

HELPDESK RESPONSE 47

Mapping and Analysing Digital Learning Platforms in Latin America and the Caribbean

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Notes

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About the EdTech Hub Helpdesk

The Helpdesk is the Hub's rapid response service, available to FCDO advisers and World Bank staff in 70 low- and lower-middle-income countries (LMICs) and UNICEF regional and country offices. It delivers just-in-time services to support education technology planning and decision-making. We respond to most requests in 1–15 business days. Given the rapid nature of requests, we aim to produce comprehensive and evidence-based quality outputs while acknowledging that our work is by no means exhaustive. For more information, please visit <https://edtechhub.org/edtech-hub-helpdesk/>.

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Abbreviations and acronyms

LACRO	UNICEF Latin America and Caribbean Regional Office
GDL	Global digital library
GEM	Global Education Monitoring Report
ICT	Information and communications technology
LAC	Latin America and the Caribbean
OECS	Organisation of Eastern Caribbean States
SEL	Social and emotional learning
SEND	Special educational needs and disabilities
SES	Socio-economic status
STEM	Science, technology, engineering and maths
TVET	Technical and vocational education and training

1. Purpose of this document

This document was produced in response to a request from the UNICEF Latin America and Caribbean Regional Office (LACRO) submitted to the EdTech Hub Helpdesk in October 2021. The UNICEF team requested a curated list of digital learning platforms¹ in the Latin America and Caribbean (LAC)² region and an analysis of a shortlisted series of platforms intending to explore their potential for at-scale implementation and impact.

[Section 2](#) provides an overview of educational levels and current challenges in the LAC region, followed by an exploration of regional EdTech use. [Section 3](#) presents the methodology, including a discussion of inclusion criteria for mapping digital learning platforms and the framework used to analyse them. [Section 4](#) presents a long list of platforms discovered in the mapping process. [Section 5](#) presents a series of case studies that apply the framework introduced in [Section 3](#).

This report does not aim to cover every leading and innovative digital learning platform in the LAC region. Rather, it presents a list of promising platforms and discusses their design and implementation to explore their relevance and potential for at-scale impact.

¹ 'Digital learning platforms' refer to EdTech tools, interventions, and platforms that are based on using technology for educational purposes.

² The acronym 'LAC' refers to 'Latin America and the Caribbean' region, which encompasses all 36 countries from the Bahamas and Mexico to Argentina.

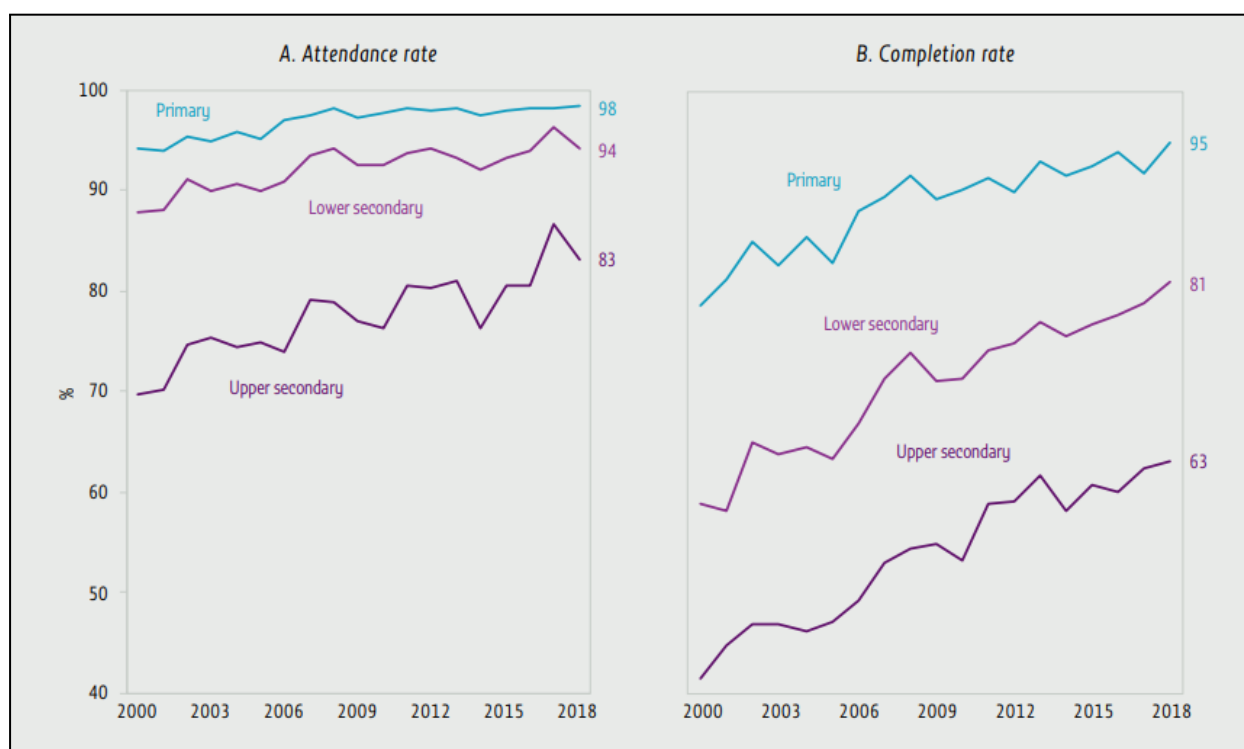
2. Digital learning in Latin America and the Caribbean

In this section, we provide an overview of educational levels and current challenges in the LAC region, followed by an exploration of regional digital learning use.

2.1. An overview of education in Latin America and the Caribbean during the Covid-19 pandemic

Education is a key component of sustainable development and a central instrument to promote inclusion and contribute to the acceleration of economic growth, equality, and participation in society. Thirty per cent of the LAC region's total population is under 18; education is, therefore, a promising investment in this region ([UNICEF, 2020](#)). According to a Global Education Monitoring Report (GEM), the region has made progress towards universal attendance and completion among primary and lower secondary school-aged children and adolescents ([GEM, 2020](#)). [Figure 1](#) below highlights this progress (between 2000 and 2018) by illustrating an increase in attendance among upper secondary school-age youth from 70% in 2000 to 83% in 2018 and an increase in completion rates from 79% to 95% in primary, and from 42% to 63% in upper secondary education.

Figure 1: Attendance and completion rates in the LAC region among children and adolescents of primary and secondary school age between 2000 and 2018.
Source: [↑GEM, 2020](#).



Despite this progress, in the LAC region, as in many parts of the world, multiple and interconnected local, regional, and national challenges impact the extent to which children and adolescents can access educational opportunities. These challenges include economic inequality, social exclusion and disparities, structural inequalities, discrimination, poverty, malnutrition, political instability, violence and adolescent pregnancy ([↑UNICEF, 2020](#)). An overview of different factors related to education quality and access in the LAC region is presented in [Figure 2](#) below.

Figure 2. Overview of factors related to education quality and access

	The total number of out-of-school children in LAC had declined until the onset of the Covid-19 pandemic. In 2019, about 1.6 million children were not attending school, in contrast to about 3 million out-of-school children in 2007 and 3.5 million in 1999 (↑UNESCO, 2010; ↑The World Bank, 2020).
	Due to the Covid-19 pandemic, an estimated 3.1 million children and adolescents in LAC may never return to school. The probability of children finishing secondary school in 18 Latin American countries has fallen from 56% to 42% (↑Seusan & Maradiegue, 2021; ↑Neidhöfer et al., 2021).



In 16 LAC countries, an average of 40% of Grade 3 students and 60% of Grade 6 students had not acquired basic competencies in literacy and numeracy as of 2019 ([↑UNESCO, 2020](#)).



As of 2020, approximately 63% of children and adolescents completed secondary school. However, in 20 LAC countries, the richest 20% are five times as likely as the poorest 20% to achieve this. In Guatemala, 5% of the children with low socio-economic status (SES) finish secondary school, compared with 74% of children with high SES in the country ([↑GEM, 2020](#)).

2.2. Digital learning in Latin America and the Caribbean

Digital learning is often positioned as a solution that enables more children to access impactful, contextualised, and continuous education while also addressing educational challenges related to socio-economic and structural inequality. While EdTech can support educational progress and equity ([↑UNESCO & Kozma, 2011](#); [↑The World Bank, 2016](#)), conversely, it can also cause unintentional harm and inequity ([↑Rubagiza et al., 2011](#); [↑Selwyn, 2016](#); [↑Wagner & Lubin, 2018](#)). Importantly, to achieve sustainable development, digital learning and EdTech should not be seen as a ‘silver bullet’ and their complexities, as well as the contexts of implementation, should be analysed ([↑Hennessy et al., 2021](#)). To achieve sustained impact and improve equity, more needs to be understood about how to capitalise best on digital learning’s potential to deliver at-scale, cost-effective, and egalitarian educational opportunities to young learners in the LAC region.

Despite an overall encouraging uptake of digital learning in LAC, education systems still face difficulties shaped by socio-economic and historical disparities; for example, substantial digital divides limit access to and usage of digital learning platforms (including virtual / remote learning) ([↑Mitchell, 2020](#)). Disparities continue shaping how LAC communities and individuals can access, use, and benefit from digital learning. Digital divides, and EdTech-related inequities in LAC are experienced at a range of geographic and systematic levels, including variable access to technological resources between countries, communities, and even between individual classrooms or teachers ([↑Hinostroza, 2017](#); [↑OECD, 2016](#)). This inequitable access to technologies (internet connections, digital

devices, and opportunities to cultivate digital literacy) is often determined by economic, historical, and geographic constraints ([↑Hinojosa, 2017](#)).

2.3. Use of digital learning during Covid-19-related closures

More recently, the Covid-19 pandemic and subsequent school closures and education disruptions dramatically impacted the LAC digital learning landscape. In March 2020, the Covid-19 pandemic left 95% of students in LAC (>154 million) out of school and eventually led to the most significant education disruption in regional history ([↑UNICEF, 2020](#); [↑UNICEF, 2021](#)). The full regional impacts of these interruptions are not yet fully understood, but they have undoubtedly contributed to massive learning loss and stagnation in the progression towards desired learning outcomes ([↑World Bank, 2020](#)). This education disruption underscored, and in some instances aggravated, regional digital divides and jeopardised access to EdTech and remote learning opportunities ([↑Moloney, 2020](#); [↑Mitchell, 2020](#)). Although many national and regional governments prioritised increasing connectivity, nearly 40% of students (~37 million) could not access remote distance learning platforms or tools during school closures ([↑Mitchell, 2020](#); [↑The World Bank, 2020](#); [↑UNICEF, 2020](#)).

Importantly, Covid-19-related learning disruptions also highlighted significant characteristics of the LAC digital learning ecosystem, especially those which impacted accessibility. [Figure 3](#) lists some of the most significant issues highlighted during Covid-19-related closures.

Figure 3. *Aspects of the LAC EdTech ecosystem impacting accessibility*

	Despite an encouraging increase in LAC internet access (↑Gainous et al., 2016; ↑HolonIQ, 2020), many communities still have concerningly limited connectivity, which only reaches 40–50% of rural community members in countries with high internet connectivity rates and 10% in countries with lower rates of connectivity (↑Núñez et al., 2020). This limited connectivity even more deeply affects young people and students in LAC (↑Núñez et al., 2020).
	Much of Latin America and the Caribbean benefit from access to radios, with ownership rates over 75% in many countries (↑Dreesen et al., 2020). These ownership rates demonstrate radio's potential as a tech-based learning modality that is more accessible to a greater proportion of LAC populations, including remote and hard-to-reach communities.



About 77 million rural inhabitants in LAC have no access to high-quality internet ([↑IICA, 2020](#)). However, in some countries, such as Chile, the Dominican Republic, and Costa Rica, mobile broadband is more accessible, with over 90 subscriptions per 100 people. The majority of LAC countries report around 50 to 77 mobile broadband subscriptions per 100 people — and 20 per 100 people in Cuba, Nicaragua, and Guatemala ([↑de Feydeau et al., 2021](#)). In Mexico, during Covid-19-related school closures, 65% of students accessed distance learning materials primarily via mobile and smartphones ([↑INEGI, 2021](#)).



Throughout Latin America, tech-enabled networking and social organising platforms have proven effective at facilitating and coordinating formal and non-formal learning experiences. Technology-based platforms have enabled educators to communicate and organise across the content, disseminate resources and teaching materials, and organise distance learning strategies ([↑Romero-Hall, 2021](#)). Use of these platforms has also been proven to increase digital literacy among students ([↑Romero-Hall, 2021](#)).

Covid-19 also prompted major innovation and investment in the LAC EdTech market ([↑Lavca, 2021](#); [↑HolonIQ, 2020](#)). While Mexico and Brazil continue to lead the region in digital learning, Covid-19-induced expansion has diversified the geography of EdTech innovators through major growth in Argentina, Colombia, Chile, and Peru ([↑HolonIQ, 2020](#)). While the EdTech market remains mostly focused on K–12 education, new trends suggest an increased focus on upskilling / workforce development and education management ([↑HolonIQ, 2020](#)).

3. Methodology

The methodology for the mapping exercise involved defining and applying the four steps below, which are discussed in turn in the subsections that follow:

1. Definition of the inclusion criteria and scope for mapping
2. Definition of the categories of information and clusters included in the mapping
3. Selection of a shortlist of digital learning platforms
4. Development of a research framework to analyse a list of selected digital learning platforms.

This methodology was developed through an iterative process to refine and improve these steps collaboratively. Aligned with EdTech Hub's Helpdesk approach, this iterative process helped to ensure that the development of a list of digital learning platforms was relevant to the work of UNICEF LACRO. It also facilitated inputs to consider and address challenges and opportunities that the research team faced when selecting and mapping digital learning platforms.

3.1. Inclusion criteria and scope

Digital learning platforms were included in the initial mapping based on the following inclusion criteria:

1. Platform's objective is to improve learning outcomes for children, with a focus on primary and secondary education.
2. Implemented in one or more LAC countries.
3. The platform uses some form of educational technology; it may also include non-tech or non-digital elements, such as the use of paper-based materials or face-to-face training.
4. Particular attention is given to platforms that have been scaled; that have included monitoring and education analysis; that include a partnership with governments; and that prioritise equity to reach marginalised and / or hard-to-reach learners.

The aim was to map up to 50 platforms implemented in the LAC region. As a result, this list is not meant as a comprehensive inventory of all digital learning platforms in the region. The overall mapping aimed to balance a

diversity of countries, contexts, and languages relevant to the region without including platforms developed in every country in the region.

3.2. Categories of information

A range of information was captured for each digital learning platform. The categories of information are presented in [Figure 4](#) below and were used as headers in the final Excel sheet that presents all the platforms mapped. The combination of information in these categories is intended to provide UNICEF and readers with a summary of each platform's educational and financial model, insights about implementation, impact, and potential for scale.

Figure 4: Overview of categories of information included in mapping

OVERVIEW - Name - Institutions involved - Government support? - Funding source - Education level / age - Description - Overall objective / category - Intended learning outcomes - Creation date and end date - Number of users to date (or approximate indication of scale)	INCLUSION & ACCESSIBILITY - Description of intended users - Accessible to and / or designed to reach marginalised groups? If yes, which ones? - Cost for users	PERSONALISED / ADAPTIVE / PLAYFUL - Personalisation to adapt to student learning levels? - Use of AI / machine learning? Y / N - Features for customisability - Game or gamified?
REGIONAL & LANGUAGE DIVERSITY - LAC countries of implementation - Languages of instruction	DEVICE, USE & FEATURES OF TOOL - Device - Offline use? - User features / level of interaction - Inclusion of non-tech activities? - Openly licensed / open source?	IMPACT Third party research or evaluation

Definitions of several of these categories are presented in [Table 1](#) below to clarify how the information can be used.

Table 1. *Definitions of categories used to classify digital learning platforms for mapping*

Category of information in mapping	Definition
User features / level of interaction	This category presents information about the type of features and levels of interactions that users of a specific tool or platform can undertake. Digital learning platforms can invite learners to interact in different ways, leading them to perform different actions. These actions can include passive activities such as listening or watching, which require low levels of learner input, or ones with higher levels of learner input, such as completing quizzes or asking questions. The level of interaction a platform requires is defined by the type and range of actions that learners can perform when using it.
Openly licensed / open source	This category presents information related to the extent to which a digital learning platform is interoperable with other solutions. This includes making available open-source, modular, interoperable pieces of code or software that can be (re)used to build or tailor other platforms or tools. This category was considered important for this mapping exercise as an open approach to digital learning can help to increase collaboration and avoid duplicating work that has already been implemented and / or evaluated. It also supports platforms to optimise their resources and reduce their costs through open approaches.
Personalisation to adapt to student learning level and use of AI / machine learning	Digital learning platforms, and the teaching and learning activities in which they are used, can target instruction to meet students' learning levels. This category was considered in this mapping exercise because by personalising instruction, platforms can increase the effectiveness and efficiency of learning. Such approaches can be enhanced by the application of artificial intelligence (AI) and machine learning.
Features of customisability	Digital learning platforms can include features for customisability based on giving learners agency in customising certain aspects of their learning experience, for example, the appearance of a character or the language of instruction. These features can make platforms more relevant and tailored to individual users, ultimately making them more user-friendly.
Game or gamification	A digital learning platform can be an educational game or can employ gamification to invite students to learn in playful, interactive, fun and / or dynamic ways. Educational games can refer to different types of games for learning, such as interactive stories, simulations, exploration games or digital puzzles. Gamification is based on using game elements to incentivise interaction and reward and / or support learning progress (e.g., reward systems, competitions, points, progress bars, etc).

Following this first identification stage, we organised digital learning platforms into seven clusters to improve information organisation and facilitate the selection of a shortlist discussed in [Section 3.3](#). These clusters and definitions are presented in [Section 4](#) alongside the digital learning platforms.

3.3. Shortlist

Our approach to creating a shortlist of platforms included re-applying the inclusion criteria to gather platforms that showed high potential to be implemented at scale and to support equitable impact. This led us to pay additional attention to platforms that focus on students with special educational needs and disabilities (SEND), are implemented in underserved communities, based on using technology-supported personalised learning to adapt to children's learning needs, and were supported and / or created by governments. We then analysed the platforms that were included in this shortlist using the framework below.

3.4. Framework for analysis

↑[Chuang & Koomar \(2020\)](#) developed a framework by adapting various criteria stemming from multiple EdTech research studies, and we adapted this framework to suit the objectives of the current mapping exercise. The adapted version of this framework that we used for analysing the shortlisted digital learning platforms is presented in [Table 2](#) below. Importantly, the criteria and key elements listed below are not exhaustive but instead provide a representative overview of principal components found in holistic and sustainable approaches to analyse digital learning platforms. In particular, for considerations about involving underserved and / or marginalised groups and issues of accessibility and inclusion, we would like to emphasise the importance of disability-specific digital content, accessible digital formats, alternative digital formats, and adherence to certain design principles, tools, and assistive technologies.

Table 2. Framework for analysing the shortlisted digital learning platforms, captured and adapted from [Chuang & Koomar \(2020\)](#)

Criteria	Key elements may include:
1. Educational design / features The platform should include educational features and opportunities that could be used to improve learning outcomes.	■ The platform should promote teaching and learning practices that are known to be impactful and inclusive for the respective target audiences. ■ Pedagogy should focus on practices recognised as being associated with high learning outcomes (e.g., feedback, self-regulation, group work, assessment for learning). ■ The platform should include features that enable learners to improve their knowledge on a given topic (e.g., feedback loops, considerations of levels of proficiency, Q&A).
2. Evidence of impact The platform has evidence of its effectiveness, ideally through rigorous studies, real-life use or testing with users.	■ Quantitative and qualitative data showing results and evidence from product testing, pilots, or scaled-up programmes. ■ Results from user research / testing. ■ Publicly available / accessible self-published / internally produced data. ■ Impact data from a third-party evaluation.
3. Potential to operate at scale The platform has the potential to be scaled in the region.	■ Evidence of growth thus far, i.e., from pilot to implementation or from local to national level. ■ Defined intention or plans to scale in the region or within a country in the region. ■ A clear path to scale that lists the necessary stages to reach mainstream rollout. ■ The platform builds on existing assets or partnerships. ■ A replicable and adaptable model.
4. Focus on marginalised communities The platform is either designed or has been implemented for marginalised communities and groups (such as	■ Participatory and inclusive platform that reflects a focus on marginalised communities. For example, the platform targets and addresses settings that have infrastructure constraints (power or connectivity) or ensures accessibility and inclusion for learners with disabilities. ■ Prioritises accessible digital content and modalities that promote and support the

women and girls, learners with disabilities, learners from minority groups, etc.).

provision of inclusive education for students with disabilities (e.g., using the [Accessible Digital Learning Portal](#))

- The platform has been tested by the target audience in the targeted contexts, and the platform has been found to address specific needs.
- Linguistic relevance and, particularly, inclusion and acknowledgement of minority languages.

5. Cost-effectiveness and financial sustainability

There are published details of costs that denote the feasibility of rolling out and scale-up a platform.

- A transparent breakdown of a platform's costs and business model.
 - Inclusion or consideration of often 'hidden' costs such as airtime or data bundles ([↑Kingori, 2015](#)).
 - Transparency as to how the platform is funded.
-

4. Long list of platforms

The first phase of mapping involved scans of major global education research repositories, media, and news outlets, digital learning market resources, Ministry of Education websites, and internet searches. This mapping phase resulted in the identification of over 300 LAC-specific digital learning platforms or tools. These included tools and platforms covering a range of educational activities and audiences, some of which were not relevant to the objectives of this study. We refined the inclusion criteria for this mapping exercise to facilitate a more precise search and the identification of 50 exemplar platforms (from the larger sample) for in-depth mapping. These exemplar platforms were then organised into seven broad categories, or clusters, representing the general function these tools aim to serve. The clusters are:

1. Learning management environments
2. Communication platforms
3. Administrative / management tools
4. Test or exam-preparation focused
5. Government-created / national platforms
6. Digital libraries / reading material
7. Tools aimed at vulnerable or marginalised communities

The complete list of 50 exemplar platforms organised in these categories is presented below, along with a summarised version of the data described in [Section 3.2](#). A full list of these platforms and data collected can be accessed [here](#) as an open-source Excel file document.

Cluster 1: Learning Management Environments

Table 3. *Digital learning platforms that compile virtual educational resources for students, caregivers, and / or educators. These resources can include but are not limited to educational books, activities, videos, games, and course materials.*

Platform's name and country	Intended learning outcomes	Description
Educação Conectada-- Plataforma AVAMEC Brazil	Focused on teacher education (training on how to teach certain subjects / use technology in the classroom)	AVAMEC Platform is a collaborative virtual learning environment that supports teachers in the design, administration and development of different types of educational activities, including virtual activities.
Tempo de Aprender Brazil	Language / linguistic education, Literacy	Tempo de Aprender is a comprehensive literacy platform whose purpose is to improve the quality of literacy in all public schools in Brazil. The platform works to improve teachers' and managers' pedagogical and managerial training; makes materials and resources based on scientific evidence available to students, teachers, and educational managers; improves monitoring of student learning through individualised attention; and aims to increase the levels of literacy of teachers and managers.
Plan Ceibal (Ceibal Centre for the Support of Children and Adolescents) Uruguay	Technological / digital education, Literacy, Language / linguistic education, Numeracy, SEL, STEM	A plan to improve Uruguayan educational policies with technology. The plan is informed by a mission to promote integrating technology into education, improve education quality, and promote social innovation. It provides students and teachers in the public education system with personal computers; it also provides schools with free access to the internet, and educational resources (of over 173,000 items), including a digital library with over 7,000 freely accessible books and 1,500 school texts, as well as pedagogical support services.
Lab4U Chile, Mexico, based in the United States	STEM	A programme aimed at improving science education by providing low-cost solutions through mobile devices. This tool facilitates hands-on lab experience in science education through web-based and mobile devices by using built-in mobile sensors (e.g., cameras) to enable

		experimentation. Also includes a crowd-learning web platform that creates a space to prepare, analyse, and share lab results.
WAWA Laptop Peru	Technological / digital education, Technical Education and Vocational Training	An organisation aimed at supporting education technology by providing / producing laptops (hardware) that are used to teach both technology-based education and facilitate digital education and promote education access. This organisation teaches children to build laptops from scratch, install systems, and use computers to access ICT-related educational materials. The open-source software component is aimed at integrating different technologies to improve education quality for students.
IXL Personalized Learning Global, and throughout Latin America	Numeracy, literacy, STEM, language / linguistic education, history, life skills education, civics education, geography	IXL is a global personalised digital learning space that covers K–12 curricula and offers learning materials for students based on age, subject, and topic. This tool also provides educators with learning analytics and recommendations to support teaching and learning.
Wumbox Latin America, based in Argentina	Numeracy, social science, literacy, language / linguistic education, STEM, technological / digital education	An adaptive learning platform that provides teachers, education professionals, and students with educational resources. It compiles interactive, story-driven resources for teacher use that measure student interactions and adapt to student needs. It also includes a sandbox that enables users to create their own educational content.
Moi Aprendizaje Social Latin America, based in Ecuador	Literacy, SEL, numeracy, science, arts	With the intention of working in hybrid learning systems, Moi Aprendizaje Social provides digital learning solutions with a focus on educational games and virtual/ remote learning systems. For example, a learning game for elementary school students includes an analysis and reward platform for parents and teachers. These tools are aimed at promoting literacy and improving educational motivation.
PleiQ Chile, Colombia, Guatemala, Mexico, Argentina, United States, based in Chile.	Language / linguistic education, numeracy, literacy, art, SEL	PleiQ uses augmented and virtual reality to promote the development of competencies and skills by combining concrete and digital resources. PleiQ offers several smart educational tools that use an app and didactic materials (e.g., cubes, books) to support learning in schools / education institutions and homes.

Prueba T
Argentina, Columbia, Costa Rica,
Chile, El Salvador, Guatemala,
Mexico, Panama, Paraguay,
Peru, Dominican Republic,
Uruguay

Numeracy, literacy, social
sciences, history, STEM

Prueba T is an online platform aiming to provide free learning experiences to students, teachers and parents, to strengthen knowledge and skills for lifelong learning. It provides learning materials, teaching management, and educational insights.

Cluster 2: Communication platforms

Table 4. Digital learning platforms and tools that facilitate and support communication, for example with / among students, caregivers, and educators. These platforms intend to improve children's learning outcomes through holistic participation and engagement in education.

Platform's name and country	Intended learning outcomes	Description
Blended Brazil and throughout Latin America	School-based learning topics — Improved learning outcomes, school management, and parental support / involvement	Blended is an app-based communication platform for teachers, students, and parents / caregivers aimed at promoting caregiver involvement in children's education and sharing student information with teachers and parents. It also aims to improve administrative and school management strategies by proposing communication, attendance, grading, and reporting solutions.
Talk2U Argentina and Brazil, (and Ukraine and South Africa)	SEL, Technological / digital education, Rights education, Comprehensive sex education	A behavioural chatbot that engages adolescents in conversations via AI to impart strategies for online safety and training on avoiding and reporting various kinds of abuse.
Afinidata Global, based in Guatemala	Life skills education	An AI chatbot that helps caregivers create educational activities for children and provides access to quality early childhood education resources. It connects directly with messaging apps, which caregivers already use to communicate, without requiring any new downloads. Afinidata connects caregivers to a virtual assistant similar to Siri, which suggests educational activities with which to engage children at home.
Crack the Code Throughout Latin America, based in Peru	Technological / digital education, STEM	Crack the Code offers small-group tutoring classes focused on digital skills building. It provides virtual computer science and programming courses to groups of students between the ages of 5 and 17 throughout Latin America. Programmes are composed of courses with monthly, bimonthly, or annual study plans based on the age and interests of students and caregivers.

Cluster 3: Administrative / management tools

Table 5. *Digital tools or platforms that aim to support education administration and school management processes (at institutional and individual levels) and ultimately improve children's learning outcomes.*

Platform's name and country	Intended learning outcomes	Description
SchoolControl Mexico	School-based learning topics — improved learning outcomes and parental support	A specialised communication and school management platform that facilitates communication between school and caregivers. It allows caregivers to access information from schools about their children's performance (including grades, announcements, calendars, events, reports, tasks, and homework).
Eduq+ Brazil	School-based learning topics — improved learning outcomes generally (grades), and parental attitude shifts	Eduq+ is a 'nudge-bot' that sends weekly nudges via text message to families, parents, and caregivers aimed at promoting increased educational engagement and student grades and decreasing school dropout and grade repetition. These messages are no more than 160 characters long and are aimed at parental attitude changes.
Red Magisterial Mexico	Numeracy, social science, literacy	Red Magisterial is a social network for basic education teachers that provides digital educational resources (aligned with national curricular requirements); it promotes sharing information about experiences and provides an educational management platform for in-person and distance learning.
Sistema Audioclase Colombia	Numeracy, literacy, STEM	This programme shares educational audio and media content with students through multiple modalities. Teachers can create lesson plans using pre-developed content, and students can access interactive educational materials and tools. Sistema Audioclase tracks students' progress, establishes reward systems, and assesses student learning.
Plataforma A+ Brazil	School-based learning topics — improved learning outcomes and school management processes	Plataforma A+ is a Brazilian EdTech company that manages in-classroom learning and school enrollment processes.

Cluster 4: Test or exam-preparation focused

Table 6: Digital learning platforms or tools that support students for national tests and examinations for educational admission and curriculum progress / tracking.

Platform's name and country	Intended learning outcomes	Description
IQ.EDU.DO (Inteligencia Quisqueya) Dominican Republic	Numeracy, literacy, social sciences, STEM	An online portal with educational materials (educational games and activities, parent portals, and virtual meeting spaces for teachers and students) aimed at delivering national curriculum standards and preparing students for examinations.
ExamO Haiti	Improved learning outcomes related to school-based learning topics and national exams.	A preparation and simulation platform for official online exams for Haitian students. It offers a web application, mobile app and desktop app that allows students to download content from the ExamO platform to a smartphone, computer, or tablet from ExamO. This content includes interfaces to facilitate learning / studying, notification / reminder tools, educational activities, progress reporting / learning assessments and evaluations.
Geekie Brazil	Numeracy, literacy, social sciences, history, STEM	Geekie is a programme that provides personalised educational content using adaptive learning technology, delivering Brazil's high-school syllabus with the aim of equipping students for national 'ENEM exams' (national exams) via digital lessons incorporating text, images, videos and exercises. The tool also evaluates student performance and provides real-time data to teachers and schools.

Cluster 5: Government-created / National platforms

Table 7: Digital learning platforms or tools that vary in scope, size, and purpose but are unified in that they are created by national governments to facilitate public education. These can include online education platforms, teaching and learning support materials, and educational programming.

Platform's name and country	Intended learning outcomes	Description
Aprendo en línea Chile	Language / linguistic education, TVET, STEM, literacy, numeracy, physical education, SEL	Developed in response to Covid-19-related closures, this national online platform provides pedagogical resources for primary and secondary school students. This includes a collection of video, radio, and online-based educational programming, games, and tools. This platform also provides education management and technical support materials, including virtual classroom management systems, online libraries, and virtual reading materials.
Aula360 Chile	Numeracy, literacy, art, STEM, social sciences, technological / digital education, language / linguistic education, civics education, history, geography, physical education	Aula360 is an interactive digital platform for Grade 3 and Grade 4 students and teachers with the aim of supporting the development of learning, promoting choice, and building 21st-century skills. Teachers can use Aula360 to lead classes through videos, quizzes, group work, conversation forums, and evaluations, among others.
Material para la continuidad educativa El Salvador	Language / linguistic education, literacy, STEM, physical education, social sciences, civics education	A platform developed by the Ministry of Education that provided pedagogical and educational resources for students during the Covid-19-related closures.
Aprende en casa Mexico	Language/ linguistic education, SEL, literacy, art, numeracy, STEM, history, life skills education, health education, financial skills	An online collection of educational materials including educational videos, reading materials, and activities that aim to support learning from home. Aprende en casa also includes radio and TV programming for multiple levels of education based on national standards.

Seguimos educando Argentina	Art, SEL, language / linguistic education, social sciences, numeracy, Technological / digital education, civics education, Technical Education and Vocational Training	This government educational portal was developed to use ICT to improve teaching and learning methods and to provide digital resources for teachers, administrators, students, and families. It produces and distributes educational resources in multiple modalities (digital, paper / hard copy, television, and radio) to meet the learning needs of students and families during Covid-19 distanced learning periods. It provides access to a collection of digital educational materials and resources organised by educational level and subject area, including information about educational TV and radio programming, communication platforms, educational games, activities, teacher and administrative training materials, and teaching materials.
Aprendo en casa Guatemala	Numeracy, literacy, STEM, history, art, social sciences	A platform created to support teachers and students at different educational levels to access various digital education resources. It also offers guidance, content, and virtual library spaces developed by international agencies.
Colombia aprende Colombia	Literacy, numeracy, STEM	An educational website that offers a support tool for educational improvement. Colombia aprende resources are available in different formats, including articles, 3D interactive games, eBooks, digital libraries, video lessons, audiobooks, and videos.
Mineduc Digital Guatemala	Literacy, numeracy, STEM	A virtual education platform aimed at closing digital divides and providing students with the opportunity to study and learn online. Mineduc Digital provides online learning materials for primary-age students across Guatemala.

Cluster 6: Digital libraries / reading material

Table 8: Digital learning platforms or tools centred on repositories of digital books, with literacy, reading and / or writing materials or activities, that are typically available for public access in both online and offline formats. Many digital libraries were found to be in Brazil, most probably due to the country's demographics and history of developing literacy-related platforms.

Platform's name and country	Intended learning outcomes	Description
Estante mágico Brazil	Language / linguistic education, literacy	Estante mágico aims to enhance literacy and creativity for children by facilitating youth authorship. This tool helps students create and author books and stories.
Letrus Brazil	Literacy	Letrus is a digital platform that uses AI to improve students' writing and literacy skills. It is targeted at enabling children to access literacy development opportunities at school through in-class instruction delivered by teachers.
Educação Conectada Na Plataforma Integrada Brazil	Literacy, numeracy, art, language / linguistic education, STEM	Educação Conectada Na Plataforma Integrada is a platform of digital educational resources that gathers and compiles resources from various educational websites. It aims to serve teachers but can also be used by school managers and students.
AprendiZAP Brazil	Language / linguistic education, Numeracy, Geography, History, STEM, Literacy, Art	AprendiZAP is a WhatsApp-based learning platform that sends educational lessons and exercises to students in Grades 6 to high school. It also allows teachers and caregivers to manage students' learning by adapting the content shared with students.
Conta pra Mim Brazil	Language / linguistic education, Literacy	A programme launched by the Brazilian Ministry of Education to promote family activities and improve literacy. Conta pra Mim aims to provide tools that encourage learning of oral language, reading, and writing at home, and improve parental engagement and involvement in their children's education.
Árvore Educação Brazil	Literacy	A digital eBook-lending programme aimed primarily at elementary and high school students from public and private education networks.

OECS Digital Library Leeward Islands: Antigua and Barbuda, St. Kitts and Nevis, Montserrat, Anguilla and the British Virgin Islands; the Windward Islands: Dominica, Saint Lucia, St. Vincent and the Grenadines and Grenada, Martinique and Guadeloupe	Language / linguistic education, Literacy, Numeracy	The Organisation of Eastern Caribbean States (OECS) Commission Global Digital Library is a digital platform and hub that houses resources for K–12 learning and manages teacher capacity development, knowledge management, and professional training. The OECS Digital Library is part of the broader strategic objective of the OECS Commission to develop a digital learning ecosystem that supports lifelong learning throughout the Member States.
CONALITEG digital Mexico	Literacy	CONALITEG digital is the decentralised public body of the Federal Public Administration that produces and distributes free textbooks and other books / materials required for students enrolled in the Mexican National Education System. These materials include both hard copies and reading and educational materials online.
Worldreader Peru and global	Literacy	A group of online tools and platforms aimed at providing digital reading and learning materials. Worldreader's BookSmart app presents a collection of storybooks with an embedded children's English Dictionary to help students expand their vocabulary, improve reading fluency and comprehension, and to support educators with incorporating digital reading into lessons. BookSmart data insights also give school leaders information to improve classroom learning and allow caregivers to access a library to support children's learning.
Mundo de Libros Mexico	Literacy	A web-based platform that matches students with grade-level-appropriate Spanish reading materials that align with their abilities and interests. This platform seeks to promote the development of reading skills among children from Grades 1–3 through free access to children's books and the technological platform.

Cluster 7: Tools aimed at vulnerable or marginalised communities

Table 9: Digital learning platforms or tools for educators, students, and caregivers that aim to fill accessibility gaps in education systems — commonly including geographically underserved communities and students with disabilities.

Platform's name and country	Intended learning outcomes	Description
Videolibros en señas Argentina, Uruguay, Paraguay, Nicaragua	Language / linguistic education, literacy	Videolibros en señas is an online library of books in Argentina, Uruguay and Paraguay offered in nationally relevant sign languages. All the books are in Spanish and include voice-over features and videos with sign language interpretation.
Lakou kajou Haiti	Life skills education, geography, civics education, physical education	Lakou kajou is a series of educational videos in Kreyòl provided in cartoon format for Haitian children and families.
Kolibri Global, all LAC countries	Numeracy, literacy, STEM, life skills education, language / linguistic education, social sciences, financial skills, technological / digital education, and health education	Kolibri is an open-source educational platform and toolkit designed for low-resource communities. It is an offline learning platform that runs on various low-cost devices. The Kolibri Product Ecosystem includes a curricular tool, a library of Open Educational Resources, and a toolkit of resources to support training and implementation in formal and informal learning environments
MIT-Ayiti Haiti	Life skills education, STEM, art, technological / digital education, social sciences, history, physical education, geography, language/ linguistic education, numeracy, civics education	MIT Ayti is a platform for teachers that compiles, creates, evaluates, selects, organises, and shares educational materials in Creole that can be used in the classroom. It offers a space to collaborate, communicate and share information among teachers in Haiti and abroad.
Hablando con Julis Colombia	Language, pronunciation, communication, SEL	Hablando con Julis is a technological solution that helps people with speech, reading, and writing difficulties to communicate more effectively. It includes videos, access to educational resources and personalisation features for children and caregivers that aim to

		improve learning outcomes and communication skills.
Señas y Sonrisas (Signs and Smiles)	Life skills education, SEL, communication	An app offering educational resources for hearing families with deaf children, including a dictionary of Nicaraguan Sign Language.
Nicaragua, developed in the United States		
Sueña letras	Language / linguistic education	Sueña letras provides app-based support for teachers working with deaf and hard-of-hearing children learning literacy skills. It is adaptable to the experience and needs of each user with other special educational needs. It uses combinations of resources that enhance reading comprehension; videos in sign language, finger-reading activities and lip-reading representation — solutions that are presented in combination with texts.
Chile		
Digital Adaptations for Effective and Inclusive Distance Learning in Rural Communities in Honduras and Nicaragua	Improved learning outcomes through teachers' professional development	A programme that seeks to strengthen education systems to enhance equity and inclusion in rural communities in Honduras and Nicaragua through distance and blended learning models — it also provides resources for teacher professional development. The model uses various available technologies and pedagogical frameworks and is intended to be designed for scale.
Honduras and Nicaragua		
Oppia	Numeracy	Oppia is a multilingual and personalised e-learning platform providing no-cost education to under-resourced and underprivileged learners worldwide. The platform is available in Portuguese and is soon release an offline version of the application.
Brazil and global		

5. Case studies

This section explores six digital learning platforms or tools by analysing them as case studies guided by the framework presented in [Section 3.4](#). The six examples analysed are [Geekie](#);³ [Learning Passport](#)⁴ (in Honduras); [Inteligencia Quisqueya](#);⁵ [Eduq+](#);⁶ [OECS Digital Library](#);⁷ and [Aprendo en Línea](#).⁸ We have organised our analyses in accordance with the elements of the framework outlined above in [Table 2](#) and reiterated in the abridged [Table 10](#) below.

Table 10. *Case study evaluation criteria and outline of key information included in case studies*

Criteria
1. Educational design / features Inclusion of educational features that improve learning outcomes.
2. Evidence of impact Evidence of effectiveness, through rigorous studies, and use / testing with users.
3. Potential to operate at scale Has potential to scale in the region.
4. Focus on marginalised communities Designed / implemented for marginalised communities and groups.
5. Cost-effectiveness and financial sustainability Published details of costs denoting feasibility to roll out and scale up a platform.

5.1. Geekie

Geekie is a Brazilian technology-based education programme launched in 2011 that offers a variety of platforms — called *Geekie One*, *Geekie Lab*, *Geekie Games*, and *Geekie Test*. They cater to users, including students, families and caregivers, teachers, administrators, and educational leaders. Across these platforms, Geekie offers learning support through different tools, including app-based games, web-based self-guided study plans and

³See <https://www.geekie.com.br/> Retrieved on 25 August 2022

⁴See <https://www.learningpassport.org/> Retrieved on 25 August 2022

⁵See <https://www.iq.edu.do/> Retrieved on 25 August 2022

⁶See <https://movva.tech/eduqmais-2/> Retrieved on 25 August 2022

⁷See <https://oecslibrary.com/> Retrieved on 25 August 2022

⁸See <https://www.curriculumnacional.cl/estudiantes/> Retrieved on 25 August 2022

materials, and video lessons, which are all compatible for use on smartphones and tablets / mobile devices.

5.1.1. Educational design / features

Geekie One supports students, teachers, and schools to adopt technology-based didactic materials and pedagogical approaches that aim to optimise student learning (↑[Rigby, 2016](#); ↑[Wise, 2016](#); ↑[UNESCO, 2020](#)). *Geekie* offers digital lessons using text, images, videos, and exercises to assess students' performance and provide teachers and schools with information about student learning progress and patterns. This programme also offers pedagogical support to educators in developing / adapting teaching techniques for varied levels of instruction and learning (from elementary to high school).

Geekie Test aims to help secondary students prepare for Brazil's national exams. It does so through adaptive learning technology, which provides personalised educational content based on the national high-school syllabus. Online lessons are delivered by teachers from private schools via videos, which are formatted along similar lines to *Khan Academy*⁹ content (i.e., including dictated explanations, colour-coded guides, scaffolded explanations of processes, etc.). This content aims to provide varied learning pathways that can accommodate different learning paces and needs. It assesses student performance and adapts content based on how students respond, including adjustments to the content type, learning level, and study patterns. The programme also sends push notifications to students to encourage sustained engagement with study plans and learning materials.

Geekie Lab offers a teaching platform designed to support schools and educators to orient to and deliver adaptive learning material. *Geekie's* pedagogical content is developed by education professionals, teachers, and internal developers. It prioritises blended learning techniques that facilitate active teaching and learning practices. The platform is also programmed to carry out assessments of teacher and administrator performance and provide data analysis to help leadership understand and coordinate schoolwide progress and goal setting.

5.1.2. Evidence of impact

Since 2011, *Geekie* has conducted multiple internal analyses of its various

⁹ See <https://www.khanacademy.org/> for more information on Khan Academy.

programmes, individual student progress tracking, as well as comparative studies of national examination statistics. These internal analyses provide insight into Geekie's reach and ability to impact learning outcomes. Importantly, however, these internal assessments are also complimented by limited third-party research on Geekie's uptake.

In 2021, an internal evaluation focused on reach and scale found that Geekie's pedagogical partnerships (*Geekie One*) had served more than 350 schools (both public and private), 95,000 students, and 10,000 teachers from across Brazil (↑[Geekie, 2021b](#)). Another internal evaluation found that Geekie's test preparation materials covered 100% mathematics, 93% natural sciences, 96% language, and 93% humanities topics tested in national examinations that year (↑[Geekie, 2021a](#)).

Given their focus on personalised learning, Geekie has developed a diagnostic evaluation system called *SAEB matrix*¹⁰ to collect data and assess student learning outcomes. Geekie also self-reports that they track individual student progress to diagnose and address learning challenges and promote educational success by applying the *Interpreted Proficiency Scale*.¹¹ Further information about this data is not publicly available — which is representative of limited information overall on how Geekie impacts student learning and performance, teacher practice, or school functioning.

A third-party evaluation (the National Education Diagnosis) conducted by Escolas Exponológicas with 400 educational institutions, 14,000 teachers and 130,000 families found that Geekie One was considered one of Brazil's most highly rated education programmes (↑[Geekie, 2021b](#); ↑[Geekie, 2021a](#); ↑[Escolas Exponenciais, 2021](#)). Importantly, information about the evaluations above was largely only available through the Geekie website, and typically the evaluations did not include formal research studies or evaluations (↑[Rigby, 2016](#); ↑[Wise, 2016](#)). The majority of available evaluations seem to be carried out by Geekie internal teams, and therefore, their findings have not been verified by an independent party outside of Geekie.

¹⁰ For more information about the SAEB matrix see <https://www.gov.br/inep/pt-br/areas-de-atuacao/avaliacao-e-exames-educacionais/saeb/matrizes-e-escalas> Retrieved on 5 September 2022

¹¹ For more information see <https://www.oecd.org/pisa/pisa-for-development/pisafordevelopment2018technicalreport/PISA-D%20TR%20Chapter%2015%20-%20Proficiency%20Scale%20Construction%20-%20Final.pdf> Retrieved on 5 September 2022

A general search outside of the Geekie website found no independent peer-reviewed evaluations.

5.1.3. Potential to operate at scale

Geekie has communicated that scalability within Brazil is a priority and has shown clear evidence of growth to national-level operations since its inception. Geekie's expansion manifested in the continued diversification of tools and platforms it offers and in the expansion of the regions and audiences it aims to serve. Most recently, in 2021, Geekie announced that it had expanded its practice to the elementary school level, thus officially serving students at all levels of basic education (from elementary to high school) ([↑Geekie, 2021b](#)). Importantly, this expansion involves engagement with students, administrators, and caregivers / families at each of these education levels. Geekie has successfully grown its user base, most recently engaging 350 schools (both public and private), 95,000 students, and 10,000 teachers across Brazil ([↑Geekie, 2021b](#)). With this growth, Geekie now operates at a national level to serve educational communities throughout Brazil. However, there is no indication that this expansion has gone or will go beyond Brazil.

In 2021, the Brazilian economics journal *Valor Econômico* issued a report about Geekie which underscores its rapid growth trajectory in the first years of the Covid-19 pandemic:

"Between 2019 and last year, the number of schools using the [Geekie One] platform increased by 130% – up from 71% between 2018 and 2019 – and the number of students grew by 208% on a base that had already grown by more than 150% a year earlier. Currently, more than 250 schools and 50 thousand students are served." ([↑Rosa, 2021](#))¹²

Notably, Geekie platforms have also been created with scale in mind, designed to learn from and adapt based on user engagement and needs ([↑Geekie, 2021b](#)). In essence, this adaptable programme is intended to be improved by algorithms that rely on user data, thus necessitating continual effort to foster uptake and use. However, as mentioned previously, there is no evidence of Geekie's intended growth beyond Brazil at this time, and Portuguese remains the only language for educational tools.

¹² The translation from Portuguese to English was done by the authors of this Response to the Help Desk and the translation from English to Spanish was done by an independent translator.

5.1.4. Focus on marginalised communities

There is limited information available about how Geekie addresses the needs of underserved or marginalised users and communities. Geekie does make an effort to increase accessibility for underserved schools through its licensing policies, which include a “buy one, give one” model. Under this policy, a public school student is given free access to Geekie services for each student licence purchased by a private school. While this model may help reduce financial barriers for some potential users, it does not account for all the barriers students may face (social, financial, linguistic, geographical, infrastructure, ability-associated, etc.) accessing Geekie. There is also limited information on the composition of Geekie’s user base, contributing to a lack of clarity on who is currently able to access these tools and, just as importantly, who cannot.

5.1.5. Cost-effectiveness and financial sustainability

As discussed above, Geekie is a subscription-based platform that has incorporated some efforts to increase accessibility for students in low-resource schools and communities. However, these efforts do not promote holistic accessibility as they do not address other factors that impact the use of EdTech tools, including, but not limited to, the costs of connectivity and access to devices.

The costs associated with this programme include developing, testing and improving the educational content, iteratively improving the personalisation algorithms, the inclusion and contributions from various stakeholders, marketing costs, as well as technology, sale and administrative costs. Geekie’s revenue is based on selling a licence to schools or directly to individuals. The company has also reported receiving funding and investments from private companies and public organisations ([†][Lulia Filho et al., 2019](#)).

Geekie has demonstrated consistent expansion in recent years in terms of its own financial growth. A 2021 article reported that Geekie’s “net sales increased 172% in 2020, after having grown 202% in the previous period” ([†][Rosa, 2021](#)). Geekie has also established numerous partnerships and diverse funding streams, most recently securing USD 7 million of support from Mitsui & Co, Virtuouse, Omidyar Network, and Gera Venture Capital. These diverse connections bode well for their continued development moving forward. However, it is unclear what this expansion might entail regarding geographic scope, diversified reach, inclusivity, and platform

development.

5.2. Learning Passport (Honduras)

Originally launched by UNICEF to support children on the move, the Learning Passport is a global platform that has been adapted in response to the Covid-19 pandemic. It aims to offer EdTech solutions and approaches developed during the Covid-19-related closures to improve children's learning outcomes in the LAC region and globally. The Learning Passport is a platform that enables children to learn on mobile devices using online and offline functionalities. It also aims to support parents and teachers in accessing curriculum-based educational material and training opportunities. In the LAC region, Honduras, Mexico and Costa Rica have officially launched the Learning Passport, which will be implemented in Brazil and Jamaica in 2022. Honduras's implementation of the Learning Passport is one of the most advanced of these countries. In 2021, the Government of Honduras partnered with Microsoft, with the help of UNICEF, to launch the Learning Passport platform making this contextualised development and implementation a useful example to consider in this case study.

5.2.1. Educational design / features

The Learning Passport is an educational platform targeted at early childhood, primary, and secondary education, adolescent skills, and technical and vocational education. It intends to tailor learning pathways to the needs of children and youth who are either out of school or need educational support. In Honduras, the educational content provided through the Learning Passport is based on the government's Educatrachos platform,¹³ which is a national repository of educational resources for preschool, basic, and secondary education developed by the Secretary of Education.

The platform includes educational videos, audio content and interactive activities that children can download for offline use or access online through the Learning Passport's website. The Learning Passport platform also includes features that guide students' access and use of educational resources based on a defined sequence (i.e., starting with easier exercises / tasks / content before unlocking higher levels of complexity). The platform

¹³ For more information see <http://www.educatrachos.hn/>

will launch features enabling teachers to use or create resources to manage and design courses. Lastly, the Learning Passport enables teachers to create or use quizzes and exams to assess students' level of learning and / or progress.

5.2.2. Evidence of impact

Given that the Learning Passport was only recently launched in Honduras (in 2021), it has yet to be evaluated. The platform's implementers have iteratively engaged with teachers and students to explore the usability of the platform. Preliminary discussions confirm the platform's suitability to be used by students and teachers with low levels of digital literacy.

As noted previously, the Learning Passport was an existing platform that was originally implemented in multiple countries and has recently been adapted to new educational needs emerging from the Covid-19 pandemic. As a result, multiple studies and analyses of the platform's implementation in other regions are available.¹⁴ In Mexico and Honduras, a total of 131,604 students have registered to the platform as of the end of 2021, and the first evaluative study of the Learning Passport in Honduras will be conducted in late 2022, which will focus on identifying gaps, needs and on evaluating the potential improvement of children's learning outcomes ([UNICEF, 2021](#))

5.2.3. Potential to operate at scale

In considering how the content and design of the platform could be adapted to different regions, scalability has been a key objective of the Learning Passport platform since its inception. The platform's technology enables local stakeholders to upload contextually-relevant content in different languages. In Honduras, the potential of this platform to operate at scale is mostly linked with the appropriation of the platform by the Secretary of Education (SEDUC), which is currently coordinating its implementation in the country.

This platform has also been capturing key operative principles underpinning the scaling-up and implementation of the Learning Passport in different regions. These include the importance of contextualising all the educational material presented in the Learning

¹⁴ For more information see:

<https://www.learningpassport.org/reports/research-and-recommendations-report-summary-findings>

Passport platform to a given country and / or region. The implementation in certain regions has shed light on the relevance of facilitating collaborations between international and local stakeholders to contextualise and iteratively improve such educational material.

5.2.4. Focus on marginalised communities

The Learning Passport platform emphasises meeting the needs of underserved or marginalised users and communities in inclusive and impactful ways. The platform can be accessed with a phone number (i.e., does not require an email address), which was an integral part of the platform's design and intended to reach users with low levels of digital literacy. The platform also intends to reach and involve out-of-school children by tailoring content to their needs and local realities.

In Honduras, the platform includes content in indigenous languages, such as Chorti. The platform can be accessed through an online website, and users are also invited to download the educational content for offline access. As further explained in [Section 5.2.5](#), the Ministry of Education and the National Council of Telecommunications have developed a programme to enable users to get free internet access (2GB of data per month) to access the Learning Passport website and other related education sites. Learning Passport in Honduras, therefore, demonstrates efforts to engage with individuals in low-infrastructure or low-connectivity settings. However, going by the information available, this platform does not seem to provide features or support for the unique needs of students and caregivers with disabilities.

5.2.5. Cost-effectiveness and financial sustainability

The implementing costs of the Learning Passport vary depending on the country and region where this platform will be introduced — with significant potential for reducing these costs through the development of partnerships. Honduras provides an interesting case study of a programme that has collaborated with stakeholders operating at different levels in an educational ecosystem, for example, by working with GIGA¹⁵ to improve internet connectivity, with private companies to distribute devices, with the secretary of education and government counterparts to ensure

¹⁵ Giga is a programme that aims to connect every school to the Internet and every young person to information, opportunity and choice. The Giga programme combines UNICEF's experience in education and procurement and ITU's expertise in regulation and policy to allow children to develop digital skills and access online learning content.

national and contextualised implementation, among other things.

5.3. Inteligencia Quisqueya

Implemented in the Dominican Republic and in partnership with the Ministry of Education of the Dominican Republic, Inteligencia Quisqueya is an online portal with educational materials, including educational games and digital reading resources, interactive interfaces, and virtual meeting spaces for teachers and students. It intends to support students in their preparation for national examinations and targets teachers and students in primary and secondary education as the main users.

5.3.1. Educational design / features

The portal includes multiple learning and teaching features, respectively, targeted at students and teachers. Students are invited to choose between different learning activities offered for different learning levels, such as educational resources for reading and educational games for students to play on their own or to interact with teachers and peers. This range of learning activities is presented as an opportunity to enable students to choose the type of activities that best suit their learning preferences, levels, and needs.

Features that enable learners to improve their knowledge on a given topic include student self-assessment tools, the inclusion of features specifically designed for teachers, and features to access backend data. Students are invited to reflect on their performance and learning gaps through self-guided lessons and assessments. The features for teachers are intended to enable them to access and review data related to students' engagement, learning trajectories, and grades to adapt the support they provide to students and access training materials. This platform also collects student and teacher data, including students' results, teachers' assessments, and students' self-assessments, to identify educational gaps and tailor educational content to students' individualised needs.

5.3.2. Evidence of impact

We were unable to find published evidence of Inteligencia Quisqueya's impact on learning online. There were no available studies about this platform's implementation and impact, suggesting that evaluative and monitoring data are perhaps maintained internally or are either analysed and / or not for publication. However, a lack of current studies on this platform does not imply that this platform has not or will not have a

positive impact on the communities and nations it aims to serve.

5.3.3. Potential to operate at scale

We could not find evidence of Inteligencia Quisqueya's growth from development in 2015 to national-level implementation within the Dominican Republic. Similarly, there is also currently no information publicly available regarding Inteligencia Quisqueya's future path or intentions to scale beyond its current scope. The only indications that suggest a potential for scale are the platform's established connections with the national government and free public availability for students and teachers. The platform has also been endorsed by the former Minister of the Presidency of the Dominican Republic, who formally highlighted the potential of this platform to help students prepare for national exams ([↑CDN, 2020](#)).

The content of the platform is aligned with national exams in the Dominican Republic. Scaling up this platform could involve exploring financial models as well as the similarities and differences between these and other national exams in LAC countries and exploring how the content and features would need to be adapted and contextualised (for example, by involving students, teachers, and other educational institutions / leaders). Despite limited information about scaling efforts to date, given Inteligencia Quisqueya's existing partnerships and educational model, the platform was evaluated as having the potential to reach scale in the Dominican Republic and other similar contexts. Although this is not the only test preparation tool operating in LAC that we have identified in this mapping exercise, its partnership with the government sets Inteligencia Quisqueya apart and holds promise for national scalability and longevity. Given that the platform has been designed to align with the specific education systems of the Dominican Republic, it is unlikely that the tool itself could be used in other countries without significant adaptation. However, it could nonetheless serve as a guide or example of how government-supported EdTech test preparation tools can operate.

5.3.4. Focus on marginalised communities

This platform complements the Dominican Republic's national curriculum by supporting teachers and students in preparation for national examinations. To access the platform, students need an internet connection and a computer or a mobile phone, which may limit some marginalised pupils from benefiting from Inteligencia Quisqueya. There is no publicly available information about how Inteligencia Quisqueya seeks to

meet the needs of students in low-resource settings or for those living with disabilities or navigating other challenges of identity or experience that impact the accessibility of tech-based tools. In addition, it is unclear what communities / populations were involved in testing or informing the platform's development. Regarding linguistic inclusivity, the platform's content is offered in Spanish but, based on available evidence, does not appear to accommodate minority languages.

5.3.5. Cost-effectiveness and financial sustainability

Inteligencia Quisqua offers its users all educational content and opportunities on its website for free but requires access to or ownership of a device (smartphone, computer, tablet, etc.) and connectivity (internet or data) to engage with available content. No public information is currently available on its business model or on the financial sustainability of the tool; the only partner listed is the Dominican Ministry of Education.

5.4. Eduq+

Eduq+ is a digital learning platform created by a Brazil-based group called *Movva*, which specialises in developing solutions and platforms for the education sector. *Movva* primarily produces tools called 'nudgebots'¹⁶, which combine behavioural economics and AI in chatbot-type platforms (computer programs that simulate live communication). These nudgebots aim to impact behaviour and habit formation via personalised communication. *Movva* receives support from the Fundação Lemann, Instituto Pennsula, Jacobs Foundation, World Bank, and UBS Optimus Foundation, among others. This digital learning platform has been implemented primarily in Brazil. Other countries of implementation in the LAC region include the Dominican Republic, Honduras and Guatemala. Eduq+ has also been used in the USA, Germany, Côte d'Ivoire, and Ghana.

5.4.1. Educational design / features

Eduq+ aims to engage students, parents, or caregivers in the first years of public high school (Grades 9 and 10) in communication about supporting adolescents' intellectual development. To do this, Eduq+ sends text messages twice a week to caregivers and/or students themselves, see [Figure 5](#). These short messages (no longer than 160 characters) aim to shift caregiver and student attitudes and habits related to supporting student

¹⁶ A nudgebot is a system that sends automated reminders and recommendations that seek to influence people's behaviour.

intellectual development outside school.

Figure 5: Example of messages sent to caregivers by Eduq+

Eduq+: A adolescência é uma fase de mudanças no corpo, na mente e na vida que reflete no comportamento do seu filho. É importante manter o diálogo.

Translation: Adolescence is a phase of changes in the body, mind and life that reflects on your child's behavior. It's important to maintain dialogue/communication.

Eduq+: Pergunte qual foi a melhor coisa que aconteceu para o seu filho hoje. Entenda as necessidades dele para ter uma relação saudável nesta fase.

Translation: Ask your child what the best thing that happened to them today was. Understand their needs to have healthy relationships at this stage.

With these messages, Eduq+ aims to facilitate increased educational engagement, improve student grades, and reduce school dropout and grade repetition.

5.4.2. Evidence of impact

Movva has prioritised engaging external partners to support impact assessment and monitoring activities to understand their social impact. Both Stanford University and the University of Pennsylvania have evaluated Movva's methodology and found evidence of a 33% reduction in exam repetition rates among users. The Stanford study demonstrated increases in school participation (15%) and maths proficiency (25%) ([↑RECC, 2016](#)). The University of Pennsylvania study showed a 50% decrease in school dropout rates ([↑Wolf et al., 2021](#)). Studies from the University of Zurich evaluated the impacts of Eduq+ nudges for high school students in Brazil during Covid-19-related school closures and found that they increased motivation to return to school (discouraged dropout), prevented learning losses in Portuguese (by 24.2%) and maths (by 7.5%), and decreased the number of schools with sub-proficient average test scores (from 17.1% to 8.4%) ([↑Lichand & Christen, 2020](#); [↑Lichand et al., 2022](#)). The 2021 study also found that nudges increased inequality of scores between girls and boys (being more beneficial for girls' scores) and between schools that offered online activities before the pandemic and those that did not ([↑Lichand et al., 2022](#)). Together, these external evaluations suggest that Eduq+ nudges can positively impact learning outcomes, but also that these favourable

impacts are variable and dependent on context.

The external evaluations above are complemented by other internal studies. Findings from these studies demonstrate Eduq+'s reach (quantity of caregivers engaged) and suggest that the nudgobot improves student attendance, linguistic and mathematical learning, and broader student achievement ([↑Eduq+, no date](#)). However, information on how those internal studies were conducted is less readily available, as are the specific results. This lack of clarity highlights the limitations of these investigations.

5.4.3. Potential to operate at scale

To date, Eduq+ has demonstrated substantial evidence of growth. Since *Movva*'s establishment in 2012, its founders have prioritised scalability and working with diverse stakeholders including foundations, institutes, and the private sector, and engagement in partnerships with public schools ([↑Eduq+, no date](#)). Since 2015 and the development of Eduq+, *Movva* has demonstrated an ability to move from localised pilots to global implementation — expanding from work with public schools in Brazil to implementation in international contexts, facilitated by global foundations and ministries of education ([↑Movva, no date](#)). Recently, *Movva* has secured a partnership with the Rio de Janeiro Department of Education to carry out an evaluation with students, parents, and teachers ([↑Eduq+, no date](#)). Partnerships like these, along with *Movva*'s private sector and foundation connections, show promise regarding the company's sustained financing and growth. *Movva* leadership has also confirmed their intention to expand operations in Brazil and extend work in Côte d'Ivoire.

5.4.4. Focus on marginalised communities

Eduq+ has demonstrated its adaptability in its linguistic contextualisation, messaging users in languages including Spanish, Portuguese, English, and German. However, there is no information about how this tool can adapt to meet the needs of linguistic minority communities (regional dialects or indigenous languages) or people who are unable to read messaging information (e.g., people who are not literate or visually impaired). Since its development, this platform has also undergone testing phases with audiences in the contexts where it is intended for use. In using SMS as its main technology modality, this tool is in theory, accessible to individuals in low infrastructure or connectivity settings but does necessitate ownership of and access to mobile phones, which requires users to carry data costs for SMS messaging. Finally, based on the information available, the design of the tool does not appear to consider the unique needs of students and

caregivers with disabilities or their ability to use mobile phones and messaging platforms.

5.4.5. Cost-effectiveness and financial sustainability

Minimal information is available regarding the costs of implementing and scaling Eduq+. Costing and contract lengths are variable, with contracts typically covering one academic year, though some are shorter depending on context. *Movva* has confirmed that in Côte d'Ivoire, the cost for Eduq+ is roughly USD 6.50 per participant per year and BRL 1.25 (= USD 0.25) in Brazil. Given what is understood about this platform, these costs are incurred by governments, ministries of education, foundations / private partners, or education institutions rather than students, caregivers, or families themselves. Based on the information available, Eduq+ does not appear to discuss or consider the 'hidden' costs of technology for users, such as device ownership and connectivity or data costs. These types of expenses, which are typically borne by caregivers and individual families, can limit the accessibility of Eduq+ platforms.

In 2019, *Movva* was projected to deliver a turnover¹⁷ of BRL 3–4 million, suggesting robust continued growth.

5.5. Organisation of Eastern Caribbean States Digital Library

The OECS¹⁸ Commission Global Digital Library (OECS Digital Library), is a digital platform launched through a partnership between the Global Book Alliance's [Global Digital Library \(GDL\)](https://www.globalbookalliance.org/global-digital-library)¹⁹ programme and the Organisation of Eastern Caribbean States (OECS).²⁰ This digital platform intends to foster lifelong learning through the provision of publicly available resources to all OECS member states.

¹⁷ Turnover: the total sales made by a business in a certain time period (alternatively, 'gross revenue' or 'income').

¹⁸ OECS Member States include the Leeward Islands: Antigua and Barbuda, St. Kitts and Nevis, Montserrat, Anguilla and the British Virgin Islands; and the Windward Islands: Dominica, Saint Lucia, St. Vincent and the Grenadines and Grenada, Martinique and Guadeloupe

¹⁹ See <https://www.globalbookalliance.org/global-digital-library> Retrieved on 5 September 2022

²⁰ For more information visit: <https://www.oecs.org/en/who-we-are/about-us> Retrieved on 5 September 2022

5.5.1. Educational design / features

This platform acts as a virtual repository of literacy and learning resources for K–12 students. It also aims to support teacher professional development and knowledge management.

The platform includes a collection of library books (reading instruction books and storybooks for leisure reading) for children to use online and / or download for offline use. The OECS Digital Library also includes technology-based educational games (for mathematics and literacy). Notably, the library organises educational materials by learner education level and thematic areas of interest (e.g., resources related to animals, colours, specific to girls, or subject areas like STEM). All resources can be accessed via computer, smartphone, or other mobile devices.

There is no publicly available information about resources for educators accessible through this platform, nor are there specifics about how this tool aims to serve learners beyond the early years of education. However, the platform was first launched in late 2021, and additional information about these offerings may be forthcoming.

5.5.2. Evidence of impact

As previously mentioned, this is a relatively new platform, though its founders (OECS and the Global Book Alliance) have been established for much longer. Likely due in part to its relatively recent development, no evidence related to this platform's impact was found through a general grey literature and academic web search. However, the lack of current studies on this platform does not imply that this platform has not or will not have an impact on the communities and nations it aims to serve.

5.5.3. Potential to operate at scale

No evidence of scale, uptake, or growth is available at the time of writing, which is early on in this platform's establishment. However, it has demonstrated promise by virtue of the multinational rollout through OECS. Its affiliation with a global effort to provide digital learning and literacy resources to early-grade students, the Global Digital Library (GDL), and a unifying governing group (OECS) also bode well for its future growth.

The platform is also connected with the Norwegian Agency for Development Cooperation (Norad), which provides connections to and buy-in and technical guidance from global organisations, including All Children Reading: Grand Challenge for Development, UNESCO, The Global

Partnership for Education, UNICEF, the Global Book Alliance, Benetech, Storyweaver, Creative Commons, and the Global System for Mobile Communications (GSMA). Content on this platform has been curated from partners including Bookdash, Asia Foundation's Let's Read, Storyweaver, African Storybook Project, USAID missions, the University Research Company (URC) and the Global Reading Network.

These diverse connections suggest stable support that could enable scalability and growth in the future. Given its open-source digital infrastructure, and designation as a digital public good, this platform has high growth potential and is promising as a scalable resource within and beyond OECS member states.

5.5.4. Focus on marginalised communities

Thanks to its connection to the GDL, the OECS Digital Library shares considerations for accessibility and inclusion for users. The digital library strives for accessibility and inclusion by providing resources in regionally relevant languages including English and French. However, information on how this platform strives to serve linguistic minority communities, including those who speak Dutch, Creole, Papiamentu, and Spanish is limited. The platform also aims to serve users with disabilities (including visual disabilities, dyslexia, or mobility impairments) and adheres to the principles of universal design and accessibility. Importantly, some of the materials offered are also completely visual (e.g., books without words) and so are accessible to people who cannot read. Additionally, the materials themselves demonstrate an effort to prioritise inclusion by representing diverse characters and themes that are relevant to a broad range of identities. In alignment with the needs of people living in low-resource settings, materials in this library are accessible offline with Kolibri and do not necessitate access to technological tools (computer, smartphone, other mobile devices).

5.5.5. Cost-effectiveness and financial sustainability

All OECS Digital Library content and tools are publicly accessible and are offered free of charge. Notably, many of the tools available on this platform are accessible offline and therefore do not necessitate consistent connectivity (and the personal financial costs inherent in that access). However, they do require users to be able to access a connection periodically to download resources. Although the use of these resources is contingent on access to or ownership of technological devices, the cost of ownership / access is not discussed by the OECS Digital Library ([Kingori](#),

2015). There is no publicly available information about the financial aspects of the partnership between OECS and the Global Book Alliance / GDL.

5.6. Aprendo en Línea

Aprendo en Línea is a digital learning platform developed by the Chilean government in response to Covid-19-related closures. It aims to support distance learning for pre-primary through adult education. It includes collections of pedagogical resources for students, caregivers, teachers, and administrators based on the Prioritised School Curriculum²¹ standards. These pedagogical resources consist of videos, radio materials, formative assessment activities, online-based educational programming, educational games, and digital library resources (↑OECD, 2020; ↑mineduc, no date).

5.6.1. Educational design / features

Aprendo en Línea is a repository of educational materials created by the Chilean government to support students, teachers, and caregivers to facilitate virtual and distance learning. For students, it includes access to a range of distance-learning education tools, including television ([Aprendo TV](#)),²² radio ([Aprendo FM](#)),²³ and digitally-based government educational programming (↑[Ayuda Mineduc](#), no date). These resources cover a range of topics, cater to numerous learning levels, and are organised thematically and by grade level to facilitate their accessibility and use. They include:

- Online STEM courses, organised learning materials, and lesson plans on coding and computer science for students in primary through secondary education (see: [Aprendo a programar](#)).²⁴
- Tools for students with disabilities, which include insights into making digital learning tools compatible with the needs of people with various disabilities, guidance on Chilean sign language, tools for deaf

²¹ For more information see:

https://www.curriculumnacional.cl/portal/Secciones/Curriculum-transitorio/178042:Priorizacion-Curricular#i_w3_ar_Innovacion2_tabs_secciones_1_178042_Fundamentos

Retrieved on 5 September 2022

²² See

<https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Aprendo-TV/214638:Aprendo-TV> Retrieved on 5 September 2022

²³ See

<https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Aprendo-FM/223682:Aprendo-FM> Retrieved on 5 September 2022

²⁴ See

<https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Programa-CODE-ORG/238620:CODE-ORG> Retrieved on 5 September 2022

and hard-of-hearing learners, and organised networks and communication boards for students with disabilities (see: [Recursos Educativos Digitales, RED](#)).²⁵

- Game-based educational materials, including interactive videos, guidelines for movement-focused and physical education-related games, activity guides for home-based learning, suggestions for gamified educational apps, and TV programming ([Aprendo jugando](#)).²⁶
- Online [physical and health education courses](#) including instructional videos, health education reading material, structured activity units, and educational materials aimed at mental and emotional health.²⁷
- [Educational support materials](#) for primary through secondary students, which include supplementary guidance materials on foundational education topics.²⁸
- Arts, music, and cultural educational materials including lectures, video lessons, and reading materials (see: [Lectura y Cultura](#)).²⁹
- Natural- and earth-science-related learning platforms that offer numerous types of digital environmental educational tools and materials (see: [Educación Ambiental](#)³⁰ and [Aprendo en mi territorio](#)).³¹

Aprendo en Línea also houses multiple digital libraries with learning and teaching materials for literacy at different reading levels ([La Biblioteca de Aula](#), [Biblioteca Digital Escolar](#), [Club de Lectura \(PLED\)](#), and [Biblioteca](#)

²⁵ See <https://especial.mineduc.cl/recursos-apoyo-al-aprendizaje/recursos-educativos-digitales> / Retrieved on 5 September 2022

²⁶ See <https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Aprendo-jugando/212572:Aprendo-jugando> Retrieved on 5 September 2022

²⁷ See <https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Vida-activa-y-emocional/175809:Vida-activa-y-emocional> Retrieved on 5 September 2022

²⁸ See <https://epja.mineduc.cl/modalidad-regular/informacion-a-estudiantes/material-de-apoyo/> / Retrieved on 5 September 2022

²⁹ See <https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Lectura-y-Cultura/176917:Lectura-y-Cultura> Retrieved on 5 September 2022

³⁰ See <https://www.curriculumnacional.cl/portal/Innovacion/Lineas-de-Innovacion/Educacion-Ambiental/246667:Educacion-Ambiental> Retrieved on 5 September 2022

³¹ See <https://www.curriculumnacional.cl/estudiantes/Aprendo-en-mi-territorio/> Retrieved on 5 September 2022

digital abierta).³² Notably, the library [Textos escolares Mineduc](#)³³ includes a collection of school textbooks, didactic guidelines, activities, and evaluations that complement school texts, for students and teachers. In addition to providing digitally based materials, this resource also allocates printed textbooks to students.

The platform also provides education management and technical support materials (including virtual classroom management systems, online libraries, and virtual reading materials). The [Aula 360](#)³⁴ pedagogical interface is designed for teachers and includes professional development content, guidance on teaching primary education, systems to monitor student work and data, assessment and evaluation materials, conversation forums, resources and guidance on technology-based education, platforms that host and house online informational events and webinars, and digital tools and textbooks ([↑mineduc](#), no date). Aprendo en Línea also provides a collection of videos and past online events / webinars for both teachers and students ([Conferencias virtuales](#)).³⁵

5.6.2. Evidence of impact

Publicly available evaluations of Aprendo en Línea's impacts and effectiveness are difficult to identify. Evaluating or assessing the impact of Aprendo en Línea is also challenging, given its complexity, the massive range of tools housed on this platform, and the diversity of audiences it aims to serve. While some studies and reports suggest that Aprendo en Línea has been useful to students and teachers, robust data on how this platform has shaped national learning and teaching in the years since its development is not available.

Although some external studies of Aprendo en Línea are available, they tend not to focus on specific learning outcomes for students. One such study comparing Aprendo en Línea and Mexico's national response to the

³² See

<https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Biblioteca-de-Aula/286601:Biblioteca-de-Aula>

<https://bdescolar.mineduc.cl/>

<https://planlectordigital.mineduc.cl/#/>

<https://www.curriculumnacional.cl/portal/Secciones/Biblioteca-Escolar-UCE/>

Retrieved on 5 September 2022

³³ See <https://www.curriculumnacional.cl/portal/Secciones/Textos-escolares/> Retrieved on 5 September 2022

³⁴ See <https://aula360.mineduc.cl/> Retrieved on 5 September 2022

³⁵ See

<https://www.curriculumnacional.cl/estudiantes/Aprendo-en-linea/Conferencias/176603:Conferencias-webinars-eventos-en-linea> Retrieved on 5 September 2022

educational demands of Covid-19-related closures found that Chilean teachers felt that the platform did not significantly mitigate the pressures of teaching virtually during school closures ([↑Loredo et al., 2020, p. 52](#)). However, the study highlighted that educators saw the free access to learning materials enabled by Aprendo en Línea as a benefit for sustained teaching and learning ([↑Arizmendi Loredo et al., 2020, p. 52](#)).

While they do not indicate the impact on learning outcomes, external reviews and opinion articles shed light on this platform's system-level and sociopolitical implications. Some of these reflections offer cautions about the potential for escalating social inequalities through the use of government-created EdTech systems — these inequalities are likely influenced in part by Chile's history of political upheaval ([↑Salas et al., 2020](#)). Another reflection highlights how socioeconomic inequalities can influence the accessibility of Aprendo en Línea, especially inhibiting use for families with limited financial security ([↑Salas et al., 2020](#)). The same article suggested that given its use to support distance learning, Aprendo en Línea could potentially put a strain on students' physiological well-being by limiting students' ability to access schools as safe spaces (e.g., spaces where they could be away from domestic violence, where they could have access to food and other resources, or have fulfilling interactions with peers) ([↑Salas et al., 2020](#)). However, these cautions are relevant for all distance learning and virtually-based educational approaches.

5.6.3. Potential to operate at scale

Aprendo en Línea has shown promising evidence of uptake and growth since its national-level implementation during the beginning of Covid-19-related closures. Operating in a system of roughly 3 million students ([↑UNESCO, 2016](#)), in its first year of operation (2021), the Chilean Ministry of Education reported that Aprendo en Línea had:

- An average of about 70,000 daily users and 500,000 weekly downloads
- Amassed 80,000 digital pedagogical resources
- Compiled 13,000 digital books in the Digital School Library with plans to add 2,000 that year and was making 4,000 daily digital library loans (in March 2021) ([↑mineduc, 2021](#))

The platform itself shows promise for future growth and sustainability by making use of and building on existing digital education resources, which include government-created programmes (such as radio and TV

programmes) and externally-developed tools such as Google's G Suite ([↑mineduc, 2021](#)). The platform is also made more robust by Aprendo en Línea's partnerships with government groups (Ministry of Transport and Telecommunications) and the private sector (including mobile network providers) ([↑mineduc, 2021](#)). Because the platform is government-owned and based on Chile's national curriculum and education standards, it is unlikely to be adopted for use in other countries. However, it may offer a useful case study for other governments seeking to provide a comprehensive national digital learning platform that integrates several features and provides curriculum-aligned content in multiple formats.

5.6.4. Focus on marginalised communities

The Ministry of Education set clear intentions to make the Aprendo en Línea platform inclusive and accessible for all Chilean students ([↑mineduc, 2021](#)). These intentions are evident in the platform's attention to students in low-resource settings, with disabilities, and from indigenous communities.

As previously discussed, Aprendo en Línea offers educational materials at various technological levels. Though most of the resources offered on this platform are online-based, students can access resources through devices, including radios, televisions, smartphones, computers, and tablets. Notably, basic mobile phones are the only major EdTech modality not accommodated by Aprendo en Línea. In addition, many Aprendo en Línea materials can be downloaded for use offline (especially PDF resources, videos, and audio files); in some cases, printed materials are provided for students who need them. These diverse platforms are of particular importance when considering that Chilean students report variable daily use of digital devices: roughly 25.5% use desktop computers, 34.5% use laptops, 80.2% use a cellphone and 16.1% use a tablet ([↑Cabello et al., 2021](#)). Furthermore, 84% of Chilean students report having access to an internet connection in their homes ([↑Cabello et al., 2021](#)).

Aprendo en Línea also tries to meet the needs of students from indigenous communities and those with disabilities. As mentioned above, learning materials on this platform are organised thematically and by learning level — including materials catered specifically to indigenous students with the aim of maintaining the linguistic and cultural heritage of indigenous communities ([↑mineduc, 2021](#)). The Ministry of Education also includes digital educational resources via Aprendo en Línea specifically for students with disabilities, including narrated resources, information on Chilean Sign Language, audiobooks, technology-based tools for people with limited

mobility, communication boards, student communication networks, and materials for visually impaired learners ([Digital Educational Resources, RED](#)). Due to the diversity and scope of this platform, Aprendo en Línea has successfully made itself adaptable to the range of needs of historically underserved communities.

5.6.5. Cost-effectiveness and financial sustainability

We could not find publicly available information on the costs or financial model of Aprendo en Línea. However, one source from the Ministry of Education stated that Aprendo en Línea had formed a strategic partnership with the Ministry of Transport and Telecommunications and several mobile providers (ENTEL, Claro, GTD, Mundo, Movistar and VTR, Mobile Telephone Association, and WOM). This suggests that the platform has a number of streams of financial support ([Mineduc, 2021](#)). These partnerships have also been key to ensuring continued free access to Aprendo en Línea resources for everyone involved in the Chilean education system ([Mineduc, 2021](#)).

References

This bibliography is available digitally in our evidence library at

<https://docs.edtechhub.org/lib/E2R8AXSA>

Arizmendi Loredó, K. F., Fernández Hidalgo, M., & Núñez Rivadeneira, S. (2020). *Análisis comparativo de las prácticas educativas implementadas en Chile y México durante la pandemia de COVID-19* | Guayana Moderna.

<https://revistasenlinea.saber.ucab.edu.ve/index.php/guayanamoderna/article/view/5423>. (details)

Ayuda Mineduc. (n.d.). *Aprendo en línea* | Ayuda Mineduc. Retrieved September 6, 2022, from

<https://www.ayudamineduc.cl/ficha/aprendo-en-linea>. (details)

CDN, R. (2020, April 16). Gobierno habilita herramienta “Inteligencia Quisqueya” para estudiantes que se preparan para pruebas nacionales. *CDN - El Canal de Noticias de los Dominicanos*.

<https://cdn.com.do/destacados/gobierno-habilita-herramienta-inteligencia-quisqueya-para-estudiantes-que-se-preparan-para-pruebas-nacionales/>. (details)

Cabello, P., Claro, M., Rojas, R., & Trucco, D. (2021). Children’s and adolescents’ digital access in Chile: the role of digital access modalities in digital uses and skills. *Journal of Children and Media*, 15(2), 183–201. <https://doi.org/10.1080/17482798.2020.1744176>. Available from

<https://www.tandfonline.com/doi/full/10.1080/17482798.2020.1744176>. (details)

Chuang, R., & Koomar, S. (2020). *EdTech Initiatives Focused on Classrooms and Teachers: A Curated List for Rwanda* (Helpdesk Response No. 28). EdTech Hub. <https://doi.org/10.5281/zenodo.4762316>. Available from <https://docs.edtechhub.org/lib/WGYWI78R>. (details)

de Feydeau, A., Menski, M., Retana Tello, I., Perry, S., & Hendel, P. (2021). *Bridging Latin America’s digital divide* | White & Case LLP.

<https://www.whitecase.com/publications/insight/latin-america-focus/bridging-digital>. (details)

Dreesen, T., Akseer, S., Brossard, M., Dewan, P., Giraldo, J.-P., Kamei, A., Mizunoya, S., & Ortiz, J. S. (2020). *Promising practices for equitable*

- remote learning: Emerging lessons from COVID-19 education responses in 127 countries* (p. 10). UNICEF.
<https://www.unicef-irc.org/publications/pdf/IRB%202020-10.pdf>.
(details)
- Eduq+. (n.d.). *Eduq+ – Movva*. Retrieved June 6, 2022, from
<https://movva.tech/eduqmais-2/>. (details)
- Escolas Exponenciais,. (2021, July 29). Pesquisa revela sistemas de ensino melhor avaliados no país - Blog do EX. *Escolas Exponenciais*.
<https://escolasexponenciais.com.br/inovacao-e-gestao/sistemas-de-ensino-melhor-avaliados/>. (details)
- Gainous, J., Wagner, K., & Gray, T. (2016). Internet freedom and social media effects: democracy and citizen attitudes in Latin America. *Online Information Review*, 40(5), 712–738.
<https://doi.org/10.1108/OIR-11-2015-0351>. (details)
- Geekie. (2021a). *Enem 2021: Geekie Teste cobre 100% dos assuntos de Matemática e 93% de Ciências da Natureza*. Geekie.
<https://www.geekie.com.br/blog/enem-2021-geekie-teste-cobre-100-porcento-de-matematica>. (details)
- Geekie. (2021b). *Retrospectiva Geekie 2021: (re)encontros de pessoas, caminhos e possibilidades*. Geekie.
<https://www.geekie.com.br/blog/post/retrospectiva-geekie-2021>.
(details)
- Hennessy, S., Jordan, K., Wagner, D. A., & Team, E. H. (2021). *Problem Analysis and Focus of EdTech Hub's Work: Technology in Education in Low- and Middle-Income Countries*. The EdTech Hub. (details)
- Hinostroza, J. E. (2017). *ICT, education and social development in Latin America and the Caribbean – UNESCO Digital Library*.
https://unesdoc.unesco.org/ark:/48223/pf0000262862_eng. (details)
- HoloniQ. (2020, June 8). *HoloniQ LATAM EdTech 100*. HoloniQ.
<https://www.holoniq.com/notes/latam-edtech-100/>. (details)
- IICA. (2020). *At least 77 million rural inhabitants in Latin America and the Caribbean have no access to high-quality internet services*. IICA.INT.
<https://iica.int/en/press/news/least-77-million-rural-inhabitants-latin-america-and-caribbean-have-no-access-high>. (details)

- INEGI. (2021). *Encuesta para la Medición del Impacto COVID-19 en la Educación (ECOVIED-ED) 2020*.
<https://www.inegi.org.mx/investigacion/ecovieded/2020/>. (details)
- Kingori, J. N. (2015). *Influence Of Hidden Costs In Education On Students' Participation In Public Secondary Schools In Kikuyu Sub County, Kenya* (p. 90). School of Education Department of Educational Administration and Planning of Nairobi University. (details)
- Lavca. (2021). *Edtech Startups in Latin America 2021 Survey Results*.
<https://lavca.org/2021-startup-survey-edtech/>. (details)
- Lichand, G., & Christen, J. (2020). *Using Nudges to Prevent Student Dropouts in the Pandemic* (arXiv:2009.04767). arXiv.
<https://doi.org/10.48550/arXiv.2009.04767>. Available from
<http://arxiv.org/abs/2009.04767>. (details)
- Lichand, G., Christen, J., & van Egeraat, E. (2022). *Do Behavioral Nudges Work Under Remote Learning? Evidence from Brazil During the Pandemic* (SSRN Scholarly Paper No. 3724386). Social Science Research Network. <https://doi.org/10.2139/ssrn.3724386>. Available from
<https://papers.ssrn.com/abstract=3724386>. (details)
- Loredo, K. F. A., Hidalgo, M. F., & Rivadeneira, S. N. (2020). Análisis comparativo de las prácticas educativas implementadas en Chile y México durante la pandemia de COVID-19. *Guayana Moderna*, 9(9), 39–59.
<https://revistasenlinea.saber.ucab.edu.ve/index.php/guayanamoderna/article/view/5423>. (details)
- Lulia Filho, H., Turri, S. N. Z., Silva, E. C., & Santos, E. de S. M. (2019). IDENTIFICAÇÃO DO MODELO DE NEGÓCIO DE UMA START-UP/TIC: ESTUDO DE CASO NA EMPRESA GEEKIE. In *Investigação Científica nas Ciências Humanas e Sociais Aplicadas 3* (1st ed., pp. 144–160). Atena Editora. <https://doi.org/10.22533/at.ed.69219160413>. Available from
<https://www.atenaeditora.com.br/wp-content/uploads/2019/04/E-book-Investiga%C3%A7%C3%A3o-Cient%C3%ADfica-nas-Ci%C3%A4ncias-Humanas-e-Sociais-Aplicadas-3-1.pdf>. (details)
- mineduc. (2021, March 26). “Aprendo en Línea” mantendrá acceso gratuito desde dispositivos móviles. Ministerio de Educación.

<https://www.mineduc.cl/aprendo-en-linea-mantendra-acceso-gratuito-desde-dispositivos-moviles/>. (details)

mineduc. (n.d.). *Se lanza Aprendo En Línea Docente para reforzar el aprendizaje remoto*. Retrieved June 6, 2022, from <https://www.mineduc.cl/aprendo-en-linea-docente/>. (details)

Mitchell. (2020). *Why COVID-19 is an EdTech opportunity for Latin America*. World Economic Forum. <https://www.weforum.org/agenda/2020/09/what-covid-19-means-for-edtech-latin-america/>. (details)

Moloney, A. (2020, May 12). Could coronavirus lockdowns help close Latin America's digital divide? *Reuters*. <https://www.reuters.com/article/us-health-coronavirus-latam-tech-trf-idUSKBN22O1L5>. (details)

Movva. (n.d.). *Movva*. Retrieved June 6, 2022, from <https://movva.tech/>. (details)

Núñez, G., Jordán, V., & Rojas, F. (2020). *CEPAL – SECRETARIA TECNICA DEL ELAC (*)*. 36. (details)

Neidhöfer, G., Lustig, N., & Tommasi, M. (2021). Intergenerational transmission of lockdown consequences: prognosis of the longer-run persistence of COVID-19 in Latin America. *Journal of Economic Inequality*, 1–28. <https://doi.org/10.1007/s10888-021-09501-x>. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8325400/>. (details)

OECD. (2016). *Teaching Strategies for Instructional Quality: Insights from the TALIS-PISA Link Data* (OECD Education Working Papers No. 148). https://www.oecd-ilibrary.org/education/teaching-strategies-for-instructional-quality_5jln1hlsr0lr-en. (details)

OECD. (2020). *Lessons for Education from COVID-19 A Policy Maker's Handbook for More Resilient Systems*. OECD Publishing. (details)

RECC. (2016). *Promoting Family and Teacher's Engagement Through Nudges*. TRECC. <https://treccprogram.org/en/project/eduq/>. (details)

Rigby, C. (2016, January 10). How software that learns as it teaches is upgrading Brazilian education. *The Observer*. <https://www.theguardian.com/technology/2016/jan/10/geekie-educational-software-brazil-machine-learning>. (details)

- Romero-Hall, E. (2021). *Current initiatives, barriers, and opportunities for networked learning in Latin America* | SpringerLink. <https://link.springer.com/article/10.1007/s11423-021-09965-8>. (details)
- Rosa, J. L. (2021). *Levar sala de aula até sala de casa é bom negócio na Geekie*. Valor Econômico. <https://valor.globo.com/empresas/noticia/2021/06/14/levar-sala-de-aula-ate-sala-de-casa-e-bom-negocio-na-geekie.ghtml>. (details)
- Rubagiza, J., Were, E., & Sutherland, R. (2011). Introducing ICT into schools in Rwanda: Educational challenges and opportunities. *International Journal of Educational Development*, 31(1), 37–43. <https://doi.org/10.1016/j.ijedudev.2010.06.004>. (details)
- Salas, G., Santander, P., Precht Gandarillas, A., Scholten, H., Moretti, R., & López-López, W. (2020). COVID-19: impacto psicosocial en la escuela en Chile. Desigualdades y desafíos para Latinoamérica. *Avances en Psicología Latinoamericana*, 38(2), 1-17. <http://repositorio.ucm.cl/handle/ucm/repositorio.ucm.cl/handle/ucm/3186>. (details)
- Salas, G., Santander, P., Precht, A., Scholten, H., Moretti, R., & López-López, W. (2020). COVID-19: impacto psicosocial en la escuela en Chile. Desigualdades y desafíos para Latinoamérica. *Avances en Psicología Latinoamericana*, 38, 17. (details)
- Selwyn, N. (2016). *Is Technology Good for Education?* Polity Press. (details)
- Seusan, L. A., & Maradiegue, R. (2021). *Educación en pausa*. <https://www.unicef.org/lac/informes/educacion-en-pausa>. (details)
- The World Bank. (2016). *World Development Report 2016: Digital dividends*. World Bank. (details)
- The World Bank. (2020). *Children out of school, primary – Latin America & Caribbean* | Data. https://data.worldbank.org/indicator/SE.PRM.UNER?locations=ZJ&most_recent_year_desc=false. Available from https://data.worldbank.org/indicator/SE.PRM.UNER?locations=ZJ&most_recent_year_desc=false. (details)
- The World Bank. (2020). *Individuals using the Internet (% of population)* | Data. <https://data.worldbank.org/indicator/IT.NET.USER.ZS>. (details)

- UNESCO, & Kozma, R. B. (2011). The Technological, Economic, and Social Contexts for Educational ICT Policy. In *Transforming education: the power of ICT policies* (pp. 3–18). UNESCO. ([details](#))
- UNESCO. (2010). *Regional overview: Latin America and the Caribbean*. <https://unesdoc.unesco.org/ark:/48223/pf0000186524/PDF/186524eng.pdf.multi>. ([details](#))
- UNESCO. (2016, November 27). *Chile*. <http://uis.unesco.org/en/country/cl>. ([details](#))
- UNESCO. (2020). *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*. Roscongress Building Trust. <https://roscongress.org/en/materials/iskusstvennyy-intellekt-v-obrazovanii-problemy-i-vozmozhnosti-dlya-ustoychivogo-razvitiya/>. ([details](#))
- UNESCO. (2020). *Results of the Curricular Analysis of the Fourth Regional Comparative and Explanatory Study (ERCE 2019)*. UNESCO. <https://en.unesco.org/news/webinar-analisis-curricular>. ([details](#))
- UNICEF. (2020). *Reimagine Education and Skills Development for Children and Adolescents in Latin America and the Caribbean*. <https://www.unicef.org/lac/media/30071/file/Reimagine-Education-in-Latin-America-and-the-Caribbean-Investment-case.pdf>. ([details](#))
- UNICEF. (2021). *Around 2 in 3 children are still out of the classroom in Latin America and the Caribbean*. <https://www.unicef.org/lac/en/press-releases/around-2-in-3-children-a-re-still-out-of-the-classroom-in-latin-america-and-caribbean>. ([details](#))
- UNICEF. (2021). *Reimaginar la educación y el desarrollo de habilidades para niños, niñas y adolescentes*. <https://www.unicef.org/lac/informes/reimaginar-la-educacion-en-america-latina-y-caribe>. ([details](#))
- Wagner, D. A., & Lubin, I. (2018). Technology for Education in Low-Income Countries: Supporting the UN Sustainable Development Goals. In *ICT-Supported Innovations in Small Countries and Developing Regions: Perspectives and Recommendations for International Education* (pp. 51–74). Springer International Publishing. ([details](#))

- Wise. (2016). *Geekie: Personalized Learning for All*. WISE.
<https://www.wise-qatar.org/project/geekie-personalized-learning-all-brazil/>. (details)
- Wolf, S., Aurino, E., Brown, A., & Tsinigo, E. (2021). *WORLD BANK STRATEGIC IMPACT EVALUATION FUND (SIEF)*. 21. (details)
- World Bank. (2020). *LATIN AMERICA AND THE CARIBBEAN Inclusion and education: ALL MEANS ALL*.
<https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Education%20Monitoring%20Report%202020%20-%20Latin%20America%20and%20the%20Caribbean%20-%20Inclusion%20and%20education%20-%20All%20means%20all.pdf>. (details)