An Investigation into the Factors that Influence Students' Academic Performance in the Caribbean:

Home and School Factors

SAINT KITTS

COUNTRY REPORT

Antigua & Barbuda

Report #: CERC_SAS1a:ANT

Caribbean Educational Research Centre

SARYT VINCENT AND

This page is intentionally blank.

An Investigation into the Factors that Influence Students' Academic Performance: Home and School Factors
ANTIGUA AND BARBUDA COUNTRY REPORT
Caribbean Educational Research Centre
September 2024
Report No: CERC_SAS 1a: ANT

This research was planned and executed by:

The Caribbean Educational Research Centre The University of the West Indies Cave Hill Campus, Barbados

- Professor S. Joel Warrican, Director
- ❖ Dr Coreen J. Leacock, Research Coordinator
- Dr Erin Mahon, Research Fellow
- Dr Laurette Bristol, Project Officer
- ❖ Ms Crescentiana Alfred, Research Assistant
- Mrs Nitha Mauricette-Philip, Research Assistant
- Ms Talyjah Hyatt, Research Assistant
- ❖ Ms Jimelle Roberts, Research Assistant
- Ms Judy Ann Auld, Research Assistant
- Ms Jonielle Alleyne, Research Assistant
- Mrs Paula Alleyne, Research Assistant
- Ms Desiré Collins, Research Assistant
- * Ms Bethlene Ferdinand, Research Assistant
- ❖ Ms Rachel Frame, Research Assistant
- Mr Don Howell, Research Assistant
- Dr Allison DaSantos, Research Fellow
- Dr Chloe Walker, Research Fellow

Global Campus, Barbados

Ms Melissa Alleyne, Planning Officer

TABLE OF CONTENTS

List of Tables	xii
EXECUTIVE SUMMARY	xvii
Overview	xvii
Objectives	xvii
Methodology	xviii
Participants	xviii
Key Findings: Participant Profiles	xviii
Students	xviii
Teachers	xix
Principals	xix
Key Findings: Home and School Factors Affecting Academic Achievement	txx
Students' Home Environment	xx
Students' Perception of School and Learning	xxi
Teachers' Classroom Practices	xxii
School Leadership	xxiii
School Characteristics	xxiv
Teachers' Views on School and Other Education-Related Issues	xxiv
Conclusion	xxiv
What's Next	XXV
INTRODUCTION	1

LITERATURE REVIEW	3
Introduction	3
Student Academic Achievement Defined	3
Education in Post-Colonial Caribbean Contexts	4
Importance of Evidence-Based Education Reform	5
Academic Achievement Indicators in the Caribbean	7
Factors Affecting Academic Achievement: International and Caribbean Perspective	s 8
Home Environment and Academic Achievement	10
Nursery-Enrolment and Early-Childhood Education	10
Parental Involvement & Home Literacy Environment	11
Student and Teacher Absenteeism	12
Students' Perceptions of Learning and School Climate	13
Student Attitudes Toward Learning and School	13
School Climate and Academic Achievement	14
Democratic Classrooms and Student-Centred Instruction	16
School Leadership	17
Post-Colonial Education Practices	18
Academic Tracking, Ability Labelling and the Use of the Common Entrance	Exam for
Secondary School Placement	18
Grade Retention	20
Technology in Education and the Impact of the COVID-19 Pandemic	21

Conclusion	23
THEORETICAL FRAMEWORK	24
METHODOLOGY	26
Research Design	26
Sampling Strategy	26
Procedure	27
Data Analysis	28
FINDINGS	29
COUNTRY PROFILE: STUDENTS	29
Primary School Students	29
Profile of Students in the Primary Schools Sample	29
Primary Students' Sex	29
Primary Students' Age	29
Enrolment in Nursery Before Primary School	30
Summary	30
Secondary School Students	30
Profile of Students in the Secondary Schools Sample	30
Secondary Students' Sex	31
Secondary Students' Form Level	31
Secondary Students' Age	31
Summary	32

COUNTRY PROFILE: TEACHERS	32
Primary School Teachers	32
Primary Teachers' Sex	32
Primary Teachers' Years of Teaching Experience	32
Primary Teachers' Years at the Current School	33
Qualifications Held by Primary Teachers	33
Education-Related Qualifications Held by Primary Teachers	34
Professional Status of Primary Teachers	34
Level Taught by Primary Teachers	35
Summary	35
Secondary School Teachers	35
Profile of Teachers in the Secondary Schools Sample	35
Secondary Teachers' Sex	36
Secondary Teachers' Years of Teaching Experience	36
Secondary Teachers' Years at the Current School	36
Qualifications Held by Secondary Teachers	37
Education-Related Qualifications Held by Secondary Teachers	37
Professional Status of Secondary Teachers	38
Subject Areas Taught by Secondary Teachers	38
Level Taught by Secondary Teachers	38
Summary	39

COUNTRY PROFILE: PRINCIPALS	39
Primary School Principals	39
Profile of Principals in the Primary Schools Sample	40
Primary Principals' Sex	40
Primary Principals' Years of Teaching Experience	40
Primary Principals' Years in Principal Position	40
Primary Principals' Years as Principal at the Current School	40
Highest Qualification Held by Primary Principals	40
Education-Related Qualifications Held by Primary Principals	40
Primary Principals' Training in School Leadership/Management	41
Summary	41
Secondary School Principals	41
Profile of Principal in the Secondary Schools Sample	41
Secondary Principal's Sex	41
Secondary Principal's Years of Teaching Experience	41
Secondary Principal's Years in Principal Position	42
Secondary Principal's Years as Principal at the Current School	42
Highest Qualification Held by Secondary Principals	42
Education-Related Qualifications Held by Secondary Principals	42
Secondary Principals' Training in School Leadership/Management	42
Summary	42

FACTORS AFFECTING STUDENT ACHIEVEMENT	43
Students' Home Environment	43
Primary Students' Home Environment	44
Family Members Living with Primary Students	44
Primary Students Access to Devices, Internet and Other Resources at Home	44
Primary Students' Transportation to School	46
Primary Students' Leisure Activities	46
Primary Students' Home Literacy Environment	46
Primary Students' Participation in Extra-Curricular Activities	48
Summary	49
Secondary Students' Home Environment	49
Family Members Living with Secondary Students	49
Secondary Students Access to Devices, Internet and Other Resources at Home	50
Secondary Students' Transportation to School	51
Secondary Students' Leisure Activities	52
Secondary Students' Home Literacy Environment	52
Secondary Students' Participation in Extra-Curricular Activities	54
Summary	55
Students' Perception of School and Learning	56
Primary Students' Attitudes Towards School and Learning	56
Summary	57

Primary Students' Perception of the School Environment
Summary61
Secondary Students' Attitudes Towards School and Learning
Summary
Secondary Students' Perception of the School Environment
Summary
Teachers' Classroom Practices
Primary Teachers' Classroom Practices
Primary Teachers' Frequency of Using Technology for Various Purposes
Student Engagement and the Use of Democratic Teaching Practices in the Primary Classroom
Summary
Secondary Teachers' Classroom Practices
Secondary Teachers' Frequency of Using Technology for Various Purposes
Student Engagement and the Use of Democratic Teaching Practices in the Secondary Classroom
Summary
School Leadership
Primary Teacher Perspectives on School Leadership
Summary
Secondary Teachers' Perspectives on School Leadership

	Summary	. 82
P ₁	rincipals' Perspectives on Primary School Leadership	. 83
	Summary	. 83
P ₁	rincipal's Perspectives on Secondary School Leadership	. 84
	Summary	. 84
So	chool Characteristics	. 85
Pı	rimary School Characteristics	. 85
	School Roll and Number of Personnel in Primary Schools	. 85
	Student and Teacher Absenteeism in Primary Schools	. 86
	Primary School Facilities	. 86
	Primary School Class Structure	. 87
	Primary School Reading Policies	. 87
	Primary School Extracurricular Activities	. 88
	Summary	. 88
Se	econdary School Characteristics	. 88
	School Roll and Number of Personnel in Secondary School	. 88
	Student and Teacher Absenteeism in Secondary School	. 88
	Secondary School Facilities	. 89
	Secondary School Class Structure	. 89
	Secondary School Reading Policies	. 89
	Secondary School Extracurricular Activities	. 89

	Secondary Students' Academic Track	. 89
	Summary	. 91
F	actors with Indirect Influences: Views on Common Educational Practices	. 92
P	rimary Teachers' Views on School and Other Education-Related Issues	. 92
	Primary Teachers' Feelings About Teaching	. 92
	Primary Teachers' Feelings about Current School	. 92
	Primary Teachers' Attitudes Toward Out-of-School Lessons	. 93
	Primary Teachers' Attitudes Toward the Grade Six National Assessment	. 94
	Primary Teachers' Attitudes Toward Streaming and Grade Retention	. 95
	Summary	. 95
S	econdary Teachers' Views on School and Other Education-Related Issues	. 96
	Secondary Teachers' Feelings About Teaching	. 96
	Secondary Teachers' Feelings about Their Current School	. 96
	Secondary Teachers' Attitudes Toward Out-of-School Lessons	. 97
	Secondary Teachers' Attitudes Toward the Grade Six National Assessment	. 98
	Secondary Teachers' Attitudes Toward Streaming and Grade Retention	. 98
	Summary	. 99
P	rimary Principals' Views on Other Education-Related Issues	100
	Primary Principals' Attitudes Toward Extra Lessons	100
	Primary Principals' Attitudes Toward the Grade Six National Assessment	100
	Primary Principals' Attitudes Toward Streaming and Grade Retention	100

Summary	100
Secondary Principal's Views on Other Education-Related Issues	101
Secondary Principal's Attitudes Toward Extra Lessons	101
Secondary Principal's Attitudes Toward the Grade Six National Assessment	101
Secondary Principal's Attitudes Toward Streaming and Grade Retention	101
Summary	101
Conclusions and Recommendations	102
What's Next	103
REFERENCES	105

List of Tables

Table 1: General Sampling Guide	26
Table 2: Antiguan and Barbudan School Sample	27
Table 3: Distribution of Primary Students by Sex	29
Table 4: Distribution of Primary Students by Age	29
Table 5: Distribution of Primary Students by Prior Nursery Enrolment	30
Table 6: Distribution of Secondary Students by Sex	31
Table 7: Distribution of Secondary Students by Form Level	31
Table 8: Distribution of Secondary Students by Age	31
Table 9: Distribution of Primary Teachers by Sex	32
Table 10: Number of Years Teaching for Primary Teachers	33
Table 11: Number of Years Teaching at Current School for Primary Teachers	33
Table 12: Qualifications of Primary Teachers	33
Table 13: Proportion of Primary Teachers with Qualifications in Education-Related Areas	34
Table 14: Professional Status of Primary Teachers	34
Table 15: Level Taught by Primary Teachers	35
Table 16: Distribution of Secondary Teachers by Sex	36
Table 17: Number of Years Teaching for Secondary Teachers	36
Table 18: Number of Years Teaching at Current School for Secondary Teachers	36
Table 19: Qualifications of Secondary Teachers	37
Table 20: Proportion of Secondary Teachers with Qualifications in Education-Related Areas.	37

Table 21: Professional Status of Secondary Teachers	. 38
Table 22: Subject Areas Taught by Secondary Teachers	. 38
Table 23: Level Taught by Secondary Teachers	. 39
Table 24: Family Members Living with Primary Students	. 44
Table 25: Primary Students' Mothers' Employment Status	. 44
Table 26: Primary Students' Fathers' Employment Status	. 44
Table 27: Primary Students' Access to the Internet at Home	. 45
Table 28: Primary Students' Access to Electronic Devices at Home	. 45
Table 29: Primary Students' Access to Other Resources at Home	. 45
Table 30: Primary Students' Mode of Travel to School	. 46
Table 31: Primary Students' Leisure Activities at Home	. 46
Table 32: Primary Students' Reading Material and Format	. 47
Table 33: Number of Books in Primary Students' Homes	. 47
Table 34: Primary Students' Who Are Read to at Home	. 47
Table 35: Person Who Reads to Primary Students at Home	. 48
Table 36: Primary Students' Perception of Reading as a Gender-Specific Activity	. 48
Table 37: Primary Students' Participating in Extra-Curricular Activities	. 48
Table 38: Family Members Living with Secondary Students	. 49
Table 39: Secondary Students' Mothers' Employment Status	. 50
Table 40: Secondary Students' Fathers' Employment Status	. 50
Table 41: Secondary Students' Access to the Internet at Home	. 50

Table 42: Secondary Students' Access to Electronic Devices at Home	51
Table 43: Secondary Students' Access to Other Resources at Home	51
Table 44: Secondary Students' Mode of Travel to School	52
Table 45: Secondary Students' Leisure Activities at Home	52
Table 46: Secondary Students' Reading Material and Format	53
Table 47: Number of Books in Secondary Students' Homes	53
Table 48: Secondary Students' Read to at Home When in Primary School	54
Table 49: Person Who Read to Secondary Students at Home when in Primary School	54
Table 50: Secondary Students' Perception of Reading as a Gender-Specific Activity	54
Table 51: Secondary Students' Participating in Extra-Curricular Activities	55
Table 52: Primary Students' Attitudes Towards School and Learning	57
Table 53: Primary Students' Responses on School Climate Survey	58
Table 54: Secondary Students' Attitudes Towards School and Learning	62
Table 55: Secondary Students' Responses on School Climate Survey	64
Table 56: Primary Teachers' Frequency of Use of Technology for Specific Purposes	69
Table 57: Factors Affecting the Use of Technology by Primary Teachers	70
Table 58: Primary Teachers' Reported Student Engagement in Activities	71
Table 59: Primary Teachers' Reported Use of Democratic Instructional Practices	72
Table 60: Secondary Teachers' Frequency of Use of Technology for Specific Purposes	74
Table 61: Factors Affecting the Use of Technology by Secondary Teachers	75
Table 62: Secondary Teachers' Reported Student Engagement in Activities	76

Table 63: Secondary Teachers' Reported Use of Democratic Teaching Practices
Table 64: Primary Teachers' Responses on PIMRS Short Form 2017 (N=32)
Table 65: Secondary Teachers' Responses on PIMRS Short Form 2017 (N=37)
Table 66: Primary School Roll by Sex
Table 67: Primary School Personnel 86
Table 68: Primary School Facilities Present and in Use
Table 69: Secondary Students' Academic Track
Table 70: Secondary Students' Choosing Their Academic Track
Table 71: Person Who Chose Secondary Students' Academic Track
Table 72: Secondary Students' Planned Career Choice Areas
Table 73: Primary Teachers' Feelings About Teaching
Table 74: Primary Teachers' Feelings About Their Current School
Table 75: Primary Teachers' Provision of Extra Lessons Outside of School Time
Table 76: Primary Teachers' Perceptions of Parent's Willingness to Pay for Extra Lessons 93
Table 77: Primary Teachers' Perceptions of Teachers Being Paid to Provide Extra Lessons Outside of School
Table 78: Primary Teachers' Support for Use of Grade Six National Assessment for Secondary School Placement
Table 79: Primary Teachers' Support for Streaming According to Ability
Table 80: Primary Teachers' Support for Grade Retention
Table 81: Secondary Teachers' Feelings About Teaching

Table 82: Secondary Teachers' Feelings About Their Current School
Table 83: Secondary Teachers' Provision of Extra Lessons Outside of School Time9
Table 84: Secondary Teachers' Perceptions of Parent's Willingness to Pay for Extra Lessons 9
Table 85: Secondary Teachers' Perceptions of Teachers Being Paid to Provide Extra Lesson
Outside of School9
Table 86: Secondary Teachers' Support for Use of Grade Six National Assessment for Secondar
School Placement9
Table 87: Secondary Teachers' Support for Streaming According to Ability
Table 88: Secondary Teachers' Support for Grade Retention

EXECUTIVE SUMMARY

Overview

Much like in other Caribbean nations, educational practices in Antigua and Barbuda are rooted in systems established during the colonial era under European rule. Despite significant societal changes, many of these practices continue today, even though they may no longer align with the needs of the modern Antiguan and Barbudan educational context. Recently, there has been a shift towards adopting evidence-informed policymaking to address and replace outdated methods. This approach is essential for small island developing states like Antigua and Barbuda, which have limited resources and require more targeted, data-driven strategies to optimise educational outcomes. This study responds to the increasing demand for empirical data to support policy decisions. Its primary goal is to provide insights into the factors at home and school that impact students' performance in Antigua and Barbuda. This research, initiated in 2017, was funded by the Board of Graduate Studies, The University of the West Indies.

Objectives

This report aims to describe data collected in Antigua and Barbuda in 2017 on:

- 1. Primary and secondary school students' home environment.
- 2. Primary and secondary school students' attitudes toward learning and perceptions of school climate.
- 3. Primary and secondary school teachers' classroom practices.
- 4. Primary and secondary teachers' and principals' perceptions of school leadership practices.
- 5. Primary and secondary school characteristics.
- Primary and secondary teachers' and principals' views on common educational practices, including using the Grade Six National Assessments for secondary school placement, grade retention and ability-based streaming.

This report is Report 1a, the first in a two-part report on the home and school factors influencing student academic achievement. Report 1b will explore the potential of these factors to predict student achievement at the primary and secondary levels.

Methodology

Surveys were used to collect quantitative data from students, teachers, and principals in primary and secondary schools in Antigua and Barbuda. The study targeted key factors affecting academic achievement, including school, personal, and home influences. A representative sample of public and government-assisted schools was selected. Data were collected from 21 schools in total. Sixteen primary schools were included in the study, focusing on students in Grade Five. Five secondary schools were included, targeting Second and Fourth Form students (ages 12-13 and 14-15, respectively).

Participants

- 280 primary students (143 female and 137 male)
- 249 secondary students (150 female and 99 male)
- 32 primary teachers (29 females, one male, two unknown)
- 37 secondary teachers (28 females, eight males, one unknown)
- Three primary principals (all female)
- One secondary principal (female)

Key Findings: Participant Profiles

The collected data were compiled and analysed using descriptive statistics to profile the primary and secondary students, teachers, and principals in 2017.

Students

- Primary students ages ranged from nine to 12, with similar proportions of males (49%) and females (51%).
- The modal age for primary students was 10.
- Most primary students (86%) had been enrolled in nursery prior to primary school.
- Secondary students' ages ranged from 12 to 18, with significantly more female (60%) than male (40%) participants.
- The modal age for secondary students was 13 (38% of the sample).
- Secondary students were roughly evenly divided by form level, with 55% of students in Form 2 and 45% in Form 4.

Teachers

- There were significantly more female teachers than male teachers at both primary and secondary levels.
- The highest qualification for teachers at the secondary level was the master's degree, with most (89%) having attained degrees at that level. The highest qualification for primary teachers was a bachelor's degree, with one quarter attaining this qualification.
- Approximately one-third of the secondary teachers reported having an associate's degree in education, and only 8% said they have a bachelor's degree in education.
- Teachers' degrees in fields other than education, included qualifications in computer science, fine arts, history, cultural studies, economics, management, and the arts.
- About one-third of secondary teachers were trained graduates, and just over one-quarter were trained non-graduates.
- It is evident that more secondary teachers need to access teacher training courses/certification, as less than half of the teachers reported that they are trained.

Principals

- Primary and secondary school principals from the sample were given questionnaires, but response rates were low. Results should, therefore, not be generalised to the broader population of primary and secondary school principals in Antigua and Barbuda because of the small sample sizes.
- Participants in this study included three female principals at the primary level and one female principal at the secondary level.
- All the principals were trained in leadership and/or management, and all the principals' highest qualification was a bachelor's degree.
- Two primary school principals had degrees in an education-related area; the secondary school principal did not.

Key Findings: Home and School Factors Affecting Academic Achievement

Students' Home Environment

The home environment is critical in shaping students' educational experiences and overall development. This section presents findings on parental employment, access to resources at home, leisure activities, and participation in extra-curricular activities, which affect the well-being and academic success of both primary and secondary school students.

- Students' reports of home environment factors were relatively consistent, with most primary school students (83%) and secondary school students (85%) living with a maternal figure. Just over half (56%) of the primary school students reported living with a paternal figure, and just under half (46%) of the secondary school students reported living with a father, stepfather or foster father.
- At the primary school level, about two-thirds of the mothers were reported as working full-time; at the secondary level, most (80%) were reported as working full-time. Regarding father figures, primary school students reported that 70% worked full time, while at the secondary school level, 78% worked full time.
- Most primary school students (84%) and secondary school students (81%) reported having internet access at home. Access to educational resources is essential to enhance students' learning experience.
- Sixty-nine percent of primary school students reported having access to a tablet, just over half had access to a laptop, and two-thirds had access to computers. Ninety percent of secondary school students indicated they had access to smartphones and three-quarters to computers for schoolwork.
- Compared to two-thirds of the primary school students who reported having a quiet place for schoolwork, just under half of secondary school students had a quiet place to study.
- Access to educational software was consistent across the levels, with about half of primary (55%) and secondary (50%) students having access to this resource.
- Approximately 57% of primary and 64% of secondary school students reported reading for leisure. At the primary school level, one-fifth of the students preferred to read fictional books in paper format, and one-quarter reported that they read non-fiction books in paper format. Nine percent of the students from the primary school level in this study indicated

that they read the electronic version of fiction books, and 8% read non-fiction in that format.

- Similar to the findings at the primary level, one-fifth of the students at the secondary school reported that they read fiction books in paper format, and one-quarter read non-fiction in paper format. Twenty-one percent of the secondary school students indicated that they read fiction books in the electronic version, and 13% read non-fiction in the electronic version.
- Fifty-eight percent of primary school students reported that someone read to them at home, and 66% of the secondary school students indicated that someone read to them at home when they attended primary school.
- Just under one-half of primary (47%) and secondary school students (43%) reported having at most twenty-five books apart from schoolbooks at home.

Students' Perception of School and Learning

Students' perceptions of their school environment and of learning significantly influence their academic motivation and overall school experience. This section explores how students viewed school and learning in 2017, highlighting engagement, discipline, school climate, and community involvement shifts.

- While most primary school students (93%) and secondary school students (96%) agreed that school would help them get a job after graduating, three-quarters of primary school students and less than half (42%) of secondary school students described their school experience as fun. About one-fifth of both primary and secondary students reported that they did not like school, and half of secondary students felt that school was like a prison.
- Compared to 56% of primary school students who reported that they felt that teachers and peers were like family to them, only one-fifth of secondary school students felt that way.
- Half of primary school students reported that they were part of the decision-making processes with the teacher in the classroom, and only one-fifth of secondary school students reported this belief.
- Just over half (55%) of primary school students and only one-third (34%) of secondary school students reported that they felt safe everywhere in the school.

• About two-thirds (61%) of primary school students reported that what was required to get good grades was clear, while only about one-quarter (23%) of secondary school students reported that this was clear to them.

Teachers' Classroom Practices

Effective classroom practices are essential for enhancing student learning and engagement. This section explores the key trends and developments in primary teachers' technology use, student engagement and democratic teaching practices.

- Under half (40%) of primary teachers reported using technology to generate teaching materials and create tests, and two-thirds reported using technology to gather instructional information. About three-quarters (72%) of the primary teachers reported never posting schoolwork online, and 59% never used technology to engage their students in online discussions in avenues such as blogs and chat rooms.
- About two-thirds (60%) of secondary teachers reported using technology to find lesson information and around half of these teachers posted grades using technology. Fifty-seven percent of secondary teachers never used technology to post homework assignments online, and about half reported that they never engaged their students in online discussions in blogs and chat rooms.
- Two-thirds of the primary teachers reported using differentiated learning, guided instructions, role play, reflective conversations, and peer-partner learning, and they told students the assessment goals. About half (53%) reported that they allowed students to rate their own work before marking.
- Approximately three-quarters of secondary teachers indicated that they worked with students to establish a code for classroom behaviour and consequences for infractions, used shared methods, used cooperative or collaborative learning, and told students of the objectives of an assessment activity. Most (78%) of the secondary teachers reported encouraging students to read for information and allowing students to participate in demonstrating their work.
- The findings about assessment, learning, and discipline highlight the need for teachers to improve their assessment and instructional practices.

School Leadership

Effective school leadership is a cornerstone of successful educational environments, directly influencing teacher performance, student outcomes, and overall school culture. This section examines the perspectives of primary and secondary principals and teachers on leadership practices in 2017.

- Only one-quarter of primary teachers said their administrator often created annual school-wide goals that they could easily understand and use, and only about one-quarter of secondary said their principal usually sets school-wide goals, that these goals are frequently clear and that their principals communicate the school's mission well to the community.
- In contrast, all of the principals for both primary and secondary schools reported that they frequently developed annual school-wide goals.
- One-quarter of the primary teachers said the principal often used the goals when making curricular decisions. One-fifth said principals often used school-wide testing data to make curriculum decisions and met with teachers to review student achievement. One-eighth of the primary teachers said principals privately praised them, wrote memos for their files, and saw superior students in their office with their work.
- One-quarter of primary teachers said the principal often used the goals when making curricular decisions. About one-third said principals checked student work while assessing classroom instruction. Approximately one-fifth said principals often used school-wide testing results to make curriculum decisions. Only about one-quarter of secondary teachers said their principals led or attended instruction-related in-service activities. Only 14% said their principals rewarded instructors by providing professional development opportunities.
- In contrast, two-thirds of the primary school principals reported that they frequently used needs assessments and data from students' performances to set the goals. All the principals (primary and secondary) indicated that they developed goals which were easily understood by teachers and referred to them when making curricular decisions. All the principals pointed out that they highlighted specific strengths and weaknesses in teachers' instructional practices in post-observation feedback, such as in conferences or written evaluations.
- Approximately one-fifth of secondary teachers reported that their principals frequently participated actively in the review of curricular materials. Additionally, only a little over

one-quarter of these teachers indicated that their principals frequently draw upon the results of school-wide testing when making curricular decisions.

School Characteristics

• The primary and secondary school principals reported that teachers' and students' absenteeism poses a moderate challenge at their schools. Additionally, it was reported that libraries, computer labs, and special subject rooms were absent from two-thirds of primary schools. The secondary principal reported that most school facilities were in use, including the library, computer lab, canteen, science labs, art rooms, industrial arts rooms and subject rooms. However, she indicated that her school did not have critical facilities such as a sick bay, a playing field, hard courts and a music room.

Teachers' Views on School and Other Education-Related Issues

- This study found that two-thirds of primary principals favoured paying teachers for extra classes. One-third supported national assessments for secondary school placements, onethird opposed, and one-third had no view. Two-thirds of principals opposed streaming and grade retention, while one-third supported them.
- Data from the one secondary principal indicated that she believes teachers should be paid
 for extra lessons and supports using Grade Six National Assessments for secondary school
 placement and grade retention. The principal did not support streaming of classes.

Conclusion

Antigua's education system advocates for a more inclusive approach that promotes gender equity among educators and guarantees that all students, irrespective of their background, can participate fully in academic and extracurricular activities. Moreover, matching educational methodologies with contemporary career requirements, including critical thinking, and enhancing reading policies are vital for equipping students for the labour market. By confronting these difficulties, Antigua and Barbuda can enhance student accomplishment and establish a sustainable basis for continuous progress.

What's Next...

In the pre-COVID-19 (2017) and post-COVID-19 (2022/2024) periods, data were collected from primary and secondary students, teachers and school principals from Barbados and the Eastern Caribbean to investigate specific home and school factors that are known to influence academic achievement, both at the individual level and school level. This report focused on the data collected in Antigua and Barbuda. It provides a descriptive summary of the responses from the various participant groups in this country that shed light on the home and school factors investigated and, in some cases, discusses implications.

A follow-up to this report is imminent. The follow-up report will examine the relationship between home and school factors summarised in this current report and academic achievement at the school level. Using primarily correlational analysis, we will explore, for example, the link between:

- school leadership and students' attitudes to school and learning
- school leadership and teachers' instructional practices
- students' home literacy behaviour and school achievement
- students' attitudes to school and learning and school achievement
- students' perceptions of their school and school achievement

Such issues will be explored for the pre- and post-COVID-19 periods.

INTRODUCTION

Over the years, education in the region has been a topic of extensive discussion and debate, with numerous contentious issues stemming from practices established during the colonial period. Debates have revolved around curriculum content and methods, transition practices from primary to secondary education, hierarchical arrangement of schools, and teacher recruitment processes, among others. These discussions, held in the media, parliamentary debates, and in various forums across the region, often lead to the formulation and implementation of policies. However, policymaking in the Caribbean frequently relies on "policymakers, who implement policies based on ideas, as well as ad hoc or outdated data" (Economic Commission for Latin America and the Caribbean, 2012). Recognising the constraints of limited financial resources, stakeholders in the region understand the importance of basing decisions about education, which remains highly valued, on rigorously gathered and analysed empirical evidence.

To this end, this study aligns with the current focus on seeking evidence to inform practice. It aims to contribute to our understanding of the factors that either promote or hinder students' academic progress in Antigua and Barbuda and the Caribbean region. The research presented here is part of a more extensive study investigating the home and school factors influencing student academic achievement in the Caribbean. Based on data from 2017, this report seeks to achieve the following objectives:

- 1. Develop demographic profiles of primary and secondary students, teachers and principals in Antigua and Barbuda.
- 2. Provide descriptions of several factors that influence Antiguan and Barbudan students' academic achievement, including:
 - a. Primary and secondary students' reported home environment.
 - b. Primary and secondary students' perception of school and learning.
 - c. Primary and secondary teachers' reported classroom practices.
 - d. Primary and secondary teachers' and principals' perspectives on school leadership.
 - e. Primary and secondary school characteristics.
 - f. Indirect factors such as primary and secondary teachers' and principals' views on school and other education-related issues

This report is Report 1a, the first in a two-part report on the home and school factors influencing student academic achievement. Report 1b will explore the potential of these factors to predict student achievement at the primary and secondary levels.

LITERATURE REVIEW

Introduction

This literature review examines various factors influencing student academic achievement, focusing on Caribbean and international perspectives. The discussion spans key areas such as the definition of academic achievement, the legacy of colonialism in Caribbean education, and evidence-based education reform. Additional sections explore specific influences on academic outcomes, including home environments, absenteeism, student attitudes, school climate, and leadership. The review also highlights the impact of post-colonial practices, such as academic tracking, and the role of technology in education, particularly in the wake of the COVID-19 pandemic on student achievement.

Student Academic Achievement Defined

Steinmayr et al. (2014) define academic achievement as a representation of the outcomes that reflect how individuals have met specific educational goals within instructional settings, including schools, colleges and universities. These goals often centre on cognitive development, either spanning multiple disciplines (e.g., critical thinking) or focusing on the mastery of specific content areas such as literacy, numeracy, science or history. Steinmayr et al. (2014) state that it is a multifaceted construct that is context-dependent and shaped by the indicators used to measure it. These indicators range from general markers, such as procedural (knowledge of a process, skill, or procedure, e.g., conducting a science experiment) and declarative (knowledge of a concept or idea, e.g., knowing what a noun is) knowledge gained through education, to curriculum-based measures, such as grades and performance on achievement tests. Other indicators include cumulative outcomes such as degrees and certifications.

In modern societies, academic achievement is critical in determining a person's opportunities for further education and professional success. For example, performance measured by Grade Point Average (GPA) or other measures often dictates whether a student will succeed at college or university (Kobrin & Michel, 2006). This can be extended to the Caribbean, where admission to community colleges and universities relies on the results of the Caribbean Secondary Education Certificate (CSEC) and the Caribbean Advanced Proficiency Exam (CAPE). Beyond individual implications, academic achievement has national significance, influencing a country's economic

prosperity and social well-being. International assessments, such as the Programme for International Assessment (PISA), assess academic achievement across nations, offering insight into the strengths and weaknesses of educational systems. The results of these studies are used to inform policy decisions aimed at improving educational outcomes (OECD, 2023).

Education in Post-Colonial Caribbean Contexts

The legacy of colonialism continues to shape education systems in the Caribbean, and inequities continue to be perpetuated by educational structures that are in place today (Brissett, 2021; Bristol, 2012; Thompson et al., 2011; Warrican, 2005, 2020; Williams, 2016). Brissett (2021) emphasises that these inequities are a direct result of colonial-era education systems that served a small elite, leaving marginalised populations, particularly those of African descent, with limited access to quality education. Similarly, Williams (2016) describes the persistence of hierarchical systems in Trinidad's education, where students from lower socio-economic backgrounds are marginalised through outdated curricula and disciplinary practices. When viewed through a postcolonial lens, we can thoroughly investigate the relationship between culture, education and research (Bristol, 2012).

While education reforms have aimed to address these inequities, Jules (2010) argues that global pressure to conform to Western educational norms often hinders truly localised efforts. The challenge, therefore, is not just one of access but of ensuring the relevance of education to local socio-economic contexts. Sappleton and Adams (2022) add an international perspective, comparing efforts to decolonise education in the Caribbean and South Africa with the ongoing challenges of racial inequalities in United States (U.S.) education. They point out that while diversity initiatives in the United States are gaining traction, they often fail to address the deep Eurocentrism embedded in the system, a challenge similarly faced in the Caribbean.

Warrican (2015) is aligned with these ideas, highlighting how the divide between home and school cultures affects literacy development in the Commonwealth Caribbean. He argues that many students, particularly those from working-class backgrounds, are disengaged from literacy instruction that prioritises Standard English (SE) and ignores the Creole languages spoken at home. The persistence of colonial education practices devaluing local languages and cultures results in poor literacy outcomes and broader educational disengagement. Warrican calls for reforms integrating students' home languages into the classroom, fostering a more inclusive learning

environment, and redefining literacy to include critical thinking and multiliteracies, which are necessary for success in modern society.

Progress has been made in certain realms, such as providing Universal Secondary Education throughout the Eastern Caribbean. Still, challenges remain in how children are placed into secondary school, with students who are more academically able being placed in prestigious schools that were historically grammar schools (Leacock, 2009; Thompson et al., 2011). Further, special and inclusive education in Barbados has transitioned from charity-based models to more inclusive practices; however, resource challenges and societal attitudes remain (Blackman, 2017).

This literature suggests that education in the Caribbean is at a crossroads. While efforts to decolonise and reform systems have made great strides, significant colonial legacies remain. Without addressing the inequities that persist in regional systems, especially those rooted in our shared colonial past, educational outcomes in the region will remain uneven, with marginalised groups continuing to face barriers to achievement.

Importance of Evidence-Based Education Reform

The impact of the Caribbean's colonial legacy on equitable access to quality education and increased globalisation necessitates ongoing educational reform in the Caribbean, and this reform is a focus of governments in the region (Jules & Williams, 2016). However, educational reform must be grounded in evidence-based research (Slavin, 2020). Further, evidence-based approaches can transform education systems by fostering continuous cycles of innovation, evaluation and improvement (Slavin et al., 2021).

The origins of evidence-based practice and policymaking trace back to the early 1990s in the medical field (Sackett & Rosenburg, 1995) and have since expanded to healthcare (Hoffmann et al., 2023), business (Luthans et al., 2021) and psychology (APA Presidential Task Force on Evidence-Based Practice, 2006). In education, it now plays a crucial role in areas such as higher education (Diery et al., 2020), remote (online) education (Greenhow & Galvin, 2020), and special and inclusive education (Mitchell & Sutherland, 2020).

Although evidence-based policymaking has gained global acceptance, many educational policies, both internationally (Gorard et al., 2020) and in the Caribbean, are often developed without sufficient evidence (Economic Commission for Latin America and the Caribbean, 2012). The

United Nations (2024) highlights the unique challenges faced by small island developing states (SIDS) in implementing evidence-based policymaking, noting that:

Small island developing states face significant challenges in data collection, analysis, technical and institutional capacity, which hinders evidence-informed policymaking, monitoring progress and accessing development financing; and we emphasise that capacity-building for stronger data governance and management will allow SIDS to support better data collection, protection, transparency and data sharing (pp. 4-5).

Shah and Kelman (2024) similarly emphasise the need for evidence-based policymaking in SIDS using both "big" data (e.g., extensive datasets) and "small" data (e.g., case studies) integrated with local expertise and extensive Indigenous datasets. Moreover, "small" data (e.g., case studies) should be integrated with local expertise and indigenous knowledge.

Researchers in the Caribbean face challenges related to the dominance of Western paradigms in educational research. Warrican (2020) critiques the imposition of Western research frameworks on Caribbean education, stating that this practice leads to the misinterpretation of local realities. For instance, educational behaviours, such as students' language use, are often misinterpreted when analysed through a Western lens. Warrican (2020) advocates for a shift towards more contextualised research methodologies that reflect the Caribbean region's socio-cultural history and educational needs.

The uncritical adoption of international education policies facilitates practices of policy transfer that overlook the unique social, cultural and economic realities of small island developing states, leading to ineffective reform (Crossley, 2019). Crossley emphasises the need for context-sensitive approaches to education reform, particularly in the Caribbean, where global benchmarks and policies, such as those from PISA, may not be appropriate. He further discusses the importance of equitable partnerships between global and local stakeholders to ensure policies are adapted to fit the local context rather than imposed without regard for local needs. Crossley advocates for a greater focus on qualitative research and Indigenous knowledge systems to support sustainable development goals, moving beyond the often quantitative-driven global governance models that dominate educational policymaking. This focus on Indigenous knowledge further contributes to the efforts to decolonise education by including the voices of those who both create and are impacted by policy.

Evidence-based education reform can transform governance and educational practices by enabling more effective resource allocation, fostering accountability, and ensuring policies address Caribbean education systems' unique sociocultural and historical context (Shah & Kelman, 2024; Slavin, 2020). Integrating "big" and "small" data with local expertise bridges gaps in equity and access while promoting sustainable development through continuous cycles of innovation, evaluation, and improvement (Crossley, 2019; Slavin et al., 2021). This approach empowers educators and institutions to enhance teaching practices, improve student outcomes, and align reforms with the region's developmental goals.

Academic Achievement Indicators in the Caribbean

The Caribbean Secondary Education Certificate (CSEC) and Caribbean Advanced Proficiency Examination (CAPE) are widely regarded as key achievement indicators in the region. They provide measurable benchmarks for assessing student performance and the effectiveness of secondary education systems (Caribbean Examinations Council, 2022). These standardised exams are often used by policymakers, educators, and researchers to evaluate trends in academic achievement, identify areas requiring intervention, and inform curriculum development.

To date, achievement indicators from the Caribbean region show significant improvement in specific curriculum areas. In contrast, other areas have stagnated or declined, and the impact of the COVID-19 pandemic remains to be fully understood. In 2019, just before the pandemic and subsequent lockdown, the overall CSEC pass rate was 75%, marking a 5% increase from the 70% pass rate in 2018 and up from 67% in 2017 (Press Release, 2019). Notably, there was a significant increase in performance in English A, with the pass rate rising from 67% in 2018 to 79% in 2019. However, in a more recent report from the Caribbean Examinations Council (2022), there has been a further decline in passing grades in most subjects since the first phase of this study was conducted in 2017, and this could be due to several factors, including the impact of the COVID-19 pandemic.

The number of students obtaining passing grades in the core compulsory subjects of English A and Mathematics is of particular concern. In English A, the pass rate fell in 2022 to 71%, compared with 74% in 2021, 83% in 2020 and 79% in 2019. Similarly, a decline was noted in Mathematics, with a 37% pass rate in 2022, compared to 41% in 2021, 53% in 2020, and 46% in 2019.

Significant declines in passing grades since 2019 have been noted for most other subjects, including Social Studies (52% in 2022, 65% in 2019), Geography (62% in 2022, 75% in 2019), Spanish (55% in 2022, 70% in 2019), Information Technology (80% in 2022, 92% in 2019), Technical Drawing (75% in 2022, 87% in 2019), Textiles, Clothing and Fashion (71% in 2022, 83% in 2019), Religious Education (59% in 2022, 75% in 2019), Physics (64% in 2022, 73% in 2019), Chemistry (60% in 2022, 68% in 2019), Additional Mathematics (63% in 2022, 71% in 2019), Principles of Business (80% in 2022, 87% in 2019), Principles of Accounts (69% in 2022, 75% in 2019), Music (69% in 2022, 75% in 2019), Electronic Document Preparation and Management (EDPM) (88% in 2022, 94% in 2019), IT (Mechanical) (80% in 2022, 86% in 2019). Slight declines in passing grades between 1% and 5% were observed between 2019 and 2014 in Economics, Portuguese, French, Information Technology (Building and Electrical), Physical Education and Sport, Food and Nutrition, and Office Administration.

The most significant increases in passing grades since 2019 are in Human and Social Biology (67% in 2022, 52% in 2019) and English B (71% in 2022, 65% in 2019). Increases in passing grades between 1% and 5% are noted in Caribbean History, Integrated Science, Family and Resource Management, Biology and Theatre Arts. Agricultural Science and Visual Arts passing grades remain the same in 2022 as in 2019. These trends suggest a need to reconsider traditional measures of academic achievement, such as standardised exam pass rates, and explore alternative assessment methods that capture a broader range of student competencies.

This study aims to examine a range of factors that may influence students' academic achievement, including those that may be contributing to the decline in passing grades observed across most subjects at the CSEC level in secondary schools and the large percentage of children who do not achieve high marks on the Common Entrance Examination at the end of primary school (Leacock et al., 2007).

Factors Affecting Academic Achievement: International and Caribbean Perspectives

Academic achievement is influenced by many factors, many of which vary across educational and cultural contexts. International research provides valuable insights into these influences, while regional studies offer a more localised understanding of Caribbean education systems' unique challenges and opportunities. By examining international and Caribbean perspectives, we can better understand the complex interplay of psychological, social, and instructional factors that

shape student outcomes. This offers a comprehensive view of the variables affecting academic success in this region.

In a systematic review of 169 studies using meta-analysis, which included over 250 variables, Kocak et al. (2021) used effect sizes to determine the strength of each variable on academic performance across education levels. The study categorises these variables into nine domains: psychological characteristics, teaching and learning strategies, socio-economic and sociodemographic characteristics, family, teacher, school, educational technology, special education and violence-related factors. They found that psychological factors such as self-efficacy and academic emotions (feelings about learning and school) had the largest positive effect sizes, indicating that psychological traits such as motivation and emotional regulation play a significant role in academic success. Concerning teaching and learning strategies, creative drama, constructivist and collaborative learning, and learning strategy instruction had substantial positive impacts on academic achievement. Higher socioeconomic status was consistently associated with better academic performance. Family variables included parental expectations, attitudes and involvement as critical predictors of academic success, with large effect sizes, especially when parents were actively involved in their children's education. Teachers' judgement of students' abilities and academic performance had significant effects, as well as the quality of teacher-student relationships. In schools, the incorporation of physical activities also positively impacts student achievement. The presence of reading disabilities and behavioural disorders impacted academic achievement negatively. Finally, tools such as computer-aided instruction and one-to-one laptop programmes positively impacted academic outcomes.

These findings are echoed in research that has been conducted in developing nations. For example, Farooq et al. (2011) found that higher socioeconomic status and higher levels of parental education predicted higher levels of academic achievement in a sample of secondary school students in Pakistan. In the Caribbean, a study conducted with middle-school students in Jamaica found that behavioural engagement, specifically participation in class activities and homework completion, positively predicted academic achievement (Martin et al., 2016). Another study in Barbados and Trinidad found that secondary school students' academic achievement improved after teachers trained in and used relational group work in their classes (Layne et al., 2008). Further, in a study conducted with primary school children in St. Vincent and the Grenadines, difficulties with attention were linked to lower academic achievement (Jimerson et al., 2006), which may connect

with the findings on behavioural disorders in the "special education" domain in Kocak et al.'s (2021) review. Other Caribbean studies related to various factors contributing to student academic achievement are presented in the sections below.

Home Environment and Academic Achievement

Nursery-Enrolment and Early-Childhood Education

Research on early childhood education (ECE) consistently shows its significant role in improving long-term academic outcomes. For example, Haslip (2018) found that public Pre-K attendance in the U.S. significantly improved first-grade literacy, particularly for economically disadvantaged children. However, socio-economic status (SES) is not the sole determinant of early educational outcomes. Other factors, such as programme quality, teacher training, and culturally relevant curricula, also play critical roles in shaping the effectiveness of ECE programs (Escayg & Kinkead-Clarke, 2018; Hogrebe & Strietholt, 2016). Moreover, early development of skills such as attention regulation and social competence – identified by Rabiner et al. (2016) as critical predictors of academic success – can amplify the benefits of high-quality ECE programmes across all socio-economic groups.

On an international scale, Hogrebe and Strietholt (2016) used data from nine countries to explore preschool's effects on reading achievement and concluded that programme quality plays a crucial role in outcomes. Similarly, Eshetu (2015) in Ethiopia and Agirdag et al. (2015) in Turkey highlighted how socio-economic disparities affect access to preschool, with wealthier students benefiting more from early education. These studies highlight the importance of targeting intervention to close achievement gaps between SES groups and socio-economically disadvantaged populations by addressing variability in programme quality and access.

Escayg and Kinkead-Clarke (2018) call for integrating culturally relevant, decolonised curricula, shifting away from Eurocentric teaching models in the Caribbean. They argue that Caribbean ECE can foster positive racial identities and create more relatable and practical learning environments for children by incorporating local traditions such as storytelling and music.

These studies suggest that while SES is an important factor, it must be considered alongside programme quality, accessibility, and cultural relevance when designing and implementing ECE programmes. Moreover, fostering foundational skills like attention regulation and social

competence can enhance the effectiveness of these interventions. To close achievement gaps, a concerted effort must be made to target socio-economically disadvantaged children while ensuring that these programmes promote academic and social development to support local cultural identities.

Parental Involvement & Home Literacy Environment

Parental involvement is a widely recognised determinant of student academic achievement, with its effects varying based on the type of involvement, socioeconomic status and regional context. Research demonstrates that parental engagement, such as setting high academic expectations and providing home-based support, is associated with improved academic outcomes (Boonk et al., 2018; Wilder, 2014). However, direct involvement in homework can yield mixed results, especially as students advance through grade levels, highlighting the importance of the quality of engagement over its frequency (Boonk et al., 2018). Socioeconomic factors also significantly influence parental involvement, as families from higher socioeconomic backgrounds generally have greater access to resources that support their children's education. In contrast, parents in lower socioeconomic settings often face financial difficulties and work-related constraints that limit their ability to engage fully (Marshall et al., 2014).

In the Caribbean, these socioeconomic disparities are pronounced, and strong school leadership and community support play a pivotal role in fostering parental involvement, particularly in under-resourced areas (Edgerton et al., 2023; Marshall & Jackman, 2015). School leaders act as intermediaries, bridging the gap between families and schools to enhance student outcomes. Furthermore, addressing the "secondary slump", or the decline in parental involvement as students progress through secondary education, is critical for sustaining academic motivation and performance (Marshall et al., 2014; Marshall & Jackman, 2015). Therefore, policies that provide resources and opportunities for sustained parental engagement, particularly in marginalised communities, are essential for improving student achievement in the Caribbean.

Research also consistently emphasises the importance of the home literacy environment (HLE) in shaping children's academic success. Schlee et al. (2009) found that parental resource capital – such as education level, income, and home literacy practices – strongly predicts early academic performance in reading and mathematics, highlighting the importance of a well-resourced home environment. This finding aligns with Heppt et al. (2022), who concluded that physical books,

especially children's books, are key predictors of academic success. Neuman and Moland (2016) introduced the concept of "book deserts", showing that income segregation limits book access in disadvantaged U.S. neighbourhoods, exacerbating literacy gaps. Neuman (2017) further demonstrated that access to books alone is insufficient; meaningful interaction between children and caregivers, such as reading together, is crucial for developing literacy skills.

Studies in other contexts reinforce these findings. In the UK, Hartas (2012) demonstrated that while socioeconomic status (SES) plays a significant role in literacy development, simple home learning activities like reading cannot entirely close the achievement gap for lower SES families. van Bergen et al. (2017) explored the interaction between genetic and environmental factors, concluding that while parental reading skills can be hereditary, environmental factors such as access to books independently improve literacy outcomes. Similarly, Lesemen and De Jong (1998) highlight the multifaceted nature of the HLE, where opportunities for reading, parent-child interactions and instructional quality collectively predict early reading success. This view is supported by Darling and Westberg (2004), who found that structured parental involvement – where parents are trained in reading activities – significantly impacts children's literacy outcomes. In the United States, Albee et al. (2019) tackled summer reading loss by distributing culturally relevant books and involving parents in literacy activities, reducing reading loss among disadvantaged students. Sammons et al. (2015) extended this to the long term, showing that early HLE strongly predicts later academic success, particularly for low-income students.

Similar patterns emerge regarding the influence of the HLE in the Caribbean. Martin et al. (2016) studied middle school students in Jamaica and found that parental engagement and motivation were critical for academic success, though socioeconomic limitations often hinder access to literacy resources. This reflects broader international findings, where socioeconomic factors limit the availability of literacy materials, contributing to persistent achievement gaps (Neuman & Moland, 2016; Schlee et al., 2009).

Student and Teacher Absenteeism

The literature consistently demonstrates that student absenteeism negatively impacts academic performance, with various causes producing different effects. Klein et al. (2022) found that truancy and sickness-related absences are particularly harmful; Jamil & Khalid (2016) found student delinquency to be a predictor of low academic achievement, while Keppens (2023) highlighted

that unexcused absences, especially during critical periods like exams, have the most detrimental effects. Allen et al. (2018) focused on health-related absenteeism, emphasising the role of chronic illness and mental health issues. The authors advocate for early interventions involving healthcare professionals, families and schools to prevent long-term academic decline due to absenteeism. These findings suggest the need for targeted interventions considering the reasons for and timing of absences.

Further, Hancock et al. (2017) investigated socioeconomic factors and absenteeism, finding that absenteeism negatively affects academic performance across all demographics. In the Caribbean, absenteeism is also tied to socioeconomic challenges. Cook and Ezenne (2010) found that factors such as financial difficulties, family responsibilities, and poor infrastructure contribute to absenteeism in Jamaica. Also, in Jamaica, Jennings et al. (2017) found financial difficulties experienced by parents as the leading cause of absenteeism. In Guyana, Bristol (2017) noted that teacher absenteeism contributes to student absenteeism, as students perceive little value in attending school when teachers are absent. Similarly, in Barbados, Lewis (2020) found negative correlations between teacher absences and student performance in core subjects such as science and math, though a positive effect was seen in English. This research in the Caribbean suggests that absenteeism is one of several factors influencing student outcomes and calls for solutions involving school, community and government intervention.

Students' Perceptions of Learning and School Climate

Student Attitudes Toward Learning and School

The influence of students' attitudes towards school and learning (ATSL) on motivation and achievement has long been acknowledged (Eccles & Wigfield, 2002; Ryan & Deci, 2000). Recent research by Veresová & Malá (2016) demonstrates a strong correlation between ATSL and academic achievement. Slovak secondary school students who displayed positive attitudes toward learning achieved higher Grade Point Averages (GPAs), with a cognitive component (beliefs about their ability to succeed) being the strongest predictor. The study also uncovered gender differences, with girls having more positive attitudes than boys, though this did not translate into a significant GPA difference.

Similarly, a study in Nigeria, Kpolovie et al. (2014) found that both interest in learning and attitude towards school were significant predictors of academic performance in secondary school students. This study suggests that these factors collectively account for over 20% of the variance in academic achievement, with interest in learning being slightly more influential. This reinforces the importance of student engagement and a positive learning attitude in driving academic success. Knight and Obidah (2014) explored student perceptions of secondary education under the Universal Secondary Education (USE) policy in the Caribbean context. Students from low-performing schools expressed dissatisfaction with teaching methods and student-teacher relationships, negatively impacting their attitudes towards learning. This demonstrates that the relationship between attitudes toward learning and academic achievement is not unidirectional. Additionally, Bowe (2012) conducted research with Caribbean students in the UK and noted that negative attitudes towards school and risky behaviour were prevalent among boys and contributed to an academic achievement gap between boys and girls.

These findings suggest that fostering positive attitudes towards school and learning can significantly contribute to better academic outcomes. Gender differences in ATSL, particularly favouring girls, indicate a need for targeted interventions aimed at enhancing boys' attitudes where significant differences exist. Additionally, as highlighted by several studies, the importance of cognitive beliefs about academic success suggests that building students' confidence in their academics is crucial.

School Climate and Academic Achievement

Research consistently highlights the critical role of school climate in shaping student well-being and academic achievement across various international and Caribbean contexts. Akey (2006), in a study of U.S. urban high schools, found that supportive teacher-student relationships and clear behavioural expectations positively influenced student engagement and perceived competence, which enhanced academic achievement. Similarly, Steinmayr et al. (2018) emphasised that a positive school climate significantly predicted student well-being, although its direct effect on academic achievement was weaker. Instead, self-efficacy emerged as the strongest predictor of academic performance, indirectly supporting school climate through enhanced student well-being.

In Australia, Maxwell et al. (2017) demonstrated that student perceptions of a positive school climate, mainly through a sense of school identification, were associated with better performance

in literacy and numeracy. Staff perceptions of school climate also positively influenced academic outcomes, underscoring the importance of a supportive environment for students and teachers. In their meta-analysis, Dulay and Karadağ (2017) further reinforced the importance of school climate, showing a medium-level positive effect on student achievement across multiple countries, with the impact observed in subjects such as English and social sciences.

Leadership plays a critical role in shaping school climate. Allen et al. (2015) found that transformational leadership positively influenced teachers' perceptions of school climate, mainly through fostering collaboration and a sense of order. However, the impact of school climate on student achievement was more nuanced, with significant effects observed primarily in reading but not mathematics. Veletić et al. (2023) highlighted the importance of distributed leadership, where shared decision-making among staff contributes to a more positive perception of school climate, especially in Scandinavian countries. This aligns with Zysberg and Schwabsky (2020), who found that a positive school climate in Israel, characterised by strong interpersonal relationships and a sense of belonging, enhanced students' academic self-efficacy, improving academic outcomes in core subjects.

In the Caribbean, Bartley (2024) examined the role of school climate in fostering resilience and well-being among Jamaican secondary school students. The study emphasised that supportive relationships between students and teachers, coupled with clear expectations and a safe environment, were crucial for promoting student resilience, particularly in the context of challenges posed by the COVID-19 pandemic. La Salle et al. (2021) also found that students in Jamaica reported higher levels of school connectedness, which was linked to better mental health outcomes, further reinforcing the importance of a positive school climate for overall student well-being.

In summary, positive interpersonal relationships, a sense of belonging, and strong leadership that fosters collaboration are critical elements of a healthy school climate. While school climate has a more indirect effect on academic performance, its role in supporting student engagement, self-efficacy, and resilience is vital across diverse educational contexts.

Democratic Classrooms and Student-Centred Instruction

The literature across international and Caribbean concepts underscores the importance of democratic classrooms and student-centred instruction in improving student outcomes, both academically and socially. Print et al. (2002) highlight how democratic participation in Danish schools fosters active citizenship and critical thinking. In Albania, Bara and Xhomara (2020) found that problem-based learning and student-centred methods led to significant improvements in science achievement, with problem-based learning showing a particularly strong effect. Similarly, Asoodeh et al. (2012), in their study of Iranian elementary students, demonstrated that student-centred learning significantly improved academic performance in subjects like mathematics, science, and reading. Additionally, they found that this approach had a lasting positive impact on students' social skills, such as communication and adaptive behaviour, with benefits persisting even months after the intervention. Further, a recent meta-analysis also demonstrated that student-centred approaches in mathematics improved academic performance and reduced anxiety, especially in middle school students (Emanet & Kezer, 2021). Finally, Yildirim (2023) similarly found that student-centred methods in life sciences significantly boosted achievement, reinforcing the broad applicability of these approaches across subjects.

Student-centred methods have also been found to be effective in developing nations. In Nigeria, Precious and Feyisetan (2020) showed that student-centred approaches, such as discussions and field trips, improved biology performance, outperforming traditional teacher-centred methods. These findings align with research from the Caribbean, where Warrican and Leacock (2011) explored democratic education in Caribbean classrooms. Leacock and Warrican's (2011) study of online learning environments illustrates both the potential and challenges of promoting democratic practices. Their findings show that while online platforms can foster greater student participation and recognition of individual needs, issues such as technological barriers and isolation hinder their effectiveness. The study highlights the cultural tensions between online learning and traditional oral communication in the Caribbean, calling for more interactive components to fully support student-centred approaches. Similarly, Layne et al. (2008) demonstrated that group work in Trinidad and Barbados significantly improved academic performance, particularly for low-achieving students. Further, Warrican et al. (2019) highlighted that while Barbadian teachers expressed support for learner centred instruction, practical barriers such as lack of resources and mentorship limited its full implementation.

School Leadership

School leadership plays a pivotal role in shaping both student outcomes and the broader school environment. Internationally, transformational and distributed leadership styles have been identified as particularly effective in fostering positive school climates and supporting student achievement. Veletić et al. (2023) demonstrated that distributed leadership, where decision making is shared among staff, was associated with improved school climate perceptions across different regions, although its impact varied, with particularly strong results in Scandinavian countries. This leadership model, emphasizing collaboration and shared responsibilities, creates a more inclusive organizational structure that contributes to better school outcomes. Further to this, Leithwood (2021) highlighted the importance of equitable leadership, focusing on culturally responsive practices that engage diverse communities and address the needs of all students. These leadership practices are essential for promoting inclusivity and ensuring that schools serve as equitable learning environments for students from various socioeconomic and cultural backgrounds. The link between transformational leadership and improved school climate is further emphasized by Allen et al. (2015) and Tan et al. (2021), who found that leadership styles that inspire and motivate staff indirectly improve student outcomes through their positive effects on the school climate. However, the direct impact of leadership on student achievement remains modest, highlighting the importance of combining leadership with strong instructional practices.

In the Caribbean, Miller (2016) pointed out that effective school leadership in this region often blends formal training with experiential learning. Principals in the Caribbean face unique socioeconomic and cultural challenges, requiring them to adapt leadership strategies to their specific local contexts. This contextual adaptation is crucial for addressing the complex needs of Caribbean schools. Leacock (2009) echoed these findings, showing that in the Caribbean, transformational leadership is particularly effective in improving student outcomes, especially in core subjects like English and mathematics. Principals who motivate their staff create a collaborative school environment that enhances both teacher performance and student engagement. This leadership style is key to fostering positive academic outcomes in Caribbean schools. Further supporting this, Brown et al. (2014) in their study of primary schools in Trinidad and Tobago, demonstrated how professional networks among teachers, facilitated by strong leadership, positively impact academic performance. Schools where principals fostered collegial trust and encouraged teacher collaboration, particularly around the use of assessment data, had

higher student proficiency levels on national tests. However, the study noted that despite these gains, resource limitations and a lack of external professional support hindered the full implementation of collaborative teaching practices. These findings reinforce the idea that leadership, when focused on building collaborative school climates, directly influences teacher effectiveness and student achievement.

However, leadership alone may not be enough. Jennings et al. (2017) stressed that a combination of strong leadership and teacher quality is necessary for improving academic performance, particularly in schools serving low income communities. Leadership's role in supporting teacher effectiveness is critical to overcoming resource constraints and ensuring that all students have the opportunity to succeed. Finally, Heaven and Bourne (2016) in their study of Jamaican schools, found only a weak correlation between instructional leadership and student achievement, suggesting that broader contextual factors, such as socio-economic conditions, also play a crucial role in shaping educational outcomes. This highlights the complex interplay between leadership and external factors in influencing student success.

Post-Colonial Education Practices

Academic Tracking, Ability Labelling and the Use of the Common Entrance Exam for Secondary School Placement

Academic tracking, ability labelling and the Common Entrance Examination (CEE) for secondary school placement have profound effects on both student outcomes and educational equity. These practices often reinforce existing socioeconomic disparities, disproportionately impacting students from disadvantaged backgrounds. For example, research which drew on data from the UK Millennium Cohort Study demonstrated that early academic streaming tends to benefit students in higher streams while disadvantaging those in lower streams (Parsons & Hallam, 2014). Students in lower academic tracks, particularly in subjects like mathematics and English, often receive less challenging curricula, which diminishes their academic performance over time. Similarly, Boliver and Capsada-Munsech (2021) found that lower-tracked students in UK primary schools reported reduced enjoyment of key subjects, leading to decreased engagement and academic achievement.

The psychological effects of tracking and ability labelling are also significant. Research by Odongo et al. (2021) in Uganda revealed that students in lower ability streams had significantly

lower self-esteem than their peers in higher streams. This is further emphasized by Papachristou et al. (2022) who found students in lower ability groups were more likely to exhibit behavioural and emotional issues, such as hyperactivity and emotional challenges, reinforcing the socio emotional divide between high and low achievers. Tracking and labelling significantly affect students' self-concepts, particularly in subjects like mathematics. Campbell (2021) found that girls placed in lower math groups developed negative self-concepts, which were further reinforced by teacher judgments. This finding aligns with Bradbury (2019) who highlighted how teachers often adopt a fixed ability mindset limiting students' opportunities for growth. Once labelled as "low ability" students are less likely to be exposed to challenging material or higher achieving peers, creating a self-fulfilling cycle that further widens the academic gap between high and low performers.

These trends are mirrored in the context of the Caribbean. Warrican et al. (2019) found that in Trinidad and Tobago's bi-dialectal context, peer effects substantially shaped individual literary achievement, where group performance significantly impacted individual outcomes. Students surrounded by higher-achieving peers performed better, regardless of their socio-economic background or individual characteristics, underscoring the importance of peer dynamics in shaping academic success. However, students in lower academic tracks, who are often separated from higher-achieving peers, lose these beneficial peer effects, further entrenching the academic divide. From a psychological standpoint, Lipps et al. (2010) reported that students in lower academic tracks in Caribbean countries, like Jamaica and St Vincent, exhibited higher levels of depressive symptoms, highlighting the emotional toll of being labelled as having "low ability".

These disparities are further engrained in the context of high-stakes exams like the CEE in Barbados. Pilgrim and Hornby (2019) noted that students from wealthier backgrounds with access to better preparatory resources consistently outperformed their less affluent peers, securing places in top-tier schools. This dynamic exacerbates existing educational inequalities, as students placed in lower-ranked schools receive fewer resources and face more significant academic challenges. Additionally, students with special educational needs and disabilities (SEND) are disproportionately placed in lower-ranked schools based on their CEE performance. This is due to a number of factors including low levels of psychoeducational assessment, weak referral systems and inadequate supplies of SEND teachers and classes, further removing them from many educational opportunities.

Despite the persistence of tracking and ability labelling, several studies call for reform. Pilgrim and Hornby (2019) advocate for abolishing the CEE in Barbados in favour of a zoning system that allows students to attend schools within their communities, thus reducing socioeconomic segregation. Similarly, Bradbury (2019) and Boliver and Capsada-Munsech (2021) proposed mixed-ability teaching to mitigate the adverse effects of tracking and ability labelling, and must be supported by resources, training and strong student support systems, providing students with more equitable educational experiences.

Overall, the literature highlights the significant academic, emotional, and social inequalities perpetuated by academic tracking, ability labelling, and high-stakes exams like the CEE. These practices, while intended to tailor education to student ability, often exacerbate socioeconomic disparities and psychological distress, particularly among students in lower academic tracks. Reform efforts and the allocation of resources to these efforts must promote inclusivity, reduce reliance on tracking, and ensure that all students, regardless of background, have access to the resources and support they need to succeed.

Grade Retention

The literature consistently shows that grade retention negatively affects students' academic performance and motivation. Rodriguez-Rodriguez (2022) found that retained students did not see significant academic improvement and experienced decreased motivation, often focusing more on avoiding failure than achieving success. Similarly, Valbuena et al. (2020) observed that any short-term academic benefits of retention tend to diminish over time, with retained students facing a higher risk of dropping out and poorer labour market outcomes compared to their peers.

The long-term consequences of retention are not limited to academic performance. A study from the Netherlands found that while retained students eventually achieved similar educational qualifications as their peers, they entered the workforce later, resulting in lower lifetime earnings due to delayed labour market entry (ter Meulen, 2023). Further, Mariano et al. (2018) studied retention in New York City schools. They found that retained students were less likely to graduate on time, accumulated fewer credits, and were more likely to be placed in special education programmes, further contributing to their higher dropout rates. Retention policies can exacerbate these issues, especially when they disproportionately affect younger students. Jerrim et al. (2022) highlighted how rigid school entry laws in Spain, which require children to start school based on

calendar year rather than readiness, increased retention rates among younger children born later in the year.

Goos et al.'s (2021) meta-analysis of 84 studies on retention across various countries found that while about 24% of the studies reviewed found some positive short-term academic and psychosocial benefits for retained students, the majority (76%) reported negative outcomes or at least no benefits. Their review highlights that retention can slightly improve psychosocial functioning, such as motivation and academic self-concept, but these are often short-lived. Long-term retention generally leads to higher dropout rates, increased placement in special education, and diminished job prospects. Moreover, retention is notably less effective in countries with separation systems like Belgium and Germany, where it is paired with ability grouping and tracking. In contrast, countries like the United States, Canada, Australia and New Zealand that use this approach as a last resort with additional support see better outcomes.

Given these findings, Goos et al. (2021) emphasise that educational policymakers should shift away from retention as a solution for underperformance and focus instead on early interventions and targeted support. Valbuena et al. (2020) similarly suggest that interventions, such as remedial programmes and personalised academic support, can help struggling students catch up without the adverse long-term effects of retention.

Overall, the evidence points to grade retention's detrimental impacts on educational attainment and future economic prospects. Rather than relying on retention, which disproportionately affects vulnerable students, educational systems would benefit from flexible policies and support mechanisms that address students' academic needs early on, providing them with the resources to succeed without repeating a grade.

Technology in Education and the Impact of the COVID-19 Pandemic

Before the pandemic, technology and education were increasingly integrated into learning environments, but their use varied widely across contexts. For instance, George (2015) found that while some Caribbean countries had introduced technology-enabled learning, rural and low-income communities faced significant barriers to accessing these tools.

The COVID-19 pandemic radically transformed the role of technology in education. The sudden closure of schools worldwide led to an unprecedented reliance on online learning platforms.

Pokhrel and Chhetri (2021) reported that the pandemic disrupted the education of over 1.6 billion students globally, forcing students to shift to emergency remote education. However, this shift exposed significant technological access disparities, particularly in rural and underprivileged areas. Winter et al. (2021) documented how teachers in Ireland struggled to engage students online, especially those from disadvantaged backgrounds, due to a lack of adequate infrastructure and digital training.

In developing nations, such as those studied by Tadesse and Muluye (2020), the lack of digital infrastructure, particularly in rural areas, makes it difficult for students to continue their education. Parents in these regions often lacked the resources to support their children's online learning, worsening educational inequalities. The digital divide between urban and rural populations was also highlighted in Fikuree et al. (2021), who studied the Maldives education system during the pandemic.

Post-pandemic, blended learning models that combine online and in-person instruction are increasingly being adopted. Bubb and Jones (2020) suggested that the creative use of technology during home-schooling should be maintained to enhance student engagement. However, the pandemic also underscored the need for more equitable access to technology and infrastructure. Leacock and Warrican (2020) reported that in the Eastern Caribbean, many teachers were not adequately trained for online instruction, and students in rural areas struggled to access the necessary technology for effective learning.

In countries like Barbados and Jamaica, the pandemic exposed deep-rooted inequities and access to education. Blackman (2022) found that although the government distributed devices and set up online learning platforms, many students, particularly those from low-income households, remained disconnected. Further, Pokhrel and Chhetri (2021) noted that while online learning presented opportunities for innovation, the shift to digital platforms highlighted the need for better teacher training and infrastructure to ensure continuity and learning.

Despite these challenges, studies conducted before the pandemic have shown that technology can improve student outcomes when effectively implemented. Fraser (2018) demonstrated that computer-aided instruction in Caribbean Studies led to significant academic improvements among students. Further, Viera et al. (2014) demonstrated in an action research project in St Vincent and the Grenadines that while students were initially hesitant to use more formal platforms such as

Google Groups and a school website, they embraced familiar social media tools, showing that technology use can bridge formal and informal learning environments. However, as Abdullah et al. (2015) pointed out, the relationship between technology and academic achievement is complex, and effective outcomes depend on how well the technology is integrated into the teaching process.

While the COVID-19 pandemic has accelerated the use of technology in education, it has also exposed significant disparities in access and readiness, particularly in developing regions like the Caribbean. Increased use of technology offers the potential for improving academic outcomes. However, its success depends on equitable access, teacher preparedness, and infrastructure development. Investments in digital infrastructure, ongoing teacher training, and blended learning models will be essential for creating resilient and inclusive education systems.

Conclusion

This review highlights the multifaceted nature of student academic achievement, demonstrating how factors ranging from socioeconomic conditions and home environments to school climate and leadership influence outcomes. Both international and Caribbean perspectives emphasise the importance of addressing inequities that stem from colonial legacies, socioeconomic disparities, and access to quality education. While the COVID-19 pandemic has exposed gaps in educational infrastructure, it has also accelerated the use of technology, presenting opportunities for reform. The studies reviewed underscore the need for evidence-based, inclusive strategies that promote equitable access to education and support students' academic success across diverse contexts.

THEORETICAL FRAMEWORK

Whether viewed from a psychological, sociological, or economic perspective, it is widely recognised that numerous factors influence children's academic performance and achievements. In larger countries with more substantial resources for research, extensive data is analysed to assess the impact of multiple factors on student academic achievement. However, in the Caribbean, which factors are most influential, how they interact to produce the observed outcomes, and the best strategies for maximising positive influences while minimising negative factors are often unclear. As a result, educational policy and education planning in the region are frequently based on incomplete information. This may lead to the inefficient use of resources and funds, devastatingly affecting small Caribbean countries with limited resources. Therefore, it is crucial to identify the factors affecting academic achievement in the region, keeping in mind that solutions from other countries may not be applicable in this context.

In countries such as the United States, the term 'achievement gap' typically highlights performance disparities between white students and students of colour. Opportunity gaps have been identified as crucial in explaining these differences in achievement among students from diverse backgrounds. Richard Milner (2012) introduced the opportunity gap explanatory framework to analyse these disparities in highly diverse and urban contexts in the United States. A vital component of this framework is the myth of meritocracy. Alongside other constructs such as colour blindness, cultural conflicts, low expectations, deficit mindsets, and context-neutral mindsets, this framework helps to "explain both positive and negative aspects and realities of people, places, and policies in educational practice." It serves as a basis for researchers to "explain and systematically name what they observe and come to know inductively" (Milner, 2012, p. 699). Although the educational context in the Caribbean differs significantly from that of the United States, the myth of meritocracy remains relevant for understanding how opportunities may be obstructed for students in the Caribbean.

The myth of meritocracy posits that educators may tend to believe that "their own, their parents, and their students' success and status have all been earned" and any individual failure regarding educational outcomes "is solely a result of making bad choices and decisions" (Milner, 2012, p. 704). While acknowledging achievement gaps, educators may overlook how socioeconomics intersect with education, even though they "appear to be more at ease, confident, and comfortable

reflecting about, reading, and discussing how socioeconomics, particularly resources related to wealth and poverty, influence educational disparities, inequities, outcomes, and opportunities" (Milner, 2012, p. 704). For example, those subscribing to the myth may overlook the role of economic privilege in their success, whether earned or unearned and may assume that all have equal or equitable opportunities for success. This myth can serve as a mechanism for understanding how teacher quality, teacher training, curriculum, the digital divide, wealth and income, healthcare, nutrition, and quality childcare affect achievement (Irvine, 2010).

In our examination of academic achievement within the current initiative, we recognise the potential for the myth of meritocracy to operate in Caribbean contexts, potentially obscuring and overlooking opportunities that impact the academic outcomes of young people. Smith (2020) has demonstrated the presence of Eurocentric mechanisms within the Caribbean educational landscape, which implicitly influence literacy and its role in student performance. Consequently, our investigations consider numerous opportunities such as school resources, technology, teacher and principal characteristics, and curriculum to understand better and uncover underlying patterns in achievement within Caribbean contexts. Through this exploration, we aim to develop frameworks that elucidate achievement and opportunity within the unique educational experience of the Caribbean region.

METHODOLOGY

In this section, a summary of the research methodology employed is provided.

Research Design

This study followed a survey design. The larger project included data collection in 2022 across five Eastern Caribbean countries (Dominica, Grenada, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines) and in 2024 in Barbados. Although Antigua was not one of the countries sampled in 2022 or 2024, it was included in the first phase of data collection, which occurred in 2017 across four Eastern Caribbean countries (Antigua, Grenada, St. Kitts and Nevis, St. Vincent and the Grenadines) and Barbados.

Sampling Strategy

Given the number of schools in Antigua and Barbuda and resource constraints, including all schools in the study was impractical. Therefore, a sampling guide was developed to select a representative sample of schools. A general sampling guide, outlined in Table 1, was established to guide the process. Additionally, recognising the difficulty in accessing private schools, the decision was made to limit the selection to public schools or government-assisted schools.

Table 1: General Sampling Guide

PRIMARY SCHOOLS	SECONDARY SCHOOLS
Four schools will be selected from each zone.	Two schools will be selected from each zone.
If schools are small, additional selections may be made.	The sample should encompass former grammar school(s).
The sample should include single-sex schools, including at least one girls' and one boys' school, where possible.	The sample should include single-sex schools, including at least one girls' and one boys' school, where possible.
Efforts will be made to ensure the representation of different groups in cases of significant diversity (e.g. language, ethnicity) within the selected schools.	Only students in the second and fourth form levels will be included.
Only students in the grade level preceding the level at which primary exit examinations are typically taken will be included.	Efforts will be made to ensure the representation of different groups in cases of significant diversity (e.g. language, ethnicity) within the selected schools.
This guide is provisional and subject to adjustment upon obtaining information on the number of students in each school.	This guide is provisional and subject to adjustment upon obtaining information on the number of students in each school.

Information was obtained from the Ministry of Education in Antigua and Barbuda to facilitate the selection of schools. A list of schools categorised by zone was acquired. Additionally, data regarding the enrolment numbers of students in the required grades and the count of teachers at the selected schools were acquired to ensure an adequate supply of questionnaires. Although all attempts were made to follow the general sampling guide, alterations had to be made in some cases for practical reasons.

Some schools could not participate for various reasons (e.g., lack of time to schedule survey administration and challenges reaching the principal to gain entry). Table 2 shows a breakdown of the number of schools from each zone included in the final sample in 2017.

Table 2: Antiguan and Barbudan School Sample

ZONE	20	017
ZONE	Number of Primary Schools	Number of Secondary Schools
1	4	0
2	4	0
3	4	0
4	4	0
N/A	0	5
TOTAL	16	5

Procedure

Hard-copy surveys were distributed to each participating school's principal and all teachers. In many instances, the questionnaires had to be left at the schools and collected at a later arranged time due to the busy schedules of teachers and principals. For primary schools, surveys were administered to Grade Five students and for secondary schools, to Form Two and Four students. Where class sizes were small, classes were combined to collect the maximum number of responses, and where classes were streamed according to ability, the "middle" group of students was surveyed.

Surveying was conducted using the traditional face-to-face method. Trained researchers administered all questionnaires directly to students in their classrooms. This approach was chosen to ensure the highest quality of data. Two researchers visited each classroom whenever possible: one read the questionnaire aloud and the other to aid students with reading difficulties. Student

questionnaires were administered and collected on the same day to streamline the data collection process.

All participants were instructed not to write their names or other identifying information on the surveys.

Data Analysis

Questionnaires were coded with unique identifiers, and responses were entered into six separate databases: one each for primary students, teachers and principals, and one each for secondary students, teachers and principals. Quantitative data analysis techniques using the Statistical Package for the Social Sciences (SPSS) were employed to analyse the collected data. Descriptive statistics were utilised to compute frequencies, means, standard deviations and ranges for individual questions and scales within the questionnaire. Where open-ended response options were provided, responses were compiled and coded where necessary (e.g. secondary students' planned career choices).

FINDINGS

COUNTRY PROFILE: STUDENTS

Primary School Students

In 2017, data were collected from 280 primary school students from 16 schools, and the results of the primary student survey are presented in the following sections.

Profile of Students in the Primary Schools Sample

The data were compiled and analysed using descriptive statistics to create a profile of the students in the primary school sample. All students in the sample were in Grade Five, and Tables 3 to 5 show the distribution of sex, age, and nursery enrolment before primary school.

Primary Students' Sex

Table 3: Distribution of Primary Students by Sex

Samuel Standard	2017 (N=280)		
Sex of Student	n	%	
Female	143	51.1	
Male	137	48.9	
TOTAL	280	100	

At the primary school level, one hundred and forty-three females and one hundred and thirty-seven males participated in the study.

Primary Students' Age

Table 4: Distribution of Primary Students by Age

A on a C Charland	2017 (N=280)		
Age of Student	n	0/0	
9	28	10	
10	157	56.1	
11	83	29.6	
12	7	2.5	
No Response	5	1.8	
TOTAL	280	100	

While the ages of five students were not received, 56% of the primary school students were ten years old at the time of the data collection, while the others were nine, eleven and twelve years old.

Enrolment in Nursery Before Primary School

Table 5: Distribution of Primary Students by Prior Nursery Enrolment

Duite Newson Frankrich	2017 (N=280)		
Prior Nursery Enrolment	n	%	
Yes	242	86.43	
No	34	12.14	
No Response	4	1.43	
TOTAL	280	100	

Most of the primary school students attended nursery school prior to enrolment.

Summary

The data were collected from two hundred and eighty primary school students, fifty-one percent females and forty-nine percent males. These students' ages ranged from nine years to twelve years. More than eighty percent of these students attended nursery school before enrolling in primary school.

Secondary School Students

Data were collected from 249 secondary school students in 2017 across five schools involved in the research, and the results of the secondary student survey are presented in the following sections.

Profile of Students in the Secondary Schools Sample

The data were compiled and analysed using descriptive statistics to create a profile of the students in the Secondary school sample. All students in the sample were in either Form 2 or Form 4. Tables 6 to 8 show the distribution of students by sex, form level, and age.

Secondary Students' Sex

Table 6: Distribution of Secondary Students by Sex

Sex of Student	2017 (N=249)		
Sex of Student	n	%	
Female	150	60.2	
Male	99	39.8	
TOTAL	249	100	

Data was collected from two hundred and forty-nine secondary students. Most of the responses came from female students, who represented sixty percent (60%) of the total students.

Secondary Students' Form Level

Table 7: Distribution of Secondary Students by Form Level

A of Sandana	2017 (N=249)		
Age of Student	n	%	
Form 2	137	55	
Form 4	112	45	
TOTAL	249	100	

Fifty-five percent (55%) of the students were from Form 2, while forty-five (45 %) were from Form 4.

Secondary Students' Age

Table 8: Distribution of Secondary Students by Age

A	2017 (N=249)		
Age of Student	n	%	
12	13	5.2	
13	95	38.2	
14	46	18.5	
15	58	23.3	
16	25	10	
18	1	.4	
TOTAL	249	100	

The mode age of secondary students in this study was 13, with 38.5% of the respondents. It should be noted that only one eighteen-year-old participated.

Summary

The data were collected from 247 secondary school students, sixty percent females and forty percent males. These students' ages ranged from eleven to eighteen, and most of the participants were between the ages of thirteen (13) and sixteen (16).

COUNTRY PROFILE: TEACHERS

Primary School Teachers

Data were collected from 32 primary school teachers across the ten primary schools involved in the research in 2017.

Profile of Teachers in the Primary Schools Sample

The data were compiled and analysed using descriptive statistics to create a profile of the teachers in the primary school sample. Tables 9 to 15 show the distribution of sex, the number of years teaching overall and at the current school, qualifications, professional status, and subjects taught.

Primary Teachers' Sex

Table 9: Distribution of Primary Teachers by Sex

Sex of Teacher	2017 (N=32)		
Sex of Teacher	n	%	
Female	29	90.6	
Male	1	3.1	
No Response	2	6.3	
TOTAL	32	100	

Of the thirty-two primary school teachers who participated in this study, approximately ninety-one percent were females, three percent were males, and two did not indicate their gender.

Primary Teachers' Years of Teaching Experience

Teachers reported their years in the teaching service; the results can be found in Table 10.

Table 10: Number of Years Teaching for Primary Teachers

	2017 (N=32)				
	n	Min	Max	Mean	SD
No. Years in Teaching Profession	30	0	38	10.77	8.982

The mean number of years in the teaching profession among the thirty teachers who submitted their years of service was 10.77, with a standard deviation of 8.982. The minimum zero number of years does not imply any experience in the teaching profession but rather a period of less than one year.

Primary Teachers' Years at the Current School

Teachers responded to the question about how many years they had been teaching at their current school, and the results are shown in Table 11

Table 11: Number of Years Teaching at Current School for Primary Teachers

			2017 (N=32)		
	n	Min	Max	Mean	SD
No. Years at Current School	30	0	23	5.83	5.730

In some instances, teachers had been at the for less than a year, thus represented by the minimum value, zero. The maximum number of years at the given school was thirty-eight years. The calculated mean was 5.83, with a standard deviation of 5.730.

Qualifications Held by Primary Teachers

Teachers were asked to indicate the qualifications that they held at the time of data collection. They could select all the qualifications held.

Table 12: Qualifications of Primary Teachers

Overliff and are	2017	2017 (N=32)		
Qualification	N %			
Associate degree	21	65.6		
Bachelor's Degree	8	25		
Other Qual (e.g. CSEC)	12	37.5		

More than fifty percent of the primary school teachers had an associate degree, and one-quarter had bachelor's degrees. While none of the teachers had master's or doctoral degrees, three-eighths indicated having other degrees.

Education-Related Qualifications Held by Primary Teachers

Not only were the teachers asked to indicate the qualifications they held, but they were also asked to indicate the areas of qualification. These areas were categorised as being education-related and not. Education-related areas include primary education, primary education core areas English, Mathematics, Science and Social Sciences. The percentages of respondents holding their education-related qualifications are shown below.

Table 13: Proportion of Primary Teachers with Qualifications in Education-Related Areas

Education Delated Qualification	2017 (N=32)		
Education-Related Qualification	n	%	
Associate degree	16	50	
Bachelor's Degree	5	15.6	
Other Qual	2	6.3	

In 2017, teachers with qualifications in non-education-related areas held degrees in areas such as Literacy Studies, Business Administration, and Accounting.

Professional Status of Primary Teachers

The teachers indicated their status as to whether they were teacher-trained or held at least a first degree.

Table 14: Professional Status of Primary Teachers

Professional Status	2017 (N=32)		
Professional Status	n	%	
Trained Graduate	7	21.9	
Trained non-graduate	15	46.9	
Untrained non-graduate	8	25	
No Response	2	6.3	
TOTAL	32	100	

Approximately twenty-two percent of the teachers were at the trained graduate level, forty-seven were trained non-graduates, and one-quarter were untrained non-graduates.

Level Taught by Primary Teachers

The teachers were asked to indicate the subject areas they typically taught at their grade level.

Table 15: Level Taught by Primary Teachers

Level	2017 (N=32)		
	n	%	
Infants (4 – 7 yrs)	7	21.9	
Lr Juniors (7 – 9 yrs)	7	21.9	
Upp Juniors (9 – 12 yrs)	10	31.3	
Other (e.g. Equally Across different levels)	6	18.8	
Missing	2	6.3	
Total	32	100	

Twenty-two percent of teachers reported teaching at the infant level, and the same percentage taught at the lower junior level. Fifty percent of the teachers taught at the upper juniors or other levels.

Summary

Of the thirty-two teachers involved, twenty-nine were females, one was male, and two did not indicate their gender. A mean of 10.77, a standard deviation of 8.982, was calculated for the number of years in the teaching profession, and a mean of 5.83, a standard deviation of 5.730, was calculated for the number of years at the school where they were. While sixty-six percent of the teachers reported having associate degrees, fifty percent were in education-related areas. Of the twenty-five percent of the teachers with bachelor's degrees, sixteen percent of these degrees were in education-related areas. Approximately sixty-nine percent of the thirty-two teachers are trained, and nineteen percent teach across all levels.

Secondary School Teachers

Data were collected from 37 secondary school teachers across the three schools involved in the research in 2017.

Profile of Teachers in the Secondary Schools Sample

The data were compiled and analysed using descriptive statistics to create a profile of the teachers in the secondary school sample. The distribution of sex, number of years teaching overall and at

the current school, qualifications, professional status and subjects and levels taught can be found in Tables 16 to 23.

Secondary Teachers' Sex

Table 16: Distribution of Secondary Teachers by Sex

Sex of Teacher	2017 (N=37)		
Sex of Teacher	n %		
Female	28	75.7	
Male	8	21.6	
No Response	1	2.7	
TOTAL	37	100	

Approximately 76 percent of the thirty-seven secondary school teachers who participated in this study were females; twenty-two percent were males. At the same time, one did not indicate his/her gender.

Secondary Teachers' Years of Teaching Experience

Teachers reported their years in the teaching service; the results are shown in Table 17 below.

Table 17: Number of Years Teaching for Secondary Teachers

	2017 (N=37)				
	n Min Max Mean SD				
No. Years in Teaching Profession	36	0	38	11.97	8.473

Secondary Teachers' Years at the Current School

Teachers responded to the question about how many years they had been teaching at their current school. The number of years ranged from zero (0) to thirty-eight (38) years. The mean number of years was 11.98.

Table 18: Number of Years Teaching at Current School for Secondary Teachers

	2017 (N=37)				
	n Min Max Mean SD				SD
No. Years at Current School	36	0	21	5.81	5.8

On average, the teachers surveyed have spent approximately six years at their current school, with a mean of 5.89.

Qualifications Held by Secondary Teachers

Teachers were asked to indicate the qualifications that they held at the time of data collection. They could select all the qualifications held.

Table 19: Qualifications of Secondary Teachers

Qualification	2017 (N=37)		
Qualification	n	%	
Associate's degree	16	43.3	
Bachelor's Degree	20	54.1	
Master's Degree	33	89.2	
Other	22	59.5	

Most of the teachers surveyed indicated that they have a master's degree. Approximately eightynine (89) percent of the teachers indicated that they have a master's degree, while fifty-four percent indicated that they have a bachelor's degree.

Education-Related Qualifications Held by Secondary Teachers

Not only were the teachers asked to indicate the qualifications they held, but they were also asked to indicate the areas of qualification. These areas were categorised as being education-related and not. Education-related areas include secondary education, secondary education core areas English, Mathematics, Science and Social Sciences. The percentages of respondents holding their education-related qualifications are shown below.

Table 20: Proportion of Secondary Teachers with Qualifications in Education-Related Areas

Education-Related Qualification	2017 (N=37)		
	n	%	
Associate degree	12	32.4	
Bachelor's Degree	3	8.1	
Master's Degree	1	2.7	
Other Qual	7	18.9	

Only about thirty-two (32) percent of the teachers indicated that they have associate degrees in education, while just eight percent have bachelor's degrees in education. Teachers, however, had qualifications in non-education-related areas, with degrees in areas such as Cultural Studies, Economics, Management, Fine Arts, History, Human Resources and Computer Science.

Professional Status of Secondary Teachers

The teachers indicated their status as to whether they were teacher-trained or held at least a first degree.

Table 21: Professional Status of Secondary Teachers

Professional Status	2017 (N=37)		
	n	%	
Trained Graduate	12	32.4	
Trained non-graduate	10	27	
Untrained Graduate	4	10.8	
Untrained non-graduate	6	16.1	
Other Professional Status	4	10.8	
No Response	1	2.7	
TOTAL	37	100	

More than half of the teachers indicated that their professional status was that of trained teachers. Approximately thirty—two percent indicated that they were trained graduate teachers, while twenty-seven percent indicated their status as trained non-graduate teachers.

Subject Areas Taught by Secondary Teachers

The teachers were asked to indicate the subject areas they typically taught at their grade level.

Table 22: Subject Areas Taught by Secondary Teachers

Subject Area	201	2017 (N=37)		
	n	%		
English	6	16.2		
Mathematics	2	5.4		
General Studies	0	0		
Science	7	18.9		
Business	5	13.5		
Art & Craft	3	8.1		
Physical Education	2	5.4		
Other Subject	11	29.7		

Level Taught by Secondary Teachers

The teachers were asked to indicate what grade level they typically teach.

Table 23: Level Taught by Secondary Teachers

Cubicat Avec	2017 (N=37)		
Subject Area	n	%	
Lower Secondary (Forms 1-3)	16	43.2	
Upper Secondary (Forms 4-5)	14	37.8	
Other Level (Across Levels)	6	16.2	

Summary

Data were collected from thirty-seven secondary school teachers across the three schools involved in the research in 2017. Out of the thirty-seven secondary school teachers who participated in this study, approximately seventy-six percent were females, twenty-two percent were males, and one did not indicate his/her gender. On average, the teachers surveyed have spent approximately six years at their current school, with a mean of 5.89. However, it should be noted that the mean number of years as a secondary school teacher was 11.98.

Most of the teachers surveyed indicated that they have a master's degree. While approximately eighty–nine (89) percent of the teachers indicated that they have a master's degree, fifty-four percent indicated that they have a bachelor's degree.

Only about thirty-two (32) percent of the teachers indicated that they have associate degrees in education, while just eight percent have bachelor's degrees in education. Teachers, however, had qualifications in non-education-related areas, with degrees in areas such as Cultural Studies, Economics, Management, Fine Arts, History, Human Resources and Computer Science.

More than half of the teachers indicated that their professional status was that of trained teachers. Approximately thirty-two percent indicated that they were trained graduate teachers, while twenty-seven percent indicated their status as trained non-graduate teachers.

COUNTRY PROFILE: PRINCIPALS

Primary School Principals

Although all primary principals were given questionnaires, the response rate was very low, and only three principals returned completed surveys. Due to the small sample size, the results for this section are described, but should not be generalised to the larger population of primary school principals in Antigua and Barbuda.

Profile of Principals in the Primary Schools Sample

Primary Principals' Sex

All three principals who responded were female.

Primary Principals' Years of Teaching Experience

Principals reported their years in the teaching service. The three principals reported a minimum of twenty-four and a maximum of thirty years in the teaching profession. The average number of years in the teaching profession was 27.67 (SD=3.22).

Primary Principals' Years in Principal Position

Principals reported their years as principals and reported a minimum of six years and a maximum of eleven years as principals. The average years in the principal position was 9 (SD=2.65).

Primary Principals' Years as Principal at the Current School

Principals responded to a question about how many years they had served as principals at their current school. The principals indicated that they had a minimum of three years and a maximum of five years as principals for the schools that they were currently serving in, with an average of 3.67 years (SD=1.12)

Highest Qualification Held by Primary Principals

At the time of data collection, principals were asked to indicate their highest qualifications. All three principals had a bachelor's degree.

Education-Related Qualifications Held by Primary Principals

Not only were principals asked to indicate their qualifications, but they were also asked to indicate their areas of qualification. These areas were categorised as being education-related and not. Education-related areas include primary education, primary education core areas English, Mathematics, Science and Social Sciences. Two principals reported having bachelor's degrees in education-related areas.

Primary Principals' Training in School Leadership/Management

Principals were asked to indicate whether they had qualifications or training in school leadership and/or management, and if so, to report at what level and in which area. All three principals reported having qualifications or training in school leadership and management. One principal's highest leadership qualification was at the bachelor's level, while two reported having qualifications at other levels.

Summary

Three female principals were involved in this study. Their mean number of years in the teaching profession was 27.67, with a standard deviation of 3.215. The mean number of years as principals was 9, with a standard deviation of 2.646. The mean number of years as principals of the school they were at during the data collection period was 3.67, with a standard deviation of 1.155. All three principals had bachelor's degrees as their highest qualifications, and all three were trained in leadership management for primary schools.

Secondary School Principals

Although all secondary school principals were given questionnaires, the response rate was very low, similar to that of primary principals, and only one principal returned a completed survey. Due to the small sample size, the results for this section are described but should not be generalised to the larger population of primary school principals in Antigua and Barbuda.

Profile of Principal in the Secondary Schools Sample

Secondary Principal's Sex

Data was collected from one female secondary school principal.

Secondary Principal's Years of Teaching Experience

Principals reported their years in the teaching service. The principal reported that she had taught for thirty-one years.

Secondary Principal's Years in Principal Position

Principals reported their years as principals. The principal reported that she had been a principal for eight years.

Secondary Principal's Years as Principal at the Current School

The principal responded to the question about how many years she has been principal at her current school. Of the eight years she had served as principal, she indicated that she had been a principal of her current school for three years.

Highest Qualification Held by Secondary Principals

The principal was asked to indicate her highest qualification at the time of data collection, which was a bachelor's degree in history and law.

Education-Related Qualifications Held by Secondary Principals

Not only were principals asked to indicate their qualifications, but they were also asked to indicate their areas of qualification. These areas were categorised as being education-related and not. Education-related areas include secondary education, secondary education core areas of English, mathematics, science, and social sciences. The principal in 2017 had qualifications in a non-education-related area with a bachelor's degree in history and law.

Secondary Principals' Training in School Leadership/Management

Principals were asked to indicate whether they had qualifications or training in school leadership and/or management, and if so, to report at what level and in which area. The principal reported that her highest qualification in school leadership or management was the Educator's Summer Leadership Institute, with a qualification in management and training in administration.

Summary

Data were collected from one secondary female school principal in 2017. The principal reported that she has taught for thirty-one years. She also indicated that she has been a principal for eight years, and of these years, she has been the principal of the current school for three years. Additionally, the principal indicated that her highest qualification was a bachelor's degree in

history and law. She reported that her highest school leadership or management qualification was Educator's Summer Leadership Institute. She also indicated that she has management qualifications.

FACTORS AFFECTING STUDENT ACHIEVEMENT

Several factors affect student achievement, and the study's findings are reported below. Findings are divided into the categories:

- **Students'** Home Environment
- Students' Perception of School and Learning
- * Teachers' Classroom Practices
- School Leadership
- School Characteristics
- ❖ Teacher and Principal Views on Common Educational Practices
- ❖ The Impact of COVID-19 on Teaching and Learning

This report presents students' perspectives first in the primary and secondary school sections. Traditionally, educational research has focused on writing **about** students; however, there is a new focus on having "students fill the pages with their voices not to 'prove,' or support researcher claims but rather to make claims of their own" (Cook-Sather, 2020, p. 9). From this perspective, we conducted this study to capture students' perspectives on important topics in education accurately.

Students' Home Environment

Primary and secondary students were asked about several factors influencing their home environments. These factors include family members living with them at home, items found in their households, access to devices and the internet, and types of leisure activities engaged in. Students were also asked several questions that indicate the home literacy environment, including the number of books in the home and whether someone reads to them at home.

Primary Students' Home Environment

Family Members Living with Primary Students

Students were asked who usually lives with them at home and their parents' employment status. Their responses are in Tables 24 to 26.

Table 24: Family Members Living with Primary Students

Family Member	2017 (N=280)	
	n	%
Mother (including stepmother or foster mother	231	82.5
Father (including stepfather or foster father)	158	56.4
Brother(s) (including stepbrothers)	158	56.4
Sister(s) (including stepsisters)	156	55.7
Grandparent(s)	96	34.3
Others (e.g. cousin)	78	27.9

Table 25: Primary Students' Mothers' Employment Status

Mother employment status	2017 (N=280)	
	n	%
She is working full-time for pay	173	61.79
She is working part-time for pay	64	22.86
She is not working but looking for a job	17	6.07
Other (e.g. home duties; retired)	17	6.07
No Response	9	3.21
TOTAL	280	100

Table 26: Primary Students' Fathers' Employment Status

Father employment status	2017 (N=280)	
	n	%
He is working full-time for pay	197	70.36
He is working part-time for pay	43	15.36
He is not working but looking for a job	12	4.29
Other (e.g. home duties; retired)	5	1.79
No Response	23	8.2
TOTAL	280	100

Primary Students Access to Devices, Internet and Other Resources at Home

Students were asked if they have access to the internet and to indicate the electronic devices they have access to at home. They were also asked to indicate access to other resources in their

households. Their responses showing the percentage of students with regular access to these resources at home can be found in Tables 27 to 29.

Table 27: Primary Students' Access to the Internet at Home

Regular internet access at home	2017 (N=280)	
	n %	
Yes	234	83.6
No	42	15
No Response	4	1.4
TOTAL	280	100

Table 28: Primary Students' Access to Electronic Devices at Home

Degular aggest to a device at home	2017 (N=280)	
Regular access to a device at home	n	%
Smartphone	196	70
Electronic tablet	194	69.3
Laptop computer	161	57.5
Desktop computer	84	30
Smart TV	204	72.9
Other	32	11.4

Table 29: Primary Students' Access to Other Resources at Home

Dogwley coogs to	2017 (1	2017 (N=280)		
Regular access to	n	%		
A computer you can use for schoolwork	167	59.6		
A desk to study at	131	46.8		
A dictionary	235	83.9		
A dishwasher (or washing machine)	176	62.9		
A DVD player	205	73.2		
A guest room	80	28.6		
Internet access	218	77.9		
Microwave oven	181	64.6		
A musical instrument	160	57.1		
A quiet place to study	173	61.8		
A room of your own	154	55		
Books of poetry	144	51.4		
Books to help with your schoolwork	226	80.7		
Classic literature (e.g. Roald Dahl; Dr Seuss)	92	32.9		
Educational software	153	54.6		
Puzzles and Educational toys	194	69.3		
Technical reference books or manuals	104	37.1		
Works of art (e.g., paintings)	192	68.6		

Primary Students' Transportation to School

Students were asked how they usually travel to school every day. Table 30 shows the percentage of students who use various modes of transportation to school.

Table 30: Primary Students' Mode of Travel to School

Mode of travel	2017 (N=280)	
Mode of travel	n	%
Walking	93	33.21
By public transport (e.g. bus, minibus, route taxi)	103	36.79
By private vehicle (e.g. parent's car; with a friend)	77	27.5
Cycling (e.g. bicycle)	1	0.36
Other	2	0.71
No Response	4	1.43
TOTAL	280	100

Primary Students' Leisure Activities

Primary students were asked to report on the leisure activities they engaged in at home. Table 31 shows the distribution of students engaged in each leisure activity.

Table 31: Primary Students' Leisure Activities at Home

I signing pativity	2017 (N=280)	
Leisure activity	n	%
Watching TV	241	86.1
Creative writing (e.g. stories, poetry, cartoons)	87	31.1
Watching movies/videos on a device	215	76.8
Listening to music	214	76.4
Playing sports	197	70.4
Reading	160	57.1
Hanging out with friends	185	66.1
Using social media (e.g. Snapchat; Facebook; Twitter; Instagram)	139	49.6
Playing video games	178	63.6
Surfing the Internet	162	57.9
Other	22	7.9

Other reported leisure activities include riding a bicycle, gymnastics, running and dancing.

Primary Students' Home Literacy Environment

The students' home literacy environment was ascertained by asking about several factors. Students were asked to report on leisure-time reading materials and whether they were accessed in paper or

electronic formats, the number of books in the home, who, if anyone, reads to them at home, and their perception of reading as a gender-specific activity. Primary student responses can be found in Tables 32 to 36.

Table 32: Primary Students' Reading Material and Format

Reading material and format	2017 (N=280)	
	n	%
Novels (Fiction): Paper format ONLY	57	20.4
Novels (Fiction): Electronic format ONLY	25	8.9
Novels (Fiction): BOTH Paper & Electronic	27	9.6
Other books (e.g. Non-fiction): Paper format ONLY	66	23.6
Other books (e.g. Non-fiction): Electronic format ONLY	21	7.5
Other books (e.g. Non-fiction): BOTH Paper & Electronic	22	7.9
Magazines: Paper format ONLY	64	22.9
Magazines: Electronic format ONLY	13	4.6
Magazines: BOTH Paper & Electronic	23	8.2
Comics: Paper format ONLY	62	22.1
Comics: Electronic format ONLY	25	8.9
Comics: BOTH Paper & Electronic	27	9.6
Newspapers: Paper format ONLY	61	21.8
Newspapers: Electronic format ONLY	12	4.3
Newspapers: BOTH Paper & Electronic	10	3.6
Other	8	2.9

Table 33: Number of Books in Primary Students' Homes

No. of books	2017 (N=280)	
No. of books	n	%
0 – 10	52	18.6
11 – 25	78	27.9
26 – 100	71	25.4
101 – 200	25	8.9
201 – 500	18	6.4
More than 500	28	10
No Response	8	2.9
TOTAL	280	100

Table 34: Primary Students' Who Are Read to at Home

December and to you of house?	2017 (N=280)	
Does someone read to you at home?	n	%
Yes	163	58.2
No	113	40.4
No Response	4	1.4
TOTAL	280	100

Table 35: Person Who Reads to Primary Students at Home

The person who reads to the student	2017 (2017 (N=280)	
	n	%	
Father (including stepfather or foster father)	72	25.7	
Mother (including stepmother or foster mother)	124	44.3	
Brother(s) (including stepbrother)	43	15.4	
Sister(s) (including stepsister)	66	23.6	
Other relatives (e.g. grandparents; cousins; aunts, uncles)	65	23.2	
Other(s) (e.g. friends)	2	0.7	

Other individuals who read to primary students include friends and neighbours.

Table 36: Primary Students' Perception of Reading as a Gender-Specific Activity

Deadles to see at the dead to fee	2017 (N=280)	
Reading is an activity that is for	n	%
Girls only	13	4.64
Boys only	4	1.43
Both girls and boys	258	92.1
No Response	5	1.79
TOTAL	280	100

Primary Students' Participation in Extra-Curricular Activities

Students were asked if they participated in extra-curricular activities. Primary student responses to this item can be found in Table 37. Students who responded yes to this question were asked to indicate the extracurricular activity they most often engage in, and students who responded that they do not participate in extracurricular activities were asked to provide a reason for this.

Table 37: Primary Students' Participating in Extra-Curricular Activities

Doubleinete in cutue equaicules cetivities	2017 (N=280)	
Participate in extra-curricular activities	n	%
Yes	253	90.4
No	24	8.6
No Response	3	1.1
TOTAL	280	100

Primary students reported engaging in various activities, including football, cricket, craft and dancing. Students who reported not participating in extracurricular activities gave various reasons, including health issues and the distance between their homes and the school.

Approximately eighty-three percent of primary students' home environment included a maternal figure, while fifty-six percent had a paternal figure. Sixty-two percent of the students reported that their mothers worked full-time, and seventy percent of the fathers worked full-time. Eighty-four percent of the students had access to the internet in their homes, fifty-eight percent had access to a laptop, thirty percent had access to a desktop and sixty-nine percent had access to an electronic tablet. Despite having access to such devices, the percentage of students who reported reading fiction and nonfiction books, magazines and comics in electronic or both paper and electronic format, did not exceed ten percent. In addition, only twenty-five percent of the students had more than one hundred books at home. Ninety-two percent of the students believe that reading is for girls and boys and fifty-eight percent said someone read to them at home. The three most popular leisure activities were watching television, videos or movies on a device, and listening to music. Ninety percent of primary school students took part in extra-curricular activities.

Secondary Students' Home Environment

Family Members Living with Secondary Students

Students were asked who usually lives with them at home and their parents' employment status. Their responses are in Tables 38 to 40.

Table 38: Family Members Living with Secondary Students

Family Mamban	2017 (N=249)	
Family Member	n	%
Mother (including stepmother or foster mother)	212	85
Father (including stepfather or foster father)	115	46
Brother(s) (including stepbrothers)	120	48
Sister(s) (including stepsisters)	115	46
Grandparent(s)	41	16.5
Others (e.g. cousin)	52	20.9

Table 39: Secondary Students' Mothers' Employment Status

Mother employment status	2017 (N=249)	
	n	%
She is working full-time for pay	198	79.5
She is working part-time for pay	16	6.4
She is not working but looking for a job	12	4.8
Other (e.g. home duties; retired)	14	5.6
No Response	23	9.2
TOTAL	249	100

Table 40: Secondary Students' Fathers' Employment Status

Father employment status	2017 (N=249)	
	n	%
He is working full-time for pay	194	77.9
He is working part-time for pay	15	6.0
He is not working but looking for a job	10	4.0
Other (e.g. home duties; retired)	7	2.8
No Response	30	12
TOTAL	249	100

Secondary Students Access to Devices, Internet and Other Resources at Home

Students were asked if they have access to the internet and to indicate the electronic devices they have access to at home. They were also asked to indicate access to other resources in their households. Their responses showing the percentage of students with regular access to these resources at home can be found in Tables 41 to 43.

Table 41: Secondary Students' Access to the Internet at Home

Decider internet cooper at home	2017 (N=249)	
Regular internet access at home	n	%
Yes	201	80.7
No	46	18.5
No Response	2	8
TOTAL	249	100

Table 42: Secondary Students' Access to Electronic Devices at Home

Decaylon access to a device at home	2017 (N=249)	
Regular access to a device at home	n	%
Smartphone	225	90.4
Electronic tablet	146	58.6
Laptop computer	158	63.5
Desktop computer	63	25.3
Smart TV	159	63.9
Other	5	2.0

Other devices listed include game consoles: Xbox, PlayStation and Nintendo.

Table 43: Secondary Students' Access to Other Resources at Home

Position accounts	2017 (2017 (N=249)	
Regular access to	n	%	
A computer you can use for schoolwork	186	74.7	
A desk to study at	110	44.2	
A dictionary	218	87.6	
A dishwasher (or washing machine)	186	74.7	
A DVD player	159	63.9	
A guest room	63	25.3	
Internet access	201	80.7	
Microwave oven	171	68.7	
A musical instrument	139	55.8	
A quiet place to study	119	47.8	
A room of your own	149	59.8	
Books of poetry	92	36.9	
Books to help with your schoolwork	202	81.1	
Classic literature (e.g. Roald Dahl; Dr Seuss)	119	47.8	
Educational software	125	50.2	
Technical reference books or manuals	79	31.7	
Works of art (e.g., paintings)	128	51.4	

Secondary Students' Transportation to School

Students were asked how they usually travel to school every day. Table 44 shows the percentage of students who use various transportation modalities to school.

Table 44: Secondary Students' Mode of Travel to School

Mode of travel	2017 (N=249)	
vioue of traver	n	%
Walking	51	20.5
By public transport (e.g. bus, minibus, route taxi)	81	32.5
By private vehicle (e.g. parent's car; with a friend)	96	38.6
Cycling (e.g. bicycle)	3	1.2
Other	4	1.6
No Response	14	5.6
TOTAL	249	100

Secondary Students' Leisure Activities

Secondary students were asked to report on the leisure activities they engage in at home. Table 45 shows the distribution of students engaged in each leisure activity.

Table 45: Secondary Students' Leisure Activities at Home

Leisure activity	2017 (N=249)	
Leisure activity	n	%
Watching TV	200	80.3
Creative writing (e.g. stories, poetry, cartoons)	58	23.3
Watching movies/videos on a device	214	85.9
Listening to music	229	92.0
Playing sports	123	49.4
Reading	159	63.9
Hanging out with friends	160	64.3
Using social media (e.g. Snapchat; Facebook; Twitter; Instagram)	196	78.7
Playing video games	127	51
Surfing the Internet	176	70.7
Other	206	82.7

Other reported leisure activities include cooking, playing games, dancing, creating videos, doing homework, drawing, eating, gardening, playing piano, sleeping, riding bicycles, studying, swimming and playing with pets.

Secondary Students' Home Literacy Environment

The students' home literacy environment was ascertained by asking about several factors. Students were asked to report on leisure-time reading materials, whether they were accessed in paper or electronic formats, the number of books in the home, and their perception of reading as a gender-

specific activity. The students were also asked who, if anyone, read to them at home when they were in primary school. Secondary student responses can be found in Tables 46 to 50.

Table 46: Secondary Students' Reading Material and Format

Reading material and format	2017 (2017 (N=249)	
	n	%	
Novels (Fiction): Paper format ONLY	50	20.1	
Novels (Fiction): Electronic format ONLY	53	21.3	
Novels (Fiction): BOTH Paper & Electronic	25	10	
Other books (e.g. Non-fiction): Paper format ONLY	63	25.3	
Other books (e.g. Non-fiction): Electronic format ONLY	33	13.3	
Other books (e.g. Non-fiction): BOTH Paper & Electronic	18	7.2	
Magazines: Paper format ONLY	41	16.5	
Magazines: Electronic format ONLY	19	7.6	
Magazines: BOTH Paper & Electronic	6	2.4	
Comics: Paper format ONLY	36	14.5	
Comics: Electronic format ONLY	38	15.3	
Comics: BOTH Paper & Electronic	12	4.8	
Newspapers: Paper format ONLY	61	24.5	
Newspapers: Electronic format ONLY	14	5.6	
Newspapers: BOTH Paper & Electronic	4	1.6	
Other	218	87.6	

Other reported reading materials include daily devotional, documentary, messages, Manga, and poetry,

Table 47: Number of Books in Secondary Students' Homes

No. of books	2017 (N=249)	
NO. OI DOOKS	n	%
0 – 10	51	20.5
11 – 25	55	22.1
26 – 100	57	22.9
101 – 200	39	15.7
201 – 500	19	7.6
More than 500	19	7.6
No Response	4	1.6
TOTAL	249	100

Table 48: Secondary Students' Read to at Home When in Primary School

Did same are used to view at home when you were in minimum school?	2017 (N=249)	
Did someone read to you at home when you were in primary school?	n	%
Yes	165	66.3
No	80	32.1
No Response	4	1.6
TOTAL	249	100

Table 49: Person Who Read to Secondary Students at Home when in Primary School

The person who read to the student	2017 (N=249)	
	n	%
Father (including stepfather or foster father)	59	23.7
Mother (including stepmother or foster mother)	135	54.4
Brother(s) (including stepbrother)	23	9.2
Sister(s) (including stepsister)	53	21.3
Other relatives (e.g. grandparents; cousins; aunts, uncles)	73	29.3
Other(s) (e.g. friends)	9	3.6

Other individuals who read to secondary students include aunts, friends, best friend, grandmother, and neighbour.

Table 50: Secondary Students' Perception of Reading as a Gender-Specific Activity

Dooding is an activity that is for	2017 (N=249)	
Reading is an activity that is for	n	%
Girls only	12	4.8
Boys only	0	0
Both girls and boys	235	94.4
No Response	2	0.8
TOTAL	249	100

Secondary Students' Participation in Extra-Curricular Activities

Students were asked if they participated in extra-curricular activities. Secondary student responses to this item can be found in Table 51. Students who responded yes to this question were asked to indicate the extracurricular activity they most often engage in. Students who answered no were asked why they do not participate in extracurricular activities.

Table 51: Secondary Students' Participating in Extra-Curricular Activities

Participate in extra-curricular activities	2017 (N=249)		
	n	%	
Yes	147	59	
No	100	40.2	
No Response	2	0.8	
TOTAL	249	100	

In 2017, students reported engaging in a range of activities, including athletics, basketball, cricket, cheerleading, choir, debate, fencing, football, golf, Interact Club, and netball.

Students who reported not participating in extracurricular activities in 2017 gave various reasons, including health problems, after-school activities taking up studying time, extra classes after school, not liking playing sports, being too shy, and not being interested.

Summary

Approximately eighty-five per cent of secondary students' home environments included a maternal figure predominantly, with only forty-six per cent having a paternal figure. Over forty percent of the students reported living with brothers (or stepbrothers) and sisters (or stepsisters). Approximately 16% of students live with their grandparents. Approximately eighty percent of the students reported that their mothers worked full-time, and seventy-eight percent of the fathers worked full-time. Approximately thirty-nine percent of students said they travel to school by private transport.

Many students indicated that they had access to the internet at home. Approximately eighty-one percent of the students had access to the internet in their homes, with over ninety percent having access to a smart phone. Approximately seventy-five percent of students indicated they had a computer they could use for schoolwork. Over 60% of students had access to a laptop and smart TV. About fifty-nine percent had access to an electronic tablet and twenty-five percent to a desktop computer.

Other resources identified at home included:

1. Approximately eighty-seven percent of students indicated they had a dictionary at home.

- 2. Over seventy percent of students indicated that they have a dishwasher or washing machine at home and books to help with homework.
- 3. Approximately fifty percent of students indicated that their homes contain works of art, musical instruments, educational software, and classic literature.
- 4. Approximately sixty-nine percent of students indicated that their home has a microwave.

It should be noted that the secondary students from Antigua and Barbuda spend most of their leisure time listening to music (ninety- two percent), watching movies (eighty- five percent), watching TV (eighty percent), using social media (seventy-nine percent), and surfing the internet (seventy-one percent). It should be noted that only fifty- nine percent of students indicated that they participate in extracurricular activities. While only about sixty- four percent of students reported reading in their leisure time.

Despite having access to electronic devices, the percentage of students who reported reading fiction and nonfiction books, magazines and comics in both paper and electronic format, did not exceed ten percent. It was significant to note that more students indicated that they read more non-fiction novels and newspapers in paper format than electronic (twenty- five percent)

In addition, only sixteen percent of the students indicated they had more than one hundred books at home. Ninety-four percent of the students believe reading is for both girls and boys. Additionally, approximately sixty-six percent of the students indicated that someone at home read to them at primary school and that their mother/stepmother/foster mother was the one who predominantly read to them (fifty-four percent).

Students' Perception of School and Learning

Primary and secondary students were asked about their feelings about learning and school in general and about several aspects of their school's climate.

Primary Students' Attitudes Towards School and Learning

Students were presented with a list of statements about school and learning and were asked to indicate whether they agreed or disagreed with each statement. They were also allowed to indicate that they did not know if they agreed or disagreed. The frequency of primary student responses to each statement is presented in Table 52.

Table 52: Primary Students' Attitudes Towards School and Learning

	2017 (N=280)				
Statement	Responses (%)				
	Agree	Disagree	Don't Know	No Response	Total
Going to school will help me get a good job when I am older.	92.5	2.9	3.6	1.1	100
School is fun.	74.6	12.1	9.6	3.6	100
I wish we didn't have to go to school at all.	21.1	66.8	9.3	2.9	100
I would rather stay at home than go to school.	16.1	71.4	7.5	5	100
I would rather go to the doctor or dentist than go to school.	20	63.2	10.4	6.4	100
Learning new things at school is fun.	83.6	6.4	6.1	3.9	100
In school all we ever do is work, work, work.	50.7	36.4	6.8	6.1	100
School will help me know many things.	91.8	2.1	3.6	2.5	100
School will help me think better.	90	3.2	3.2	3.6	100
School will get me prepared for the future.	80.7	7.9	5	6.4	100
School is boring.	20.4	61.4	12.5	5.7	100
I don't like school.	18.6	68.9	7.1	5.4	100
I like to do schoolwork.	64.3	22.5	8.6	4.6	100
I will never use what I learn at school.	20.7	66.4	8.2	4.6	100
School is like a prison.	27.5	57.1	10.4	5	100
I would rather be at school than playing video games	58.9	28.6	8.9	3.6	100
I hate to do schoolwork.	16.1	71.8	7.5	4.6	100
I would rather be at school than at home watching T.V.	58.9	29.6	7.1	4.3	100
I don't need school to get a job.	13.9	76.8	5	4.3	100
I like all the different things we do at school.	82.1	7.9	5.0	5.0	100
What I learn at school is good for my brain.	94.6	1.8	1.4	2.1	100
School is important for everyone.	87.1	4.6	3.2	5	100
I will never use what I learn at school	17.9	69.3	6.4	6.4	100
I would rather be at home alone than at school.	17.9	67.9	10.4	3.9	100

Ninety-three percent of the primary school students believed the school would help them gain employment. Although, fourteen percent of the students believed that schooling was not necessary to gain employment. Seventy-five per cent of them found school fun, but twenty-one per cent wished they did not have to attend school entirely. Nineteen percent of the students did not like school, and sixteen percent preferred to stay at home rather than attend school. Fifty-one percent of the students perceived that school was strictly about getting work done. Despite this perception, eighty-four percent of the students enjoyed learning new things at school, and eighty-one percent believed that school was helpful in preparation for the future.

Primary Students' Perception of the School Environment

One of the research objectives was to understand students' perceptions of their school environment. To achieve this, primary school students were administered a 29-item School Climate Survey-Student Version ESAI-E-S3. This instrument comprises stems for 29 statements, each offering three options for completion. Students read each stem and selected the option that best reflected their perception of the school. Typically, student responses within a school are aggregated, providing a measure of the school climate from the student's viewpoint. For this report, the percentage of students selecting each option for each item is presented in Table 53, offering an overview of the proportions of primary school students' responses. Some students circled more than one response, which was classified as "ambivalent" in the table below.

Table 53: Primary Students' Responses on School Climate Survey

Shahamand	2017 (N=280)	
Statement	Responses (%)	
From what I can tell, this school is		
A great place for people to visit.	68.6	
An okay place for people to visit.	23.6	
Not a place people want to visit.	5.0	
No response	2.9	
In my experience, at this school		
Everything works or gets fixed quickly.	53.9	
A few things are broken, but mostly things here work.	36.8	
A lot of things are broken.	36.8	
No response	3.2	
When I look around at this school I see		
Lots of colour and kids' work is up everywhere.	63.9	
Some colour and kids' work is up in some places.	25.0	
Mostly blank walls.	8.2	
No response	2.9	
Most of the students at this school		
Help the teachers and other kids make the school clean and nice to look at.	58.2	
Keep the school clean because we would get in trouble if we did not.	25.7	
Don't keep the school pretty and clean even when teachers tell us to.	13.6	
No response	2.5	
My teacher spends time with other teachers		
Planning, talking and teaching together often.	60.7	
Talking mostly at recess or school events.	22.9	
Only at lunch or not at all.	13.9	
No response	2.5	

When I am at school, I feel like	
The teachers, classmates, and I are like a family.	55.7
I am part of a good school, but not really a family.	32.9
No one cares about me at this school.	8.6
No response	2.9
At this school	41.1
Students all get along no matter what they look like or where they are from.	41.1
Students who are alike or friends get along.	25.0
A lot of students don't get along.	31.8
No response	2.1
The popular students at this school	
Are nice to the other students.	43.6
Are nice to the other popular students.	18.9
Think they are better and are often mean to others.	34.3
No response	3.2
In my class	
We make a lot of the decisions along with the teacher.	49.3
The teacher lets us choose sometimes.	31.8
The teacher makes all the decisions.	16.4
No response	2.5
In my class	
There are lots of classroom jobs and we all take turns doing them.	56.4
There are a few jobs for students in the class.	28.2
Students only do classroom jobs because they have to or have gotten in trouble.	12.1
No response	3.2
School events such as games, plays, performances, meetings, or conferences are attended by	
Lots of people.	55.7
Some people who care about that event.	30.7
Not many people.	10
No response	3.6
At this school, I feel safe	
Everywhere in the school.	54.6
Only in my classroom.	20.7
Some days and not other days.	21.8
No response	2.9
At this school	
Many students are in leadership roles in and out of class.	48.9
A few students are picked by the teachers to be leaders.	36.4
There are few or no students in leadership roles.	11.8
No response	2.9
At this school	
The students and teachers from different classrooms work together on many projects.	43.9
The students work together on projects in their class.	33.2
Students do not work together on projects.	19.6

No response	3.2
In my class, the rules	
Are clear and help the kids get along.	54.3
Are clear and keep the kids from misbehaving.	30.0
Are not clear and the kids are afraid of doing something to make the teacher angry.	11.4
No response	4.3
When students break rules	
The teacher gives them a fair consequence and helps them understand why.	48.2
The teacher gives consequences sometimes.	23.9
The teacher gets upset at the students publicly.	23.6
No response	4.3
In my judgment, I would say that	
I am learning to be more responsible every day because of my teacher.	60
I am learning to do what the teacher wants.	17.1
I feel like if I did what I wanted to do, I would get in trouble.	18.2
I would say that	
I can see clear evidence that my teacher respects and cares about me.	53.9
When I show my teacher respect, he/she shows me respect.	29.6
I try to respect my teacher, but sometimes I feel like I am not respected.	13.2
No response	3.2
In my class	
Things run smoothly because the teacher makes things very clear.	53.2
Things run pretty well because the teacher has a lot of control.	26.1
A lot of the time things do not run smoothly.	17.5
No response	3.2
When it comes to grades and assignments	
What it takes to get a good grade is very clear to me.	61.4
Most of the time I understand what is expected.	21.4
Often, I am confused as to why I get the grades I do.	13.6
No response	3.6
What is important in my class is	
How much we try and the effort we put into our work.	58.6
Getting right answers and good grades.	27.5
Doing what makes the teacher happy.	10.4
No response	3.6
I would describe the work in my class as	
Active, hands-on and interesting.	60
Interesting but mostly out of the book.	22.1
Mostly worksheets and the teacher talking.	14.6
No response	3.2
The work in my class	
Makes me think and challenges me.	66.4
Is mostly about remembering what the teacher or textbook says	18.6
Is mostly about keeping us all busy	9.6

No response	5.4
At this school when a student uses mean language	
Other students point out to them that it is not right.	50.7
Sometimes they get in trouble from an adult.	32.9
Usually nothing happens to them, so they keep doing it.	11.1
No response	5.4
At this school	
I trust and can talk to most of the adults.	59.3
There are one or two adults that I can trust to talk to, but not many.	22.9
I do not feel like I can be honest with the adults at the school.	12.1
No response	5.7
On the playground	
We have peer mediators and/or "Peacemakers" that help the students solve their own problems.	46.1
We have peer mediators and/or "Peacemakers," but they mostly just get kids in trouble.	21.8
There are only adults to supervise.	25
No response	7.1
The best way to describe how I feel about this school is	
I am very proud to be a student here.	50.7
I like this school.	28.6
This school is okay, but I would rather be at another school.	15
No response	5.7
My parents	
Feel welcome to come to the school.	58.6
Mostly just come to school for events that are expected such as parent-teacher conferences.	22.9
Don't come to the school very often.	13.9
No response	4.6
At this school	
We have lots of guests, visitors, and volunteers.	68.2
We have a few guests, visitors and volunteers.	17.1
There are not many guests, visitors or volunteers.	10
No response	4.6

Sixty-seven percent of the students felt their school was a great place to visit, and fifty-four percent believed everything worked well or got fixed quickly. More than sixty percent of the students acknowledged that there were lots of colours and children's work on display at their school. Fifty-eight percent of the students indicated that teachers and students helped keep the school clean and pleasant to look at.

Fifty-six percent of the students felt that they were part of a family with their teachers and other classmates, and sixty-one percent felt like teachers at that school planned and worked together.

Forty-one percent of the students also indicated that students in their school got along with each other, oblivious of physical features and origin. Forty-four percent of students believed that popular students at their school were nice to others, and fifty-one percent of the students were proud to belong to their school.

Forty-nine percent of the students acknowledged their involvement in the decision-making process at their school together with the teachers, while fifty-six percent of the students indicated the existence of numerous class jobs and duties that they got a turn to partake in. Fifty-five percent of the students felt safe everywhere in their school, and fifty-three percent believed that things ran smoothly because teachers made their expectations abundantly clear. Sixty-one percent of the students revealed that they knew exactly what was required to get good grades in assignments and other tasks. Sixty percent of the students suggested that classwork was active, hands-on and interesting.

Secondary Students' Attitudes Towards School and Learning

Secondary students were also presented with a list of statements about school and learning and were asked to indicate whether they agreed or disagreed with each statement. They were allowed to indicate that they did not know if they agreed or disagreed. The frequency of secondary student responses to each statement is presented in Table 54.

Table 54: Secondary Students' Attitudes Towards School and Learning

	2017 (N=249)				
Statement	Responses (%)				
	Agree	Disagree	Don't Know	No Response	Total
Going to school will help me get a good job when I am older.	96.4	2.4	0.8	0.4	100
School is fun.	41.8	28.1	28.5	1.6	100
I wish we didn't have to go to school at all.	24.1	61.4	14.1	0.4	100
I would rather stay at home than go to school.	21.7	58.6	18.9	0.8	100
I would rather go to the doctor or dentist than go to school.	12.9	76.7	10	0.4	100
Learning new things at school is fun.	75.9	7.2	16.5	04	100
In school all we ever do is work, work, work.	54.2	37.8	6.8	1.2	100
School will help me know many things.	94.8	2.8	2.0	0.4	100
School will help me think better.	85.5	6.4	7.2	0.8	100
School will get me prepared for the future.	94.4	1.6	3.6	0.4	100

School is boring.	42.6	33.7	22.3	1.2	100
I don't like school.	19.7	61.8	16.9	1.6	100
I like to do schoolwork.	39.4	30.1	28.1	2.4	100
I will never use what I learn at school.	5.2	83.5	8.4	2.8	100
School is like a prison.	50.6	34.9	13.3	1.2	100
I would rather be at school than playing video games	39.8	39.0	20.5	0.8	100
I hate to do schoolwork.	24.1	55	20.1	0.8	100
I would rather be at school than at home watching T.V.	43.4	35.7	19.3	1.6	100
I don't need school to get a job.	10	81.9	7.21	0.8	100
I like all the different things we do at school.	66.7	15.3	15.7	2.4	100
What I learn at school is good for my brain.	88.4	4.0	6.8	0.8	100
School is important for everyone.	88.8	3.6	6.8	0.8	100
I would rather be at home alone than at school.	20.5	63.1	15.3	1.2	100

In 2017, of the 23 statements about school, most students responded positively to the positive statements about school. Of the fifteen positive statements, thirteen of them received over 67 percent of students agreeing to the statements. Approximately ninety- six percent of the students indicated that "going to school will help me get a good job when I am older", and about ninety-four percent of students indicated that "school will help me know many things" and "school will help prepare for the future."

It should be noted that for the eight negative statements about school, most students generally disagreed with most of the statements, except approximately fifty-one percent of the students indicated that "School is like a prison" and forty three percent indicated that "School is boring".

Secondary Students' Perception of the School Environment

One of the research objectives is to understand students' perceptions of their school environment. Secondary school students were administered a 29-item School Climate Survey-Student Version ESAI-E-S3 to achieve this. This instrument comprises stems for 29 statements, each offering three options for completion. Students read each stem and select the option that best reflects their perception of the school. Typically, student responses within a school are aggregated, providing a measure of the school climate from the student's viewpoint. In the presented findings, the percentage of students selecting each option for each item is summarised in Table 55, offering an

overview of the proportions of Secondary school students' responses. Some students circled more than one response, and these are shown as option "d" in the table below.

Table 55: Secondary Students' Responses on School Climate Survey

	2017 (N=249)
Statement	Responses (%)
From what I can tell, this school is	
A great place for people to visit.	29.3
An okay place for people to visit.	57.0
Not a place people want to visit.	12
No response	1.6
In my experience, at this school	
Everything works or gets fixed quickly.	15.3
A few things are broken, but mostly things here work.	59
A lot of things are broken.	23.3
No response	2.4
When I look around at this school I see	
Lots of colour and kids' work is up everywhere.	22.5
Some colour and kids' work is up in some places.	40.2
Mostly blank walls.	34.9
No response	2.4
Most of the students at this school	
Help the teachers and other kids make the school clean and nice to look at.	13.3
Keep the school clean because we would get in trouble if we did not.	32.5
Don't keep the school pretty and clean even when teachers tell us to.	52.2
No response	2
My teacher spends time with other teachers	
Planning, talking and teaching together often.	43.8
Talking mostly at recess or school events.	33.7
Only at lunch or not at all.	16.9
No response	5.6
When I am at school, I feel like	
The teachers, classmates, and I are like a family.	20.
I am part of a good school, but not really a family.	57.4
No one cares about me at this school.	19.7
No response	2
At this school	
Students all get along no matter what they look like or where they are from.	10.8
Students who are alike or friends get along.	44.6
A lot of students don't get along.	43.0
No response	1.6
The popular students at this school	
Are nice to the other students.	22.1

Are nice to the other popular students.	18.9
Think they are better and are often mean to others.	55.4
No response	3.6
In my class	
We make a lot of the decisions along with the teacher.	20.5
The teacher lets us choose sometimes.	59.8
The teacher makes all the decisions.	16.5
No response	3.2
In my class	
There are lots of classroom jobs and we all take turns doing them.	14.9
There are a few jobs for students in the class.	28.1
Students only do classroom jobs because they have to or have gotten in trouble.	53.8
No response	3.2
School events such as games, plays, performances, meetings, or conferences are attended by	
Lots of people.	43.0
Some people who care about that event.	43.8
Not many people.	10.8
No response	2.4
At this school, I feel safe	
Everywhere in the school.	33.7
Only in my classroom.	21.7
Some days and not other days.	41.8
No response	2.8
At this school	
Many students are in leadership roles in and out of class.	25.7
A few students are picked by the teachers to be leaders.	52.2
There are few or no students in leadership roles.	18.9
No response	3.2
At this school	
The students and teachers from different classrooms work together on many projects.	20.1
The students work together on projects in their class.	61.0
Students do not work together on projects.	16.1
No response	2.8
In my class, the rules	
Are clear and help the kids get along.	20.5
Are clear and keep the kids from misbehaving.	55
Are not clear and the kids are afraid of doing something to make the teacher angry.	20.5
No response	4
When students break rules	
The teacher gives them a fair consequence and helps them understand why.	35.3
The teacher gives consequences sometimes.	36.1
The teacher gets upset at the students publicly.	25.7
No response	2.8
In my judgment, I would say that	

I am learning to be more responsible every day because of my teacher.	49
I am learning to do what the teacher wants.	16.5
I feel like if I did what I wanted to do, I would get in trouble.	30.5
	4
No response	4
I would say that	24.5
I can see clear evidence that my teacher respects and cares about me.	24.5
When I show my teacher respect, he/she shows me respect. I try to respect my teacher, but sometimes I feel like I am not respected.	45
	26.9
No response	3.6
In my class	22.5
Things run smoothly because the teacher makes things very clear.	22.5
Things run pretty well because the teacher has a lot of control.	31.3
A lot of the time things do not run smoothly.	42.6
No response	3.6
When it comes to grades and assignments	47.0
What it takes to get a good grade is very clear to me.	45.8
Most of the time I understand what is expected.	34.1
Often, I am confused as to why I get the grades I do.	16.9
No response	3.2
What is important in my class is	
How much we try and the effort we put into our work.	42.2
Getting right answers and good grades.	49.4
Doing what makes the teacher happy.	5.6
No response	2.8
I would describe the work in my class as	
Active, hands-on and interesting.	26.9
Interesting but mostly out of the book.	37.3
Mostly worksheets and the teacher talking.	32.9
No response	2.8
The work in my class	
Makes me think and challenges me.	55
Is mostly about remembering what the teacher or textbook says	34.1
Is mostly about keeping us all busy	8.4
No response	2.4
At this school when a student uses mean language	
Other students point out to them that it is not right.	16.1
Sometimes they get in trouble from an adult.	47.8
Usually nothing happens to them, so they keep doing it.	32.5
No response	3.6
At this school	
I trust and can talk to most of the adults.	22.9
There are one or two adults that I can trust to talk to, but not many.	43.4
I do not feel like I can be honest with the adults at the school.	28.1
No response	5.6

On the playground	
We have peer mediators and/or "Peacemakers" that help the students solve their own problems.	30.5
We have peer mediators and/or "Peacemakers," but they mostly just get kids in trouble.	22.5
There are only adults to supervise.	35.3
No response	11.6
The best way to describe how I feel about this school is	
I am very proud to be a student here.	41.4
I like this school.	27.3
This school is okay, but I would rather be at another school.	28.1
No response	3.2
My parents	
Feel welcome to come to the school.	28.1
Mostly just come to school for events that are expected such as parent-teacher conferences.	45
Don't come to the school very often.	24.1
No response	2.8
At this school	
We have lots of guests, visitors, and volunteers.	35.3
We have a few guests, visitors and volunteers.	43.4
There are not many guests, visitors or volunteers.	18.9
No response	2.4

Fifty-seven percent of the secondary students described their school as an okay place for people to visit, while almost three -fifth of the students indicated that few things are broken in the school. However, more than half (fifty-two percent) of students indicated most students do not keep the school pretty and clean, even when the teacher tells them to.

It should be noted that fifty-seven percent of the students indicated that they feel part of a good school, but not really a family. As approximately forty- five percent of students indicated, students who are alike or friends get along; however, however forty three percent of students indicated that a lot of students do not get along. Approximately fifty-six students indicated that the popular students think they are better and are often mean to others.

Fifty-five percent of students indicated that the rules are clear and keep the kids from misbehaving. While thirty-six percent indicated that the teachers sometimes give consequences when the rules are broken. About one—quarter of the students further indicated that things run well because the teacher has a lot of control.

Approximately forty-two percent of students indicated that what is important in their class is how much the students try and the effort put into their work. Thirty - seven percent of the students describe the work in their class as interesting, but mostly from the textbooks. Thirty- four percent of the students indicate that the work in the class is mostly about remembering what the teacher or textbook says. While fifty- five percent indicated, the work makes them think and challenges them.

Approximately forty- eight percent of the students indicated that when students use mean language, sometimes they get in trouble with an adult. Approximately forty-three percent of the students indicated that "There are one or two adults that I can trust to talk to, but not many". Only about forty-one percent of the students indicated that they were proud to be a student of their school. Only about twenty-eight percent of the students indicate that their parents feel welcome to come to the school. Forty-three percent of the students indicated that the school has few visitors, guests, and volunteers.

Teachers' Classroom Practices

One section of the questionnaire focused on teachers' classroom practices, particularly technology integration. Additionally, given the current emphasis on student-sensitive practices that foster engagement and embody democratic principles, teachers were also asked about their student's involvement in activities that align with these ideals and their use of democratic teaching practices.

Primary Teachers' Classroom Practices

Primary Teachers' Frequency of Using Technology for Various Purposes

The questionnaire included a list of activities where technology might be utilised in teaching and learning. Teachers were asked to reflect on their practices over the past academic year and indicate how often they use technology for these purposes. The percentages of the teachers in the sample reporting the frequency of use of technology for each activity are presented in Table 56.

Approximately forty-four percent of the teachers reported that they often used technology to create instructional materials. Fifty-nine per cent of teachers never used technology to engage their students in online discussions through avenues such as blogs and chat rooms. Forty-one percent of the teachers indicated that they often used technology to formulate tests, and sixty-six percent often got information using technology for use in lessons. While seventy-two percent never put

homework or assignments online for their students, fifty percent often used technology to produce handouts. Approximately sixty-three percent never sent lesson information, assignment or other communication to students' emails, fifty percent never used digital camera to enhance lessons, forty-four percent never used LCD projectors to present lessons and fifty-six percent never used scanners to prepare lessons.

Table 56: Primary Teachers' Frequency of Use of Technology for Specific Purposes

			2017	' (N=32)		
	Fr	equency of Us	se over the A	Academic Y	ear (% of sai	nple)
Purpose of using Technology:	Often 8+times	Sometimes 3-7 times	Seldom 1-2 times	Never	No Response	TOTAL
Access lessons from the internet	28.1	12.5	21.9	9.4	28.1	100
Create instructional materials	43.8	21.9	3.1	3.1	28.1	100
Design multimedia presentations (e.g. PowerPoint)	9.4	15.6	18.8	28.1	28.1	100
Engage students in online discussion (e.g., blogs, chat rooms, social networking sites	9.4	0	3.1	59.4	28.1	100
Formulate tests for students.	40.6	21.9	3.1	6.3	28.1	100
Get information from the Internet for use in lessons	65.6	6.3	0	0	28.1	100
Have students use the internet for research subject content	21.9	12.5	9.4	28.1	28.1	100
Post homework assignments online	0	0	0	71.9	28.1	100
Prepare homework assignments	25.0	21.9	9.4	15.6	28.1	100
Produce handouts for students	50.0	18.8	3.1	0	28.1	100
Record student grades	31.3	15.6	15.6	9.4	28.1	100
Send lesson information, assignments and other communication to students by email	3.1	0	6.3	62.5	28.1	100
Share material, ideas and/or information with other teachers	25.0	25.0	15.6	6.3	28.1	100
Use digital cameras to enhance lessons	3.1	3.1	15.6	50.0	28.1	100
Use LCD projectors to present lessons	6.3	9.4	12.5	43.8	28.1	100
Use scanners to prepare for lessons	3.1	6.3	6.3	56.3	28.1	100
Use skill games to reinforce concepts taught	25.0	15.6	12.5	18.8	28.1	100
Use software for remediation of basic skills	6.3	9.4	12.5	43.8	28.1	100
Use software to teach concepts	15.6	9.4	18.8	28.1	28.1	100
Use videos or DVS to teach concepts	31.3	12.5	12.5	15.6	28.1	100

Teachers were provided with a list of factors that impact the frequency of technology use in teaching and learning. They were asked to specify how each factor influenced their use of technology in their practice. Table 57 presents the percentages of teachers in the sample who reported various levels of influence for each factor.

Table 57: Factors Affecting the Use of Technology by Primary Teachers

	2017 (N=32)									
		Extent of Influence (% of the sample)								
Purpose of using Technology:	To a Great Extent	To a Moderate Extent	A Little Bit	Not At All	No Response	TOTAL				
Not enough computers available	53.1	6.3	3.1	9.4	28.1	100				
Unreliable computers	53.1	3.1	6.3	9.4	28.1	100				
Internet not easily accessible	43.8	15.6	6.3	6.3	28.1	100				
Lack of good instructional software	53.1	3.1	12.5	3.1	28.1	100				
Inadequate training opportunities	15.6	28.1	9.4	18.8	28.1	100				
Lack of administrative support	9.4	25.0	12.5	25	28.1	100				
Lack of support regarding ways to integrate technology into the curriculum	9.4	25.0	15.6	21.9	28.1	100				
Lack of technical support or advice	18.8	21.9	12.5	18.8	28.1	100				
Lack of relevant computer skills	6.3	6.3	9.4	50.0	28.1	100				
Inadequate amount of computer peripherals	50.0	15.6	3.1	3.1	28.1	100				
Lack of knowledge in ways to integrate technology to enhance the curriculum	6.3	3.1	18.8	43.8	28.1	100				
Use of technology not integrated into curriculum documents	25.0	6.3	25.0	15.6	28.1	100				

Fifty-three percent of teachers found that insufficient availability of computers and unreliable computers greatly impacted the frequency with which technology was used in teaching and learning. Fifty-three percent reported that lack of good instructional software also had a great impact. While forty-four per cent acknowledged that the internet not being easily accessible had a great impact, forty-four per cent believed that lack of knowledge in ways to integrate technology to enhance the curriculum did not have a great impact at all. This was further emphasised since fifty percent indicated that lack of relevant computer skills did not have an impact at all, but rather an inadequate amount of computer peripherals had a great impact.

Student Engagement and the Use of Democratic Teaching Practices in the Primary Classroom

Student-centred instruction is indicated by the extent to which teachers use activities that involve high levels of student engagement. Teachers were given a list of activities, including traditional methods, those aligned with democratic principles, and student-centred approaches. They were asked to report the frequency with which students participated in these activities during the term. Tables 58 and 59 show the percentages of teachers who reported various frequencies of student engagement in these activities and the percentage of teachers using democratic teaching practices, respectively.

Table 58: Primary Teachers' Reported Student Engagement in Activities

			2017 ((N=32)		
Activity		Fre	equency of E	ngagement (%	<u>/o)</u>	
	Often 8+times	Sometimes 3-7 times	Seldom 1-2 times	Never	No Response	TOTAL
Worked on projects that took a week or longer	9.4	15.6	37.5	9.4	28.1	100
Worked in small groups to come up with solutions or approaches to problems.	25.0	18.8	25.0	3.1	28.1	100
Engaged in a writing activity in which they were expected to explain their thinking or reasoning at some length	15.6	31.3	25.0	0	28.1	100
Suggested or helped plan classroom activities	15.6	21.9	25.0	9.4	28.1	100
Worked individually answering questions in textbooks or worksheets	50.0	21.9	0	0	28.1	100
Led discussions	15.6	21.9	31.3	3.1	28.1	100
Gave presentations	21.9	25.0	25.0	0	28.1	100
Worked in small groups to complete an assignment	34.4	12.5	25.0	0	28.1	100
Worked on their own assignment at their own desks.	53.1	6.3	9.4	3.1	28.1	100
Wrote in a journal	9.4	12.5	21.9	28.1	28.1	100
Participated in interactive/hands-on classroom activities	46.9	18.8	6.3	0	28.1	100
Conducted research for projects via the Internet	12.5	6.3	25.0	28.1	28.1	100
Worked on individual tasks for portfolios	12.5	3.1	21.9	34.4	28.1	100
Engaged in whole-class activities	71.9	0	0	0	28.1	100
Demonstrated their work to others (teachers/students)	34.4	25.0	9.4	3.1	28.1	100

Table 59: Primary Teachers' Reported Use of Democratic Instructional Practices

	2017 (N=32)							
		Fr	equency of Use	(%)				
Practice	Never Uses	Uses	Unsure / Not Applicable	No Response	TOTAL			
Used didactic questions (Who? What? Where? When? How?)	0	71.9	0	28.1	100			
Used demonstrations	0	65.7	6.3	28.1	100			
Used guided methods (e.g. Guided reading)	0	65.7	6.3	28.1	100			
Used shared methods (e.g. Shared writing)	3.1	62.5	6.3	28.1	100			
Used journals	21.9	47	3.1	28.1	100			
Used learning logs	37.5	28.1	6.3	28.1	100			
Used research projects	9.4	59.4	3.1	28.1	100			
Used learning centres	21.9	43.7	6.3	28.1	100			
Used learning contracts	40.6	22	9.4	28.1	100			
Used differentiated instruction	0	65.7	6.3	28.1	100			
Used problem-solving approaches	0	68.8	3.1	28.1	100			
Used case-based method	21.9	34.4	15.6	28.1	100			
Used reflective discussions	3.1	65.6	3.1	28.1	100			
Used simulations	6.3	59.4	6.3	28.1	100			
Used field observation	12.5	56.3	3.1	28.1	100			
Used role play	0	65.6	6.3	28.1	100			
Used service learning	25.0	34.5	12.5	28.1	100			
Used cooperative and collaborative learning	0	65.7	6.3	28.1	100			
Used controversial discussions	9.4	53.2	9.4	28.1	100			
Used debates	37.5	31.2	3.1	28.1	100			
Used peer partner learning	0	68.8	3.1	28.1	100			
Told the students the objectives of an assessment activity	9.4	59.4	3.1	28.1	100			
Allowed the students to rate their own work before you graded it	18.8	53.2	0	28.1	100			
Allowed the students to engage in peer assessment activities	6.3	62.6	3.1	28.1	100			
Taught students' strategies for reading in your subject area	0	65.7	6.3	28.1	100			
Gave time for reading books of own choice	3.1	59.4	9.4	28.1	100			
Allowed choice of reading material	3.1	56.4	12.5	28.1	100			
Provided support for struggling readers in your classroom	0	65.6	6.3	28.1	100			
Encouraged students to read for pleasure	0	62.5	9.4	28.1	100			
Encouraged students to read for information	0	62.5	9.4	28.1	100			

(Re)Wrote instructional materials to facilitate diverse reading ability in the classroom	6.3	62.6	3.1	28.1	100
Assigned grade- and ability- appropriate open-ended mathematics problems for students to solve	0	46.9	25	28.1	100
Encouraged students to talk about the mathematics that they are learning in the classroom	3.1	40.7	28.1	28.1	100
Led the students in grade and ability- appropriate investigations of mathematics concepts	3.1	40.7	28.1	28.1	100
Allowed students to submit mathematics projects and investigations using different modes	18.8	31.3	21.9	28.1	100
Allowed students to explain phenomena scientifically	6.3	40.6	25	28.1	100
Allowed students to evaluate and design scientific enquiry	18.8	28.2	25	28.1	100
Allowed students to interpret data and evidence scientifically	9.4	43.8	18.8	28.1	100
Rewarded positive behaviours with incentives (e.g. stars, stickers)	0	65.6	6.3	28.1	100
Used physical restraint for misbehaving students	21.9	40.6	9.4	28.1	100
Threatened to send students out of the classroom if they do not behave	21.9	46.9	3.1	28.1	100
Sent home notes to parents about students' good behaviour	31.3	40.7	0	28.1	100
Called parents about students' misbehaviour	6.3	56.3	9.4	28.1	100
Worked with students to establish a code of classroom behaviour and consequences for infractions	6.3	59.3	6.3	28.1	100

While forty-seven percent of the teachers reported that they allowed students to participate in interactive, hands-on classroom activities very often, the activities which were selected by at least fifty percent of the teachers in the often category were (1) working individually answering questions in textbooks or worksheets (2) working on their own assignments at their own desk and (3) engaging in whole-class activities. Demonstration of work to teachers and peers was often allowed by thirty-four per cent of the teachers, students giving presentations was often implemented by twenty-two per cent of the teachers and allowing students to lead discussions was often used by sixteen per cent of the teachers.

However, sixty-six per cent of the teachers indicated their use of differentiated learning, demonstrations, guided methods and role-playing. Sixty-six per cent of the teachers also engaged students in reflective discussions; sixty-nine used peer-partner learning and forty-four per cent used learning centres. Fifty-nine percent of the teachers usually informed their students of the

objectives of the assessment, and fifty-three percent allowed students to rate their own work before grading it.

Secondary Teachers' Classroom Practices

Secondary Teachers' Frequency of Using Technology for Various Purposes

The questionnaire included a list of activities where technology might be utilised in teaching and learning. Teachers were asked to reflect on their practices over the past academic year and indicate how often they use technology for these purposes. The percentages of the teachers in the sample reporting the frequency of use of technology for each activity are presented in Table 60.

Table 60: Secondary Teachers' Frequency of Use of Technology for Specific Purposes

			2017 (N=37		
D 6 . T 1 1	Fre	equency of Use	`		r (% of samp	ole)
Purpose of using Technology	Often 8+times	Sometimes 3-7 times	Seldom 1-2 times	Never	No Response	TOTAL
Access lessons from the internet	21.6	16.2	18.9	21.6	21.6	100
Create instructional materials	45.9	21.6	10.8	0	21.6	100
Design multimedia presentations (e.g. PowerPoint)	5.4	16.2	35.1	21.6	21.6.	100
Engage students in online discussion (e.g., blogs, chat rooms, social networking sites	5.4	16.2	8.1	48.6	21.6	100
Formulate tests for students.	45.9	18.9	2.7	10.8	21.6	100
Get information from the Internet for use in lessons	59.5	18.9	0	0	21.6	100
Have students use the internet for research subject content	30.5	18.9	16.2	2.7	21.6	100
Post homework assignments online	0	5.4	16.2	56.8	21.6	100
Prepare homework assignments	32.4	21.6	24.3	0	21.6	100
Produce handouts for students	37.8	10.8	24.3	5.4	21.6	100
Record student grades	54.1	5.4	8.1	10.8	21.6	100
Send lesson information, assignments and other communication to students by email	8.1	13.5	16.2	40.5	21.6	100
Share material, ideas and/or information with other teachers	29.7	10.8	27.0	10.8	21.6	100
Use digital cameras to enhance lessons	10.8	5.4	8.1	54.1	21.6	100
Use LCD projectors to present lessons	2.7	5.4	16.2	54.1	21.6	100
Use scanners to prepare for lessons	2.7	8.1	16.2	51.4	21.6	100
Use skill games to reinforce concepts taught	16.2	18.9	18.9	24.3	21.6	100
Use software for remediation of basic skills	5.4	2.7	13.5	21	21.6	100
Use software to teach concepts	5.4	10.8	13.5	48.6	21.6	100
Use videos or DVDs to teach concepts	13.5	10.8	24.3	29.7	21.6	100

Approximately sixty percent of the teachers reported that they often used technology for obtaining information for lessons. While about fifty four percent of teachers indicated that they use technology to post students' grades. The third most common uses of technology by teachers were to create instructional materials and to formulate tests, with approximately forty – six percent of teachers indicating this.

It is important to note that about fifty-seven percent of teachers never used technology to post homework assignment online. And about forty- nine percent of teachers never engage their students in online discussions in avenues such as blogs and chat rooms.

Teachers were provided with a list of factors that impact the frequency of technology use in teaching and learning. They were asked to specify how each factor influenced their use of technology in their practice. Table 61 presents the percentages of teachers in the sample who reported various levels of influence for each factor.

Table 61: Factors Affecting the Use of Technology by Secondary Teachers

	2017 (N=37)							
		Extent of	Influence	e (% of the	sample)			
Influence	To a Great Extent	To a Moderate Extent	A Little Bit	Not at All	No Response	TOTAL		
Not enough computers available	37.8	13.5	13.5	16.5	21.6	100		
Unreliable computers	29.7	21.6	10.8	16.2	21.6	100		
Internet not easily accessible	54.4	8.1	5.4	10.8	21.6	100		
Lack of good instructional software	21.6	27	8.1	21.6	21.6	100		
Inadequate training opportunities	16.2	24.3	18.9	18.9	21.6	100		
Lack of administrative support	16.2	18.9	24.3	18.9	21.6	100		
Lack of support regarding ways to integrate technology into the curriculum	10.8	29.7	27	10.8	21.6	100		
Lack of technical support or advice	18.9	18.9	27	13.5	21.6	100		
Lack of relevant computer skills	2.7	5.4	29.7	40.5	21.6	100		
Inadequate amount of computer peripherals	29.7	27	16.2	5.4	21.6	100		
Lack of knowledge in ways to integrate technology to enhance the curriculum	18.9	32.4	27	0	21.6	100		
Use of technology not integrated into curriculum documents	13.5	27	18.9	18.9	21.6	100		

The most significant factor affecting technology use was the accessibility of the internet, as about fifty – four percent of teachers indicated that the internet was not easily accessible.

Student Engagement and the Use of Democratic Teaching Practices in the Secondary Classroom

Student-centred instruction is indicated by the extent to which teachers use activities that involve high levels of student engagement. Teachers were given a list of activities, including traditional methods and those aligned with democratic principles and student-centred approaches. They were asked to report the frequency with which students participated in these activities during the term. Tables 62 and 63 show the percentages of teachers who reported various frequencies of student engagement in these activities and the percentage of teachers using democratic teaching practices.

Table 62: Secondary Teachers' Reported Student Engagement in Activities

			2017 (N=37)		
Activity		Fre	equency of E	ngagement (%	<u>/o)</u>	
Activity	Often 8+times	Sometimes 3-7 times	Seldom 1-2 times	Never	No Response	TOTAL
Worked on projects that took a week or longer	8.1	32.4	35.1	2.7	21.6	100
Worked in small groups to come up with solutions or approaches to problems.	29.7	32.4	16.2	0	21.6	100
Engaged in a writing activity in which they were expected to explain their thinking or reasoning at some length	37.8	23.3	16.2	0	21.6	100
Suggested or helped plan classroom activities	8.1	18.9	29.7	21.6	21.6	100
Worked individually answering questions in textbooks or worksheets	43.2	32.4	2.7	0	21.6	100
Led discussions	10.8	40.5	21.6	5.4	21.6	100
Gave presentations	16.2	29.7	29.7	2.7	21.6	100
Worked in small groups to complete an assignment	21.6	43.2	13.5	0	21.6	100
Worked on their own assignment at their own desks.	45.9	29.7	2.7	0	21.6	100
Wrote in a journal	5.4	5.4	16.2	51.4	21.6	100
Participated in interactive/hands-on classroom activities	24.3	24.3	27	2.7	21.6	100
Conducted research for projects via the Internet	10.8	29.7	27	10.8	21.6	100
Worked on individual tasks for portfolios	8.1	16.2	16.2	37.8	21.6	100
Engaged in whole-class activities	40.5	32.4	5.4	0	21.6	100
Demonstrated their work to others (teachers/students)	13.5	37.8	24.3	2.7	21.6	100

Table 63: Secondary Teachers' Reported Use of Democratic Teaching Practices

			2017 (N=37)		
		Fre	quency of Use	(%)	
Activity	Never Uses	Uses	Unsure / Not Applicable	No Response	TOTAL
Used didactic questions (Who? What? Where? When? How?)	0	73	5.4	21.6	100
Used demonstrations	0	78.4	0	21.6	100
Used guided methods (e.g. Guided reading)	0	75.7	2.7	21.6	100
Used shared methods (e.g. Shared writing)	5.4	72.9	0	21.6	100
Used journals	51.4	27	0	21.6	100
Used learning logs	54.1	18.9	5.4	21.6	100
Used research projects	10.8	67.6	0	21.6	100
Used learning centres	51.4	21.6	5.4	21.6	100
Used learning contracts	48.6	21.7	8.1	21.6	100
Used differentiated instruction	8.1	70.3	0	21.6	100
Used problem-solving approaches	0	75.7	2.7	21.6	100
Used case-based method	8.1	67.6	2.7	21.6	100
Used reflective discussions	0	75.7	2.7	21.6	100
Used simulations	5.4	73	0	21.6	100
Used field observation	24.3	51.4	2.7	21.6	100
Used role play	13.5	64.9	0	21.6	100
Used service learning	18.9	46	13.5	21.6	100
Used cooperative and collaborative learning	5.4	73	0	21.6	100
Used controversial discussions	10.8	62.2	5.4	21.6	100
Used debates	27	48.7	2.7	21.6	100
Used peer partner learning	2.7	75.7	0	21.6	100
Told the students the objectives of an assessment activity	2.7	73	2.7	21.6	100
Allowed the students to rate their own work before you graded it	13.5	62.2	2.7	21.6	100
Allowed the students to engage in peer assessment activities	18.9	59.9	0	21.6	100
Taught students' strategies for reading in your subject area	18.9	59.5	0	21.6	100
Provided support for struggling readers in your classroom	13.5	62.2	2.7	21.6	100
Encouraged students to read for pleasure	8.1	67.6	2.7	21.6	100
Encouraged students to read for information	0	78.4	0	21.6	100
(Re)Wrote instructional materials to facilitate diverse reading ability in the classroom	10.8	67.6	0	21.6	100
Rewarded positive behaviours with incentives (e.g. stars, stickers)	8.1	67.6	2.7	21.6	100
Used physical restraint for misbehaving students	45.9	32.5	0	21.6	100
Threatened to send students out of the classroom if they do not behave	10.8	67.6	0	21.6	100

Sent home notes to parents about students' good behaviour	24.3	54.1	0	21.6	100
Called parents about students' misbehaviour	24.3	54.1	0	21.6	100
Worked with students to establish a code of classroom behaviour and consequences for infractions	2.6	75.7	0	21.6	100

Approximately forty-six percent of the teachers reported that they often allowed students to work on assignments on their own. While forty three percent indicated students are often allowed to work individually answering questions in textbooks or worksheets. And about forty – one percent indicated that students are also often allowed to engage in whole-class activities.

Encouraging students to read for information and demonstration of work to teachers and peers were often allowed by about seventy- eight percent of the teachers. About three-quarters of teachers used peer partner learning, guided methods and reflective discussions.

Approximately seventy – three percent of the teachers indicated that they 1. work with students to establish a code for classroom behaviour and consequences for infractions, 2. use shared methods, 3. cooperative or collaborative learning and 4. Tell students of the objectives of an assessment activity.

School Leadership

One section of the questionnaire aimed to capture teachers' perspectives on the conduct of their school leaders. Both primary and secondary teachers were asked for their perspectives on their school's leadership. The tool utilised for this purpose was the teacher's short form of the Principal Instructional Management Rating Scale (PIMRS; Hallinger & Wang, 2015). This instrument comprises 22 behaviours associated with school leadership. Teachers were asked to assess the extent to which they observed these behaviours in their school principal during the preceding school year, utilising a rating scale ranging from 1 (Almost Never) to 5 (Almost Always). The instrument allows for scoring and analysis on a comprehensive scale and across three dimensions of school leadership or ten functions/jobs of school principals.

Primary Teacher Perspectives on School Leadership

The distribution of responses from teachers in 2017 is outlined in Table 64. The option with the largest proportion of the sample is in **bold** font.

Table 64: Primary Teachers' Responses on PIMRS Short Form 2017 (N=32)

				%			
To what extent does your principal?	Almost Never	Seldom	Sometimes	Frequently	Almost Always	No Response	Total
Develop a focused set of annual school-wide goals	3.1	3.1	12.5	25	21.9	34.4	100
Use data on student performance when developing the school's academic goals	0	9.4	21.9	18.8	15.6	34.4	100
Develop goals that are easily understood and used by teachers in the school	0	9.4	21.9	25	9.4	34.4	100
Communicate the school's mission effectively to members of the school community	0	6.3	18.8	15.6	25	34.4	100
Refer to the school's academic goals when making curricular decisions with teachers	0	3.1	18.8	25	18.8	34.4	100
Ensure that the classroom priorities of teachers are consistent with the goals and direction of the school	3.1	6.3	15.6	25	15.6	34.4	100
Review student work products when evaluating classroom instruction	3.1	6.3	28.1	18.8	9.4	34.4	100
Make clear who is responsible for coordinating the curriculum across grade levels (e.g., the principal, vice principal, or teacher-leaders)	6.3	9.4	12.5	21.9	15.6	34.4	100
Draw upon the results of school- wide testing when making curricular decisions	3.1	3.1	28.1	18.8	12.5	34.4	100
Participate actively in the review of curricular materials	6.3	12.5	18.8	25	3.1	34.4	100
Meet individually with teachers to discuss student progress	6.3	12.5	18.8	18.8	9.4	34.4	100
Use tests and other performance measure to assess progress toward school goals	0	18.8	12.5	12.5	21.9	34.4	100
Encourage teachers to use instructional time for teaching and practicing new skills and concepts	3.1	0	12.5	18.8	31.3	34.4	100
Take time to talk informally with students and teachers during recess and breaks	3.1	9.4	15.6	21.9	15.6	34.4	100
Attend/participate in extra- and co-curricular activities	3.1	3.1	12.5	18.8	28.1	34.4	100
Compliment teachers privately for their efforts or performance	6.3	6.3	15.6	12.5	25	34.4	100
Acknowledge teachers' exceptional performance by writing memos for their personnel files	0	18.8	21.9	12.5	12.5	34.4	100
Create professional growth opportunities for teachers as a reward for special contributions to the school	3.1	15.6	15.6	18.8	12.5	34.4	100

Lead or attend teacher in-service activities concerned with instruction	3.1	15.6	12.5	28.1	6.3	34.4	100
Set aside time at faculty meetings for teachers to share ideas or information from in- service activities	3.1	6.3	18.8	18.8	18.8	34.4	100
Recognise superior student achievement or improvement by seeing in the office the students with their work	9.4	12.5	15.6	15.6	12.5	34.4	100
Contact parents to communicate improved or exemplary student performance or contributions	6.3	6.3	21.9	15.6	15.6	34.4	100

One-quarter of the teachers reported that their principal frequently developed annual school-wide goals, which are easily understood and used by the teachers. One-quarter of the teachers indicated that the principal frequently referred to the goals when making curricular decisions with teachers. Twenty-eight percent indicate that sometimes the principals review students' work when evaluating classroom instructions. While approximately nineteen percent reported that the principals frequently drew upon the results of school-wide testing when making curricular decisions, nineteen percent indicated that principals sometimes met with teachers to discuss students' progress. One-eighth of the teachers revealed that principals complimented teachers privately for their efforts or performance, acknowledged teachers' exceptional performance by writing memos for their personal files and recognised superior students' achievement or improvement by seeing the students in their office with their work.

Secondary Teachers' Perspectives on School Leadership

The same tool utilised to gain information on primary teachers' perspectives of their school's leadership was used for secondary teachers: the teacher's short form of the Principal Instructional Management Rating Scale (PIMRS; Hallinger & Wang, 2015). The distribution of responses from teachers in 2017 is outlined in Table 65. The option with the most significant sample proportion is in bold font.

Table 65: Secondary Teachers' Responses on PIMRS Short Form 2017 (N=37)

				%			
To what extent does your principal?	Almost Never	Seldom	Sometimes	Frequently	Almost Always	No Response	Total
Develop a focused set of annual school-wide goals	0	10.8	24.3	13.5	24.3	27	100
Use data on student performance when developing the school's academic goals	8.1	8.1	13.5	35.1	8.1	27	100
Develop goals that are easily understood and used by teachers in the school	2.7	8.1	24.3	27	10.8	27	100
Communicate the school's mission effectively to members of the school community	0	8.1	24.3	24.3	16.2	27	100
Refer to the school's academic goals when making curricular decisions with teachers	5.4	5.4	29.7	18.9	13.5	27	100
Ensure that the classroom priorities of teachers are consistent with the goals and direction of the school	2.7	16.2	27	18.9	8.1	27	100
Review student work products when evaluating classroom instruction	5.4	13.5	24.3	29.7	0	27	100
Make clear who is responsible for coordinating the curriculum across grade levels (e.g., the principal, vice principal, or teacher-leaders)	8.1	8.1	8.1	32.4	16.2	27	100
Draw upon the results of school- wide testing when making curricular decisions	8.1	2.7	27	27	8.1	27	100
Participate actively in the review of curricular materials	8.1	10.8	27	18.9	8.1	27	100
Meet individually with teachers to discuss student progress	8.1	10.8	27	16.2	10.8	27	100
Use tests and other performance measure to assess progress toward school goals	10.8	10.8	27	13.5	10.8	27	100
Encourage teachers to use instructional time for teaching and practicing new skills and concepts	0	16.2	27	29.7	0	27	100
Take time to talk informally with students and teachers during recess and breaks	2.7	10.8	10.8	27	21.6	27	100
Attend/participate in extra- and co-curricular activities	0.	16.2	16.2	13.5	27	27	100
Compliment teachers privately for their efforts or performance	5.4	2.7	16.2	24.3	24.3	27	100

Acknowledge teachers' exceptional performance by writing memos for their personnel files	13.5	18.9	16.2	21.6	2.7	27	100
Create professional growth opportunities for teachers as a reward for special contributions to the school	5.4	16.2	21.6	13.5	16.2	27	100
Lead or attend teacher in-service activities concerned with instruction	0	8.1	21.6	24.3	18.9	27	100
Set aside time at faculty meetings for teachers to share ideas or information from in- service activities	0	8.1	21.6	18.9	24.3	27	100
Recognise superior student achievement or improvement by seeing in the office the students with their work	2.7	8.1	35.1	10.8	16.2	27	100
Contact parents to communicate improved or exemplary student performance or contributions	2.7	18.9	24.3	18.9	8.1	27	100

Summary

With regards to the ways in which the principal communicates the school's most important goals to key stakeholders, for example, teachers, parents, students, etc., approximately twenty- four percent of teachers expressed that their school principal almost always develops a focused set of annual school-wide goals. While. Twenty-seven percent of teachers indicated that the goals developed by their principals are frequently easily understood. However, approximately twenty-four percent of teachers reported that their principals frequently communicate the school's mission effectively to members of the school community.

In terms of the coordination and control of instruction and curriculum, it should be noted that approximately nineteen percent of secondary teachers reported that their principals frequently participate actively in the review of curricular materials. Additionally, only twenty seven percent of these teachers indicated that their principals frequently draw upon the results of school-wide testing when making curricular decisions

In terms of the principals modelling values and practices that create a climate and support the continuous improvement of instruction (teaching and learning). It should be noted that only about twenty – four percent of the teachers indicated that their principals frequently lead or attend teacher in-service activities concerned with instruction. Additionally, about fourteen percent reported that

their principals Create professional growth opportunities for teachers as a reward for special contributions to the school.

Interestingly, only ten percent of teachers reported that their principals almost always use tests and other performance measures to assess progress toward school goals. While only approximately nineteen percent reported that their principals frequently contact parents to communicate improved or exemplary student performance or contributions.

Additionally, twenty-seven percent of teachers indicated that their principals sometimes meet individually with teachers to discuss student progress. While, only twenty- four percent of teachers expressed that their school principal almost always compliments teachers privately for their efforts or performance and set aside time at faculty meetings for teachers to share ideas or information from in-service activities.

Principals' Perspectives on Primary School Leadership

One section of the survey was designed to provide a profile of principals' leadership. The tool utilised for this purpose was the principal form of the Principal Instructional Management Rating Scale (PIMRS; Hallinger & Wang, 2015). This section included fifty behavioural statements that describe principal job practices and behaviours. Principals were asked to consider each statement concerning their leadership over the past academic year and circle the appropriate response based on its frequency in their practices and behaviours. Response categories range from 5 (Almost Always) to 1 (Almost Never). The distribution of principal responses to each statement can be found in Table 84.

Summary

All three principals reported that they frequently developed annual school-wide goals, and while two of the principals organised the goals in terms of staff responsibilities sometimes, one principal frequently did. Two of the principals frequently used needs assessments and data from students' performances to set goals. All the principals developed goals which were easily understood and referred to them when making curricular decisions. While two principals ensured that the goals were frequently placed in highly visible positions, one reported that they seldom did. Two of the principals frequently ensured that the classroom priorities of teachers were consistent with the goals and direction of the school, reviewed students' work products when evaluating classroom

instruction, and conducted informal observations in classrooms on a regular basis, and one did such sometimes.

All the principals pointed out specific strengths and weaknesses in teachers' instructional practices in post-observation feedback, such as in conferences or written evaluations. Two of the principals frequently monitored the classroom curriculum to see that it covered the school's curricular objectives and assessed the overlap between the school's curricular objectives and the school's achievement tests while one sometimes. All principals limited interruptions of instructional time by public address announcements, and while two of the principals encouraged teachers to use the instructional time for teaching and practising new skills and concepts, one principal reported that they always encouraged teachers to do so.

All three principals indicated that they frequently took time to talk informally with students and teachers during recess and breaks and visited classrooms to discuss school issues with teachers and students. The principals took providing incentives for learning very seriously, with all of them reporting that they always recognised students who did superior work with formal rewards such as an honour roll or mention in the principal's newsletter and used assemblies to honour students for academic accomplishments or for behaviour.

Principal's Perspectives on Secondary School Leadership

The Principal Instructional Management Rating Scale (PIMRS; Hallinger & Wang, 2015) was also administered to the secondary school principal.

Summary

In terms of the principal's perspective on the framing of the school goals, she reported that she frequently developed a focused set of annual school-wide goals and framed the school's goals in terms of staff responsibilities for meeting them. However, she seldom used needs assessment or other formal and informal methods to secure staff input on goal development in terms of communicating the school goals. She indicated that she frequently communicated the school's mission effectively to members of the school community, discussed the school's academic goals with teachers at faculty meetings and referred to the school's academic goals when making curricular decisions with teachers. As it pertains to supervising and evaluating instruction, the principal indicated that she frequently conducted informal observations in classrooms on a regular

basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference) and pointed out specific strengths and weaknesses in teacher's instructional practices in post-observation feedback (e.g., in conferences or written evaluations). In terms of coordinating the curriculum, she frequently drew upon the results of school-wide testing when making curricular decisions regarding the school's curricular objectives, monitored the classroom curriculum to see that it covered the school's curricular objectives, assessed the overlap between the school's curricular objectives and the school's achievement tests and participated actively in the review of curricular materials. As it pertains to monitoring students' progress, she reported that she frequently informed teachers of the school's performance results in written form (e.g., in a memo or newsletter) and informed students of the school's academic progress. She also reported that she frequently encouraged teachers to use the instructional time to teach and practise new skills and concepts. She maintained high visibility by always taking time to talk informally with students and teachers during recess and breaks. The principal indicated that she frequently reinforced superior performance by teachers in staff meetings, newsletters, and/or memos and complimented teachers privately for their efforts or performance. Finally, to promote professional development, the principal reported that she always ensured that in-service activities attended by staff were consistent with the school's goals and that she led or attended teacher inservice activities concerned with instruction.

School Characteristics

Data were compiled and analysed using descriptive statistics to create a profile of the schools in the sample. These results are based on principal reports, and principal response rates were very low; therefore, the findings cannot be generalised to the broader population.

Primary School Characteristics

School Roll and Number of Personnel in Primary Schools

Principals were asked to report on their school's roll by sex and the number of personnel in their schools. The reported student roll and number of personnel are shown in Tables 66 and 67.

Table 66: Primary School Roll by Sex

Normalian of students	2017 (N=3)				
Number of students	Min	Max	Mean	SD	
Female	32	74	54.67	21.2	
Male	33	78	52.33	23.2	

Table 67: Primary School Personnel

Number of manageral	2017 (N=3)				
Number of personnel	Min	Max	Mean	SD	
Teachers (Female)	8	11	9	1.73	
Teachers (Male)	0	1	0.67	0.58	
Librarians	0	0	0	0	
Guidance Counsellors	0	0	0	0	
Ancillary Staff	4	5	4.33	0.58	

No other staff members were reported by the principals.

Student and Teacher Absenteeism in Primary Schools

Absenteeism is an issue of concern in schools in Antigua and Barbuda. Principals were asked to indicate how much student and teacher absenteeism challenges their school. Two of the principals reported that student absenteeism was not a challenge and one reported that it was a moderate challenge, the reverse was reported for teacher absenteeism with two of the principals reporting that teacher absenteeism was the moderate challenge for them.

Primary School Facilities

To gain insight into the environment of the participating schools, attention was directed toward the available facilities and their utilisation. To accomplish this, school principals were asked to complete an item prompting them to indicate the presence of certain facilities at the school and, if available, whether they were currently in use. The percentages of primary principals' responses to each facility listed are shown in Table 68.

Table 68: Primary School Facilities Present and in Use

	2017 (N=3)					
School facility	Present & In Use	Present & Not in Use	Not Present	No Response		
Library	33.3	0	66.7	0		
Computer Lab	33.3	0	66.7	0		
Canteen	0	0	100	0		
Sickbay	0	0	100	0		
Playing Field	100	0	0	0		
Hard Courts	33.3	33.3	33.3	0		
Science Labs	0	0	100	0		
Art Rooms	0	0	100	0		
IA Rooms	0	0	100	0		
HE Rooms	0	0	100	0		
Music Room	0	0	100	0		
Special subject rooms (e.g. math room, geography room)	33.3	0	66.7	0		

All facilities which were present were in use except in the case of hard courts where one of the principals reported that although available, they were not in use. None of the principals reported having a canteen, sickbay, science labs or Art, Industrial Arts, Home Economics and Music rooms.

Primary School Class Structure

Principals were asked to indicate if classes were best described as grouped by ability or mixed ability grouping. They were also asked how the school day was divided into lessons, including the length of each lesson. In all instances, principals reported that the classes in their schools could be classified as mixed-ability groupings. The number of lessons in a day ranged between four and five and lasted between 45 and 60 minutes (M=55, SD=8.7).

Primary School Reading Policies

Principals were asked to indicate if their school had a reading policy and if their school's timetable included a designated time for leisure reading. All the principals reported that reading for leisure was timetabled in their schools, and one of the principals reported that there wasn't a reading policy in their schools.

Primary School Extracurricular Activities

Principals were asked to indicate if their school had a policy on extracurricular and/or co-curricular activities and if their schools' timetables included a designated time for extracurricular and/or co-curricular activities. All the principals reported that there were not any policies on extracurricular and or cocurricular activities and that these activities were not timetabled.

Summary

Teachers' absenteeism was reported as a moderate challenge in more schools than students' absenteeism. Two-thirds of the principals reported that their schools did not have libraries, computer labs, or special subject rooms. All classrooms were reported as being mixed-ability classrooms. School days were reported as having a minimum of four lessons and a maximum of five on any given day, with the duration of lessons being between forty-five to sixty minutes each. While one-third of the principals reported that their schools did not have reading policies, reading for leisure was reported as being timetabled. The principals reported that there weren't any policies for extracurricular and cocurricular activities.

Secondary School Characteristics

School Roll and Number of Personnel in Secondary School

The principal was asked to report on their school's roll by sex and the number of personnel in their school. The one secondary school principal who responded had a school roll of 641 students (294 females and 347 males). The school had 46 female teachers, 18 male teachers, two librarians, one guidance counsellor, and 15 ancillary staff.

Student and Teacher Absenteeism in Secondary School

Absenteeism is an issue of concern in schools in Antigua and Barbuda. Principals were asked to indicate how much student and teacher absenteeism challenges their school. The principal indicated that student and teacher absenteeism pose a moderate challenge.

Secondary School Facilities

To gain insight into the environment of the participating schools, attention was directed toward the available facilities and their utilisation. To accomplish this, school principals were asked to complete an item prompting them to indicate the presence of certain facilities at the school and, if available, whether they were currently in use. The principal reported that most of the school facilities were in use, including the library, computer lab, canteen, science labs, art rooms, I A rooms and subject rooms. However, she indicated that her school did not have some key facilities, such as a sick bay, a playing field, a hard court, and a music room.

Secondary School Class Structure

Principals were asked to indicate if classes were best described as grouped by ability or mixed ability grouping. They were also asked how the school day was divided into lessons, including the length of each lesson. The principal indicated that ability grouping was an appropriate description of the classes at the school and that there were eight lessons per day, lasting 35 minutes.

Secondary School Reading Policies

Principals were asked to indicate if their school had a reading policy and if their school's timetable included a designated time for leisure reading. The principal reported that there was no reading policy nor timetabled leisure reading at the school.

Secondary School Extracurricular Activities

Principals were asked to indicate if their school had a policy on extracurricular and/or co-curricular activities and if their schools' timetables included a designated time for extracurricular and/or co-curricular activities. The principal reported that there were no policies for extracurricular activities and timetabled extra-curricular activities at the school.

Secondary Students' Academic Track

Secondary students were asked to indicate their academic track and whether they chose this track for themselves. If they did not choose their educational track, students were asked who decided for them to follow this academic track. Secondary students were also asked to indicate their planned career choices. The distribution of responses on these items can be seen in Tables 69 to 72.

Table 69: Secondary Students' Academic Track

Current Academic Track	2017 (1	N=249)
Current Academic Track	n	%
Arts (e.g. Languages, Literature, History, Geography)	65	26.1
Business (e.g. Accounts, Business, Management)	90	36.1
Science (e.g. Biology, Chemistry, Physics)	31	12.4
Technical and Vocational (e.g. Building Technology, Building drawing; Home management; textiles; food & beverage technology)	22	8.8
Other	7	2.8
No Response	34	13.7
TOTAL	249	100

The most popular track was business, with about thirty-six percent of students indicating this. Several students reported multiple academic tracks; some examples of this include TVET and Science.

Table 70: Secondary Students' Choosing Their Academic Track

Is your annual and only that your shains?	2017 (N=249)		
Is your current academic track your choice?	n	%	
Yes	209	83.9	
No	25	10	
No Response	15	6.0	
TOTAL	249	100	

The majority of the students indicated that their current academic track was their decision.

Table 71: Person Who Chose Secondary Students' Academic Track

If company other than you shope your academic treet, the decision was made by	2017 (N=249)		
If someone other than you chose your academic track, the decision was made by:	n	%	
The teachers at the school	24	9.6	
My mother	18	7.2	
My father	10	4.0	
Other	12	4.8	

Less than ten percent of the students indicated that their teacher, mother, father or other individual was involved in the selection process with regard to their academic track.

Table 72: Secondary Students' Planned Career Choice Areas

Area of Career Choice	2017 (2017 (N=249)		
Area of Career Choice	n	%		
Medicine & Health Services (e.g. paediatrician, pharmacist, nurse, psychologist, physiotherapist)	37	14.9		
Law (e.g. lawyer)	8	3.2		
Arts (e.g. journalist, photographer, singer, artist, writer, actor, music)	13	5.2		
Technology (e.g. IT engineer, YouTuber, game developer)	5	2.0		
Technical and Vocational (e.g. mechanic, needle worker)	2	0.8		
Science and STEM jobs (e.g. forensic scientist, veterinarian, marine biologist, aerospace engineer, aviation, architecture)	14	5.6		
Business (e.g. accountant, entrepreneur, bank manager, farmer)	67	26.9		
Beauty & Aesthetics (e.g. barber, hairdresser, nail technician, tattoo artist)	1	0.4		
Tourism/Hospitality (e.g. chef, air hostess, hotel manager)	15	6.0		
Fashion & Design (e.g. interior designer, fashion designer)	7	2.8		
Sports (e.g. footballer, track athlete)	10	4.0		
Public Sector (e.g. teacher, special needs teacher, policeman, soldier, firefighter, social worker)	33	13.3		
Don't know	19	7.6		
Other	1	0.4		
No Response	17	6.8		
TOTAL	249	100		

The three most popular career paths were business, medical and health sciences, and careers in the public sector. Approximately twenty - seven percent of the students indicated that they would like to have careers in a business field, for example, accounting, business manager and entrepreneurship. The least popular career paths were the beauty and aesthetics careers, with one student or four-tenths of the students choosing, and the Technical and Vocational careers, with only two students choosing this option.

Summary

Several students reported multiple academic tracks; some examples of this include TVET and Science. Most students indicated that their current academic track was their decision. It should be noted that the three most popular career paths were business, medical and health sciences, and careers in the public sector. Approximately twenty-seven percent of the students indicated they would like to have careers in a business field, such as accounting, business management and entrepreneurship. The least popular career paths were the beauty and aesthetics careers, with one student or four-tenths of the students choosing, and the Technical and Vocational careers, with only two students choosing this option.

Factors with Indirect Influences: Views on Common Educational Practices

In this section, the primary and secondary teachers' and principals' perspectives on several common educational practices in Antigua and Barbuda are explored. These issues include feelings about teaching, extra lessons, the Antigua and Barbuda Grade Six National Assessment, streaming and grade retention. These educational practices are often linked to teacher expectations, which research shows profoundly influences student outcomes. Teacher expectations can be influenced by various factors, including stereotypes and preconceived notions about students' abilities, which in turn affects teachers' instruction and interaction with students (Rubie-Davies, 2009). These preconceived notions of ability may be influenced by the results of standardised tests, placement in certain schools or classes and whether a student has had to repeat a grade.

Primary Teachers' Views on School and Other Education-Related Issues

Primary Teachers' Feelings About Teaching

Teachers in the sample were asked to indicate their feelings about teaching in general. Their responses are summarised in Table 73.

Table 73: Primary Teachers' Feelings About Teaching

Llika tasahing in ganaral	2017 (N=32)		
I like teaching in general	n	%	
Sometimes True	8	25	
Always True	13	40.6	
No Response	11	34.4	
TOTAL	32	100	

Approximately forty-one percent of the teachers always like teaching, and one quarter reported that their like for teaching fluctuates.

Primary Teachers' Feelings about Current School

Teachers were asked to indicate their feelings about their current school. Their responses are summarised in Table 74.

Table 74: Primary Teachers' Feelings About Their Current School

I like teaching at this school	2017 (N=32)		
	n	%	
Never True	0	0	
Sometimes True	10	31.3	
Always True	11	34.4	
No Response	11	34.4	
TOTAL	32	100	

While thirty-four percent of the teachers always enjoy teaching at their school, thirty-one percent enjoy teaching at their school sometimes.

Primary Teachers' Attitudes Toward Out-of-School Lessons

Three questionnaire items address the issue of teachers delivering instruction beyond regular school hours. The teachers' responses in the primary school sample are presented in Tables 75 to 77.

Table 75: Primary Teachers' Provision of Extra Lessons Outside of School Time

I provide extra lessons for students in my class outside of school hours	2017 (N=32)		
	n	%	
Never True	11	34.4	
Sometimes True	6	18.8	
Always True	4	12.5	
No Response	11	34.4	
TOTAL	32	100	

While thirty-four percent of the teachers never provided extra lessons outside school hours, approximately nineteen percent provided lessons sometimes, and nearly thirteen percent always provided extra lessons.

Table 76: Primary Teachers' Perceptions of Parent's Willingness to Pay for Extra Lessons

Parents at this school are willing to pay for extra lessons for their children	2017 (N=32)	
	n	%
Never True	8	25
Sometimes True	10	31.3
Always True	3	9.4
No Response	11	34.4
TOTAL	32	100

One-quarter of the teachers reported that parents were never willing to pay for extra lessons. Thirty-one percent reported that parents were sometimes willing to pay, and nine percent indicated that parents were always willing.

Table 77: Primary Teachers' Perceptions of Teachers Being Paid to Provide Extra Lessons Outside of School

Teachers should be paid for extra lessons.	2017 (N=32)	
	n	%
Yes	17	53.1
No	4	12.5
No Response	11	34.4
TOTAL	32	100

While fifty-three percent of the teachers believed that teachers should be paid for extra lessons, one-eighth did not agree, and thirty-four percent did not respond.

Primary Teachers' Attitudes Toward the Grade Six National Assessment

Teachers in the sample were asked to express their support for specific practices embedded within the current Antiguan and Barbudan education system. One such practice involves using the results of the Grade Six National Assessment to allocate students to secondary schools. The extent of teachers' endorsement of this practice is illustrated in Table 78.

Table 78: Primary Teachers' Support for Use of Grade Six National Assessment for Secondary School Placement

Using the Grade Six National Assessment for Secondary School Placement	2017 (N=32)	
	n	%
I support this	18	56.3
I do not support this	2	6.3
Not Applicable/No Opinion	1	3.1
No Response	11	34.4
TOTAL	32	100

Fifty-six percent of the teachers were in support of the Grade Six National Assessment being used for secondary school placement while six percent did not support, three percent had no opinion and thirty-four percent did not respond. While this practice aims to provide a standardised measure for secondary school placement, it is imperative to acknowledge that certain groups of students, including those from under-resourced communities and students with special educational needs, may be disadvantaged by this practice.

Primary Teachers' Attitudes Toward Streaming and Grade Retention

Teachers in the sample were asked about their endorsement of the practices of streaming students based on academic ability and grade retention (having students repeat grades until they pass). Their responses are outlined in Tables 79 and 80, respectively.

Table 79: Primary Teachers' Support for Streaming According to Ability

Streaming classes according to ability	2017 (N=32)	
	n	%
I support this	16	50
I do not support this	4	12.5
Not Applicable/No Opinion	1	3.1
No Response	11	34.4
TOTAL	32	100

Fifty percent of the teachers agreed to streaming class practices, one-eighth did not support it, three percent had no opinions, and thirty-four percent did not respond. Further investigations should be conducted to determine the reasons behind the teachers' support for ability-based streaming, as it may lead to inequities, reinforce stereotypes, or limit opportunities for some students.

Table 80: Primary Teachers' Support for Grade Retention

Grade Retention	2017 (N=32)	
	n	%
I support this	9	28.1
I do not support this	10	31.3
Not Applicable/No Opinion	2	6.3
No Response	11	34.4
TOTAL	32	100

Twenty-eight percent of the teachers supported grade retention practices, thirty-one percent did not support them, and six percent had no opinions.

Summary

Forty-one percent of the teachers always enjoyed teaching in general, and thirty-four enjoyed teaching at the school where they were at. While thirty-four percent never provided extra lessons after school hours, one-eighth always provided. However, one-quarter of the teachers indicated that parents were never willing to pay for the extra lessons. Fifty-three percent of the teachers,

however, supported teachers providing extra lessons. Half of the teachers supported streaming classes; fifty-six percent supported using Grade Six National Assessment for secondary school placement, and twenty-eight percent supported grade retention practices.

Secondary Teachers' Views on School and Other Education-Related Issues

Several current issues in education in Antigua and Barbuda were investigated, including feelings about teaching, extra lessons, the Antigua and Barbuda Grade Six National Assessment, streaming and grade retention.

Secondary Teachers' Feelings About Teaching

Teachers in the sample were asked to indicate their feelings about teaching in general. Their responses are summarised in Table 81.

Table 81: Secondary Teachers' Feelings About Teaching

I like teaching in general	2017 (N=37)	
	n	%
Never True	0	0
Sometimes True	12	32.4
Always True	25	67.6
No Response	12	32.4
TOTAL	37	100

Approximately sixty- eight percent of teachers indicated that they like teaching as they responded always true to the statement "I like teaching in general".

Secondary Teachers' Feelings about Their Current School

Teachers were asked to indicate their feelings about their current school. Their responses are summarised in Table 82.

Table 82: Secondary Teachers' Feelings About Their Current School

I like teaching at this school	2017 (N=37)	
	n	%
Never True	1	2.7
Sometimes True	14	37.8
Always True	10	27.0
No Response	12	32.4
TOTAL	37	100

When asked whether they liked teaching at the school, most secondary school candidates reported "sometimes true" to the statement, "I like teaching at the school."

Secondary Teachers' Attitudes Toward Out-of-School Lessons

Three questionnaire items address the issue of teachers delivering instruction beyond regular school hours. The teachers' responses in the secondary school sample are presented in Tables 83-85.

Table 83: Secondary Teachers' Provision of Extra Lessons Outside of School Time

I provide extra lessons for students in my class outside of school hours	2017 (N=37)	
	n	%
Never True	6	8.1
Sometimes True	14	37.8
Always True	8	21.6
No Response	12	32.4
TOTAL	37	100

Approximately thirty-eight percent of the teachers indicated that it is sometimes true that they provide extra lessons.

Table 84: Secondary Teachers' Perceptions of Parent's Willingness to Pay for Extra Lessons

Parents at this school are willing to pay for extra lessons for their	2017 (N=37)	
children	n	%
Never True	8	21.6
Sometimes True	14	37.8
Always True	3	8.1
No Response	12	32.4
TOTAL	37	100

Approximately twenty-two percent of secondary school teachers reported that parents are never willing to pay for extra lessons for their children.

Table 85: Secondary Teachers' Perceptions of Teachers Being Paid to Provide Extra Lessons Outside of School

Teachers should be paid for extra lessons	2017 (N=37)	
	n	%
Yes	20	54.1
No	5	13.5
No Response	12	32.4
TOTAL	37	100

More than half of the secondary school teachers indicated their support of teachers being paid for extra lessons.

Secondary Teachers' Attitudes Toward the Grade Six National Assessment

Teachers in the sample were asked to express their support for specific practices embedded within the current education system. One such practice involves using the Grade Six National Assessment results to allocate students to secondary schools. The extent of teachers' endorsement of this practice is illustrated in Table 86.

Table 86: Secondary Teachers' Support for Use of Grade Six National Assessment for Secondary School Placement

Using the Grade Six National Assessment for secondary school placement	2017 (N=37)	
	n	%
I support this	20	54.1
I do not support this	4	10.8
Not Applicable/No Opinion	1	2.7
No Response	12	32.4
TOTAL	37	100

More than half of the secondary school teachers indicated their support for using national assessments at the Grade Six level for secondary school placement.

Secondary Teachers' Attitudes Toward Streaming and Grade Retention

Teachers in the sample were asked about their endorsement of the practices of streaming students based on academic ability and grade retention (having students repeat grades until they pass). Their responses are outlined in Tables 87 and 88, respectively.

Table 87: Secondary Teachers' Support for Streaming According to Ability

Streaming classes according to ability	2017 (N=37)	
	N	%
I support this	16	43.2
I do not support this	9	24.3
No Response	12	32.4
TOTAL	37	100

Forty-three percent of secondary school teachers supported streaming classes according to ability, while twenty-four percent did not.

Table 88: Secondary Teachers' Support for Grade Retention

Grade Retention	2017 (N=37)	
	N	%
I support this	12	32.4
I do not support this	11	29.7
Not Applicable/No Opinion	2	5.4
No Response	12	32.4
TOTAL	37	100

Thirty-two percent of the secondary school teachers supported grade retention practices, and approximately thirty percent did not.

Summary

Teachers generally had a favourable view of teaching, as approximately 68% of teachers indicated that they liked teaching in general. Additionally, most secondary school teachers reported that they sometimes like teaching at the school.

Regarding their views on providing extra lessons, only about thirty-eight percent of the teachers said they sometimes provide extra lessons. However, more than half of the secondary school teachers indicated their support of teachers being paid for extra lessons. They further indicated that parents are willing to pay for lessons as only approximately twenty-two percent of the secondary school teachers reported that parents are never willing to pay for extra lessons for their children.

In terms of the national exit examinations for grade six, more than half of the secondary school teachers indicated their support for the use of national assessments at the Grade Six level for secondary school placement. Forty-three percent of secondary school teachers supported streaming classes according to ability.

It is important to note that while about one-third of the secondary school teachers supported grade retention practices, one-third did not.

Primary Principals' Views on Other Education-Related Issues

Several current issues in education in Antigua and Barbuda were investigated from primary principals' perspectives, including feelings about extra lessons, the Antiguan and Barbudan Grade Six National Assessment, streaming and grade retention.

Primary Principals' Attitudes Toward Extra Lessons

The questionnaire addressed the concern of teachers delivering instruction beyond regular school hours. Two of the principals reported that they believed that teachers should be paid for extra lessons, while one did not believe that teachers should be paid for extra lessons.

Primary Principals' Attitudes Toward the Grade Six National Assessment

Principals in the sample were asked to express their support for specific practices embedded within the current education system. One such practice involves using the Grade Six National Assessment results to allocate students to secondary schools. One of the principals reported that they supported the use of the national assessment for secondary school placement, one reported that they did not support this method, and one reported that they did not have an opinion on the matter.

Primary Principals' Attitudes Toward Streaming and Grade Retention

Principals in the sample were asked about their endorsement of the practices of streaming students based on academic ability and grade retention (having students repeat grades until they pass). Two of the principals reported that they did not support streaming according to ability, while one-third of the principals reported that they did support the practice. Two of the principals reported that they did not support the grade retention practices, while one principal reported that they supported the practice.

Summary

Two-thirds of the primary principals who participated in this study reported that they supported paying teachers for extra lessons. One-third reported that they agreed to the use of national assessments for secondary school placements, one-third did not agree, and one-third had no opinion. Two-thirds of the principals reported that they did not support streaming and grade retention practices, and one-third agreed to these practices.

Secondary Principal's Views on Other Education-Related Issues

Several current issues in education in Antigua and Barbuda were investigated from Secondary principals' perspectives, including feelings about extra lessons, the Antigua and Barbuda Grade Six National Assessment, streaming and grade retention.

Secondary Principal's Attitudes Toward Extra Lessons

The questionnaire addressed the concern of teachers delivering instruction beyond regular school hours. The one principal who responded believes that teachers should be paid for extra lessons.

Secondary Principal's Attitudes Toward the Grade Six National Assessment

Principals in the sample were asked to express their support for specific practices embedded within the current education system. One such practice involves using the results of the Antigua and Barbuda Grade Six National Assessment to allocate students to secondary schools. The principal supported using Grade Six National Assessments for secondary school placement.

Secondary Principal's Attitudes Toward Streaming and Grade Retention

Principals were asked about their endorsement of the practices of streaming students based on academic ability and grade retention (having students repeat grades until they pass). The principal indicated her support for grade retention practices but did not support the streaming of classes.

Summary

The viewpoints of secondary principals in Antigua and Barbuda were examined regarding many current challenges in education, such as attitudes towards additional classes, the Antigua and Barbuda Grade Six National Assessment, streaming, and grade retention were sought. Only one principal responded to the survey, and the data indicates the following. Firstly, the principal believed that teachers should be paid for extra lessons. Interestingly, the principal supported using Grade Six National Assessments for secondary school placement. Additionally, the principal indicated her support for grade retention practices but did not support the streaming of classes.

Conclusions and Recommendations

Educational delivery in Antigua and Barbuda is still challenged by old imperial teaching methods, unequal access to resources, and limited policies for social and educational inclusion. The study's results point out important areas that need attention to create the educational ecosystem needed for enhanced student achievement.

The findings of this study indicate disparities underscore the need for:

- Increased use of technology and resources in both primary and secondary education. Fair
 educational transformation can focus on addressing these inequalities by removing
 remaining barriers, such as inadequate computers or software, to ensure all students benefit
 from digital learning opportunities.
- Continuous professional development for teachers and principals in modern teaching methods, particularly blended learning, digital literacy, and innovative assessment techniques, ensuring that educators are well-equipped to meet the demands of the 21st century.
- Promoting equitable access to early childhood teacher training programs, ensuring all teachers have a solid developmental literacies foundation regardless of academic background.
- Implementing policies that provide all students access to the technological tools and resources necessary for reading materials and promoting reading during leisure time.
- Ensuring that all students, particularly those at the secondary level, know what it takes to
 achieve academic success. This could be addressed by implementing programs that build
 both academic and soft skills.
- Placement mechanisms like the Caribbean Primary Exit Assessment (CPEA) should be assessed to prevent the perpetuation of inequalities and ensure fairness in how students are evaluated and placed into secondary education.
- Fostering gender balance among educators and school administrators, mainly through specific activities to recruit and support male teachers in elementary education.

- Cultivating inclusive educational environments in which every student, irrespective of gender, socioeconomic status, or kind of institution, feels involved and encouraged.
- Eliminating obstacles to extracurricular activities to guarantee that all students, especially
 those from economically disadvantaged backgrounds, can engage in and benefit from
 personal development opportunities beyond academics and programs to accomplish those
 goals.
- Relevance entails aligning educational methods and policies with society's current and future requirements. The results indicate multiple domains in which educational relevance could be enhanced.

The results of this study provide essential insights into the educational transformation requirements in Antigua and Barbuda. By rectifying access inequities, promoting diversity, aligning with contemporary job trajectories, and incorporating technology innovations, Antigua and Barbuda can be positioned to establish a more equitable, inclusive, and future-oriented education system.

What's Next...

In the pre-COVID (2017) and post-COVID (2022/2024) periods, data were collected from primary and secondary students, teachers and school principals from Barbados and the Eastern Caribbean to investigate specific home and school factors that are known to influence academic achievement, both at the individual level and school level. This report focused on the data collected in Antigua and Dominica. It provides a descriptive summary of the responses from the various participant groups in this country that shed light on the home and school factors investigated and, in some cases, discusses implications.

A follow-up to this report is imminent. The follow-up report will examine the relationship between home and school factors summarised in this current report and academic achievement at the school level. Using primarily correlational analysis, we will explore, for example, the link between:

- school leadership and students' attitudes to school and learning
- school leadership and teachers' instructional practices
- students' home literacy behaviour and school achievement
- students' attitudes to school and learning and school achievement

• students' perceptions of their school and school achievement

Such issues will be explored for the pre- and post-COVID periods.

REFERENCES

- Abdullah, Z., Ziden, A., Aman, R., & Mustafa, K. (2015). Students' attitudes towards information technology and the relationship with their academic achievement. *Contemporary Educational Technology*, 6(4), 338-354.
- Agirdag, O., Yazici, Z., & Sierens, S. (2015). Trends in pre-school enrolment in Turkey: Unequal access and differential consequences. *Comparative Education*, *51*(4), 537-554.
- Akey, T. (2006). School context, student attitudes and behaviour, and academic achievement: An exploratory analysis. Manpower Demonstration Research Corporation.
- Albee, J., Smith, M., Arnold, J., & Dennis, L. (2019). Digging struggling students out of the summer reading slump. *The Reading Teacher*, 73(3), 291-299.
- Allen, C., Diamond-Myrsten, S., & Rollins, L. (2018). School absenteeism in children and adolescents. *American Family Physician*, 98(12), 738–744.
- Allen, N., Grigsby, B., & Peters, M. (2015). Does leadership matter? Examining the relationship among transformational leadership, school climate, and student achievement. *International Journal of Educational Leadership Preparation*, 10(2), 1-22.
- APA Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *The American Psychologist*, 61(4), 271-285. https://doi.org/10.1037/0003-066X.61.4.271
- Asoodeh, M., Asoodeh, M., & Zarepour, M. (2012). The impact of student-centred learning on academic achievement and social skills. *Procedia-Social and Behavioral Sciences*, 46, 560-564.
- Bara, G., & Xhomara, N. (2020). The effect of student-centered teaching and problem-based learning on academic achievement in science. *Journal of Turkish Science Education*, 17(2), 180-198.

- Bartley, M. (2024). Examining the School Climate Influence on Jamaican Secondary School Students: A Comprehensive Literature Review. *Caribbean Journal of Education and Development*, 1(3), 43-59.
- Blackman, S. (2017). From charity education to inclusion: The development of special and inclusive education in Barbados. In S. Blackman & D. Conrad (Eds.) *Caribbean Discourse in Inclusive Education: Historical and Contemporary Issues* (pp. 3-20). Information Age Publishing.
- Blackman, S. N. (2022). The impact of COVID-19 on education equity: A view from Barbados and Jamaica. *Prospects*, *51*(4), 611-625.
- Boliver, V., & Capsada-Munsech, Q. (2021). Does ability grouping affect UK primary school pupils' enjoyment of Maths and English? *Research in Social Stratification and Mobility*, 76, 100629.
- Boonk, L., Gijselaers, H. J., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10-30. https://doi.org/10.1016/j.edurev.2018.02.001
- Bowe, A. (2012). A cross-cultural comparison of predictors of achievement amongst Caribbean students: Attitudes and behaviors that may explain the achievement gap between girls and boys in the English-speaking Caribbean. [Doctoral dissertation, University of Minnesota].
- Bradbury, A. (2019, April). Rethinking 'fixed-ability thinking' and grouping practices: Questions, disruptions and barriers to change in primary and early years education. *Forum*, 61(1), 41-52
- Brissett, N. (2021). A critical appraisal of education in the Caribbean and its evolution from colonial origins to twenty-first-century responses. In *Oxford Research Encyclopaedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.1650
- Bristol, L. (2012). *Plantation Pedagogy: A Postcolonial and Global Perspective*. New York: Peter Lang.

- Bristol, T. (2017). Why teachers and students stay home: A mixed-methods analysis of teacher and student absenteeism across nine schools in Guyana. *International Journal of Comparative Education and Development*, 19(4), 134–149.
- Brown, L. I., Esnard, T., & Bristol, L. (2014). Relating professional in-school networks, school leadership, and assessment data to academic performance in Trinidad and Tobago: An exploration. *Caribbean Curriculum*, pp. 22, 1–34.
- Bubb, S., & Jones, M. A. (2020). Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers and teachers. *Improving Schools*, 23(3), 209–222. https://doi.org/10.1177/1365480220958797
- Campbell, T. (2021). In-class 'ability'-grouping, teacher judgements and children's mathematics self-concept: evidence from primary-aged girls and boys in the UK Millennium Cohort Study. *Cambridge Journal of Education*, *51*(5), 563–587.
- Caribbean Examinations Council (2022). *Annual Report 2022*. https://www.cxc.org/cxc-annual-report-2022/
- Cook, L., & Ezenne, A. (2010). Factors influencing Students' absenteeism in primary schools in Jamaica: perspectives of community members. *Caribbean Curriculum*, 17, 33-57.
- Cook-Sather, A. (2020). Student voices across contexts: fostering student agency in today's schools. *Theory Intro Practice*, 59(2), 182-191.
- Crossley, M. (2019). Policy transfer, sustainable development and the contexts of education.

 Compare: A Journal of Comparative and International Education.

 https://doi.org/10.1080/03057925.2018.1558811
- Darling, S., & Westberg, L. (2004). Parent involvement in children's acquisition of reading. *The Reading Teacher*, *57*(8), 774.
- Diery, A., Vogel, F., Knogler, M., & Seidel, T. (2020). Evidence-based practice in higher education: Teacher educators' attitudes, challenges, and uses. *Frontiers in Education*, 5, https://doi.org/10.3389/feduc.2020.00062

- Dulay, S., & Karadağ, E. (2017). The effect of school climate on student achievement. In E. Karadağ (Ed.). *The Factors Affecting Student Achievement: Meta-analysis of Empirical Studies* (pp 199-213). Springer.
- Eccles, J., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109–132.
- Economic Commission for Latin America and the Caribbean. (2012). *Policy brief: Evidence-based policy making in the Caribbean*. https://repositorio.cepal.org/bitstreams/bf1a46dc-18af-4db8-97af-ccbcf5845662/download
- Edgerton, J., Peters, G., & Shamley, D. (2023). Community support and parental engagement in the Caribbean: A pathway to academic success. *Caribbean Journal of Education*, 45(1), 52–65.
- Emanet, E., & Kezer, F. (2021). The effects of student-centered teaching methods used in mathematics courses on mathematics achievement, attitude, and anxiety: a meta-analysis study. *Participatory Educational Research*, 8(2), 240-259.
- Escayg, K. A., & Kinkead-Clark, Z. (2018). Mapping the contours of Caribbean early childhood education. *Global Education Review*, *5*(4), 236–253.
- Eshetu, A. (2015). The impact of attending pre-school education on later academic achievement of students: Empirical evidences from Dessie, Ethiopia. Basic *Research Journal of Education Research and Review*, 4(3), 72–80.
- Farooq, M., Chaudhry, A., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: A case of secondary school level. *Journal of Quality and Technology Management*, 7(2), 1-14.
- Fikuree, W., Shiyama, A., Muna, A., Naseer, B., & Mohamed, Z. (2021). Challenges to education from the Covid-19 pandemic: A SIDS perspective with special reference to the situation in the Maldives. *International Education Journal: Comparative Perspectives*, 20(2), 5-22.

- Fraser, S. (2018). The Effects of Computer Aided Instruction in Caribbean Studies on the Academic Performance of Students in the Lower Sixth Form at President's College. *International Journal of Arts Humantieis and Social Sciences*, 2(8), 1-6.
- George, N. (2015). *Technology-Enabled learning in the Commonwealth Caribbean countries: A baseline study*. Commonwealth of Learning, BC.
- Goos, M., Pipa, J., & Peixoto, F. (2021). Effectiveness of grade retention: A systematic review and meta-analysis. *Educational Research Review*, *34*, 100401.
- Gorard, S., See, B., & Siddiqui, N. (2020). What is the evidence on the best way to get evidence into use in education? *Review of Education*, 8(2), 570-610. https://doi.org/10.1002/rev3.3200
- Greenhow, C., & Galvin, S. (2020). Teaching with social media: evidence-based strategies for making remote higher education less remote. *Information and Learning Sciences*, 121(7/8), 513-524. https://doi.org/10.1108/ILS-04-2020-0138
- Hallinger, P., & Wang, W. (2015). Assessing instructional leadership with the Principal Instructional Management Rating Scale. Dordrecht, Netherlands: Springer.
- Hancock, K., Lawrence, D., Shepherd, C., Mitrou, F., & Zubrick, S. (2017). Associations between school absence and academic achievement: Do socioeconomics matter? *British Educational Research Journal*, 43(3), 415-440.
- Hartas, D. (2012). Inequality and the home learning environment: Predictions about seven-year-olds' language and literacy. *British Educational Research Journal*, *38*(5), 859-879.
- Haslip, M. (2018). The effects of public pre-kindergarten attendance on first grade literacy achievement: A district study. *International Journal of Child Care and Education Policy*, 12(1).
- Heaven, G., & Bourne, P. (2016). Instructional leadership and its effect on students' academic performance. *Review of Public Administration and Management*, 4(3), 1-20.

- Heppt, B., Olczyk, M., & Volodina, A. (2022). Number of books at home as an indicator of socioeconomic status: Examining its extensions and their incremental validity for academic achievement. *Social Psychology of Education*, 25(4), 903-928.
- Hoffmann, T., Bennett, S., & Del Mar, C. (2023). *Evidence-based practice across the health professions*. Elsevier Health Sciences.
- Hogrebe, N., & Strietholt, R. (2016). Does non-participation in preschool affect children's reading achievement? International evidence from propensity score analyses. *Large-scale Assessments in Education*, 4, 1-22.
- Irvine J. (2010). Foreword. In Milner's H.R. (Ed.). *Culture, curriculum, and identity in education*. New York: Palgrave Macmillan.
- Jamil, F., & Khalid, R. (2016). Predictors of academic achievement in primary school students. *Pakistan Journal of Psychological Research*, 31(1), 45-61.
- Jennings, Z., Cook, L., Anderson, S., & Huton, D. (2017). Interventions to address the root causes of absenteeism in remote rural primary schools in Jamaica: Challenges to sustainability and implications of the results. *Journal of Education & Development in the Caribbean*, 16(2).
- Jerrim, J., Lopez-Agudo, L., & Marcenaro-Gutierrez, O. (2022). Grade retention and school entry age in Spain: a structural problem. *Educational Assessment, Evaluation and Accountability*, 34(3), 331-359.
- Jimerson, S. R., Durbrow, E. H., Adam, E., Gunnar, M., & Bozoky, I. K. (2006). Associations among academic achievement, attention, and adrenocortical reactivity in Caribbean village children. *Canadian Journal of School Psychology*, 21(1-2), 120–138. https://doi.org/10.1177/0829573506298899
- Jules, T., & Williams, H. (2016). Education reform initiatives in the Caribbean basin. In I. Minto-Coy & E. Berman (Eds.) *Public Administration and Policy in the Caribbean* (pp. 247-293). Routledge. https://doi.org/10.1201/b18667-16

- Jules, D. (2010). Rethinking education for the Caribbean: A radical approach. In P. Mayo (Ed.)
 Education in Small States: Global Imperatives, Regional Initiatives and Local
 Dilemmas (pp. 79-90). Routledge
- Keppens, G. (2023). School absenteeism and academic achievement: Does the timing of the absence matter? *Learning and Instruction*, 86, 101769.
- Klein, M., Sosu, E. M., & Dare, S. (2022). School absenteeism and academic achievement: does the reason for absence matter? *AERA Open*, *8*, 23328584211071115.
- Knight, V., & Obidah, J. (2014). Instituting Universal Secondary Education: Caribbean Students' Perceptions of their Schooling Experiences. *Journal of Education and Practice*, *5*(32).
- Kobrin, J., & Michel, R. (2006). *The SAT as a predictor of different levels of college performance* (Report No. 2006-3). College Board Publications, New York. https://files.eric.ed.gov/fulltext/ED563073.pdf
- Kocak, O. Goksu, I., & Goktas, Y. (2021). The factors affecting academic achievement: a systematic review of meta analyses. *International Online Journal of Education and Teaching (IOJET)*, 8(1), 454-484.
- Kpolovie, P. J., Joe, A. I., & Okoto, T. (2014). Academic achievement prediction: Role of interest in learning and attitude towards school. International *Journal of Humanities Social Sciences and Education*, *I*(11), 73-100.
- La Salle, T., Rocha-Neves, J., Jimerson, S., Di Sano, S., Martinsone, B., Majercakova Albertova, S., ... & Zvyagintsev, R. (2021). A multinational study exploring adolescent perception of school climate and mental health. *School Psychology*, *36*(3), 155.
- Layne, A., Jules, V., Kutnick, P., & Layne, C. (2008). Academic achievement, pupil participation and integration of group work skills in secondary school classrooms in Trinidad and Barbados. *International Journal of Educational Development*, 28(2), 176-194.
- Leacock, C. (2009). Quality education for all in the eastern Caribbean: Rethinking the curriculum in the face of universal secondary education. *Journal of Eastern Caribbean Studies*, *34*(3), 19-38.

- https://www.proquest.com/docview/216618629?parentSessionId=oAtYS0s%2BFwcjz6v FYomZ5XngQG%2BNTr9N9HeVrsjEsYU%3D&sourcetype=Scholarly%20Journals
- Leacock, C. J., Thompson, B. P., Burnett, A. & Obidah, J. (2007). *The Academic Achievement of Barbados Public Primary and Secondary Schools* 1999 2005: A Comprehensive Report. Education Evaluation Centre, UWI Cave Hill.
- Leacock, C. J., & Warrican, S. J. (2011, March). Learning with Technology: Experiences of Using an Online Environment to Promote Democracy in Caribbean Classrooms. In *Society for Information Technology & Teacher Education International Conference* (pp. 2883-2888). Association for the Advancement of Computing in Education (AACE).
- Leacock, C. J., & Warrican, S. J. (2020). Helping teachers to respond to COVID-19 in the Eastern Caribbean: issues of readiness, equity and care. *Journal of Education for Teaching*, 46(4), 576-585.
- Leithwood, K. (2021). A review of evidence about equitable school leadership. *Education Sciences*, 11(8), 377.
- Leseman, P., & De Jong, P. (1998). Home literacy: Opportunity, instruction, cooperation and social-emotional quality predicting early reading achievement. *Reading Research Quarterly*, 33(3), 294-318.
- Lewis, W. (2020). Teacher absenteeism and the perceived reasons for its effect on student achievement in three Barbadian secondary schools. [Doctoral dissertation, Durham University].
- Lipps, G., Lowe, G. A., Gibson, R. C., Halliday, S., Morris, A., Clarke, N., & Wilson, R. N. (2010). Symptoms among adolescents in three Caribbean countries. *Child and Adolescent Psychiatry and Mental Health*, 4(6).
- Luthans, F., Luthans, B., & Luthans, K. (2021). *Organizational behavior: An evidence-based approach* (14th ed.). Information Age Publishing.

- Mariano, L., Martorell, P., & Berglund, T. (2018). The effects of grade retention on high school outcomes: Evidence from New York City schools. *Journal of Research on Educational Effectiveness*, 1-31.
- Marshall, D., & Jackman, M. (2015). Socio-economic status, parental involvement, and academic outcomes in Caribbean schools. *International Journal of Educational Development*, 40, 35-45.
- Marshall, D., Jackman, M., & Simmons, S. (2014). Parental involvement and the "secondary slump" in Caribbean schools. *Caribbean Educational Research Journal*, 2(1), 12-28.
- Martin, T. G., Martin, A. J., & Evans, P. (2016). Student engagement in the Caribbean region: Exploring its role in the motivation and achievement of Jamaican middle school students. *School Psychology International*, 38(2), 184-200. https://doi.org/10.1177/0143034316683765
- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2017). The impact of school climate and school identification on academic achievement: Multilevel modeling with student and teacher data. *Frontiers in Psychology*, 8. https://doi.org/10.3389/fpsyg.2017.02069
- Miller, P. (2016) Caribbean Perspectives Developing Successful and Effective School Leadership. In: *Successful School Leadership International Perspectives*. Bloomsbury, London, UK, pp. 81-91. ISBN 9781472586377
- Milner, H. (2012). Beyond a test score: Explaining opportunity gaps in educational practice. *Journal of Black Studies*, 43(6), 693-718.
- Mitchell, D., & Sutherland, D. (2020). What really works in special and inclusive education: Using evidence-based teaching strategies. Routledge.
- Neuman, S. B. (2017). The information book flood: Is additional exposure enough to support early literacy development? *The Elementary School Journal*, *118*(1), 1-27.
- Neuman, S., & Moland, N. (2016). Book deserts: The consequences of income segregation on children's access to print. *Urban Education*, *54*(1), 126-147.

- Odongo, O., Otyola, W., & Loyce, K. (2021). Cognitive based classroom streaming and self-esteem among secondary school students in Lira district. *American Journal of Education and Practice*, 5(1), 22-36.
- OECD (2023). PISA 2022 Results (Volume I): The State of Learning and Equity in Education, PISA, OECD Publishing, Paris. https://doi.org/10.1787/53f23881-en.
- Papachristou, E., Flouri, E., Joshi, H., Midouhas, E., & Lewis, G. (2022). Ability-grouping and problem behavior trajectories in childhood and adolescence: Results from a UK population-based sample. *Child Development*, *93*(2), 341-358.
- Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141.
- Parsons, S., & Hallam, S. (2014). The impact of streaming on attainment at age seven: evidence from the Millennium Cohort Study. *Oxford Review of Education*, 40(5), 567-589.
- Pilgrim, M., & Hornby, G. (2019). The implications of selective secondary education for inclusive education in Barbados. In S. Blackman, D. Conrad & L. Brown (Eds.). *Achieving Inclusive Education in the Caribbean and Beyond: From Philosophy to Praxis*, 35-49.
- Precious, E., & Feyisetan, A. (2020). Influence of teacher-centered and student-centered teaching methods on the academic achievement of post-basic students in biology in Delta State, Nigeria. *Teacher Education and Curriculum Studies*, 5(3), 120-124.
- Press Release. (2019). *National summary for CXC CSEC 2019*. Retrieved from https://www.nowgrenada.com/2019/08/national-summary-for-cxc-csec-2019/
- Print, M., Ørnstrøm, S., & Nielsen, H. (2002). Education for democratic processes in schools and classrooms. *European Journal of Education*, *37*(2), 193-210.
- Rabiner, D., Godwin, J., & Dodge, K. (2016). Predicting academic achievement and attainment: The contribution of early academic skills, attention difficulties, and social competence. *School Psychology Review*, 45(2), 250-267.

- Rodríguez-Rodríguez, D. (2022). Grade retention, academic performance and motivational variables in Compulsory Secondary Education: a longitudinal study. *Psicothema*, 34(3), 429-436.
- Rubie-Davies, C. (2009). Teacher Expectations and Labeling. In L. Saha & A. Dworkin (Eds.), International Handbook of Research on Teachers and Teaching (pp. 695-707). Springer. https://doi.org/10.1007/978-0-387-73317-3_43.
- Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Sackett, D., & Rosenberg, W. (1995). The need for evidence-based medicine. *Journal of the Royal Society of Medicine*, 88(11), 605-664. https://doi.org/10.1177/014107689508801105
- Sammons, P., Toth, K., Sylva, K., Melhuish, E., Siraj, I., & Taggart, B. (2015). The long-term role of the home learning environment in shaping students' academic attainment in secondary school. *Journal of Children's Services*, 10(3), 189-201.
- Sappleton, S. J., & Adams, D. (2022). On Decolonizing US Education: Lessons from the Caribbean and South Africa. *Professional Educator*, 45(1), 42-57. https://doi.org/10.47038/tpe.45.01.11
- Schlee, B., Mullis, A., & Shriner, M. (2009). Parents social and resource capital: Predictors of academic achievement during early childhood. *Children and Youth Services Review*, 31(2), 227-234.
- Shah, K., & Kelman, I. (2024, April). Institutional capacity, useability of data, and evidence-based decision-making for sustainable development in Small Island Developing States. (ODI SIDS Future Forum 2024 Working Paper). https://odi.org/documents/9046/Shah_Institutional_capacity_useability_of_data_and_evidence-based_decision-making_for.pdf
- Slavin, R. E. (2020). How evidence-based reform will transform research and practice in education. *Educational Psychologist*, 55(1), 21-31. https://doi.org/10.1080/00461520.2019.1611432

- Slavin, R., Cheung, A., & Zhuang, T. (2021). How could evidence based-reform advance education? *ECNU Review of Education*, 4(1), 7-24. https://doi.org/10.1177/2096531120976060
- Smith, P. (December 4, 2020). *Ideological tensions across Englishes: Implications for literacy education*. Paper presented at the 2020 annual meeting of the Literacy Research Association Conference.
- Steinmayr, R., Heyder, A., Naumburg, C., Michels, J., & Wirthwein, L. (2018). School-related and individual predictors of subjective well-being and academic achievement. *Frontiers in Psychology*, 9. https://doi.org/10.3389/fpsyg.2018.02631
- Steinmayr, R., Meißner, A., Weidinger, A. F., & Wirthwein, L. (2014). *Academic achievement*. Oxford Bibliographies: Education. https://doi.org/10.1093/obo/9780199756810-0108
- Tadesse, S., & Muluye, W. (2020). The impact of COVID-19 pandemic on education system in developing countries: a review. *Open Journal of Social Sciences*, 8(10), 159.
- Tan, C., Dimmock, C., & Walker, A. (2021). How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis. *Educational Management Administration Leadership*. doi: 10.1177/17411432211061445
- ter Meulen, S. (2023). Long-term effects of grade retention (No. 10212). CESifo Working Paper.
- Thompson, B. P., Warrican, S. J., & Leacock, C. J. (2011). Education for the future: Shaking off the shackles of colonial times. In D. Dunkley (Ed.). *Readings in Caribbean history and culture: Breaking ground* (pp. 61–86). Lanham, MD: Lexington Books.
- United Nations (2024). The Antigua and Barbuda agenda for SIDS (ABAS) a renewed declaration for resilient prosperity. https://sdgs.un.org/sites/default/files/2024-04/SIDS4%20-%20Co-Chairs%20FINAL.pdf
- Valbuena, J., Mediavilla, M., Choi, Á., & Gil, M. (2020). Effects of grade retention policies: A literature review of empirical studies applying causal inference. *Journal of Economic Surveys*, 35(2), 408-451.

- van Bergen, E., van Zuijen, T., Bishop, D., & de Jong, P. (2017). Why are home literacy environment and children's reading skills associated? What parental skills reveal. *Reading Research Quarterly*, 52(2), 147-160.
- Veira, A. K., Leacock, C. J., & Warrican, S. J. (2014). Learning outside the walls of the classroom: Engaging the digital natives. *Australasian Journal of Educational Technology*, *30*(2).
- Veletić, J., Price, H. E., & Olsen, R. V. (2023). Teachers' and principals' perceptions of school climate: the role of principals' leadership style in organizational quality. *Educational Assessment, Evaluation and Accountability*, 35(4), 525-555.
- Verešová, M., & Mala, D. (2016). Attitude toward school and learning and academic achievement of adolescents. *The European Proceedings of Social and Behavioural Sciences: 7th International Conference on Education and Educational Psychology*, https://www.europeanproceedings.com/files/data/article/46/1381/article/46/1381/pdf/100.pdf
- Warrican, S.J. (2005). *Hard words: The challenge of reading and writing for Caribbean students and their teachers*. Kingston, Jamaica: Ian Randle.
- Warrican, S.J. (2015). Fostering true literacy in the Commonwealth Caribbean: Bridging the cultures of school and home. In P. Smith & A. Kumi-Yeboah (Eds.) *Handbook of Research on Cross-Cultural Approaches to Language and Literacy Development* (pp. 367-392). IGI Global.
- Warrican, S.J. (2020). Conducting research in the Caribbean. Peering through the lenses of Western frames. *Caribbean Educational Research Journal*, *5*(1), 144-158.
- Warrican, S.J. (2020). Towards caring language and literacy classrooms for black immigrant youth: Combatting raciolinguistic ideologies and moral licensing. *Teachers College Record, Yearbook Special Issue, 122*(13).
- Warrican, S. J., Alleyne, M. L., Smith, P., Cheema, J., & King, J. R. (2019). Peer effects in the individual and group literacy achievement of high-school students in a bi-dialectal context. *Reading Psychology*, 40(2), 117-148.

- Warrican, S. J., & Leacock, C. J. (2011). The Effectiveness of the Education for Democratic Citizenship in the Caribbean Project. *A report commissioned by the Organization of American States*.
- Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta-synthesis. *Educational Review*, 66(3), 377-397.
- Williams, H. M. A. (2016). A neocolonial warp of outmoded hierarchies, curricula and disciplinary technologies in Trinidad's educational system. *Critical Studies in Education*, 60(1), 93–112. https://doi.org/10.1080/17508487.2016.1237982
- Winter, E., Costello, A., O'Brien, M., & Hickey, G. (2021). Teachers' use of technology and the impact of Covid-19. *Irish Educational Studies*, 40(2), 235-246.
- Yildirim, E. (2023). The Effect of Student-Centered Practices on Academic Achievement in Life Science Course: A Meta-Analysis Study. *Journal of Educational Technology*, 20(2).
- Zysberg, L., & Schwabsky, N. (2020). School climate, academic self-efficacy and student achievement. *Educational Psychology*, *41*(4), 467-482.