

COUNTRY PROFILE

Landscape Analysis for the Accessible Digital Textbooks Implementation

Jamaica

December 2023

Introduction

This document was developed within the framework of the UNICEF Accessible Digital Textbooks for All (ADT) initiative, with the aim of providing an overview of the main contextual aspects affecting the implementation of this new learning tool in Jamaica. This country profile presents an analysis of the inclusive and digital education environment, addressing a range of relevant topics for the development, implementation, and sustainability of accessible digital textbooks.

The ADT initiative in Jamaica is a collaborative effort between the Ministry of Education and Youth (MOEY), UNICEF, and the technology partner BookFusion. The information shared in this document was collected through a series of questionnaires developed by UNICEF, which were answered with the support of the MOEY and the UNICEF country office, along with additional documentation review.

This country profile is organized into five main sections: (1) Regulation and inclusive education overview, (2) Teacher professional development and training in inclusive education, (3) Experience with accessible learning materials, (4) Information and Communications Technology (ICT), infrastructure and digital devices for learning and (5) Strengths, Weaknesses, Opportunities, and Threats analysis (SWOT) for the implementation of accessible digital textbooks.

Section 1: Regulation and inclusive education overview

Significant milestones in Jamaica's regulation have been made in the past two decades to support the inclusion of children with disabilities in education, contributing to a shift in its education system.

Regulation on disability, special and inclusive education

The first key milestones towards inclusion of children with disabilities dates to 2007 when Jamaica ratified the Convention on the Rights of Persons with Disabilities, an important global agreement that aims to protect and guarantee the rights of persons with disabilities. Since then, several domestic regulations to address disability-related concerns have been implemented. The main regulation governing these matters in the country is the Disabilities Act.

The Disabilities Act, launched in 2014 and effective in 2022, aims to safeguard and enhance the well-being of Jamaicans with disabilities. It prohibits any educational or training institution from denying enrolment or attendance to individuals because of their disability. Its enforcement falls under the responsibility of the Jamaica Council for Persons with Disabilities (JCPD), which provides policy guidance as well as services to promote the independence and inclusion of persons with disabilities.

The Disabilities Act brings the government closer to guaranteeing fundamental rights, including education for all children in Jamaica. It also indicates that educational institutions should be prepared to receive children with disabilities by providing them with the necessary support, enabling access to the premises in the least restrictive and most suitable environment adapted to their needs. By doing so, the regulation aims to ensure that children with disabilities benefit from educational services as children without disabilities do.

However, registering and certifying persons with disabilities in Jamaica remains challenging. Although the JCPD maintains a Confidential Register of Persons with Disabilities, the current number of registered individuals represents merely a small fraction of the total population of persons with disabilities. According to [UNICEF \(2018\)](#), only 4 per cent of the estimated 785,000 individuals with

disabilities in Jamaica are included in a database as they prefer to remain invisible, and 5,000 of the persons registered would be children. As of mid-March 2022, the Confidential Register of Persons with Disabilities had only approximately 13,600 registered individuals ([Hunter, 2022](#)).

Nevertheless, Jamaica actively pursues access to quality education for all learners. For example, the National Education Strategic Plan of 2011 – 2020 and the National Standards Curriculum Framework of 2016 (NSCF) positioned inclusivity as a core value. The NSCF was complemented in 2017 by the Curriculum for Students with Moderate to Profound Intellectual Disabilities, supported by UNICEF, to provide teachers with more student-centred tools. Another significant milestone took place in 2021 with the introduction of sign language into the NSCF.

“An inclusive classroom provides the support that each student needs to access the curriculum [...] Applying the principles of Universal Design for Learning (UDL) is a way of developing and implementing the curriculum that allows all students, including students with special education needs, to have equitable access to the curriculum” ([MOEY, 2020](#)).

These efforts, summarized in Figure 1, could be reinforced through the Special Education Policy, which has been pending approval since 2019. This policy, actively advocated by UNICEF, aims to promote a model where children with and without disabilities learn together in the same classroom, provided with the necessary support, rather than in separate settings ([UNESCO, 2021](#)). Its implementation would be key for shifting from a segregated or integrated model where children with disabilities are placed in separate classes within the school premises towards an inclusive one where all children learn together in the same classroom. To follow the progress towards inclusion in Jamaica, the MOEY, UNICEF Jamaica and UNICEF LACRO have carried out the WELBIN Index in most Jamaican schools. In this index, inclusion is one of the critical dimensions.

School organization: inclusive and segregated

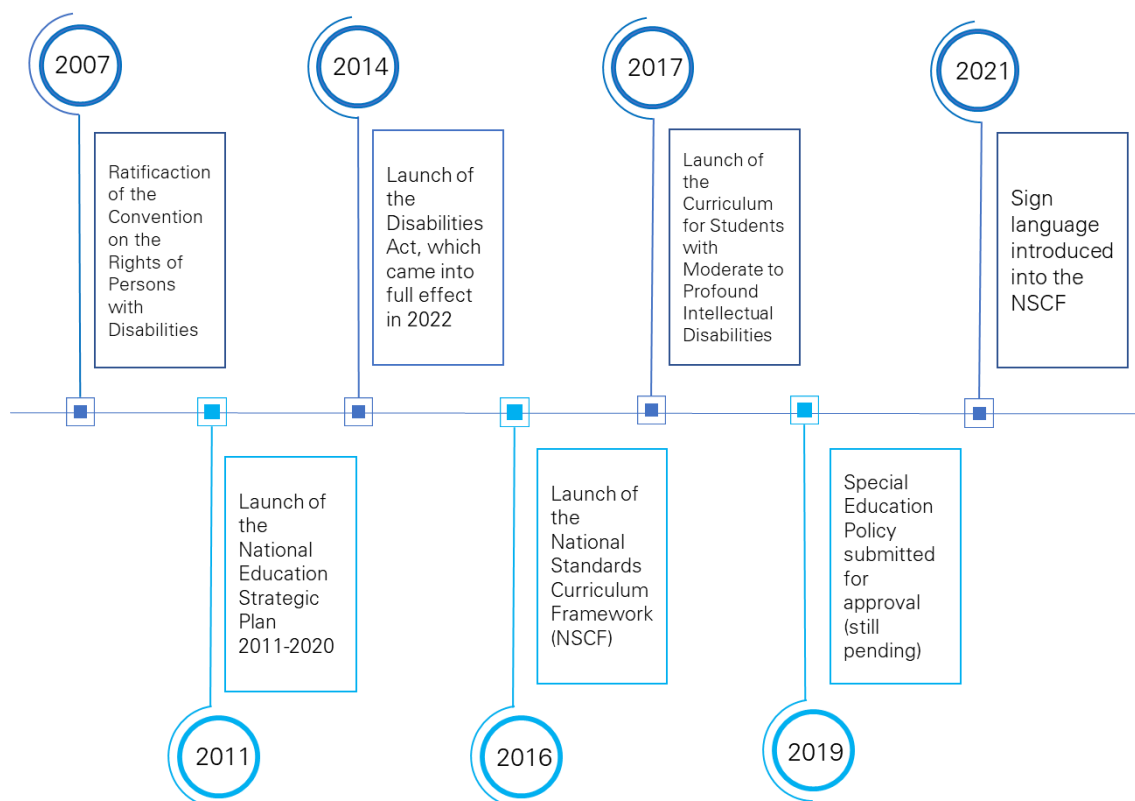
Despite the advocacy of the Special Education Policy for understanding 'inclusion' as a model where children with and without disabilities learn together in the same classroom, the term continues to be used to describe an integration model where special education units are hosted in regular schools ([UNESCO, 2021](#)).

In Jamaica, accommodating children with invisible and non-severe disabilities is generally easier than accommodating those with severe disabilities ([UNESCO, 2020](#)). As a result, special education units in regular schools typically host children with motor disabilities and learning disabilities, while children with visual, hearing and intellectual disabilities are often enrolled in special schools.

It is important to note that Jamaica's school organization still includes a significant number of special schools that offer specialized educational services to children with disabilities. In 2019, more than 10,000 children with disabilities were enrolled in elementary to secondary level schools, both special and regular ([UNESCO, 2020](#)). The main challenges that regular schools encounter when accommodating children with disabilities in Jamaica include non-accessible infrastructure, non-accessible learning and examination materials, and untrained teachers ([Morris and Phil, 2011](#)). Even when progress has been made addressing these challenges, there is still much more to be done to shift towards an inclusive system.

In terms of financing, investment in inclusive education is still limited. In 2020, special education accounted for 1 per cent of the total education expenditure, with 45 per cent allocated to schools accommodating children with learning disabilities and 21 per cent directed towards schools catering to children with hearing disabilities ([UNICEF and The World Bank, 2021](#)).

Figure 1: Milestones in disability-inclusive education initiatives in Jamaica



Section 2: Teacher professional development and training in inclusive education

Jamaica's education policies continuously strive to improve teachers' skills in inclusive education and the use of technology in the classroom.

As regulations for inclusive education have advanced, Jamaica has also improved and promoted its training opportunities for teachers outside special education to develop competencies in supporting students with disabilities.

The Jamaica Teaching Council (JTC) is one of the main institutions supporting training and facilitating the retention of qualified teachers by offering courses to improve their teaching strategies. Furthermore, many universities and colleges across the country currently include a mandatory special education course in their programs. Mico University and Sam Sharpe Teachers' College offer undergraduate and graduate programmes in special education. The National College on Education Leadership also provides a special education course designed for school leaders ([Spencer-Ernandez and Edwards-Kerr, 2017](#)).

While these courses refer to special education, there has also been a shift towards promoting training in inclusive education rather than special education. Examples of this progress include the teacher training provided by the MOEY to 29 primary schools in 2020 ([UNESCO, 2021](#)), as well as the establishment of the master's degree programme in inclusive special education at the University of the

West Indies since the academic year 2012-2013. In addition, an online, free to access, asynchronous inclusive education in early childhood course has also been available since 2021 and a course for school leaders on inclusion has also been made available by the National Council on Education over the last few years.

Despite all these efforts, it is important to note that the transition to more inclusive schools requires quality ongoing training and supervision on inclusive education to all in-service teachers, rather than solely focusing on special education for segregated schools. Even among special education teachers, not all of them have received proper training. The most recent available statistics from the MOEY (2013) indicate that 82 per cent of the 310 special education teachers received training in the subject. Data from the Baseline Survey of Teacher Training in Special Education in the Caribbean (2017) indicates that teachers do not feel prepared to work with children with hearing, language, or physical disabilities, highlighting the need for more teacher training in inclusive education, not only in Jamaica, but in the Caribbean region ([Spencer-Ernandez and Edwards-Kerr, 2017](#)).

Inclusive education training, particularly when emphasizing the use of digital accessible material, requires a dedicated component to enhance teachers' digital skills. In this sense, the JTC offers training on how to integrate technology in the classroom through different courses. Also, certain programmes in the country provide digital devices and facilitate teacher training to incorporate technology into the learning process. Appropriate use of digital technologies improves access to resources and helps foster an inclusive environment, enabling all children, including those with disabilities, to learn together.

Section 3: Experience with accessible learning materials

A few learning materials in Jamaica started offering audio voice-over and interactivity but are not fully accessible.

Box 1: How does the textbook production chain in Jamaica work?

In Jamaica, the MOEY is responsible for producing learning materials that are distributed to public schools nationwide. The production process involves a call for content, where publishers submit materials aligned with the curriculum. These submissions then go through a review phase to select the content that will be produced by publishers. The Media Services Unit, within the MOEY, is responsible for the development of learning materials in print, audio and audio-visual formats. Its Utilization Section, along with educators and experts, evaluates all educational materials, including those for the National Textbook Programme.

Digital learning material availability and accessible formats

To facilitate content adaptation into accessible formats for persons who are print disabled, deaf or hard of hearing, Jamaica enacted the Copyright (Amendment) Act in 2015, which cover eligible books to be adapted. However, without further domestic regulation or ratification of the Marrakesh Treaty, which sets limitations and exceptions to traditional copyright law when producing and internationally transferring accessible books for people with blindness or visual impairment, getting access to accessible educational content in Jamaica remains challenging. The lack of international harmonization restricts cross-border exchange of accessible materials, resulting in limited access to foreign content and a reduced supply of accessible resources for teaching and learning.

Production of Accessible Digital Textbooks

Accessible digital learning materials can be a powerful tool to enhance the learning of diverse learners, including those with disabilities, through the provision of content in different accessible formats. Since 2016 the MOEY has collaborated with BookFusion to provide digital learning materials for the school-aged children. These digital books incorporate voice-over features but lacked full accessibility.

As part of the ADT initiative, Jamaica has made progress in the development of accessible digital learning materials. Since 2021, a set of digital books for elementary and primary level education has been developed and made available in the BookFusion library. These digital storybooks were zero-rated in their standard digital version during COVID-19 school closures to make them available for all students. The storybooks with activities '[My Brain is my Boss](#)' and '[Harriett Hen and the Hawk](#)', which focus on science and math for grades 1 and 2, were the first prototypes developed and tested with children with and without disabilities in 2022. These books created in ePub3 format represent one of the first steps to bridge the existing gap in the availability of accessible learning resources. They incorporate features such as navigation, subtitles, sign language videos, image description and customizable display settings into standard digital books, enabling children with different access needs and learning preferences to engage with content.

The production of these prototypes was carried out by BookFusion in collaboration with the Media Services and Special Education Unit of the MOEY and under the guidance and supervision of UNICEF LACRO. Together, these units worked to ensure the creation of accessible educational content following Universal Design for Learning principles. The Media Services Unit was responsible for creating content in various formats such as print, audio, and video. The Special Education Unit oversaw and validated the quality of the content produced. Additionally, Organizations of Persons with Disabilities and children with disabilities provided feedback and validation to the production team, which consists of curriculum team members, special education teachers, graphic designers, and authors.

Currently, Jamaica is completing a series of 12 storybooks for primary grades 1, 2, and 3. The first set of accessible storybooks was initially produced in 2021 and is now available on the MOEY and BookFusion platforms. More books will soon become available, with plans to upload them to other platforms used by students. This effort aims to make these learning tools more widely available to the education community, promoting and maximizing their usage.

Section 4: ICT infrastructure and digital devices for learning

Jamaica's government has prioritized improving access to digital devices and connectivity for school-age children in public schools to facilitate the use of digital content.

Access to accessible digital content for all children requires the availability of digital devices and connectivity in schools. In Jamaica, the government and its partners have implemented several programmes to improve access to both devices and connectivity for students.

The Tablets in Schools programme, launched in 2014 and funded by the Universal Service Fund (USF), is implemented by e-Learning, a digital learning initiative that facilitates web-based and computer-based education. With technical support from both the fund and the MOEY, its aim is to provide tablets to school-aged population. Overall, 150,000 students were provided with digital devices over recent years ([MOEY, 2023](#)). However, while most secondary schools received digital devices by the MOEY, primary schools still face challenges in this regard. To address this issue, some primary schools have

implemented the Bring Your Own Device, which allows students to bring to school their own device for educational purposes.

The COVID-19 pandemic also led to the introduction of innovative programmes such as Own Your Own Device, a government initiative that provided e-vouchers to parents or guardians to purchase laptops or tablets for around 36,000 students ([Linton, 2020](#)). There are also initiatives aimed at supporting teachers. Tablets for Teachers, for example, is a collaboration between the government and Jamaica's Teachers' Association, which facilitated the procurement of 26,000 tablets for educators, contributing to the creation of technology-driven lessons ([Vaz, 2021](#)). Also, UNICEF Jamaica leveraged partnerships to provide tablets and free internet access for one year for 200 special needs students identified by the MOEY Special Education Unit.

Although accessibility remains a challenge, school devices typically come preloaded with the MOEY's learning resources and assistive apps. Notably, there are screen readers installed on desktops and open-source assistive apps downloaded on tablets. Ongoing efforts in this direction aim to enhance access to technology and digital learning materials in the classroom for children with and without disabilities, benefiting all students.

Internet connectivity is crucial for the effective integration of technology in the classroom. While 74 per cent of schools in Jamaica have access to connectivity, reliability is not consistent in both urban and rural areas ([MOEY, 2022](#)), with the latter accounting for 40 per cent of all the public schools ([Patterson, 2021](#)). The government, along with the USF and other partners, have implemented programmes to improve connectivity nationwide ([USF, 2023](#)). These programmes target both communities and schools, although specific details regarding coverage within schools are not publicly available yet.

Box 2: Programmes to improve connectivity across Jamaica

Community Wi-Fi Programme by USF was designed to provide Wi-Fi internet access in 189 communities. By May 2022, 125 community access Wi-Fi sites had been connected.

Universal Service Fund Connect by USF establishes free Wi-Fi in parks, town centres and high traffic stretches of roadway across the country.

Island-wide Broadband by USF since 2011 aims to link schools, hospitals, libraries, and police stations while providing these locations with internet access.

Community Access Points by USF establishes computer labs in underserved and unserved communities in collaboration with community organizations. By 2022, more than 300 communities had been served.

The Three Tier Plan groups public schools into three "tiers" based on their enrolment and bandwidth requirements so service providers can create private data network for each one.

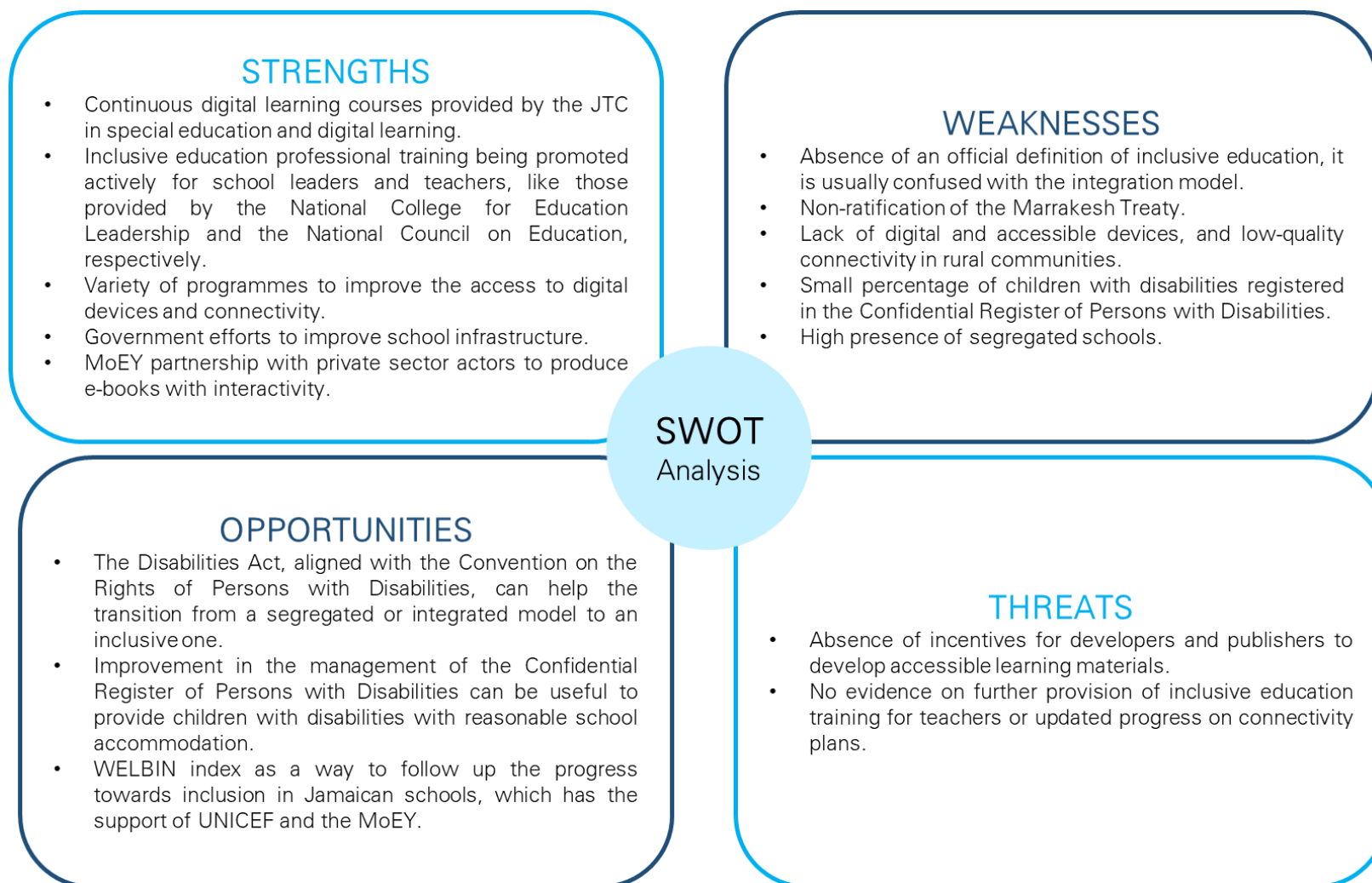
In terms of costs, compared to other countries in Central America and the Caribbean, Jamaica's internet tariff (USD 1.21 per GB) is lower than the regional average (USD 3.45 per GB) ([Cable.co.uk, 2022](#)). However, the affordability of supplementary data plans for accessing educational platforms continues to pose a challenge for many. In response to this issue, efforts were made during the COVID-19 pandemic to provide teachers and students with cost-effective data plans. Additionally, some telecommunications companies, such as Digicel, offered zero-rated access to over 100 educational websites.

At the end of 2022, there were no further updates on the continuation of special data plans for teachers and students, or considerable progress in connectivity initiatives. Nevertheless, the government recognized the need to address this barrier as educational technology not only improves access but also promotes learner engagement, facilitates better learning outcomes, and fosters autonomy through supportive measures ([Lynch et al., 2021](#)).

Section 5: Strengths and challenges identified for the implementation of Accessible Digital Textbooks

The figure below provides a SWOT analysis of the country profile, highlighting its strengths, weaknesses, opportunities, and threats. This type of analysis offers valuable insights by recognizing strengths like accessible infrastructure and learning materials and addressing challenges such as teacher training gaps and connectivity disparities enables tailored solutions for inclusion.

Figure 2: SWOT analysis for the ADT initiative implementation in Jamaica



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