GLOBAL BOOK ALLIANCE

Supply Chain Analysis Dominica

December 2022



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Table of Contents

RIGHTS AND PERMISSIONS	ii
ACKNOWLEDGMENTS	v
LIST OF ACRONYMS AND ABBREVIATIONS	vi
EXECUTIVE SUMMARY AND HIGH-LEVEL RECOMMENDATIONS	1
Executive Summary	2
High-Level Recommendations	4
INTRODUCTION	6
CONTEXTUAL DRIVERS OF THE TEACHING AND	
LEARNING MATERIALS CHALLENGE	7
Educational System	7
Textbook and ERMs	11
BOOK SUPPLY CHAIN ANALYSIS	13
Supply Chain Overview: Six Strategic Phases	
SCA PHASE I: PLANNING AND FORECASTING	14
GBA Findings: Planning and Forecasting/Strengths	14
GBA Findings: Planning and Forecasting/Weaknesses	14
GBA Recommendations: Planning and Forecasting	
SCA PHASE II: TITLE DEVELOPMENT	16
Digital Materials by Development Partners and NGOs	
GBA Findings: Title Development/Weaknesses	20
GBA Recommendations: Title Development	
SCA PHASE III: PUBLISHING AND PRINTING	21
Textbook Publishing	
Digital Materials	21
Production of Books for Learners with Disabilities	22
Printing and Binding	22

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GBA Findings: Publishing and Printing/Weaknesses	
GBA Recommendations: Publishing and Printing	
SCA PHASE IV: PROCUREMENT AND PURCHASING	
Government Procurement	24
GBA Findings: Procurement and Purchasing/Strengths	
GBA Findings: Procurement and Purchasing/Weaknesses	
GBA Recommendations: Procurement and Purchasing	
SCA PHASE V: DISTRIBUTION MANAGEMENT	
Book Distribution on Dominica	
GBA Findings: Distribution Management/Strengths	
GBA Findings: Distribution Management/Weaknesses	27
GBA Recommendations: Distribution Management	
SCA PHASE VI: ACTIVE USE	
Active Use in Schools	
Active Use in Communities	
GBA Findings: Active Use/Strengths	
GBA Findings: Active Use/Weaknesses	
GBA Recommendations: Active Use	
CONCLUSION	
ANNEX 1: FOCUS GROUPS AND INDIVIDUAL INTERVIEWS:	
(FOCUS GROUPS IN PERSON/ZOOM)	
ANNEX 2: MPTLM	
ANNEX 3: BIBLIOGRAPHY	

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The study was led by USAID's Global Book Alliance in Action project, which supports the work of the Global Book Alliance and is implemented by EDC, under the direction of Dr. Simon James, project director; Julianna Nielsen, chief of party; and researchers/writers Linda Hiebert and Lois Bristol. EDC team members also included Caitlin Flynn and Elysia Moon. We are deeply appreciative of the contributions of all team members.

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LIST OF ACRONYMS AND ABBREVIATIONS

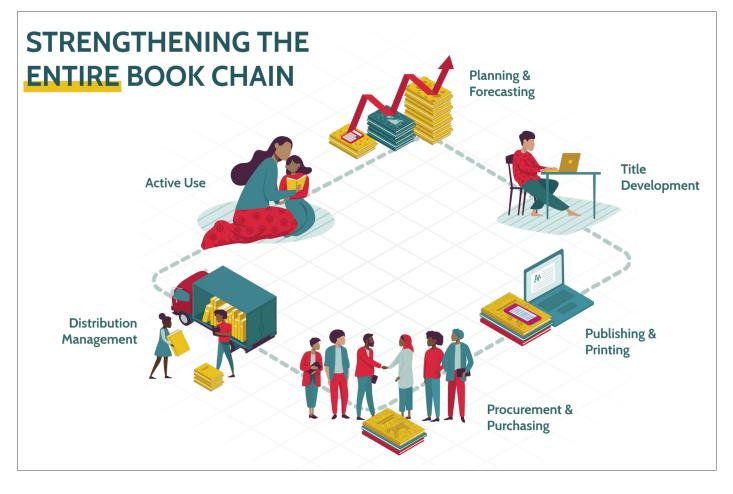
CSEC	Caribbean Secondary Education Certificate
CSOs	civil society organizations
ECD	Eastern Caribbean Dollar
ELP	Early Learners' Programme
EMIS	education management information system
ERMs	essential reading materials
ETF	Education Trust Fund
GBA	Global Book Alliance
GBAIA	Global Book Alliance in Action
Lol	language of instruction
MoE	Ministry of Education, Human Resource Planning, Vocational Training and National Excellence
MPTLM	Minimum Profile of teaching and learning materials
NGOs	nongovernmental organizations
OECS	Organisation of Eastern Caribbean States
OESS	OESS Education Sector Strategy
SCA	supply chain analysis
TLMs	teaching and learning materials
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development

EXECUTIVE SUMMARY AND HIGH-LEVEL RECOMMENDATIONS

This book supply chain analysis (SCA) for the Commonwealth of Dominica was conducted on behalf of the Global Book Alliance (GBA) by the United States Agency for International Development (USAID) Global Book Alliance in Action (GBAIA) project. For the purposes of the analysis, the *book supply chain* is defined as a six-phase process:

- 1. Planning and forecasting
- 2. Title development
- 3. Publishing and printing
- 4. Procurement and purchasing
- 5. Distribution management
- 6. Active use

FIGURE 1. THE SIX PHASES OF THE BOOK SUPPLY CHAIN



Executive Summary

The SCA focuses on the supply of essential reading materials (ERMs) that children in primary school grades 1–4 need to become proficient readers. The SCA was commissioned to inform the work of the GBA as well as that of USAID and the Dominica Ministry of Education, Human Resource Planning, Vocational Training and National Excellence (MoE), and other key development partners in the country. The SCA gives an overview and analysis of the challenges and opportunities at each of the six phases of the book supply chain in Dominica.

The GBAIA team of researchers carried out the SCA both remotely and in person, from April to June 2022. Desk research was carried out, followed by focus groups and in-person interviews with nine government officials, 15 teachers and eight principals, eight parents, one development partner, two civil society organization (CSO) officials, one bookseller, one printer, and one librarian. A full list of interviewees can be found in Annex 1.

Conclusions found throughout the report are drawn from these interviews and focus group discussions. Findings have been triangulated, using multiple sources and referring to published literature when available. Conclusions were drawn when there was corroboration by sources, preferably from different stakeholder groups.

The SCA research incorporated conclusions for both textbooks and ERMs, since the evidence on the textbook supply chain has implications for the supply of ERMs as well. Overall, the SCA research identified several gaps in the supply chain for textbooks, as well as opportunities to improve the supply of both textbooks and ERMs.

The research found that the MoE on the island of Dominica does not officially supply ERMs and there is no supply chain planned for government support for ERMs. The government plans for and secures textbooks for students in kindergarten through 6th grade, as well as for all other grades through secondary school. The MoE also provides a list of supplementary readers, but these are not included in the MoE budget.

There have been three key issues that have influenced the availability of textbooks and ERMs on the island. First, historically, according to MoE officials, teachers, parents, and CSOs, the population had a robust reading culture and had several bookstores on the island. Currently there is only one bookseller of textbooks and other reading material. Previously there were two other textbook sellers and a third that sold other reading material. There has never been any publisher on the island. Authors used publishers in the region or in the U.K. to publish their books. However, in the last few years, reading has dropped off and as a result most bookstores closed, unable to make a profit.

Secondly, according to the United Nations Educational, Scientific and Cultural Organization (UNESCO), Hurricane Maria in 2017 caused extensive damage to the economy, further reducing the ability of islanders to purchase books. The hurricane destroyed 90% of the housing and seriously damaged the agriculture and tourism sectors.¹ Newspapers, flyers, and posters are printed on the island, but paper and ink are imported and expensive. Textbooks and other reading materials are imported from the U.K., United States, Trinidad, or Jamaica.

Hurricane Maria also destroyed 90% of the school structures. The Organisation of Eastern Caribbean States and the United Nations International Children's Emergency Fund (UNICEF) provided support for restoration of the schools. As a result of the hurricane, the government of Dominica has vowed to become a climate-resilient nation and instituted the Climate Resilient and Restoration Project, supported by the Canadian government.² This will include building schools that can withstand hurricane-force winds. Three such schools have already been built.

The third key event that affected the availability of textbooks was the COVID-19 pandemic. The pandemic impacted both the economy and the social service sector, decreasing the MoE's budget and parents' income status. Since institutions had been closed for a year, schools relied heavily on printed materials (produced at the school level to complement online instruction) and experienced delays in obtaining books due to the pandemic and closures of the printing companies. Parents did have access to books at the schools and could purchase these on the payment plan.

During the pandemic, the MoE has developed a website for education employees and students, which includes e-books and teacher support material. Before the pandemic, children were exposed to more reading material in school, including class libraries. During the pandemic, children received instruction online but almost no reading material, and the academic gap widened.

This focus in online instruction has started the process to support both the in-person teaching and learning as well as possible student support outside of the classroom. Several development partner projects supplied devices and Internet support starting in 2020. The Global Partnership for Education and the World Bank contributed to the education sector during the pandemic. In response to COVID-19, funding for 2020–2022 for four countries, including Dominica, was US\$3 million to harmonize education policies and procedures, support the academic recovery plan, complement online learning instruction, and support distribution of devices to all students. Teachers, however, did not receive devices. The government subsidized the cost of the Internet for vulnerable families.

Executive Summary and High-Level Recommendations | 3

¹ ReliefWeb. Dominica: The Impact of Hurricane Maria–Disaster Profile–January 2018 (2018). https://reliefweb.int/report/dominica/dominica-impact-hurricane-maria-disaster-profile-january-2018

² Globe Newswire.

High-Level Recommendations

GBA recommends:

Short-Term

- That the MoE provide access to/promote online e-books from the Global Digital Library, and provide training to teachers and librarians on accessing these websites.
- That the MoE review the data collection system in terms of timing and numbers of books per school in order for students to receive textbooks on time for the beginning of the school year.

Long-Term

- That the MoE curriculum staff work with the planning and procurement staff as well as with the bookseller though a committee to develop a five-year plan for acquisition of textbooks.
- That the MoE establish an agreed-upon Minimum Profile of teaching and learning materials by the grade level needed to deliver the specified curriculum learning objective (see Annex 2).
- That development partners work with the MoE and CSOs to support the production of local, culturally appropriate ERMs written by local writers and teachers that are targeted to boys as well as to girls and that spark the interest of the readers.
- That development partners provide grants to the MoE to produce more ERMs for schools and libraries.
- That the MoE research the process of producing local-content books and streamline it to improve the production and publishing of local-content books.
- That development partners support continued training for teachers and educators to write reading guides and leveled and decodable books.
- That development partners support the MoE in training teachers and students on how to use and manage libraries.
- That development partners develop online ERMs that include early-grade reading material as well as educational games for pre-primary and primary levels.
- That the MoE consider bulk procurement of textbooks—opportunities for economies of scale a similar model to the bulk procurement of medicines in the Organisation of Eastern Caribbean States.

BOOK TERMINOLOGY

There are varying terms used to describe educational books. For the purposes of this report, we are using the following:

Teaching and learning materials (TLMs): This category includes all the types of books that are typically provided to schools, including textbooks (pupil or student books), teacher guides, readers, e-readers, reference books.

Teacher guide: A book in print or electronic form, or one that consists of any combination of print and electronic materials providing assistance and guidance to teachers on how to use the accompanying textbook.

Textbook: A comprehensive learning resource that is in print or electronic form, or that consists of any combination of print and electronic materials collectively designed to fully support the syllabus of a given level and subject.

The term **essential reading materials** has many different meanings, and what may be *essential* at one stage of learning will be less so at another. For the purposes of this report, we use the following terms and definitions, per USAID guidance. Note that the term does NOT include textbooks and teacher guides.

Decodable, leveled, and **supplementary readers**—Collectively described as *essential readers,* these readers are required elements for reading acquisition, but each plays a different role.

Decodable readers are reading materials in which all words are consistent with the letters and corresponding phonemes that the reader has been taught. These readers are sequenced in the order in which letters are taught in the school curriculum, and increase in difficulty.

Leveled readers are a set of books organized by level of difficulty and based on the complexity of the words, sentences, content, and other factors.

Supplementary readers are used for reading practice. They may not be decodable or leveled, and they do not tie directly to the school curriculum.³

Note that although the term **supplementary readers** is used to describe all general children's books, we at GBA believe that this terminology is inaccurate, as these books are critical to a child's learning to read, and should be planned for and procured for early-grade reading classes. Nonetheless, we continue to use the term in this report.

We also use the term general book when speaking of books in general.

³ Definitions are adapted from U.S. Agency for International Development, 2020 Compendium of Standard PIRS.

INTRODUCTION

This report takes as a starting point the research and evidence on the role of high-quality texts and materials in reading skills acquisition. This includes the necessity of ensuring that children have access to level- and language-appropriate materials, in sufficient quantity, and at the appropriate time in the school year, and that teachers and parents understand and support the use of these materials for literacy acquisition.

High-quality texts and a range of reading materials are key elements required to foster reading skills acquisition for all students.⁴ In order to ensure that every student learns to read, not only are textbooks required but every student also must have access to essential reading materials (ERMs) in local languages. Per United States Agency for International Development (USAID) guidance,⁵ a copy of decodable text, whether packaged together in one textbook per learner or in a set of readers, should be provided to each learner in all grade 1 classrooms and should always be available to grade 2 learners. For higher grades, decodables are only a required part of this package if assessment data demonstrate that children's reading levels are so low as to indicate a need for such material. For leveled readers, when a complete set of leveled paragraphs and stories are bound together in one book, each learner should have a copy of the compilation. If materials are provided in sets of books, sets should be shared by not more than three students in a classroom. A set of leveled readers should include no less than one book per week of the school year.

This supply chain analysis (SCA) report identifies strengths and weaknesses in each link of the book supply chain and provides recommendations to ensure that learners can access sufficient, appropriate, high-quality reading materials to improve reading outcomes in Dominica.

^{4 &}lt;u>https://r4d.org/resources/global-book-fund-feasibility-study/</u> Results for Development, *Global Book Fund Feasibility Study.*

^{5 &}lt;u>https://www.edu-links.org/resources/USAID-Education-Reporting-Guidance</u>, USAID, *Education Reporting Guidance*.

CONTEXTUAL DRIVERS OF THE TEACHING AND LEARNING MATERIALS CHALLENGE

Educational System

The Eastern Caribbean island nation of Dominica is a parliamentary representative democratic republic. Dominica is divided into 10 parishes and four education districts.⁶ The total population of the nation is 72,348 (based on the United Nations estimate in 2022). The largest parish by population is Saint George, which includes the capital city, Roseau. The smallest parish by population is Saint Peter.

The Ministry of Education, Human Resource Planning, Vocational Training and National Excellence (MoE) comprises the minister; the permanent secretary; the chief education officer and the assistant chief education officer; the senior education officers of the Curriculum, Measurement, and Evaluation Unit (including language arts, social studies, health and family life, modern languages), secondary schools, and district education officer (North, South, East and West); the guidance counselors; the learning support advisors; and the education management information system (EMIS) coordinator. Each district is staffed by the district education officer, learning support advisor, as well as the guidance counselor.

According to the Education Act of 1997, education is free and compulsory for children from the age of 5 to 16. Education through secondary school is paid for by the government and local private communities. The education system has three levels: primary, secondary, and tertiary. There are 83 pre-primary schools (early childhood centers—all are privately owned and funded), and 63 public primary schools (5 are government-assisted and 5 are private schools). Pre-primary is usually ages 3 to 4; primary is kindergarten through grade 6 for ages 5 to 11; secondary is Form 1 to 5 for ages 12–16. There are 15 secondary schools. The school year starts in September and runs through June.

In the past, there was one school for students with impaired hearing. For many years there has been an establishment called the Alpha Centre that offers services for students with special needs—severe challenges (learning disabilities, speech limitations)—if parents are able to take advantage of the services. Some parents may live too far away and without transportation, they cannot use the services. In the Kalinago Territory (indigenous people reserve), there is a school (Isilukatu) for students with special needs in that area operated by the Kalinago people. However, now most students with disabilities are integrated into the regular classroom. The special education officer at the MoE oversees all schools to ensure the education of children with special needs.

At the tertiary level, Dominica State College is the national college, specializing in a number of disciplines, including associate's degrees in teacher education and bachelor's degrees in nursing. Other tertiary institutions on the island include the University of the West Indies Open Campus

Contextual Drivers of the Teaching and Learning Materials Challenge | 7

⁶ Wikipedia. Parishes of Dominica. https://en.wikipedia.org/wiki/Parishes_of_Dominica

and All Saints University School of Medicine, both in Roseau. St. Joseph University opened its doors in September of this year.

Although early childhood and tertiary education are not compulsory, they do form part of the education system and are highly encouraged. As in other islands, data indicate that boys drop out of secondary school at a higher rate than girls (2.6% for boys and 2.2% for girls; UNICEF report, 2017). This report indicated the main reason was migration. To encourage boys to stay in school, secondary schools—which have their own budgets—provide additional educational and vocational experiences.

Total enrollment of all students is 10,591 for the 2021–2022 school year. There are 5,983 primary students and 1,464 pre-primary students. The number of teachers is approximately 4,640, and the percentage of teachers trained is 58% (World Bank, 2020). At the pre-primary level, the student-teacher ratio was 18:1. At the primary level, the ratio was 22:1. The highest student-teacher ratio was in the government-assisted schools (25:1), with the lowest being at the private schools (20:1). The student-teacher ratio was lower in rural areas (21:1) than in urban areas (24:1).⁷

During the first term of each academic year, students in grades 3 and 5 take the grade 2 and grade 4 National Assessment. These exams are taken within the first two months of the academic year as a diagnostic tool to determine the needs of the cohort to ensure that students have attained their milestones in the grade they have entered. The assessments are literacy- and numeracy-based to help teachers assist students in mastering the prerequisite concepts of grades 2 and 4.

At grade 6, students sit for the Common Entrance Exam, which determines entrance into the secondary level. In 2016, the secondary school enrollment rate increased from about 75% to 88%; the secondary school enrollment rate was higher for girls (91%) than boys (84%). In 2018–2019, only 1% of lower-secondary school-age adolescents were out of school. In comparison, 19% of boys and 17% of girls were out-of-school at the upper-secondary level. According to the Organisation of Eastern Caribbean States (OECS) Statistics report, 2020, the repetition rate was 3% for primary and 7% for secondary education. Male students were twice as likely to repeat primary grades (4%) and secondary grades (10%), compared to female students (2% and 4% respectively). The most recent numbers were collected this year but are not yet available. These students who fall behind in reading in the early grades struggle to catch up in later grades, according to principals, teachers, and parents.

Year	2013	2014	2015	2016
Girls	96	101	106	114
Boys	96	104	112	116
Total	96	98	101	112

Table 1. Primary completion rates as a percentage of total enrollment reflect repeating students.8

Source: The World Bank 2021. Total reflects average of girls and boys.

⁷ World Bank, Trained Teachers.

⁸ https://data.worldbank.org/indicator/SE.PRM.CMPT.ZS?locations=DM

⁸ Supply Chain Analysis–Dominica

	Reading		Reading Comprehension		Writing				
	А	В	С	А	В	С	A	В	С
Female	89.81	2.75	7.44	72.31	22.04	5.65	35.01	53.22	11.76
Male	84.02	4.64	11.34	56.83	33.17	10	22.82	58.72	18.46
All	86.82	3.73	9.45	64.19	27.88	7.93	28.65	56.09	15.26

Table 2. National Assessment results 2019-grade 4. (Ministry of Education, Dominica)

A-Reading/performing at grade 4 level.

B-Reading/performing at one level below grade level.

C-Reading/performing at two or more levels below grade level.

At the end of secondary school, students take the Caribbean Secondary Education Certificate (CSEC) examination administered by the Caribbean Examination Council. The proportion of students who passed five or more CSEC subjects, including English and mathematics, was higher in Dominica (39%) than the average for the Caribbean region. Girls (44%) were more likely than boys (33%) to pass five or more CSEC subjects.⁹

Subjects at the primary level include language arts, math, science, social studies, health and family life, and, in some cases, agriculture. Each subject has two books—a textbook and a workbook. The social studies books published by Macmillan Education are specific to Dominica and have been written by local education experts; math and English subject books are common among the OECS member countries. The MoE provides data on student numbers and a book

list to Jay's Limited in Roseau, which orders and receives the books and delivers them to the MoE.

The MoE's textbook scheme provides textbooks to all primary-level students across the island at a reduced price (at least 40% off the actual retail cost). This includes public, government-assisted, and private schools. Through the textbook scheme, parents rent the books from each school for about 10 Eastern Caribbean Dollars (ECD10) per book, per year, depending on the condition of the book. These are returned to the school at the end of the year. There is a range of jobs and income on the island from public servants to workers under the National Employment Programme. Many salaried incomes fall within the minimum wage of US\$1,500 per month. Parents who can afford it can purchase textbooks from the bookstore for ECD60–ECD80 per book, per year. In addition to buying textbooks at the reduced cost, some students who face economic hardship also receive financial support through the Education Trust Fund (ETF) for transportation, uniforms, and meals at school. The ETF raises money from private sources on the island.

Although a high percentage of children attend pre-primary school, teachers and principals reported that children are not prepared to enter kindergarten. The children enter kindergarten without having acquired the basic skills. There is little support from parents at home to prepare children for school; once children are in school, the parents, who may be illiterate or lack interest in reading, do not support reading at home for their children.

Contextual Drivers of the Teaching and Learning Materials Challenge | 9

⁹ UNICEF Eastern Caribbean Media, Generation Unlimited.

Government Budget

The estimated government budget for education in 2020–2021 was ECD87,497,139, compared to the 2019–2020 budget of ECD90,092,416. The education budget is approximately 12% of the national budget. The estimated 2020–2021 budget for pre-primary and primary was ECD22,923,960 compared to the 2019–2020 budget of ECD26,550,303, a reduction of 1.2%.¹⁰ The curriculum budget was reduced from ECD690,000 in 2019 to ECD456,800 in 2022. In addition, the library budget was reduced from ECD1,326,000 in 2019 to ECD1,190,000 in 2021. The ETF budget was increased slightly from US\$2,893,000 to US\$2,965,000. However, the teacher training budget increased by almost 7% in the same time period.

Curriculum

Dominica is a member of the OECS. The OECS is an international organization dedicated to regional integration in the Eastern Caribbean. The OECS was founded on June 18, 1981, when seven Eastern Caribbean countries signed a treaty agreeing to cooperate and promote unity and solidarity among the members. The vision of the organization for 2020–2024 is "A better quality of life for the people of the OECS," and the mission statement is "To drive and support sustainable development through regional integration, collective action and development cooperation."¹¹

The OECS in collaboration with its member states developed the OECS Education Sector Strategy (OESS) in 2012. The main purpose of the OESS is to guide the educational directions and priorities of member states of the OECS. The OESS provided the framework for member states to align their national strategies and plans with the OESS. It is strategic and results-oriented and concentrates on learner outcomes. Common curricula in four core subjects at the primary level and two subjects at the lower-secondary level have been developed.¹² The development of learning outcomes for the core curriculum is an essential part of the harmonization of OECS educational systems.

The curriculum harmonization process began five years ago with discussions between the OECS Education Reform Unit (now the OECS Education Development Management Unit) and educational personnel in all member countries (Mission report, 1998). After the preparation of the report, curriculum officers, teacher educators, and evaluation officers in a sub-regional workshop in Antigua and Barbuda developed basic principles for language arts in primary school. All language arts curricula from member countries were examined during the workshop. The report of the OECS workshop in 1998 presents a full account of the decisions taken at the workshop.

Dominica has adopted and modified the OECS Language Arts Programme. The current curriculum emphasizes the four strands of literacy—reading, speaking, listening, and viewing—and incorporates a variety of strategies to teach the elements of language using the Balanced Literacy Approach.

10 | Supply Chain Analysis—Dominica

¹⁰ Ministry of Finance, 2020/2021 Estimates.

¹¹ OECS, About OECS/USAID ELP.

^{12 &}lt;u>https://www.oecs.org/en/our-work/knowledge/library/oecs-education-sector-strategy-2012-2021-may-2012/</u> viewdocument/592

Literacy instruction focuses in part on phonological awareness, phonemic awareness, and usage as well as oral and silent reading during a specified time frame commonly referred to as the Literacy Hour or Language Block. Many teachers and MoE staff feel that this approach is somewhat confusing, since teachers are more comfortable using the segmented approach to teaching the literacy components.

The current language arts curriculum is under review. The text and workbook for kindergarten through grade 6 recommended by the MoE is *Language Tree*. There is a revised draft completed in December 2020, which utilizes the standards of the OECS Harmonised Primary Curriculum. Phonics is included in the language arts curriculum. The issue identified by the focus groups is the competence and efficiency of the instruction. The curriculum for kindergarten through grade 3 has been revised and is being piloted at selected schools.

Teacher training in early-grade reading, although supported by the MoE as part of the Early Learners' Programme (ELP), has not been available to all teachers, according to focus group participants. Literacy coaches were deployed as part of the ELP but, unlike other islands, Dominica did not pull teachers from the classrooms to become full-time coaches. A number of MoE officers were appointed to the position of ELP coordinators and undertook the implementation of the project under the supervision of the National Focal Point (Senior Education Officer - Curriculum, Measurement and Evaluation).

In general, textbook lists are reviewed every five years. The MoE has approved the basic language arts curriculum developed by the Curriculum Unit. There are no MoE decodable or leveled readers in the classrooms, although there are some donated copies in classroom libraries. Other reading material is provided to students by the government. The recommended platform for online learning proposed by the MoE was Google Classroom. During the months that students were away from the classroom due to COVID-19, the MoE conducted virtual training for teachers in the use of this platform. Virtual instruction was instituted across the last two academic years.

Language of Instruction Policy

According to the MoE, the language of instruction (LoI) is English. The island population uses English (spoken by almost everyone) and non-standard English, French Creole (spoken by a majority of communities), and Kokoy (spoken in four communities). French Creole is not taught in schools at any level. A draft LoI policy was developed under the ELP supported by USAID in 2018. A discussion paper was circulated in December 2019 but not yet adopted. The policy would introduce French Creole as an LoI for use in classrooms. The policy is waiting for the final review by the cabinet.

Textbook and ERMs

Publishing is nonexistent on the island. Textbooks and other reading materials are imported from the U.K., United States, Trinidad, or Jamaica. Books are procured in alignment with the MoE data. Teachers in each class provide the MoE with the number of books needed for the following year. Additional textbooks are stored in a cupboard or a space or room designated for that (depending on the size of the school).

There is no official policy on school libraries. Libraries are established if there is available space and connections with the diaspora or agencies that provide donations of books and other essentials. Schools generally have a book collection within the classroom. Some schools have libraries or a reading corner in the classroom. There is no consistent policy across the school systems on taking books home.

Replacement of textbooks is more common in the lower grades. At the end of the year, all books are returned to the school, unless they are lost by the student or purchased by the parents. At the end of the school year, parents will rent the next year's textbook from the school or purchase it from a bookstore, if they can afford it.

The MoE provides a list of textbooks and workbooks for primary and secondary schools to booksellers who in turn purchase these books from publishers outside of Dominica for the ministry or for purchase by parents. The MoE does provide a list of ERMs but does not purchase any, and parents generally do not buy these from the bookseller. Parents who can afford it will purchase ERMs books on Amazon through a U.S. mailbox that is then forwarded to their local address. Teacher guidebooks are not provided by the MoE. Schools are provided with subject curriculum guides that teachers use to prepare instructional material. Private schools are exempt from provision of textbooks by the textbook scheme.

According to the Dominica Library and Document Services and the Document Center website, Hurricane Maria destroyed much of the main library in the capital of Roseau, leaving just 5,000 titles, mostly reference material. There are only three community libraries remaining in other communities (Marigot, Portsmouth, and Grand Bay). Occasionally, the library will order adult and children's reading material from abroad.

BOOK SUPPLY CHAIN ANALYSIS

Supply Chain Overview: Six Strategic Phases

The Dominica book SCA examines the six strategic links in any book supply chain. An effective book supply chain requires accurate forecasting and planning, high-quality title development in a functioning distribution system to deliver books, and appropriate knowledge and support to ensure use and to build a population of active readers. Each of these phases is summarized with discussion, findings, and recommendations. Sources are found in Annex 1.

SCA PHASE I: PLANNING AND FORECASTING

Planning and forecasting are recurring work carried out by governments and publishers to assess need and demand for books, and to arrange for the financial and material resources to meet that demand. In order to do this, ministries of education need timely information not only on current enrollment but on projected enrollment, and realistic estimates of book wastage over time. Publishers must plan for, and be prepared to respond to, demand from ministries and schools, as well as parents who may purchase books for their children's reading practice. For a Ministry of Education, the collection, management, analysis, and use of data on book needs/demand and provision is integral to education planning. For the publishers, it is market research. For both, accurate and timely data collection is of key importance for a functioning book supply chain.

In Dominica, data collection and forecasting focus on data regarding textbooks. ERMs are not included in the school budget. The data collection is first carried out at the school level by teachers in each class and collected on a form by the principals. These data, including numbers of students and numbers of textbooks stored in the classroom or library, are then sent to the statistician at the Education Planning Unit, often through the district education officer either by email or on paper copies. There does not seem to be a strong EMIS.

Information on numbers of students and books is collected at the end of each school year to provide numbers for the classes for the next year; there is a similar process across all school districts. Numbers of books per class are sent to booksellers for purchase of textbooks for the next school year. Principals, teachers, parents, and booksellers in four focus groups reported frequent delays in data information and book delivery due to delays in transferring data to the MoE and the booksellers. Primary schools do not have independent budgets. Purchase of additional materials (ERMs) is dependent on fundraising with individual schools or through the local purchase order process through the MoE.

GBA Findings: Planning and Forecasting/Strengths

- There is a functioning system of annual data collection on students, teachers, and textbooks required by each class in each school.
- The textbook scheme provides textbooks to all primary and secondary level students.

GBA Findings: Planning and Forecasting/Weaknesses

- Data are often sent late, making it difficult to order and receive textbooks on time.
- Slow data collection results in delays of data transfer to booksellers.

- The existing EMIS focuses on textbook acquisition. There is an EMIS, but it focuses heavily on report card production (teachers enter student performance data; EMIS unit produces/prints report cards for every school); the EMIS unit collates much of the data on student/teacher attendance, etc.
- > There's not a budget to purchase ERMs at the primary level.

GBA Recommendations: Planning and Forecasting

GBA recommends:

- The MoE curriculum staff work with the planning and procurement staff, as well as with the bookseller, though a committee to develop a five-year plan (or national book policy) that includes:
 - » A strengthened EMIS that can be used to collect and transfer data on time
 - Acquisition of ERMs, through coordination with donor agencies (United Nations Educational, Scientific and Cultural Organization [UNESCO] and USAID) and civil society organizations (CSOs)
 - The MoE's reaching out to development partners to include a five-year plan and commitment for funding support to teachers and local authors
- The MoE develop a Minimum Profile of teaching and learning materials (MPTLM) for pre-primary, primary, and secondary schools. See Annex 2 for components of an MTPLM.

SCA PHASE II: TITLE DEVELOPMENT

Title development refers to the creation of texts and books intended to support acquisition of reading skills in languages children use and understand. The process of title development begins once an author has been selected (or in some cases, when a complete manuscript has been chosen for publication) and continues until the final PDFs of the book are sent to the printer. It is a process that calls on the skills of pedagogical experts, writers, editors, graphic designers, illustrators, proofreaders, page layout specialists, and others. Title development for ERMs can be carried out by publishers, whether state or private, and as is often the case in developing countries, by development partners and nongovernmental organizations (NGOs) that step in to provide these materials where they do not exist.

In Dominica, textbooks are generally purchased from companies outside Dominica. Teachers report that there are not enough reading books in their classrooms, and those they have do not correspond to the curriculum. As a result, teachers forgo the curriculum and use the textbook for the teaching points. The education staff refer to this as "teaching to the text."

Development of Textbooks and ERMs by Development Partners and CSOs

Since there are no reading books produced on the island, supplementary readers are supplied by development partners, CSOs, and NGOs, or the diaspora outside of Dominica or purchased by parents who can afford additional books. Development partners in the Eastern Caribbean region offer a range of reading material for children. At present, there is some coordination among the development partners and with the MoE on what materials are needed or donated.

The OECS/USAID ELP began in 2015 to improve reading levels among early-grade readers in Antigua and Barbuda, Dominica, Grenada, Saint Lucia, Saint Kitts and Nevis, and Saint Vincent and the Grenadines. The program came to an end on September 30, 2020, with a total estimated cost of US\$8.9 million. During the five-year period, the program focused on the development and enhancement of reading instruction for kindergarten through grade 3: 3,440 teachers participated in professional development; 2,966 teachers were supported through mentoring and coaching; 3,185 early-grade classrooms were observed; and almost 305,000 teaching and learning materials (TLMs) were provided to 2,305 OECS classrooms.¹³ One of the components was the Write to Read Programme, which encouraged both teachers and students to write books. Dominica did not participate in this part of the program. This initiative came on stream around the time that the country was reeling from the devastating effects of Hurricane Erica in 2015 and subsequently Hurricane Maria.

The United Nations International Children's Emergency Fund (UNICEF) had already taken the initiative to support countries in the sub-region to move toward the digitalization of their education systems. This involved the creation and delivery of digital content and hosting this content on e-learning platform Moodle. While proving to be a good foundation, most of the developed resources remained

¹³ OECS, Leaving a Legacy!

accessible only to small pockets of learners within the respective territories and did not cover all subject areas.¹⁴

Hands Across the Sea has donated thousands of books to schools across the region. These books are given to the organization from publishers, schools, and others. One of the publishers used by a well-known author, Dr. Lennox Honeychurch, is Papilotte Press located in the U.K., which publishes books on Dominica and the wider Caribbean.

The Caribbean Reads director, Carol Mitchell, publishes books in Jamaica, Trinidad, or the United States. Caribbean Reads saw a gap in culturally relevant books in the region and now includes themes and characters that are relevant to children in Dominica and the other islands. They work exclusively with local authors and illustrators. Caribbean Reads has a website listing books available, which schools can purchase. However, due to the high cost of these books, few regional governments, schools, or parents can afford them.¹⁵ Carol Mitchell worked with the OECS on the Write to Read project to help write locally relevant books. Carol Mitchell produced local readers but is now moving more toward pre-primary book writing.

E-material is usually "western" in content, coming from the United States or other English-speaking countries. Hands Across the Sea does work with Caribbean Reads to place books in schools. The materials include readers for school and community libraries. The organization also helps with lending policies, training of student librarians, teacher resource guides for reading books, and sharing strategies to help libraries remain active. Table 3 summarizes recent and current activities of development partners and CSOs in developing books.

Organization	Activity/Materials				
Caribbean Reads	Headed by a writer and publisher, based in the United States and Saint Kitts.				
Hand Across the Sea	Provides English language books purchased from Caribbean Reads, Scholastic, and Penguin to support school libraries; trains teachers and students in book management; works with the MoE on importing books for schools.				
USAID	Supported the ELP program from 2015 to 2020 to improve the education systems in the OECS countries. Worked with Caribbean Reads to produce books for children. Currently developing a digital program with UNICEF and the OECS.				

Table 3. Development	partner, interr	national organizations,	, and CSO support	for reading material.

¹⁴ UNICEF. USAID-UNICEF Sign Agreement to Boost Digital Education in the Eastern Caribbean (2022). https://www.unicef.org/easterncaribbean/stories/usaid-unicef-sign-agreement-boost-digital-educationeastern-caribbean

¹⁵ Caribbean Reads. <u>https://www.caribbeanreads.com/</u>

Organization	Activity/Materials					
OECS	Supported the ELP from 2015 to 2020 to improve the education systems in the OECS countries. The ELP contributed significantly to the supply of early-grade reading resources. An entire component of the project was committed to the provision of reading material that was procured internationally (28,000+ books for the region). Additionally, through the Write to Read initiative, approximately 40 culturally relevant early-grade readers were written, published, and supplied to participating member states, including Dominica. OECS also is working with USAID/UNICEF on digital learning support.	t) d				
UNICEF	Provided teaching materials and textbooks for students after the hurricane of 2017 with support from the European Union.Also funding Notesmaster to support teachers in developing lesson	n				
	plans, e-textbooks, and other reading material.					
The World Bank	Assisted with Education Reform, 2016 with leveled learning materia	als.				
UNESCO	Providing teacher training for digital content, including the "digital classroom." Currently training secondary-level teachers using the Blackboard platform. Developed e-books, including culturally relevation books specific for Dominica.					

A significant barrier to the supply of ERMs and locally produced supplementary reading materials is the costs for writers, publishers, and illustrators. Paper, printing, and ink are expensive and prohibit writers and illustrators from pricing their books at reasonable rates. As a result, booksellers are reluctant to purchase these books, and parents are unable to afford to buy books for the home.

To fill the gaps in ERMs, teachers have written their own stories and made copies of their own reading materials for use in the classroom. Teachers were trained under the ELP/USAID program to produce their own books using the Bloom Library website. Teachers developed their own grade-level decodable books. These were all copyrighted. There is potential for teachers to recreate their own books using the Bloom website. Teachers and principals have reported that these materials reflect the Dominica culture far better than many of the books donated by CSOs or the textbooks for the early-grade reading curriculum. Many of the teachers and principals interviewed requested that the books developed by teachers be replicated for use across the island.

Digital Materials by Development Partners and NGOs

Due to the pandemic and the increase in use of cell phones, the use of the Internet has significantly increased, according to focus group participants. Internet service is available in almost all communities on the island. (There are two providers on the island—FLOW and Digicel, the latter being the government-retained provider.) Residents may experience intermittent service depending on a number of factors, including a weak signal or the number of users on the system at one time.

In 2019, Digicel cooperated with the MoE to provide an online learning platform, Learning Hub, for primary and secondary student to access learning material and to support teachers.¹⁶

In Dominica, as a result of the COVID-19 pandemic, remote learning started in March 2020 and ended in April 2022. Thanks to support from the World Bank, tablets loaded with the Google Classroom software were provided to all students to assist with remote learning. Several websites and software, including YouTube and Facebook, were blocked by the Information and Communication Technology Unit to avoid misuse. However, this policy was revisited, and students and teachers were able to use these platforms to complement the instructional process. The tablet program was implemented in three phases: first to government-supported elementary schools; second to private primary schools; and finally, to secondary schools. Two thousand tablets also were provided to students through a COVID-19 Accelerated Grant by the Global Partnership for Education through the OECS Commission.

Teachers and other education officials have access to a wealth of supplementary material on the MoE Classroom Education site within the Management of School System Unit. They can post and share material with other teachers and with students in the Classroom using Gmail. The content includes curriculum guides, workbooks, supplementary materials (including phonics), and other information for teachers.

However, teachers did not receive tablets, and they used their own phones or laptops to teach remotely. In some cases, parents physically picked up assignments weekly for their children if they did not have access to the Internet. The government entered into an agreement with the Internet service provider to offer Internet service to qualifying parents who paid a monthly user fee of US\$10. The government subsidized this, providing US\$150 for each family. But many families were not able to access the service, according to focus group participants, because they had not heard about the service or were in remote areas without Internet.

Currently, teachers and students do not seem to use mobile devices in the classroom. According to principals, teachers, and parents, many of the devices are no longer usable.

USAID and UNICEF signed an agreement in April 2022 titled "Digital Education Capacity-Strengthening Initiative (DECI)." The agreement is expected to significantly boost digital education in five Eastern Caribbean countries over the next year. The US\$684,000 project is aimed at strengthening the capacity of Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines to deliver quality online education. This will include building the capacity of teachers to deliver and monitor online learning as well as ensuring that content is accessible to all.¹⁷

¹⁶ Dominica News Online. Digicel Launches Online 'Learning Hub' Platform (2019). https://dominicanewsonline.com/news/homepage/news/digicel-launches-online-learning-hubplatform/#:~:text=The%20Learning%20Hub%20is%20described,Digicel%20Dominica%2C%20Nikima%20 Royer%20Jno.

¹⁷ UNICEF. USAID-UNICEF Sign Agreement to Boost Digital Education in the Eastern Caribbean (2022). https://www.unicef.org/easterncaribbean/stories/usaid-unicef-sign-agreement-boost-digital-educationeastern-caribbean

GBA Findings: Title Development/Strengths

- Development partners work with NGOs or regional CSOs to develop culturally relevant ERMs.
- USAID and UNICEF are cooperating to significantly improve online TLMs and digital infrastructure.
- SCSOs and private regional book developers provide significant numbers of ERMs.

GBA Findings: Title Development/Weaknesses

- The government does not allocate funds for the development of ERMs.
- Teachers are not sufficiently supported in collaborating on writing culturally appropriate books for wider distribution.
- > Writers and illustrators do not have access to publishers.
- There is neither interest nor enough in the budget to purchase ERMs whether locally, from booksellers, or from publishers.

GBA Recommendations: Title Development

GBA recommends:

- That development partners work with the MoE and CSOs to support the production of local, culturally appropriate ERMs, written by local writers and teachers, that spark the interest of the readers.
- That the MoE research the process to produce local, culturally appropriate ERMs and streamline it to improve the production and publishing of local-content books.
- That development partners support continued training for teachers and educators to write reading guides and leveled and decodable books, including training to use the Bloom software and website.
- That development partners provide grants to the MoE to develop the capacity to produce more ERMs for schools and libraries.
- That development partners develop online ERMs that include early-grade reading material as well as educational games for pre-primary and primary levels.

SCA PHASE III: PUBLISHING AND PRINTING

Publishing generally encompasses the contracting of authors and all the steps of title development (writing, editing, illustrating, graphic design, and page makeup). It also includes the ownership, licensing, and marketing of intellectual property. In the case of a private sector publisher, publishing is a for-profit business. The MoE's curriculum staff are not engaged in textbook production. All textbooks are sourced from external sources. Education officers may prepare material that they share with teachers.

Printing refers to the manufacturing process, whereby the final PDF is transformed into a printed, bound book by means of ink, paper, and a printing press, and then the use of binding equipment. Sometimes private publishers have their own printing press, but more often, they contract out the printing. In the case of a state publisher, books may be printed by a state printer or tendered out to a private printer.

There are no publishing companies in the Commonwealth of Dominica. All textbooks and other ERMs or supplementary reading materials are published either in the U.K., United States, or within the region of Trinidad, Jamaica, or Barbados. The Curriculum, Measurement and Evaluation Unit (responsible for the Curriculum Unit) has the capacity only to undertake small printing jobs such as the printing of curriculum guides for schools. This unit does not print textbooks.

Printing is available on the island through two companies (Paramount Printers and Campbell Business Systems) as well as 12 other smaller print or computer shops. They offer printing of newspapers, receipts, reports, bulletins, and fliers. Some offer copying. They have a variety of machines used in printing (Kimori, Lithrome, Kord, and CTP for imagery). There are two newspapers on the island—the Sun and the New Chronicle, printed by Paramount Printers.

Textbook Publishing

Curriculum and Textbook Development

The MoE curriculum staff are responsible for development of all curricula for the primary level. The CSEC content provides the framework for the secondary level. The curricula are influenced by the standards developed by the OECS. Textbooks are purchased from education companies based outside of the Eastern Caribbean region.

Digital Materials

USAID and UNICEF have agreed to support several of the Eastern and Southern Caribbean islands to further develop their digital capacity to support the education sector. (See above, SCA Phase II: Title Development.)

- Flow, the island's telecommunications company, donated Amazon Fire tablets for schools.
- The Global Partnership for Education partnered with the OECS to provide a US\$3 million grant, which covers Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines, to support acquisition and distribution of devices for vulnerable children.
- The MoE offers a digital classroom through Moodle's platform.
- The Caribbean Development Bank is supporting a new country strategy, including support for digital access.
- UNESCO, Blackboard, the Caribbean Centre for Educational Planning, and the University of the West Indies, supported by the German government, launched the Education Response to COVID-19: Distance Learning and Teacher Training Strategies in the Caribbean SIDS in January 2021, with the aim to train 10,000 teachers in the Caribbean small-island development states in the use of online education tools, resources, and interactive platforms to effectively engage students through online learning.

Private Markets/International Sales

There is only one bookseller on the island of Dominica. Previously, there had been several bookstores (four) on the island. However, in the last several years, interest in reading books has waned and bookstores have closed. The MoE staff, teachers, principals, and CSOs, as well as the booksellers anecdotally report that the population's attention may have been diverted to reading on their cell phones. Students prefer to be on their tablets playing games.

The remaining bookseller, Jay's Limited, purchases textbooks for sale to the government as well as to parents. The store has several copies of the early-grade literacy program, *Language Tree*, on their shelves for parents to purchase. There is very little other early-grade reading material available.

Production of Books for Learners with Disabilities

There was no information about books for learners with disabilities. The policy of the government is to integrate students with disabilities into the mainstream classroom.

Printing and Binding

There are two printing companies on the island—Paramount and Campbell. These companies print material such as posters, receipts, and flyers. They have not been involved with printing books but may have the capacity to expand in the future if feasible, with an increase in market share and investment. Printing, shipping, paper, and ink are all expensive and, as a result, writers and illustrators cannot sell enough books to make a profit. For example, the price of paper, which is sourced out of Trinidad, recently increased by 25%.

GBA Findings: Publishing and Printing/Weaknesses

- > There are no government funds dedicated to ERMs.
- Printers have historically printed promotional material and not books. It's not clear they have the equipment for printing paperback books.

GBA Recommendations: Publishing and Printing

GBA recommends:

- That the MoE work with development partners and printers to print books developed by local writers and teachers, ensuring they have copyright protection.
- That the MoE provide access to and promotes online e-books from the Global Digital Library and the Bloom Library website in conjunction with current digital learning activities.
- That all the curriculum staff receive training in synchronizing the curriculum and textbook and ERMs book use, to ensure they can fulfill their mandates effectively.
- That development partner-funded projects that engage in providing either books or e-books to schools should initially involve private writers and illustrators in developing these materials. Engaging the private sector provides opportunities for the MoE to build long-term support and guarantees sustained availability of these materials even after development partner funding has ended.
- That the MoE organize professional development for teachers for them to take a full role in developing TLMs.
- That development partners plan to support capacity-building for digital materials, and overall development and use of digital materials.

SCA PHASE IV: PROCUREMENT AND PURCHASING

Procurement and purchasing is the acquisition of books and texts to support reading skills. In the education sector, the largest procurer of books is often the government, which will select vendors, establish payment terms, negotiate contracts for per-unit and print-run prices for reading materials, and pay vendors. Purchasing also may involve non-standard financing models, such as the use of advanced market commitments or purchasing consortia. Individual teachers, families, and students are also book consumers and may purchase books depending on their ability to pay for them.

In the Commonwealth of Dominica, most textbooks are purchased from U.K. companies. Publishers share fliers and promotional material with the booksellers who turn them over to the Curriculum Unit. When new texts come on the market, the Curriculum Unit and other committee members review texts to find one that closely aligns with the curriculum. Recommendations are made for changing textbooks at least every five years. The change in textbooks sometimes results in books being left on shelves that were purchased by the booksellers. The assistant chief education officer said, "we review textbooks based on changes in the CSEC syllabus and in consultation with booksellers and publishers. Books are reviewed by classroom teachers and curriculum officers and a recommendation made."

Booksellers are tasked with purchasing the stocks for both government schools and for sale in the bookstore. Several issues impinge on the quality and availability of ERMs and textbook resources. Shipping costs are high, and the price of books impacts the budget of the MoE. Textbooks that may be on the booklist may often not be adequately used during instruction. Teachers use multiple resource materials (worksheets, online resources) to complement content from curriculum guides. In some cases teachers just do not use the texts to complete all the exercises because they run out of time. Other factors could also play into this issue. Parents then complain that these textbooks are a waste of resources. Books also are phased out when they are no longer in print, increasing the cost to the MoE and parents, because the frequent review of textbooks results in revised editions being recommended to schools.

Government Procurement

The MoE receives a budget to finance the textbook scheme, which provides textbooks for all students. Parents, however, have the right to purchase from any vendor they choose, but purchasing from the bookseller is more expensive. The MoE receives the estimated number of students who will need to access the textbook scheme from each school through the district office. If parents are not able to pay for the books, the parents and school will establish a payment plan. Parents can also apply to the ETF for assistance or seek help from the credit union, local businesses, or agencies.

Texts are frequently produced by writers and are advertised to the bookseller by the publisher. Brochures about the textbooks are shared with the relevant subject curriculum officer as well as schools for feedback and possible piloting. Changes are based on reviews by MoE teams and other stakeholders. Books are reviewed between January and March, data are collected between March and June, and Jay's bookstore orders the books within two months. The bookseller can be left with several hundreds of unwanted textbooks if the curriculum staff change the textbook required for a subject without informing the bookseller.

Private Schools

Booksellers also provide textbooks, as well as some ERMs, for the few private schools.

GBA Findings: Procurement and Purchasing/Strengths

- Booksellers purchase books for the MoE education system, including for primary, secondary, and tertiary levels.
- The procurement plan is based on the textbook list approved by an established group of ministry staff.
- Procurement must adhere to the prescribed booklist.
- > The textbook scheme provides rental of textbooks to all island schools.
- Parents can purchase supplementary texts from bookstores or online.
- The MoE budget covers textbooks; curriculum guides are produced and provided by the Curriculum Unit.

GBA Findings: Procurement and Purchasing/Weaknesses

- Purchases of textbooks by the MoE textbook scheme can arrive months into the school year.
- MoE-approved textbooks are purchased by booksellers, but then may be replaced by other titles, leaving the booksellers with hundreds of unsellable texts.
- Data accuracy and transfer to the booksellers is often very late or is inaccurate in the number of textbooks required for students.

GBA Recommendations: Procurement and Purchasing

GBA recommends:

That the MoE establish a committee approach before the next school year, bringing the curriculum staff together to develop a plan for procurement and purchase that ensures accurate numbers and titles of textbooks.

SCA PHASE V: DISTRIBUTION MANAGEMENT

Distribution management encompasses the organization, oversight, and activities involved in moving books from the point of origination to the point where learners access them, and includes packaging, inventory, warehousing, and logistics.

Even when challenges related to title development and procurement have been addressed, books may not make it to the classrooms and the children they are intended to benefit. This can happen for a myriad of reasons, including challenging conditions of climate and geography, inadequate transportation infrastructure, unrealistic distribution budgets and timelines, and corruption in the supply chain.

Book Distribution on Dominica

The distribution of books by the MoE is first managed by the procurement officer. Each teacher provides the number of students in each class and the numbers are forwarded to the district level. Distribution practices are similar across the island. Schools establish distribution teams—groups of teachers—and a distribution schedule for who will distribute the books and receive the payment from parents. Funds collected are forwarded to the procurement officer.

Books returned by each student annually are counted and compared to the estimated number of students in each new class. The number of required textbooks is provided by the MoE to the bookseller, who in turn orders the textbooks from the publishers for the textbook scheme. Principals are responsible for picking up textbooks for their schools. Overstocked books are kept in a cupboard. Overstock may result from inaccurate numbers from the MoE.

Textbooks often are late in arriving on the island due to the delay by the MoE in sending the correct number needed. Rural distribution may also be late. The MoE will send both school meals and textbooks in the same truck. The textbook distribution operates out of the MoE building on the Bath Estate, where books are stored for distribution to schools. Books may temporarily get lost in transport. Schools may be 30 or 40 miles from the distribution office. Principals also will ask bus drivers or staff to pick up the books. There is no annual assessment by the MoE on how distribution is working. Principals will inform the MoE of issues if asked.

GBA Findings: Distribution Management/Strengths

- An email and paper system is used to collect and to transfer data to the relevant education division units.
- All classes and all students receive textbooks and workbooks under the textbook scheme, either by buying, renting, or having them funded under the ETF.

- Payment plans are in place for students who cannot pay for books or use the ETF.
- Textbooks are returned to the schools at the end of the year to be recycled to the next class, saving the MoE money.

GBA Findings: Distribution Management/Weaknesses

- Teachers report delayed delivery of textbooks, causing some students to receive textbooks late in the school year.
- Distribution is the responsibility of the Textbook Scheme Unit to ensure books reach the school. This is sometimes delayed due to transportation issues.
- Principals may be obliged to arrange transportation of books if delivery is delayed.
- There is no online data process that would improve the MoE's ability to order the right number of books and reduce unnecessary overstock of some books
- There is very little distribution of ERMs to libraries.

GBA Recommendations: Distribution Management

GBA recommends:

- That the MoE establish a digital data collection process to ensure on-time delivery of textbooks and reduce the impact on the budget by late submission of data.
- That the MoE work with development partners to increase the private contributions for the distribution of ERMs to libraries.

SCA PHASE VI: ACTIVE USE

Active use refers to the effective use of books by learners, their teachers, and children's family members and caregivers. Children's development of reading skills hinges on the effective use of books in classrooms and homes and is directly affected by an adequate provision of essential and supplemental reading materials.

Factors that impact book use, both in and outside of school, are therefore essential considerations in analyzing the book chain. Evidence has shown that teachers and families often do not know of the importance of reading practice and how to support it effectively. Further, unstable book supplies and penalties for book damage can lead teachers to restrict access to books, and delays in distribution impact the availability of the text for use by students.

On Dominica, active use is severely limited in communities, in homes, and in schools. Where once five community libraries existed, only three remain. School libraries, where they exist, are limited in acquisition of books due to budget restrictions.

Active Use in Schools

There is a recommended text for teachers in each grade from kindergarten through grade 4. However, teachers do not have sufficient additional ERMs to support them and their students. Some teachers only teach from the MoE-recommended textbook, *Language Tree*, while some use *Jolly Phonics* (not recommended by the MoE) to supplement their lessons on language arts. Other teachers take books from the school library where it exists; use storybooks to supplement their lessons; use YouTube or e-books; or have written their own stories.

Schools may have reading corners, libraries in the class, or bookshelves. Some schools have students take a book home once a week and return that book to talk about it in class.

Principals reported that some teachers restrict the use of books, fearing that they will not be replaced if they are lost or destroyed. Teachers and principals report that there are not enough early readers in school. They would like to have more big books, picture books, leveled and decodable readers, and books for boys. There is a lack of books that interest boys. Interviewed teachers suggested these topics: trucks, how to make things, animals, and adventure stories. There is dedicated time in the day for reading, usually 30 minutes. Teachers supplement this with stories that support the text for the day.

Teachers participate in professional development, but they and principals say younger teachers have not been taught how to teach reading. They also report that there is little follow-up with coaching or mentoring, although this was a program offered through the USAID ELP. In addition, none of the teachers specialize in teaching reading. Teachers reported that students entering kindergarten are not prepared for reading by preschools where letters and numbers are not taught. These students are then left behind as teachers work with the average students in their classes.

Active Use in Communities

The MoE staff, teachers, principals, and parents all reported that parents do not purchase ERMs for their children. According to participants, the culture of reading has fallen away, as parents spend time on Facebook or other websites, and children use YouTube or play games on their tablets. Books are expensive. The average book costs about ECD30. As noted above, the average monthly income for parents in government employment or the service industry is US\$1,500/month. Many parents work in the public and private sector as well as under the National Employment Programme as caregivers, roadside landscapers, and classroom assistants, or in agriculture. They have little discretionary money to spend on books. Very few parents (mostly teachers or professionals) have books at home for their children. Also, teachers and principals reported that parents do not value books or reading anymore.

Community libraries in Grand Bay and Castle Bruce were destroyed in the hurricane in 2017. As a result, libraries are not available in many communities now. The main library in Roseau has only reference books, with no books for children. Two other libraries remain in Marigot and Portsmouth. The librarian who was interviewed asked that development partners provide reading books, as well as games, book festivals, and other activities to spark the interest of the children to read books.

GBA Findings: Active Use/Strengths

- Teachers occasionally receive training.
- Teachers are requesting professional training in reading and materials to support reading for their classrooms.

GBA Findings: Active Use/Weaknesses

- S Children do not have books at home and are not read to at home.
- There is a lack of a reading culture on the island.
- There is a lack of a variety of materials (posters, reading cards, big books, and picture books) to spark reading in school, in libraries, or at home.
- There are very few books in French Creole or books of interest to boys.
- Teachers are insufficiently trained in early-grade reading and in the use of books.
- Community libraries lack reading material for children learning to read and those who are proficient readers.

GBA Recommendations: Active Use

GBA recommends:

- That development partners support more efforts to integrate reading materials (beyond textbooks) and activities into the classroom.
- That development partners and the MoE have reading specialists in districts to support professional development for teachers in reading.
- That development partners support low-cost printing and distribution of readers developed by teachers, students, and other local writers and provide these free of cost to students.
- That the GBA or development partners offer training to parents, and develop a social media campaign, book festivals, and other incentives to encourage parents to have books and to read to children at home.
- That the GBA and/or development partners offer to build and support libraries, including mobile libraries, and train librarians to resource the libraries to encourage children and parents to visit for national book days, games, plays, art programs, etc.
- That development partners support the MoE in training teachers and students in how to use and manage libraries.

CONCLUSION

The Commonwealth of Dominica has a well-established, comprehensive education system that guarantees all students ages 5 to 16 have the opportunity to attend school through the secondary level. The government has also provided the textbook scheme to ensure all children on the island have access to textbooks and workbooks. However, the MoE has not produced ERMs to support the learning process at the same level. The MoE's foundation of textbook support provides the opportunity for the government to continue to build their education resources to continue to give all children the best possible future. With the support from development partners—the World Bank, USAID, UNICEF, UNESCO, CSOs, NGOs, and the private sector—Dominica can expand the wealth of ERMs both from local writers and illustrators as well as increase the digital material that can support all children from pre-primary through the tertiary level.

ANNEX 1: FOCUS GROUPS AND INDIVIDUAL INTERVIEWS: (FOCUS GROUPS IN PERSON/ZOOM)

Focus groups:

Focus	Focus	Focus	Focus	Focus	Focus	Focus
Group 1:	Group 2:	Group 3:	Group 4:	Group 5:	Group 6:	Group 7:
MoE	principals	teachers	parents	UNESCO	MoE	parents
Chief Education Officer (Ag.) Senior Planning Officer Senior Education Officer District Officer Coordinator (2) Teacher Learning Support Advisor	Principal Northern Dist. (3) Principal Western Dist. (2) Principal Southern Dist. (2)	Roosevelt Douglas Grade 2 Wills Stevens Grade 2 Bense Primary Grade K Castle Bruce Primary Grade K Massacre/ Canefield Primary Grade 4 Goodwill Primary Grade K Newtown Primary Grade K	ESTB office staff EMIS officer Special Education Teacher Junior Clerk	UNESCO Secretary General MoE Permanent Secretary	Measurement Officer Curriculum Officer, Language Arts	Interview by Zoom 8 parents— Principal Teacher Wesley Primary school

Interviews in person:

Interview 1	Interview 2	Interview 3	Interview 4	Interview 5
CEO, Managing Director, Jay's Bookstore Deputy Manager	Local Representative, Hands Across the Sea	Government Document Centre, Chief Librarian	Paramount Printers, Admin. Assistant	Caribbean Reads, Director

ANNEX 2: MPTLM

The first step in a textbook strategy is to decide what the MPTLM should be to deliver the curriculum, including accurate quantification and forecasting of TLMs in line with their projected lifespans.

- S Components: TLMs by category–examples include the following:
 - » Textbook
 - » Teacher guide
 - >> E-textbook
 - >> Learning object
 - >> DVD
 - » CD
 - >> Internet
 - >> Intranet
 - >> Reading book
 - >> Reference book
 - >> Nonfiction book
- > TLMs by source—examples include the following:
 - » Existing product available in international and national languages for immediate purchase
 - » Existing product available for use or purchase in another language
 - » Existing product that requires some change to make it suitable for use in the country
 - » Materials that need to be developed specifically for the national curriculum

> TLMs procurement strategy—examples include the following:

- >> Purchases
- >> Reprint rights
- >> Translation
- >> Adaptation
- >> Translation and adaptation
- >> Origination in-house
- » Origination by competitive bid

The Concept of the MPTLM

Ministries of education should establish an agreed-upon MPTLM by the grade level needed to deliver the specified curriculum learning objectives:

- The MPTLM is qualified with quantities (one per learner, five per class, one per teacher, etc.), assumed life expectancy, and assumed loss and damage rates.
- > The MPTLM is specified by grade level and by subject.
- > The MPTLM must be affordable to the government and parents, and it must be sustainable.

Establishing an MPTLM is a *step-by-step* process that can be conducted within a Ministry of Education with some external support and assistance:

- 1. Curriculum and syllabus designers' specifications of their required materials for teachers, and learners
- 2. Analysis of cost implications of recommendations and comparison with available financial resources
- **3.** Pilot testing and/or micro-testing with evaluations focused on usability, impact on outcomes, time on task, etc.
- 4. Classroom observations: what teachers and students do in class, what they enjoy
- 5. Discussions with teachers and learners
- 6. Revised list of TLMs
- 7. Second cost analysis and budget comparison
- 8. Cost reduction considerations (both cash flow and amortized cost)
- 9. Final MPLTM

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