to youth in remote locations. Distance to school and transportation challenges affect girls more. Riding motorcycles is more accepted by males, limiting transportation for females significantly to cars and buses. One secondary school student who recently dropped out of school reported that she received penalties at school for arriving late in the mornings. She and her parents said that the school was a distance from their village and the student had to take two buses. While she would be out waiting for the first bus it would not stop for her and then she would have to take another bus that made her reach late to school every time. She explained the situation to school administration, but she was told it is her business to make sure she arrives on time for school daily. The student felt it was unfair because they could see when the bus would drop her in front of the school. The disciplinary actions imposed upset the student and she began to miss classes and to not perform as well academically, and she eventually dropped out.

Infrastructural deficiencies at schools also adversely impact female participation. Only 30% of Belize’s schools meet the internationally accepted standard of one toilet per 25 girls (only 33% meet the standard for boys of 50 boys per toilet). Only 13% of schools provide bathroom access to children with physical disabilities. Lack of proper toilet and sanitation makes going to school more difficult for girls especially at the time of menstruation affecting their attendance at school.

Teachers are also not sufficiently trained to deal with gender stereotypes and to encourage diversity. The stereotypical attitudes of parents, peers and educators tend to reinforce discrimination based on gender. Students and teachers carry into school cultural values that are dominant outside school premises, thereby replicating the gendered assumptions of Belizean society within education evident by low enrolment in TVET programs. TVET enrollment in the 2019/2020 school was 856, with 674 male youth and only 182 female youth enrolled. Males continue to outnumber females at a rate of 4 men to 1 woman, which has remained constant over the last ten years where women only comprise 20-26% of total enrolments. Even when females apply to TVETs they tend to enroll in female dominated courses rather than in non-traditional subject areas. Therefore, women remain underrepresented in TVET programs.

4. Immigrants

The situation of children and adolescents during the migratory process requires special attention as they are particularly vulnerable to trafficking in persons and a variety of human rights violations inflicted by criminal groups, other migrants, and even authorities. Children and adolescents during the migration process, whether they are accompanied, unaccompanied, or separated require special protections which include access and participation in the national education system. Since January 2017 – April 2018, a total of 121 migrant children (56% males and 44% females) ranging from ages 2 weeks – 17 were identified in Belize; of this total 60% were unaccompanied and 30% were identified as having entered the country irregularly with a parent or guardian.

The process of asylum seeking in Belize should take no more than 30 days to be completed (from lodgment of claim to issuing of proper documentation); however, the process could take some four years to be completed. During this time, persons of concern have no legal documentation, are not allowed to work and they do not have the financial means to fulfill their families' basic needs. Draft protocols for Accompanied and Unaccompanied Migrant Children in Belize have sought to establish standards to assess and ensure the best interest of migrant children and to guarantee their rights by implementing actions to identify, refer, protect, and assist them while ensuring appropriate safeguards for migration management and governance. Though the protocol seeks to meet the needs of all identified migrant children and their families there is a lack of coordinated response for migrants: asylum seekers/refugees' access and participation in secondary education.

The inherently political nature of the content and structures of refugee access and participation in the Belizean education system can alienate individual children and lead to education that is neither high quality nor protective. Education is mandatory in Belize up to age 14 or the completion of primary education. Though the current act fosters an environment where the school systems cooperate with Belizean Immigration officials, it only safeguards refugees' access to primary education. When refugees must transition to secondary school, they are systematically barred due to the lack of documentation (social security card, birth records, etc.) required for admission.

Language is another barrier for immigrant children and youth who do manage to access education institutions. Language development is essential to all students' education, regardless of their prior or current experiences with language. Students who are in the process of learning English (English Language Learners-ELLs) are unique because they are learning the language of instruction and the curriculum simultaneously. Home languages are also fundamental to student identities and their cognitive, linguistic, and socio-emotional development (Olivia-Olson et al., 2019). Similar to indigenous children, migrant children have limited exposure to the language of instruction and are thus at a disadvantage in learning. Many migrant children also attend schools in rural areas which, as discussed previously, tend to be staffed by younger and less experienced teachers.

According to the Statistical Institute of Belize Labor force survey 2021, only 29% of all immigrants in Belize completed secondary level education or higher. The only alternative for school aged refugees is to be transitioned into the TVET system where they can gain access to skills training and an opportunity to learn English. Amongst secondary school aged children 15-18yrs old, managing conflicting priorities of education and needing to contribute to family income whether through formal/informal employment are consistent with their lived realities (majority of young refugees in Belize are out of school; majority of them girls). Despite delayed entry, secondary education provides a safe space for personal development and positive social network for adolescents whose transition to adulthood has been disrupted by instability and violence. It represents a critical step in the educational pathways towards sustainable livelihoods, increased earning power and the skills to rebuild their communities.

In addition to access, the quality and relevance of education provided is also an important issue. The provision of education for refugee and asylum seekers often faces the issue of quality and relevance. It is sometimes difficult to evaluate their educational background, including requirements for secondary school, since many refugees lack identification documents or academic transcripts usually needed to transfer to a new institution. Many refugees have not been able to take documentary proof of their qualifications or either lost along the way. The effective inclusion of refugees in national secondary education systems would require a comprehensive look at challenges regarding the quality of teachers, their lack of preparations as well as the lack of resources to continue their training on teaching vulnerable

populations including those suffering from trauma. An intervention is needed to help equip school administration/management with expertise needed to work with refugee and asylum seekers in their enrolment criteria to gain entry and transition to secondary and tertiary education in Belize.

5. Special Educational Needs

Children with disabilities arguably form the largest group of readily identifiable children in Belize who have been and continue to be persistently excluded from education and are forced into an intergenerational cycle of poverty. The Early Childhood Development Strategy underscores limited access by warning that when net enrolment rates reach 90% and above a substantial proportion of children who remain out of school are those with special needs. The OOSCI study showed that children with disabilities made up 25% of 4 yr. old's who were not in school and 36.4% of children between 5-10 who never attended primary school.

The World Bank estimates that of 115 million children worldwide who are not in school, 30-40% are children with disabilities. Children with severe and moderate disabilities may be acknowledged, but children with mild to moderate disabilities often transition to secondary school and are systematically ignored. So too is the large population of children with undocumented learning disabilities or difficulties. These children account for a large population of children who drop out and do not complete secondary education in Belize. They have no obvious disability but may experience extreme difficulty in learning in one or more areas.

Belize currently has no standardized educational diagnostic systems or identification and assessment system of child disabilities. Due to lack of harmonization of data, children are indirectly denied disability specific services such as rehabilitation and early intervention combined with prejudice and rejection has resulted in economic and social exclusion for children and adults with disabilities. Designing and implementing this system would ensure that any developmental delays, impairment, or difficulties experienced by children are addressed as early as possible to ensure the provision of appropriate support and care (i.e.: evidence-based individualized educational plans, teacher aids, accurate diagnostic and treatment plans) at secondary level. Another intervention at the TVET level shall have positive effects in the labor market. It will lead to reducing the significant social and economic cost as people with disabilities can acquire skills and qualifications required in the labor market to improve their employment opportunities.

V. Data Gaps

(TBC-see Annex 2)

VI. Conclusions

(TBC-Identification of cross cutting themes and prioritization of underlying problems and issues that can be addressed through targeted investments and activities.)

References

(to be completed)

- Belize Chamber of Commerce and Industry. (2018). *Skills Mismatch in the Agriculture and ICT Labor Market*.
<https://www.belize.org/wp-content/uploads/bsk-pdf-manager/2019/11/belize-chamber-of-commerce-skills-gap-2018.pdf>
- Gideon, R. and Pech, B. (2019). *TVET Sector Diagnosis*. Policy, Planning, Research and Evaluation Unit, Belize Ministry of Education, Youth, Sports and Culture. Belize City, Belize.
<https://www.moe.gov.bz/education-statistics-reports/>
- Government of Belize. (2003). *Education Rules*.
<http://www.belize-law.org/web/lawadmin/PDF%20files/cap036s.pdf>
- Government of Belize. (2010). *Belize Education and Training Act, 2010*. Belmopan, Belize: Print Belize.
- Government of Belize. (2012). *Education Amendment Rules, 2012*. Belmopan, Belize: Print Belize.
- Naslund-Hadley, E., Navarro-Palau, P. and Prada, M. F. (2020). *Skills to shape the future: Employability in Belize*. Inter-American Development Bank, Education Division.
[https://publications.iadb.org/publications/english/document/Skills to Shape the Future Employability in Belize en.pdf](https://publications.iadb.org/publications/english/document/Skills_to_Shape_the_Future_Employability_in_Belize_en.pdf)
- Pech, B. and Gideon, R. (2020). *Tertiary Sector Diagnosis*. Policy, Planning, Research and Evaluation Unit, Belize Ministry of Education, Youth, Sports and Culture. Belize City, Belize.
<https://www.moe.gov.bz/education-statistics-reports/>
- Policy, Planning, Research and Evaluation Unit. (2011). *Abstract of Education Statistics 2010/11*. Belize Ministry of Education, Youth, Sports and Culture. Belmopan, Belize.
<https://www.moe.gov.bz/education-statistics-reports/>
- Policy, Planning, Research and Evaluation Unit. (2021). *Abstract of Education Statistics 2020/21*. Belize Ministry of Education, Culture, Science and Technology. Belmopan, Belize.
<https://www.moe.gov.bz/education-statistics-reports/>
- Statistical Institute of Belize. (2021). *Belize Labour Force Survey Report, April 2021*. Belmopan, Belize.
http://sib.org.bz/wp-content/uploads/LabourForce_2021-04.pdf
- Statistical Institute of Belize. (2011). *Belize Population and Housing Census: Country Report 2010*. Belmopan, Belize: SIB
http://sib.org.bz/wp-content/uploads/2017/05/Census_Report_2010.pdf
- Statistical Institute of Belize. (2021). *Poverty Study 2018/19*. Belmopan, Belize
<http://sib.org.bz/wp-content/uploads/PovertyStudy2018.pdf>

Statistical Institute of Belize and UNICEF Belize. (2012). *Belize Multiple Indicator Cluster Survey 2011*. Belmopan, Belize: Statistical Institute of Belize and UNICEF Belize. Available at http://sib.org.bz/wp-content/uploads/MICS4_Report_2011.pdf

Statistical Institute of Belize and UNICEF Belize. (2017). *Belize Multiple Indicator Cluster Survey, 2015-2016, Final Report*. Belmopan, Belize: Statistical Institute of Belize and UNICEF Belize. http://sib.org.bz/wp-content/uploads/MICS5_Report_2015.pdf

Young, R.A., Macfarlane, V. and Aldana, M. (2017). *Out-of-School Children Initiative Study*. Report submitted to UNICEF Belize

Annexes

Annex 1-Stakeholder Engagement Process

- A description of the stakeholder consultation process that informed the RCA.