LEARNING RECOVERY PROGRAMS

Assessing the Evidence and Potential
for Latin America

MARCH 2022

María Ester Mancebo & Denise Vaillant

Autores: María Ester Mancebo y Denise Vaillant

Diagramación: Victoria Tosi

Índice

Tables and Figures

Acronyms & Abbreviations

AECID	Spanish International Development Cooperation Agency (*Agencia Española de Cooperación Internacional para el Desarrollo*)
CAF	Latin American Development Bank (*Corporación Andina de Fomento*)
CIESAS	Center for Research and Advanced Studies in Social Anthropology (*Centro de Investigaciones y Estudios Superiores en Antropología Social*)
CIPPEC	Center for the Implementation of Public Policies for Equity and Growth
COVID	Coronavirus Disease
CREA	Center for Open Educational Resources (*Centro de Recursos Educativos Abiertos*)
ELP	Early Learners Program
ERIC	Educational Research Information Center
GPE	Global Partnership for Education
IAD	Inter-American Dialogue
ICT	Information and Communication Technology
IIPE	International Institute for Educational Planning
JEE	Extended School Day (*Jornada Escolar Extendida*)
KIX	Knowledge & Innovation Exchange
LAC	Latin America and the Caribbean
MIA	Independent Learning Measurement (*Medición Independiente de Aprendizajes*)
MINERD	Ministry of Education of the Dominican Republic (*Ministerio de Educación de la República Dominicana*)
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
OECS	Organization of Eastern Caribbean States
OREALC	Regional Office for Latin America and the Caribbean (*Oficina Regional de Educación para América Latina y el Caribe*)
PAM	Adaptive Mathematics Platform (*Plataforma Adaptativa de Matemáticas*)
PISA	Program for International Student Assessment
SciELO	Scientific Electronic Library Online
TaRL	Teaching at the Right Level
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank

Acknowledgements

I. PRESENTATION OF THE STUDY

The COVID-19 pandemic reached Latin America and the Caribbean (LAC) in early 2020 and led to the closure of educational institutions for prolonged periods and the implementation of various strategies in response to the suspension of face-to-face classes. It is in this context of crisis that a new concept appeared, namely emergency remote teaching (ERT) conceptualized by Hodges et al. (2020), among others. ERT is defined as transitional education in response to a crisis through the support of digital technologies and a variety of resources.

While the repercussions of the COVID-19 crisis have not been comprehensively measured, they cover multiple aspects of education, from on-time schooling, dropout, and progress to the learning achieved by students. Today more than ever, it is important to consider strategies for learning recovery to be implemented in the post-pandemic period.

In this report, the term *learning recovery program* is used to refer to educational interventions designed to close the gap between what students know and what they are expected to know. Based on this general notion, it is important to distinguish between three terms that often seem to overlap and are used ambiguously, both in educational practice and in the specialized literature: remedial programs, leveling programs, and accelerated learning programs.

Remedial programs refer to specific additional support concurrent with regular classes for students who, in order to succeed in formal courses, require short-term help in the acquisition of content or skills (Schwartz, 2012). These are educational interventions aimed at addressing the learning needs of a specific group of children who lag academically in the incorporation of knowledge or the mastery of certain skills. Generally, these programs target students who attend formal learning programs and have comparatively more difficulties than their peers (World Bank, 2018).

Leveling programs are short-term transitional educational interventions designed for children and young people who actively attended school prior to an educational interruption. They provide students with the opportunity to catch up on content missed due to the interruption and support their re-entry and continuity in educational programs (CAF, 2021).

Finally, *accelerated learning programs* are a type of alternative education based on the principles of accelerated learning. They are flexible proposals adapted to the age of the student (Aquilino, 2015) and are generally aimed at children and young people from vulnerable sectors who are either over-age or have dropped out of school.

Some authors (e.g., Baxter & Bethke, 2009) make a distinction between remedial and accelerated programs: while the former focuses on the mastery of basic learning competencies of each level, the latter delivers curriculum content at a faster pace and focuses on over-age students and children and adolescents who are disaffiliated from the educational system or who have difficulties accessing schools.

There is currently an academic debate on the effectiveness of learning recovery programs. In this regard, Darling-Hammond et al. (2020) argue that learning acceleration should be promoted rather than remedial programs. It would seem that personalized acceleration strategies along with formative assessment would yield better results than the mere implementation of remedial activities.

The study presented in this report is based on a systematic review of literature on learning recovery programs in primary and secondary education. To delimit the corresponding corpus of studies, the methodological framework designed by Wolfswinkel et al. (2013) was adopted based on the following stages: delimitation and search; selection and identification of emerging themes; and interpretation of results and development of conclusions. As a first step, a categorization of books, articles, reports, and webpages was conducted using the *ERIC*, *Scopus*, *SciELO*, and *Latindex* databases. Emphasis was placed on the identification of rigorous assessment studies and in particular, impact assessments of learning recovery experiences.

The task was particularly difficult for the Latin American region because of a shortage of reports and articles focused on the assessment of programs and innovations. In addition, there is a marked tendency in these sources to focus on process and outcome assessments to the detriment of impact assessments. As Aquilino (2015) points out, impact assessment is not a very common practice in the public policy cycle in Latin America. For this reason, the present study also incorporates experiences that, although they have not been subjected to impact assessments, have been positively evaluated in terms of equity and educational quality in the communities involved. Cases that had innovative components and potential for scalability were also included.

The report is organized into four sections. It first presents a review and analysis of international and regional learning recovery programs. Two representative cases of programs were selected for six categories identified in the literature review: leveling; acceleration; tutoring; teaching at the right level; extension of teaching time; and computer-assisted learning. Next, a cross-sectional analysis of the experiences was carried out in terms of the institutional framework and the actors, the pedagogical model, and human resource training. The critical points were then examined. Finally, several suggestions were formulated for the post-pandemic scenario.

II. REVIEW AND ANALYSIS OF LEARNING RECOVERY PROGRAMS

A review of the literature shows that learning recovery initiatives have been designed and implemented in a wide variety of ways. In some cases, they are developed independently either during or outside school hours while in others, they form part of a more comprehensive educational program or project. In addition, there are cases of isolated experiences as well as programs conceived as key components of a country's education policy.

Second, learning recovery programs often have several simultaneous objectives: achieving learning in general; improving reading and math skills; avoiding grade repetition or dropout, and preparing students to continue their educational path.

Learning recovery interventions tend to use a wide range of tools. While some programs focus on extending teaching time and changing pedagogical approaches, others rely on tutoring and the distribution of materials, while yet others focus on the use of technological devices.

Miranda López (2018) categorizes three groups of interventions according to their purpose: (i) addressing social vulnerability, such as conditional transfers of financial assistance to families or scholarships for children and adolescents; (ii) addressing issues of academic integration through tutoring and academic counseling, curricular flexibility, technical support in schools, and the provision of materials; and (iii) favoring the teaching of participants through the provision of materials and guides and psychosocial support for students.

According to the categorizations identified in the bibliography (Schwartz, 2012), the present study distinguishes six types of learning recovery programs (Figure 1).

FIGURE 1. TYPES OF LEARNING RECOVERY PROGRAMS
Source: Authors

Leveling	**Acceleration**	**Tutoring**
Short-term interventions based on curricular adaptation aimed at students who need to recover content or skills in order to continue with the regular education program.	Short-term interventions based on the principle of Accelerated Learning and aimed at students who are over-age or disaffiliated from the system.	Specific support delivered to students by tutors that complements the regular teaching they receive in order to facilitate the achievement of learning objectives.
Teaching at the Right Level	**Extended Teaching Time**	**Computer-based Learning**
Assignment of students to groups based on skill level, especially in literacy and math.	Increase in teaching time through extracurricular activities or a variety of other opportunities.	Use of specialized software with adapted content and learning activities.

Of the numerous experiences developed at the international and regional levels, the selection of cases examined in this study was based on two criteria. First, an effort was made to include cases representative of the six types distinguished in Figure 1. Second, consideration was given to the existence of an impact assessment or, failing that, an evaluative report with rigorous evidence of the results obtained and of the potential scalability and transferability of the experiences. Six international experiences and six interventions in LAC were selected.

Figure 2 illustrates the diversity of experiences identified at the international level based on leveling, acceleration, tutoring, teaching at the right level, extended teaching time, and computer-based learning. These are programs for which there are rigorous evaluations. They were initiated and implemented prior to the COVID-19 pandemic and in some cases are ongoing. This study considers a variety of contexts and regions, with cases from Spain, France, Turkey, Ethiopia, and India. All of these interventions have inspiring characteristics for other contexts and may have the potential for scalability.

FIGURE 2. LEARNING RECOVERY: INTERNATIONAL CASES

Source: Authors

Leer en parejas
Tutoring.
Spain.

Vacances Apprenantes
Extended Teaching Time.
France.

Catch Up Program
Leveling.
Turkey.

Second Chance
Acceleration.
Ethiopia.

TaRL
Teaching
at Right Level.
India.

Mindspark
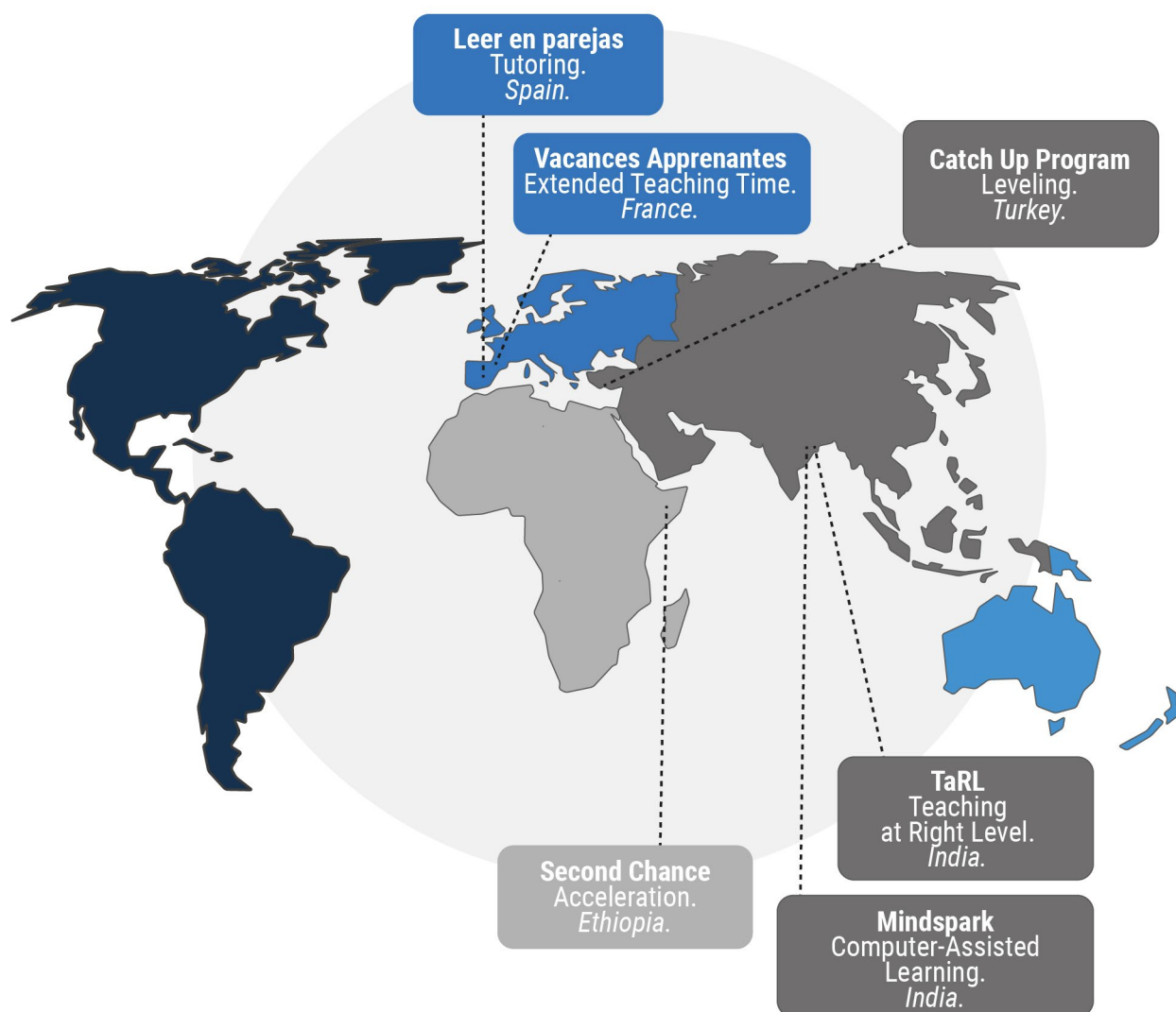Computer-Assisted
Learning.
India.

Figure 3 illustrates a series of interventions identified at the regional level and grouped according to the aforementioned a priori categories: leveling, acceleration, tutoring, teaching at the right level, extended teaching time, and computer-based learning. These were implemented prior to the COVID 19 pandemic and for which rigorous evaluations are available. The regional cases cover a variety of countries and contexts are located in the Dominican Republic, Mexico, the Caribbean, Colombia, Brazil, and Uruguay. The characteristics of these interventions are important for the region in question because of their potential and future replicability.

FIGURE 3. LEARNING RECOVERY: REGIONAL CASES

Source: Authors.

In the paragraphs that follow, one international and one regional case are presented for each of the six categories of learning recovery interventions identified in the literature (for a total of 12 cases).

2.1. Leveling

There is now a broad consensus on the importance of math and reading comprehension skills, both because of their direct effect on future educational and employment prospects (CAF, 2021) and because of the role they play in the acquisition of other skills and knowledge. This need to ensure that children, adolescents, and young people acquire minimum levels of these basic skills has led in recent decades to the emergence of learning leveling programs.

Leveling programs are based on the assumption that learning is cumulative, that is, certain knowledge and skills must be acquired before others. Given the fact that a significant percentage of students in some countries lag, the challenge is to adapt pedagogical efforts to level and then improve the skills of those who are the furthest behind (CAF, 2021).

The application of diagnostic tests is fundamental for the implementation of leveling programs. Not only to qualify educational policy decision-making, but also to provide schools and families with information that enables them to adapt the teaching and learning process to the specific situation of their students when they return to the classroom.

2.1.1. CATCH-UP EDUCATION PROGRAM, TURKEY

Turkey's Catch-up Education Program initiative targets students between the ages of 10 and 14 who never enrolled in primary education, dropped out of school, or are at least three years behind in their studies. The program was launched by the Turkish Ministry of Education in collaboration with UNICEF and was implemented in 81 provinces between 2008 and 2013.

The intervention followed a five-stage cycle: (i) identification of the target group of students to be leveled; (ii) planning; (iii) school enrollment; (iv) implementation of the intervention; and (v) monitoring and evaluation. This was a comprehensive large-scale educational program in terms of its design and the scope of its implementation. Students were grouped according to diagnostic test results into various eight-week leveling sub-programs according to how far behind they were in their studies.

FINDINGS

Börkan et al. (2015) conducted a midterm study based on a documentary review and interviews with various actors who participated in the program. In 2010, they conducted 237 semi-structured interviews with students, families, principals, teacher trainers, and Ministry of Education teams. By the end of the 2009-2010 academic year, the program involved 19,990 students (37.3% boys, 62.7% girls) in 61 provinces. According to the teachers and principals interviewed, the Catch-up Education Program produced considerable differences in the children who participated in it. Among the weaknesses noted were the diversity of needs of participating students, the program's short duration, student absenteeism due to seasonal work, and the lack of institutional capacity, especially at the local level.

2.1.2. EARLY LEARNERS PROGRAM, OECS

The *Early Learners Program* (ELP) was implemented in member states of the Organization of Eastern Caribbean States (OECS) (Antigua and Barbuda, Dominica, Grenada, St. Lucia, St. Kitts and Nevis, and St. Vincent and the Grenadines) by the United States Agency for International Development (USAID) and OECS in the period 2015-2020.

The focus was on improving the reading skills of preschool children up to third grade through multiple strategies related to curriculum development, teacher training, school management, and planning. A range of specific methodologies was implemented to improve vocabulary and reading comprehension. Teachers were trained in the use of various materials for reading practice and the continuous evaluation of student achievement for subsequent feedback.

FINDINGS

Results from a mid-term report produced by USAID (2020) indicate that during the 2015-2020 period, the ELP contributed to a 50% increase in reading achievement among second-grade students in participating countries. It reached over 73,000 students at the primary school level, provided professional development to over 3,400 teachers, and facilitated over 1,400 lessons and 1,000 teacher training sessions. In addition, the ELP provided development grants for reading improvement projects to 60 schools and 304,552 sets of teaching and learning materials to 2,582 classrooms throughout OECS.

2.2. Acceleration

The flexible educational models included in the term Accelerated Learning are designed for children and adolescents who are over-age, that is, three or more years older than the average age of the grade they are about to attend. These teaching strategies aim to enable students to level their schooling and acquire the knowledge and conceptual, procedural, and attitudinal skills set for each grade. Likewise, acceleration programs seek to personalize the learning process and strengthen students' self-esteem in order to help them overcome the school failure experienced at some point in their lives (Schwartz, 2012).

As the term suggests, accelerated learning focuses on the acquisition of content and knowledge by students, not on the speed of teaching. Sometimes, accelerated can even mean slowing down. For example, a Grade 7 algebra unit may require 30 lessons rather than 20 to allow for the development of the essential skills needed to achieve the learning goals set for the level (Schwartz, 2012).

2.2.1. SECOND CHANCE, ETHIOPIA

The Luminos Fund's *Second Chance* initiative, formerly known as Speed School, is an accelerated learning program that targets children between the ages of 8 and 14 who have either dropped out or interrupted their schooling. The program has been running in Ethiopia since 2011 and was initially managed by Geneva Global. Since 2016, the Luminos Fund has overseen the program. Over a period of 10 months, several interventions are carried out with the aim of recovering learning between the first and third grades of primary school. The main purpose of the intervention is to prepare students for the transition to fourth grade in public schools.

During the seven- to eight-hour school day, *Second Chance* students learn reading, writing, and arithmetic in small groups and with individualized support from trained teachers. The program emphasizes the importance of community involvement in mobilizing support to ensure that children continue their schooling after the *Second Chance* interventions are completed. Another key component of the intervention is alliances with partners and government schools to facilitate the broadest possible adoption of the Luminos model by governments and various stakeholder networks.

FINDINGS

Since 2011, the Center for International Education at the University of Sussex has conducted several assessments to measure the effectiveness of the *Speed School* and later *Second Chance* program. One of the most recent published studies (Akyeampong et al., 2018) reports following 625 children who participated in the *Speed School* program in 2011, completed it, and then transitioned to public schools. Their progress was compared with that of 1,250 public school students who did not participate in the program. The assessment shows that the education *Speed School* students receive over 10 months of instruction extends beyond that period as their ability to learn is strengthened overall. In addition, about 74.6% of *Speed School* students stayed in school compared to 66.1% of public school students. Moreover, former *Speed School* students are generally less likely to drop out of school compared to public school students.

2.2.2. ACELERA BRASIL

The *Acelera Brasil* program is one of the most important remedial initiatives developed in public schools in Latin America. In 1997, the Brazilian government stipulated in its National Education Plan that public schools could create specific groups to support students enrolled in third through fifth grades of elementary school who were underperforming for their age due to grade repetition or late entry into school.

The main objective of *Acelera Brasil* is for students to master the expected content in the shortest possible time to be able to re-enter the appropriate grade for their age. The aim is to correct the age-grade distortion in pedagogy and school management. The strategy combines training, systematic planning and implementation, and monitoring and evaluation. The first stage is based on a diagnostic assessment designed to establish the literacy level of students with age-grade distortion. Based on the results, students are then categorized according to learning level.

The *Acelera Brasil* program has been implemented in several Brazilian states. Diagnostic evaluations prior to the implementation of the program showed that about 30-40% of students who repeated grades or dropped out of school had not learned to read in the early grades. For this reason, *Acelera Brasil* places a strong emphasis on reading as well as math. In addition, a program known as *Se Liga* is aimed at specific groups of non-literate students. Once students are literate, they join *Acelera Brasil* classes until they can enter regular classes according to the appropriate grade for their age.

The Ayrton Senna Institute has played a crucial role in the development of the *Acelera Brasil* initiative, which has been used as a reference in designing similar projects in Colombia and El Salvador. While the initiative had distinctive characteristics In Argentina, it also draws on the fundamentals of the Brazilian experience.

FINDINGS

According to evidence reported by Schwartz (2012), 52% of students participating in the *Acelera Brasil* program in Paraíba State passed more than one grade in 2011, while in Pernambuco State, the dropout rate of participating students (3.2%) was lower than the state average of 14.8%.

Meanwhile, a report by Schneid Scherer et al. (2020) shows that 52 municipalities in Brazil's five macro-regions in addition to Rio Grande do Sul State implemented the *Acelera Brasil* program and successfully reported the findings of the following indicators: number of books read; completion of scheduled school days; teacher and student attendance; class observations by the mediator; teachers' planning meetings; and student completion of homework.

2.3. Tutoring

According to González Palacios & Avelino Rubio (2016), the concept of tutoring is polymorphic, contextual, and elusive. Internationally, over the last decades, tutoring has been the subject of multiple studies and has been conceptualized in different ways. What is clear in all definitions is that there is a relationship between two participants and a support activity that is conscious, intentional, and methodical, which focuses on delivering pedagogical support to students to help them achieve their learning objectives. In some cases, tutoring also aims at improving students' social-emotional skills.

Several learning recovery programs have made use of tutoring in the school itself during specific hours, while in other cases, the activities have taken place outside school hours. Some are led by teachers, others by volunteers, and there have also been cases of tutoring being conducted by fellow students from more advanced courses. Tutoring is generally carried out in person, although online modes have also been developed.

2.3.1. LLEGIM EN PARELLA, SPAIN

Llegim en Parella (Reading in Pairs) is a learning recovery program promoted by the peer learning group of the Institut de Ciències de l'Educació at the Universitat Autònoma de Barcelona. It combines three elements considered strategic: peer tutoring, family involvement, and reading comprehension (Duran, 2018).

The program is based on a cooperative learning method in which pairs of students are formed with the aim, whether in the role of tutor or student, of both members learning through a script of structured interactions. The methodology has been widely used in many countries under the denomination of "peer tutoring" at all education levels and in all subjects. There have also been cases of tutoring between students of different ages (or "cross-age tutoring"), in which the tutor is the older student. Finally, we also note tutorials involving students of the same age (or "same-age tutoring"), which are less complex to organize. Depending on the fixed or interchangeable character of the role of tutor and tutored, a distinction is made between fixed-role tutoring and reciprocal tutoring, in which tutor and tutored periodically exchange roles. Additionally, peer tutoring can be supported by family tutoring.

Llegim en parella uses peer tutoring—at school between students and at home between the student and a family member—to improve reading and reading comprehension in primary school. The tutoring is conducted through a structured script that allows tutor and tutored to know at all times what they have to do in two 30-minute sessions per week over one trimester. The teachers form the pairs based on a set of criteria such as ensuring that the most knowledgeable tutor should be paired with the most knowledgeable tutored student.

FINDINGS

The study by Blanch et al. (2012) explored the impact of both peer and family tutoring on improvements in reading comprehension in various schools in Catalonia. The study was based on a sample of 303 schoolchildren aged 8 to 11 years and 223 family tutors (61.5% mothers, 15% fathers, 17% both parents, and 6.5% siblings). Reading comprehension performance was assessed through standardized tests administered before and after the intervention. Student and parent surveys, as well as teacher and family interviews, were conducted and family tutoring interactions were analyzed. The main results of the assessment revealed positive effects for all students but especially for the 223 students who received family support. Overall, the study revealed the effectiveness of peer learning in improving reading comprehension skills and the potential of family involvement for the development of academic skills when the school provides reassurance and support.

2.3.2. AULA GLOBAL, COLOMBIA

The Aula Global program was created to address learning poverty, or the inability to read and comprehend a short age-appropriate text at age 10, and to reduce learning gaps between children. In Colombia, 49% of children in the upper grades of primary school suffer from learning poverty, which leads to grade repetition, school dropout, over-age students, frustration, and low self-esteem.

In the foundational phase of the program, two interventions were developed in the city of Cali: one for tutoring, the other for the professional development of teachers. The first intervention consisted of 30 one-hour sessions per semester delivered to students at the low end of the distribution within each grade and school included in the study over one academic term. Tutors were hired and trained by the Carvajal Foundation and worked directly with students on reinforcing their basic language and math skills.

The second intervention involved a monthly visit throughout the academic year to selected teachers in public schools. Visits consisted of classroom observations and feedback to the teacher and were aimed at providing teachers with pedagogical strategies and, strengthening their educational practices and thus achieving improved learning in language and math for students lagging. The visits were conducted by tutors and pedagogical counselors hired by the Carvajal Foundation and were complemented by workshops (three per semester) in which the sampled teachers shared their experiences.

Following its beginnings in Cali, *Aula Global* was adopted by the Ministry of Education as a model to be replicated in Colombia and has since expanded to the 36 public schools with the highest dropout rates in the Colombian Pacific, enabling 25% of participating students to move from being at the lowest and basic levels of performance in math and language to adequate and higher levels.

Aula Global implements semi-personalized tutoring sessions with students lagging in reading and math, assigns them a tutor who provides them with focused and personalized attention, valuing them as learners. With their guidance, the tutor helps students identify their own abilities and skills in order to achieve the goals they set for themselves. The tutoring facilitates students' reincorporation into the expanded classroom with greater self-confidence. [1]

FINDINGS

A pilot study conducted in 2017 (Barrera-Osorio & Lagos, 2018) found that by the end of the academic year, on average, *Aula Global* students improved their performance compared to their baseline and outperformed their peers in the control group. This effect was positive and statistically significant and increased as students participated in further tutoring sessions. This study also showed that the metacognitive process of students in the program allowed them to take stock of the knowledge acquired, thus generating greater self-confidence and improving their relationships with others.

An impact assessment conducted in 2021 (Carvajal Foundation & Ministry of Education, 2021) confirmed that students in the treatment group (with tutoring) improved on average more than students in the control group (without tutoring). The dropout rate for children who did not participate in the program was 3.4% compared to 1.6% for those who did. Students who attended all of the tutorials saw an improvement of 0.38 standard deviations in basic learning, while girls who participated improved their performance in basic skills by 0.14 standard deviations. The program also reduced the grade repetition rate in elementary school by 50%. The assessment concluded that there is a positive correlation between the implementation of this program and student performance and shows that tutoring contributes to closing education gaps in Cali even though there is a need to continue targeting efforts for further reduction and quality improvement (measured through standardized test results).

2.4. Teaching at the Right Level

Teaching at the Right Level is an evidence-based initiative that enhances the quality of primary education by improving teachers' capacity to improve children's foundational skills and by supporting teachers through mentoring and monitoring (GPE-KIX, 2022). [2]

Interventions based on the *Teaching at the Right Level* model have been conducted in Mexico, India, and several African countries. In these interventions, teachers create learning groups of students of different ages who are offered activities adapted to their level. Individual

action plans are proposed for each student, and they are supported and accompanied by a teacher. Students are incorporated into small flexible groups. Some interventions also introduce a tutor, mentor, or assistant to support the classroom teacher.

The TaRL model focuses on each child's learning process. It can be particularly effective in remediating a loss of learning in children lagging, while also benefiting all students. For example, children who can read a word are then taught to read a sentence, and students who can read a paragraph are then taught to read a story: each child progresses and acquires foundational skills at their own pace. This approach differs from models of learning recovery classes in which students can continue to do below grade-level work and therefore never catch up, which may widen gaps between students receiving remediation and their grade-level peers.

2.4.1. TARL, INDIA

TaRL emerged as an initiative of the Pratham NGO [3] to teach children according to their actual learning level in four Indian states. It started as a pilot initiative and has evolved over time (Banerjee et al. 2016), spreading in the 2000s across India as part of Pratham's *Read India* Program.

The approach focuses on a set of Combined Activities for Maximized Learning (CAMaL), also referred to as *Teaching at the Right Level* (TaRL). TaRL has been implemented in rural schools and communities in India based on the prior training of educators who are Pratham team members or community volunteers. The approach was designed for students in the third through fifth grades of primary school and performing below the expected level for their age. Over time, the strategy has been replicated at various grade levels. The approach focuses on the development of basic reading and math skills. Students are grouped by actual learning level and receive tutoring and continuous follow-up.

TaRL is implemented in two formats. In the first, called *Learning Camps*, students in the third through fifth grades receive two hours of supplementary training led by instructors every day during the school day. These interventions are intensive, lasting about 10 days, and are repeated three to five times during the school year for a total of 30 to 50 days. In the second format, the activities designed by Pratham are carried out by public school teachers. These teachers receive specific prior training

from the Pratham team and carry out activities to support students for 60 to 80 days during the school year.

FINDINGS

A study by Banerjee et al. (2016) shows that students participating in the TaRL program see significant improvements in their literacy and math learning. In their quest for evidence regarding the TaRL formats, the authors designed a large-scale experimental evaluation in Haryana and Uttar Pradesh. Both models proved effective, with a language benefit of 0.15 standard deviations in Haryana and 0.70 in Uttar Pradesh.

The TaRL model has expanded to several countries on the African continent, including Botswana, Côte d'Ivoire, Ghana, Kenya, Madagascar, Mozambique, Niger, Nigeria, Uganda, and Zambia. In Latin America, the approach has been adopted in Mexico and is being implemented in the state of Veracruz.

2.4.2. TARL, MEXICO

The Independent Learning Measurement (MIA) project developed by CIESAS and Universidad Veracruzana has implemented the *Aprender Jugando* Summer Courses since 2017 based on the TaRL methodology. The clubs develop activities for groups of children according to their basic learning level. Between 2016 and 2019, the MIA project implemented courses in 49 locations in 15 municipalities in the state of Veracruz, in which 5,466 children participated.

Community-based and playful in nature, the summer courses aim to reinforce participants' basic learning in reading and math. The activities take place over 15 sessions (Monday through Friday), each lasting 3.5 hours. Each session consists of 10 minutes of physical activity, 85 minutes of math and 85 minutes of reading. The math and reading activities are complemented with arts, crafts, and music workshops.

Summer courses begin with a diagnostic evaluation based on which groups of up to 20 children are formed. At the end of the course, each participant is evaluated again, the results are presented to the families and the community, and actions are discussed to ensure the sustainability of educational innovations. The activities are documented and are carried out by volunteer facilitators, who receive 40 hours of training for this purpose.

FINDINGS

A study by Hevia et al. (2022, pending publication) analyzed the effectiveness of summer courses in strengthening reading and arithmetic in Mexico based on the Teaching at the Right Level pedagogical model. The study was based on a quasi-experimental pre-post design with a control group and purposive sampling with 1,185 children and young people. The study found that the TaRL summer courses had a positive and significant impact on improving reading and arithmetic in children ages 3 to 14. The results are congruent with the findings of Banerjee et al. (2016). In addition, the work of Hevia et al. (2022) highlights the dimension of cost-effectiveness concerning the results, since the TaRL intervention is low-cost and generated by independent governmental agencies with community stakeholders, which also makes it replicable and scalable.

2.5. Extended Teaching Time

Some learning recovery programs focus on the extension of teaching time, which can be done by increasing class hours, decreasing recess time, or implementing classes on weekends or during school vacations. These extra hours can be used for either curricular or extracurricular activities and can be strongly oriented to the recovery of learning but also to the emotional support of students.

This type of intervention assumes that teaching time is a variable with the capacity to have a positive impact on the improvement of student learning. Its design usually includes not only the extension of teaching time but also other aspects referred to as the enrichment of educational goals (Vercellino, 2016).

These programs are considered advisable for countries with significant learning losses and a homogeneous distribution of these losses among students.

2.5.1. *VACANCES APPRENANTES*, FRANCE

Since the early 1980s, France has offered the *Vacances Apprenantes* program, which aims to provide out-of-school educational time to improve learning. Several institutions

offer the program and benefit from a government subsidy amounting to 80% of the total cost of the activity.

Vacances Apprenantes provides an opportunity for children and young people to strengthen their knowledge and skills in a playful environment and become better prepared for the upcoming school year. The program takes a variety of forms, although the most widespread is the Summer Camp program. The priority target audience consists of school-age children and young people (ages 3 to 17) from families living in precarious socioeconomic conditions in rural or suburban areas. They generally take place during the summer school recess in July and August over 7, 12, or 14 days.

FINDINGS

The report prepared by Mörch & Buffet (2020) indicates that the *Vacances Apprenantes* Program has played an important role in the learning recovery of French school children and adolescents. In 2019, over 60,000 children attended learning camps, representing 1,500 holiday stays. A total of €20 million was mobilized and entirely allocated to learning camps. The report argues that the strategy has a positive effect on student learning, facilitating academic recovery, enrichment, and acceleration. Their impact appears to be greater for children from vulnerable backgrounds.

2.5.2 JORNADA EXTENDIDA, DOMINICAN REPUBLIC

En The National Extended School Day Policy has been implemented in the Dominican Republic for kindergarten, primary, and secondary levels starting in the 2014-2015 school year. The initiative seeks to extend the school timetable to the extended school day (JEE) in public schools in order to increase and strengthen student learning in the various subjects that make up the curriculum. It also seeks to enable families living in conditions of economic and social vulnerability to focus on their work and home activities while their children are in a safe place, learning and expanding their life skills and abilities through workshops or optional courses outside regular hours at the location where they study.

The *Jornada Extendida* is an 8-hour day in which students receive—in addition to regular classes—breakfast, lunch, and snacks as well as comprehensive medical attention through a variety of programs. In 2020, prior to the COVID-19 pandemic, a process of curricular revision and updating of the JEE format was initiated in order to

improve the quality of learning and the comprehensive development of students.

FINDINGS

Martinic (2015) examined how time is used in extended-day schools in the Dominican Republic by applying the Stallings classroom observation tool with a random sample of 40 JEE schools stratified by size and comparing the results of these schools with those of half-day schools. The results showed no significant differences in learning since both types of schools spend the same percentage of time (68%) on academic activities. However, there were differences in terms of students' socio-emotional skills. Overall, extended-day schools seemed to achieve better results than half-day schools.

2.6. Computer-Assisted Learning

Self-learning programs can also facilitate learning recovery and the gradual progression of students toward the mastery of various skills and abilities. These interventions can be implemented with input and support from teachers and facilitators through computer-assisted programs whenever appropriate technology is available.

Computer-assisted learning is supported by adaptive software that assesses students, assigns them specific skills to practice, and monitors their progress. Students can work asynchronously and at their own pace, which gives them greater flexibility. Assisted learning initiatives can be implemented during or after the regular school day in teacher-led classrooms or remotely.

Urdinola (2020) argues that this type of program has the potential to improve the academic preparation of higher education students appropriately and cost-effectively by providing personalized leveling instruction using easily accessible technologies.

2.6.1. MINDSPARK, INDIA

Mindspark offers an example of computer-assisted learning implemented in India. This software adapts to students' individual learning levels in language and math. The program is administered outside traditional school hours in computer centers dedicated to primary

and secondary students (first through tenth grades). Participants attend daily 90-minute sessions: 45 minutes of individual work on computers and 45 minutes in small groups with a facilitator who gives them instructions.

Mindspark diagnoses student misconceptions and provides individualized content to help children learn. A pilot program was implemented in public high schools in Delhi. The intervention combined a 45-minute session of self-directed learning using the Mindspark software and 45 minutes of teacher support in groups of 12 to 15 students at off-site centers for six days a week over 4.5 months. The software is based on an extensive corpus of instructional materials that include a bank of over 45,000 questions.

FINDINGS

An impact assessment of the *Mindspark* program (Muralidharan et al., 2019) yielded highly positive results backed by rigorous evidence of the effectiveness of digital technology for improving students' foundational skills in language and math. The authors found an increase of more than double the average score in math and language tests for students who had used the *Mindspark* platform, with no variation in these effects by initial skill level, gender, or household socioeconomic status. This shows that the intervention was effective for all students despite significant heterogeneity in learning levels among students in the same grade (with knowledge differing by as much as six grade levels).

2.6.2. PLATAFORMA ADAPTATIVA DE MATEMÁTICA, URUGUAY

Starting in 2013, Uruguay implemented online adaptive learning software, known as *Plataforma Adaptativa de Matemáticas* (PAM), in primary and secondary education. The program is aligned with the national curriculum and offers personalized support according to each student's skill level. PAM was first implemented in public schools and its use has been increasing both inside and outside the classroom.

The PAM platform contains over 100,000 exercises and offers personalized assistance to students, with feedback after each answer and suggestions for alternative solutions.

The PAM platform provides teachers with tools to help them plan lessons, introduce new topics, set learning goals, prepare quizzes and exams, and assign homework (group or individual). Each teacher sends activities

through the platform and students carry these out. As they progress, the platform identifies areas for improvement for each student and proposes personalized activities that allow them to work on their difficulties and make progress in their knowledge acquisition. At the end of each day, each teacher receives information about the activities of each group in general and of each student in particular, which provides them with timely information with which to enrich the planning process.

The use of PAM is optional for teachers and students. There is no specific data on PAM access during the COVID-19 pandemic. However, there is data on access to the CREA tool, which includes PAM and allows teachers to manage their classes virtually. During the closure of school buildings from March 16 to June 30, 2020, access to CREA among students and teachers in the public education system was 88% and 90%, respectively.

FINDINGS

The study by Perera and Aboal (2019) sought to identify the effect of PAM use on learning gains in math based on longitudinal data from a sample of primary school students. The results of the assessment indicated a positive correlation between the use of the PAM platform and improved math performance among primary school

students, with indications of greater learning gains among students of lower socioeconomic status

In summary, Section II of this report shows that the learning recovery programs developed worldwide and in the region are highly heterogeneous in terms of educational working methods, prioritized objectives, and results.

It is therefore important to gather information on the characteristics of each intervention, its target population, and the available evidence on the results obtained and the actors promoting and implementing the intervention. Table 1 systematizes the main characteristics of the cases studied.

TABLE 1. SELECTED INTERNATIONAL AND REGIONAL CASES

INITIATIVE	COUNTRY	CHARACTERISTICS OF INTERVENTION	PROMOTER AND IMPLEMENTER	TARGET POPULATION AND COVERAGE	FINDINGS
LEVELING					
Catch-up Education Program	Turkey	Comprehensive program, grouping of students, 8-week duration	Turkish Ministry of Education and Culture and UNICEF	Children and young people aged 10-14 During the 2009-2010 period, the program involved 19,990 children from 61 provinces	Study based on documentary review and interviews, with positive results among program participants
Early Learners Program	OECS Member States	Leveling program for improvements in vocabulary and reading comprehension	USAID and OECS	Preschool and school children up to 8-9 From 2015-2020, the program involved 73,000 children	Impact assessment based on control groups, with results indicating a 50% increase in reading achievement
ACCELERATION					
Second Chance	Ethiopia	Transition program to fourth grade in 8-hour days with an emphasis on reading, writing, and arithmetic in small groups	Geneva Global Luminos Fund Civil society partnerships	Children and young people aged 8-14 During 2020-2021, the program involved 9,750 children and young people in Addis Ababa	Impact assessment, with positive evidence regarding a favorable transition of program participants to regular school
Acelera Brasil	Brazil	Program based on a diagnostic assessment and the grouping of students by learning level	Ayrton Senna Institute Ministry of Education	Children in third through fifth grade of primary school During 2000-2020, the program involved over 1 million children. This program is ongoing in 2022.	Evaluation of results with indicators such as number of books read, school attendance, collaborative work by teachers, etc.
TUTORING					
Llegim en parella	España	Program to improve reading comprehension, based on peer tutoring and family support	Instituto de Ciencias de la Educación de la Universidad Autónoma de Barcelona	Children aged 8-11 In 2011, the program involved 303 children	Impact assessment, with ex-ante and ex-post measurements of intervention and positive effects for all students

INITIATIVE	COUNTRY	CHARACTERISTICS OF INTERVENTION	PROMOTER AND IMPLEMENTER	TARGET POPULATION AND COVERAGE	FINDINGS
TUTORING					
Aula Global	Colombia	Program focused on the improvement of reading and math skills through semi-personalized tutoring	Ministry of Education and Carvajal Foundation	Children in second through fifth grades of primary school In 2020, the program involved 3,240 children at 36 educational institutions. This program is ongoing in 2022.	Impact assessment with ex-ante and ex-post measurements of intervention and positive effects for all students
TEACHING AT THE RIGHT LEVEL (TARL)					
TarL	India	Program focused on the development of basic math and reading skills with grouping by learning level, tutoring, and follow-up	Pratham NGO	Children in third through fifth grades of primary school From 2015-2020, the program involved 200,000 children	Large-scale impact assessment with positive language results
TarL	Mexico	Community-based playful summer courses to reinforce learning in reading and math with grouping by learning level	MIA-CIESAS Universidad Veracruzana	Children and young people aged 3-14 During 2016-2020, the program involved over 12,760 children and young people in the state of Veracruz	Impact assessment showed positive and statistically significant effects on participants' learning
EXTENDED TEACHING TIME					
Vacances apprenantes	France	After-school program with extension of teaching time to improve learning implemented in summer camps	Ministry of Education	Children and young people aged 3-17 In 2019, the program involved approximately 60,000 children	Evaluation of results indicates positive effects on improving participants' learning

INITIATIVE	COUNTRY	CHARACTERISTICS OF INTERVENTION	PROMOTER AND IMPLEMENTER	TARGET POPULATION AND COVERAGE	FINDINGS
EXTENDED TEACHING TIME					
Jornada Extendida	Dominican Republic	An educational program of 8 hours per day to strengthen student learning in various subjects and integrating the curriculum with school meals and healthcare	Ministry of Education	Children and young people from kindergarten, primary and secondary levels During 2017-2018, the program involved 1,162,849 children and young people. This program is ongoing in 2022.	Results show no improvement in participants' learning but reveal improvements in social-emotional skills
COMPUTER-ASSISTED LEARNING					
Mindspark	India	Program based on software with teacher support that diagnoses student misconceptions and provides individualized content to help children learn	Mindspark	Children and young people from first to tenth grades at primary and secondary levels By 2018, close to 400,000 children had participated in the program	Impact assessment reveals positive results in learning outcomes in language and math
Plataforma Adaptativa de Matemática (PAM)	Uruguay	Program based on personalized learning software according to each student's skill level	Ceibal Center	Children and young people at primary and secondary levels During 2013-2016, PAM was used by half of all children in third to sixth grades in primary school. This program is ongoing in 2022.	Longitudinal study shows positive results in the learning of math by primary school students

III. CROSS-SECTIONAL ANALYSIS OF RELEVANT INITIATIVES[4]

A cross-sectional look at the 12 initiatives described in the preceding section makes it possible to distinguish three key dimensions in all the interventions: (i) the institutional and stakeholder dimension; (ii) the pedagogical model; and (iii) the human resources dimension. The characteristics adopted by these initiatives in these three dimensions are presented below and, as will be seen in Section IV, should be carefully considered in the design and implementation phases of post-pandemic initiatives.

expansion and sustainability of the interventions over time frequently require state intervention.

The key educational agents are teachers hired and trained by the state or NGOs, foundations, or businesses. In some remedial programs, the involvement of families or the community is highly relevant. For example, in the *Maestros Comunitarios* Program in Uruguay, regular meetings are held with families to improve their relationship with the school or even carry out literacy activities in homes.

3.1. Institutional Framework and Actors

This dimension considers the State's role in the development of learning recovery programs, the organizational arrangements these programs adopt, and the educational agents involved. Regarding the role of the state, observations show that the inclusion in the public agenda of the benefits of this type of educational intervention in addressing deficits of quality and equity in education has on some occasions been the responsibility of civil society (e.g., *Aula Global* in Colombia) and on others the responsibility of a national or state government (*Catch-up Education Program* in Turkey).

The implementation phase of these programs can be a state responsibility or based on the work of civil society actors, whether foundations, non-governmental organizations (NGOs), or businesses, which generates a range of possible program formats, from purely State to purely private along with hybrid formats. *Jornada Extendida* in the Dominican Republic is an example of a state initiative, Second Chance in Ethiopia is an example of a non-state initiative, and *Acelera Brasil* is a powerful mixed case.

In all cases, the role of the State is extremely important when looking at the scalability of programs. These programs usually begin as pilot initiatives with limited geographical extension and coverage, and both the

3.2. Pedagogical Model

LLearning recovery programs seek to build an innovative pedagogical model with respect to the one traditionally used in modern schools. In the variety of cases surveyed, some emerging features tend to prevail.

First, there is a tendency to work with students in a personalized manner by adapting teaching processes to their interests and needs. Personalization in teaching also requires adaptation of course content, rhythm, and level according to the motivations and capabilities of each student.

Second, the programs' teaching methodologies seek to favor active student participation in order to achieve meaningful learning. Participants in Teaching at the Right Level (TaRL) interventions learn to read and write through meaningful activities while math is learned through problem-solving activities that are close to the students' daily lives. Students learn to read and write by telling stories. This emphasis on active and situated learning is expressed in different formats in the various initiatives analyzed, for example, through the writing of a school newspaper (*Acelera Brasil*).

Third and closely linked to the two previous features, many of the programs have tried out curricular adaptations aimed at adjusting the established curriculum to the needs

and abilities of the students. Curricular adaptations may be carried out at the program's central level or may take place in the school attended by participating students. In all cases, this process of curricular flexibility involves a hierarchization of content and skills, which breaks with the logic of graduated teaching.

Fourth, the strategy of tutoring[5] is often used and understood as the educational process through which a student receives specific support from another person in the pursuit of learning objectives. This support can be provided by different actors: teachers from the student's own school, teachers hired specifically to act as tutors, or volunteers with or without teacher training.[6] There are cases of both individual and small group tutoring.[7] Tutoring can take place during or outside school hours, inside or outside the school. In many cases, tutors are paid while in others they are volunteers who contribute their time to the program.

Fifth, many learning recovery programs design their curricular materials to provide students and their teachers with exercises, explanations, and activities deemed necessary for students to adequately follow the program. These curricular materials come in different forms: in some cases, they are written, such as didactic guides, textbooks, learning modules, and educational games (e.g., the *Acelera Brasil* experience), while in others, the materials are presented to students and teachers in digital format that can be downloaded over the Internet or accessed through DVDs.

Finally, although most of the programs are face-to-face, interventions can also make intensive use of digital technology (e.g., *PAM* in Uruguay or *Mindspark* in India). This resource can facilitate personalized learning, either autonomously by students or under teacher guidance.

3.3. Human Resource Training

Before considering the training of human resources for learning recovery programs, the number of teachers and tutors needed for each intervention must be considered. This number depends on the type of program. For example, in the case of peer tutoring, the literature (Cantwell et al., 2021) recommends two tutors for a group of 7 to 10 students, while for tutoring by teachers or other figures, one tutor for a maximum of 20 students is preferred.

Croll & Hastings (1996) provide empirical evidence of the influence of group size on improvements in student performance. Small groups have an impact on the pedagogical process, activities, student involvement, and therefore learning. These authors show that the student-teacher ratio is a key element because it reflects the time the teacher can devote to each student.
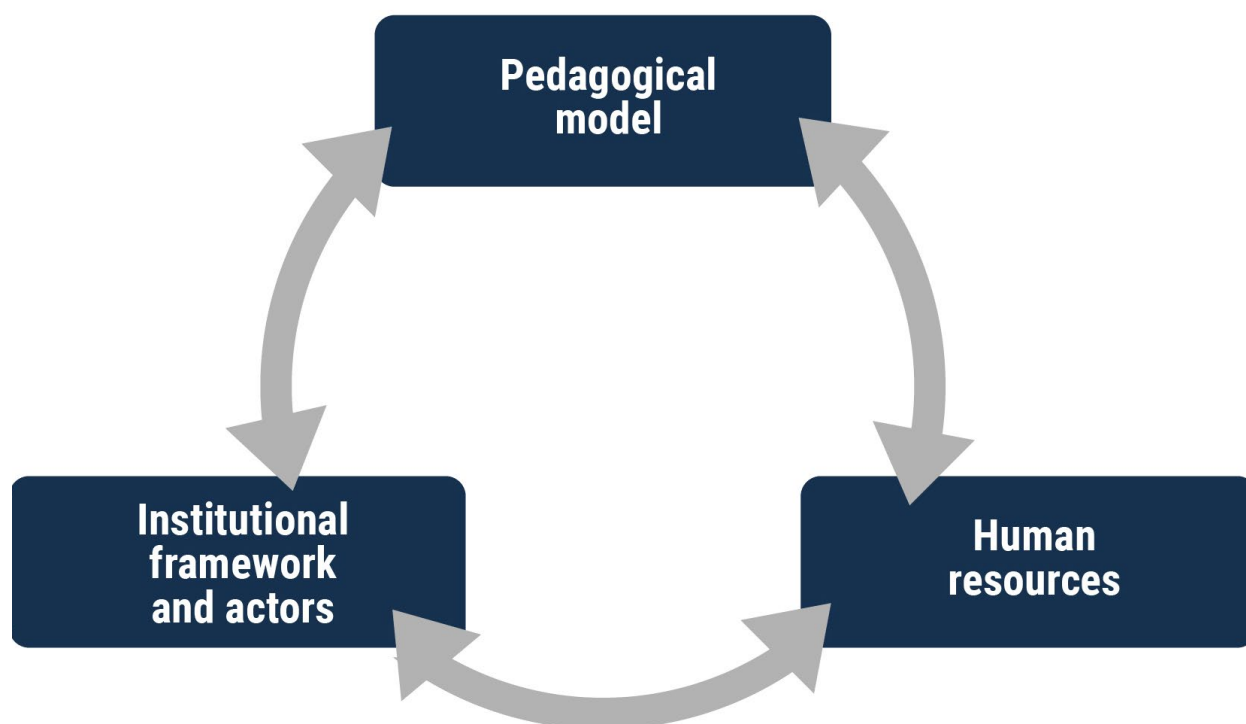
On the other hand, the description of learning recovery programs in Section II revealed the importance that human resource training has taken for classroom teachers and tutors. Several areas that attract the attention of training processes. First, the importance of developing the capacity for diagnostic evaluation and adequate recruitment of program participants has been noted. Second, work has been done on the development of new pedagogical strategies to improve teaching effectiveness. Third, some programs have made inroads in sensitizing teachers and tutors to student difficulties, highlighting the link between learning and self-esteem as well as emotional well-being.

It is worth noting that the description of the programs reports practically no training for teaching leaders, which could be considered a strategic deficit, given their role as school and community leaders.

In sum, as graphically represented in Figure 4, the institutional framework and actors, the pedagogical model, and the training of human resources constitute three closely interrelated and complementary dimensions that are of the utmost importance in any learning recovery program.

FIGURE 4. DIMENSIONS IN THE ANALYSIS OF LEARNING RECOVERY PROGRAMS

Source: Authors

3.4. Requirements for Learning Recovery Programs

The implementation of any learning recovery initiative requires adequate assessment of each type of program's requirements, particularly when seeking large-scale implementation that goes beyond the narrow confines of a pilot initiative. In this sense, Table 2 systematizes the basic requirements of each of the six types of programs in relation to the three analytical dimensions distinguished in this document (pedagogical model, human resources, and institutional framework and actors).

TABLE 2. REQUIREMENTS FOR LARGE-SCALE IMPLEMENTATION OF EACH TYPE OF LEARNING RECOVERY PROGRAM

Source: Authors

TYPE OF PROGRAM	REQUIREMENTS		
	PEDAGOGICAL MODEL	HUMAN RESOURCES	INSTITUTIONAL FRAMEWORK AND ACTORS
LEVELING	Curricular adaptation	Identification of amount of human resources needed Training of teachers to be in charge of leveling groups	• Precise definition of program institutional arrangements • Definition of roles for participating actors • Clear definition of program objectives • Diagnostic testing • Grouping of students by learning level • Program evaluation • Funding
ACCELERATION	Familiarity with the Accelerated Learning model	Identification of amount of human resources needed Training of teachers to work in the program Training focus on Accelerated Learning model	• Precise definition of program institutional arrangements • Definition of roles for participating actors • Clear definition of program objectives • Diagnostic testing • Grouping of students by learning level • Program evaluation • Funding

TYPE OF PROGRAM	REQUIREMENTS		
	PEDAGOGICAL MODEL	HUMAN RESOURCES	INSTITUTIONAL FRAMEWORK AND ACTORS
TUTORING	Design of personalized teaching support strategies	Identification of amount of human resources needed Training of tutors Training focus on design of personalized teaching support strategies	• Precise definition of program institutional arrangements • Definition of roles for participating actors • Clear definition of program objectives • Diagnostic testing • Program evaluation • Funding
TaRL	Design of personalized teaching support strategies	Identification of amount of human resources needed Training of teachers to be in charge of groups in program Training focus on design of personalized teaching support strategies	• Precise definition of the program institutional arrangements • Definition of roles for participating actors • Clear definition of program objectives • Diagnostic testing • Grouping of students by learning level • Program evaluation • Funding

TYPE OF PROGRAM	REQUIREMENTS		
	PEDAGOGICAL MODEL	HUMAN RESOURCES	INSTITUTIONAL FRAMEWORK AND ACTORS
EXTENDED TEACHING TIME	Design of strategies for use of Extended Teaching Time	Identification of amount of human resources needed Training of classroom teachers and other teaching roles (e.g. physical education, art, recreational activities) Training focus of other teaching roles on characteristics of Extended Teaching Time program	• Precise definition of program institutional arrangements • Definition of roles for participating actors • Clear definition of program objectives • Availability of building infrastructure • Program evaluation • Funding
COMPUTER-ASSISTED LEARNING	Availability of computer-based self-study programs with exercises, feedback, and personalized assistance	Identification of amount of human resources needed Training of facilitators and classroom teachers Training focus for facilitators on personalized assistance for students with particular attention to selected platform Training focus for classroom teachers on digital literacy, with particular attention to selected platform	• Definition of program objectives • Availability of IT infrastructure (hardware, software, and connectivity) • Program evaluation • Funding

The requirements set out in Table 2 are critical factors that, when present, contribute significantly to the proper development of an intervention and, if absent, seriously jeopardize the achievement of the set objectives. In this sense, for illustrative purposes only, questions such as the following can be asked:

- How could an acceleration program be implemented without the teachers involved in the intervention mastering the Accelerated Learning model?

- How likely would a Computer-Assisted Learning program be to succeed in a country with very low levels of connectivity?

- How would a Tutoring program be implemented if there were no human resources available to act as tutors?

Beyond these examples, it is necessary to explain why these are critical factors and why their inclusion or exclusion in the design and execution of a program strongly affect its success.

From a pedagogical standpoint, each type of learning recovery program has a basic pillar on which all of its actions are based. This role is played by curricular adaptation in Leveling programs, the Accelerated Learning model in acceleration programs, personalized pedagogical support strategies in Tutoring and TaRL-type programs, strategies for the use of additional pedagogical time in Extended Teaching time programs, and adaptive software programs in Computer-Assisted Learning. Teachers involved in each type of program must master its basic pillar in aspects such as its psycho-pedagogical fundamentals, work dynamics, support materials, appropriate assessment methods, potential, and limitations.

As regards the human resources dimension, it is important to determine the number of teachers needed for a learning recovery program and to assess their training. Latin American education systems suffer from a quantitative deficit of qualified teachers and also have a heterogeneous teaching population, with working conditions that may hinder their in-service training. It is therefore essential to determine how many teachers a program requires and what specific training should be provided for them. For example, in a Computer-Assisted Learning initiative, many classroom teachers must undergo a digital literacy process while facilitators must master the selected platform and know-how to provide personalized support to students. On the other hand, in a TaRL-type program, there is a need for more in-depth training of teachers in personalized pedagogical support strategies.

As regards the institutional framework and actors, Table 2 shows that several of the requirements are shared by several program types.

First, the precise definition of the program's institutional arrangements involves establishing the responsibilities of the state units involved in the initiative, the type of partnership with civil society actors, and the modalities for contracting human and material resources. These institutional arrangements constitute the "rules of the game" of the program, generating incentives or disincentives for the actors and conditioning cooperation or conflict among them.

Second, many actors can potentially be involved in programs: central government, provinces or municipalities, families, NGOs, businesses, and international organizations, among others. It is necessary to define the role of each actor involved and the resources they will contribute. If this step is omitted, it could lead to a design error, with serious consequences for the effectiveness of implementation.

Third, the objectives sought by each initiative must also be explicitly set. Are we seeking to level the learning of students left behind by the COVID-19 pandemic? Do we hope to attract children and adolescents who have dropped out during the 2020-2021 period? Do we expect improvements in all students in priority areas such as language and math? These and other objectives can be addressed simultaneously in the design phase of a program as long as they are clearly stated. If they are not, the work of those involved in the program will lack direction.

Four, learning recovery programs require diagnostic assessments that provide information on the level of knowledge and skills of participants. If this diagnostic assessment is available, teachers will be in a better position to plan their pedagogical strategies and facilitate student learning.

Fifth, several types of programs require categorizing or grouping students by learning level. It is therefore vital to carefully select program participants according to the entry criteria defined by the intervention. This selection can be done by delimiting a specific population (e.g., adolescents 15 years of age or older no longer enrolled in the education system), defining performance levels (e.g., students with low scores in math) or identifying participants by classroom

teachers, in which case it is advisable for them to receive specific training in this type of identification.

In addition to the diagnostic assessment of students, programs also need to be evaluated. If a rigorous evaluation is not carried out, it will not be known whether they effectively contribute to learning recovery, and ultimately, there will be no evidence on which to continue, adjust, or terminate the initiative.

The availability of infrastructure is a necessary condition for some types of learning recovery programs. For example, it is impossible to develop a Computer-Assisted Learning intervention without adequate computer infrastructure from hardware and software to connectivity. Similarly, Extended Teaching Time inevitably requires physical spaces for its implementation.

Lastly, funding is a real Achilles' heel of learning recovery programs. These interventions require additional funding for teachers' salaries, teacher training, and the development of printed or digital materials. Extending teaching time, paying tutors, providing educational hardware and software, and printing teaching materials are all items that are as costly as they are essential.

IV. TOWARD POST-PANDEMIC LEARNING RECOVERY

4.1. Lessons Learned During the COVID-19 Pandemic

Many of the cases analyzed in this report were designed and implemented prior to the pandemic. It should be noted that one of the criteria adopted for their selection was to conduct evaluations of outcomes. The most recent interventions developed during COVID-19 were not included in the final sample of programs because there was insufficient evidence regarding their outcomes and even less of their impacts. Nevertheless, it is important to consider some characteristics of educational work conducted during the pandemic to reflect on the challenges that lie ahead for learning recovery during the return to school in the post-pandemic period.

In Latin America and the Caribbean, the closure of schools due to COVID-19 was quite lengthy and added to the educational problems the region was already facing in the pre-pandemic period. In addition to the weaknesses carried over from previous decades, in the early 2020s, there was the need to implement educational approaches that would make it possible to continue with the teaching and learning processes. In all interventions, significant efforts were required from all educational actors, including students and their families, teachers, civil society, and governments.

Government policies initially focused on addressing the health crisis, then on managing the continuity of the education system, and finally on attempts to improve and recover learning. According to a UNICEF report (2021), the educational responses implemented by Latin American and Caribbean countries after the pandemic began were highly heterogeneous. Both in the policies developed during the suspension of face-to-face classes and in the return to school, the situations of the various countries are highly diverse. Yet it is possible to identify some trends and projections for the future.

First, one of the common aspects pointed out by the UNICEF report is that the measures used tended to involve the lowest additional investment while the costliest ones were rarely developed. The impact of the crisis on national economies and public budgets thus exacerbated the ever-present tension between the demands linked to learning recovery and the scarcity of economic resources.

Second, there are countless interventions in LAC designed to reduce learning gaps. Distance learning, for instance, has been increasingly incorporated, as in Argentina, where the *Seguimos Educando Program* has been broadcasting 14 hours of educational content specifically produced for students daily since April 1, 2020, through television and radio. In Mexico, the *Aprende en Casa* program was implemented, offering distance learning classes to primary and secondary school students through various television channels and the Internet.

Third, many countries have promoted the dissemination of educational content through mass media such as television and radio. This approach has shown potential for post-pandemic times as it makes it possible to reach households with limited Internet access or those lacking electronic devices for accessing virtual platforms and online resources. Mexico, for example, uses the *Red del Sistema de Televisión Educativa* (Edusat). Brazil, Peru, Chile, and Colombia also broadcast content through public television and radio channels.

Fourth, curricular adaptations were present during the pandemic and constitute another important factor when reflecting after the event. For example, Chile put in place its *Unidad de Currículum y Evaluación* for the prioritization of current curriculum at all levels of basic schooling. In Colombia, curricular flexibility measures were taken to ensure student learning in preschool, primary, and secondary education.

Fifth, a trend observed in several LAC countries during the pandemic was the provision of support for teachers through training courses as well as the delivery of guides, tools, and resources generally available on distance education

platforms. In Colombia, teaching teams had access to interactive content to use with their students through the *Aprender Digital: Contenidos para Todos* platform. In Uruguay, *Ceibal en Casa para Docentes* provided support to primary and secondary school teachers through virtual workshops and tutorials. These initiatives are inspiring for times to come since any learning recovery program requires strong support from teachers in educational institutions.

Sixth, in some LAC countries, partnerships have been established with the private sector to support administrative teams and teachers. Such is the case in Brazil, where a partnership was established between the Secretariat of Education and the *Fundação Telefônica Vivo* to provide various educational actors with training. In this sense, the post-pandemic period offers a chance to maintain these existing public-private partnerships or to create new ones. Government initiatives could thus benefit from interventions developed by civil society proven to have positive effects on learning recovery.

The pandemic has yielded a host of lessons LAC education systems can incorporate in the future. This section highlights three of the most relevant:

• Work was done using technological environments that even in conditions of intermittent access or a shortage of devices have enabled the continuity of teaching and learning on the one hand and proximity to students and their families on the other.

• Curricular adaptations were made to teach basic content and skills that ensure student learning at the corresponding grade level.

• New pedagogical practices were developed in order to teach remotely for which teachers generated innovative proposals and received training, particularly in the use of ICT.

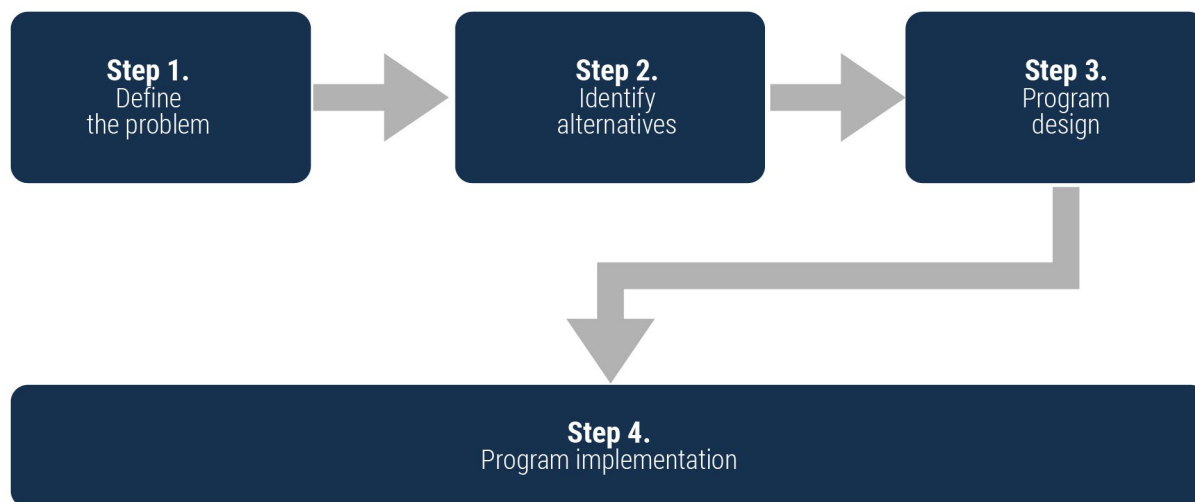# 4.2. Roadmap for the Construction of Post-Pandemic Learning Recovery Programs

In the first two decades of the twenty-first century, Latin American countries faced serious issues concerning quality and equity in education (OECD, 2019). The COVID-19 pandemic resulted in school closures for lengthy periods and clearly had an impact on student learning loss, especially among the most vulnerable children and young people.

Learning recovery programs are a powerful educational policy option capable of overcoming this situation. Their implementation can draw on the critical factors identified in this document (Section 3.4) as well as the lessons learned in LAC during the pandemic (Section 4.1).

As a contribution to decision-making in this area, a roadmap consisting of five major steps and some guiding questions is presented below (Figure 5).

FIGURE 5. ROADMAP FOR DECISION MAKING IN THE AREA OF LEARNING RECOVERY[8]

Source: Authors

The first step in the process of constructing a learning recovery program consists of defining the problem to be addressed, to which end the following questions must be answered:

a) What are the specific objectives of the intervention: learning recovery, dropout reduction, or a decrease in grade repetition?

b) Is the aim to recover the learning of the entire school population (universal program) or of part of that population (targeted program)?

c) Is the goal to recover learning in language and math or to improve performance in all areas of knowledge?

d) Based on the above answers, how many children and young people make up the target population?

The second step refers to the identification of alternatives, at which stage decision-makers will need to weigh the costs and benefits of choosing a Leveling program, an Acceleration program, a Tutoring program, a TaRL program, an Extended Teaching Time program, or a Computer-Assisted Learning program. This weighing of costs and benefits must combine educational aspects with economic and political aspects. In other words, the identification of alternatives should be supported by evidence regarding the outcomes of each type of program and consider the budget required for each type of program as well as potential political resistance.

The third step is complex because it includes questions of a very diverse nature:

a) What will the pedagogical pillar of the program be: curricular adaptation, accelerated learning, personalized pedagogical support strategies, an extension of teaching time, or computer-mediated learning?

b) How will the diagnostic assessment of students be conducted?

c) How will the teachers who will work in the program be trained, how long will the training last, and what forms of training will be used?

d) Through what mechanisms will the innovative pedagogical practices of the pandemic be recovered?

e) What institutional arrangements will support the program?

f) Which actors will be involved in program development and what will the responsibilities and contributions of each actor be?

g) How will the program be evaluated? Will there be an assessment of processes, results, impact, or all

three? What technical team will be responsible for the design and execution of the evaluation?

h) What are the infrastructure and IT requirements of the initiative?

i) How much will the chosen program cost and how will it be funded?

The fourth step deals with program implementation, a stage of considerable technical and political complexity:

a) What unit will be responsible for implementation and what activities and procedures will it have to carry out?

b) What methods of recruitment and supervision of human resources will be applied?

c) How will the commitment of program stakeholders be fostered?

d) What channels will be followed for building legitimacy and support?

4.3. Suggestions for the Medium Term

Section 4.2 outlined a roadmap that will be useful in the construction of post-pandemic learning recovery programs. To complement this, four medium-term recommendations can be made to contribute to educational development in LAC countries.

• The learning assessment systems of all countries need to be strengthened. Chile and Uruguay are two pioneering countries in the region as regards the development of these instruments, which could be very useful for the post-pandemic period. Chile has the *Diagnóstico Integral de Aprendizajes* and Uruguay the *Aristas en Clase* online test. These mechanisms measure learning in reading and math (and in the Chilean case, students' socio-emotional state also).

• Incipient mechanisms for program and policy evaluation need to be strengthened. As noted in this report, the quantity and quality of assessment studies are clearly insufficient and hinder the accumulation of evidence on the effectiveness and equity of interventions.

• Attention should be paid to the scalability of interventions in an effort to go beyond pilot interventions and reach a broad population. In addition, the sustainability over time of effective programs should also be ensured because such permanence is essential to consolidating good practices and positive results.

• Cost studies should be promoted in order to move forward in quantifying the critical dimensions of the costs involved in learning recovery programs. As such information is lacking, it is crucial to complement the description of programs to be scaled up with an analysis of the funding for such interventions.

REFERENCES

Akyeampong, K., Delprato, M., Sabates, R., James, Z., Pryor, J., Westbrook, J., Humphreys, S., & Tsegay, A. (2018). Speed School Programme in Ethiopia. Tracking the Progress of Speed School Students: 2011-17. University of Sussex; Geneva Global.

Aquilino, N. (2015). Hacia una política nacional de evaluación (Documento de Políticas Públicas N.° 151). CIPPEC.

Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukherji, S., Shotland, M., & Walton, M. (2016). Mainstreaming an effective intervention: Evidence from randomized evaluations of "teaching at the right level" in India (Working Paper 22746). National Bureau of Economic Research.

Bardach, E.-Patashnik, E. (2016). A practical guide for policy analysis. The eightfold path to more effective problema solving. EEUU: Sage Publications.

Barrera-Osorio, F., & Lagos, F. (2018). Tutoring, Professional Development, and Educational Improvement: Evidence from Cali, Colombia. Pilot Study Results and Next Steps. Harvard University.

Baxter, P., & Bethke, L. (2009). Alternative education: filling the gap in emergency and post-conflict situations. IIPE-UNESCO.

Blanch, S., Duran, D., Flores, M., & Valdebenito, V. (2012). The Effects of a Peer Tutoring Programme to Improve the Reading Comprehension Competence Involving Primary Students at School and their Families at Home. Procedia - Social and Behavioral Sciences, 46, 1684-1688. https://doi.org/10.1016/j.sbspro.2012.05.361

Börkan, B., Ünlühisarcikli, Ö., Caner, H. A., & Sart, Z. H. (2015). The catch-up education programme in Turkey: opportunities and challenges. International Review of Education, 61(1), 21-40. http://dx.doi.org/10.1007/s11159-015-9464-2

CAF (2021). Políticas para reducir las brechas educativas en la pospandemia (Documentos de políticas para el desarrollo N.° 13).

Cantwell, G., Blackburn, S., Pearman, J., Berlage, M.,

Sedgwick, S., Clancy, E., Rowland, B., Klettke, B., & Toumbourou, J. W. (2021). Promoting positive youth development in schools: A program logic analysis of Peer Support Australia. https://s3-ap-southeast-2.amazonaws.com/prod-peer-support-web/wp-content/uploads/2021/04/Deakin-2021-PSA-evidence.pdf

Croll, P. & Hastings, N. (Eds.). (1996). Effective primary teaching –research based classroom strategies. London: David Fulton

Darling-Hammond, L., Schachner, A., & Edgerton, A. K. (2020). Restarting and Reinventing School Learning in the Time of COVID and Beyond. Learning Policy Institute.

Duran, D. (2018). Llegim i escrivim en parella: Tutoria entre iguals, amb implicació familiar, per a la competència comunicativa. Horsori.

Fundación Carvajal & Ministerio de Educación Nacional de Colombia (2021). Resultados Ruta de la Permanencia Grados 2 a 5.

González Palacios, A., & Avelino Rubio, I. (2016). Tutoría: una revisión conceptual. Revista de Educación y Desarrollo, 38, 57-68.

GPE-KIX (2022). Enseñar al nivel correcto: aprendiendo a mejorar el apoyo de los docentes a través de la tutoría y el monitoreo. https://www.gpekix.org/es/proyecto/ensenar-al-nivel-correcto-aprendiendo-mejorar-el-apoyo-de-los-docentes-traves-de-la#:~:text=%22Teaching%20at%20the%20Right%20Level,los%20maestros%20a%20trav%C3%A9s%20de

Hevia, F., Vergara-Lope, S., & Velásquez-Durán, A. (2022). Efectividad de cursos de verano TaRL en México. Manuscrito inédito.

Hodges, C., Moore, S., Lockee, B.,Trust, T., y Bond, A. (2020). The Difference Between Emergency Remote Teaching and Online Learning. Educause Review. https://er.educause.edu/articles/2020/3/

Martinic, S. (2015). Uso del tiempo en centros educativos de jornada extendida y media jornada en República Dominicana. EDUCA; MINERD; AECID.

Miranda López, F. (2018). Diagnóstico, teoría e intervenciones públicas para abatir el abandono escolar en la educación secundaria de segundo ciclo: aprendizajes desde América Latina. Revista Latinoamericana de Educación Comparada, 9(14), 11-30.

Mörch, S., & Buffet, M. G. (2020). Enquête pour mesurer et prévenir les effets de la crise du COVID-19 sur les enfants et la jeunesse (Rapport N.° 3703). Assemblée Nationale.

Muralidharan, K., Singh, A., & Ganimian, A. J. (2019). Disrupting education? Experimental evidence on technology-aided instruction in India. American Economic Review, 109(4).

Organización para la Cooperación y el Desarrollo Económicos (OCDE) (2019). PISA 2018 Results. What Students Know and Can Do.

Perera, M., & Aboal, D. (2019). The impact of a mathematics computer-assisted learning platform on students' mathematics test scores. Maastricht Economic and social Research institute on Innovation and Technology.

Schneid Scherer, S., Marchi Nascimento, F., & Cóssio, M. (2020). Parcerias público-privadas: atuação do Instituto Ayrton Senna na educação pública do estado do RS. Educação & Sociedade, 41. https://doi.org/10.1590/ES.241715

Schwartz, A. (2012). Remedial Education Programs to Accelerate Learning for All (Working Paper N.° 11). Global Partnership for Education.

UNESCO (2021). Las respuestas educativas nacionales frente a la COVID-19. El panorama de América Latina y el Caribe. Santiago de Chile: OREALC-UNESCO

UNESCO (2020). COVID-19 response-enrolment. https://en.unesco.org/sites/default/files/unesco-COVID-19-response-toolkit-re-enrolment.pdf

Urdinola, A. (2020). Uso de programas de remediación asistidos por computador para prevenir la deserción estudiantil en el contexto del COVID-19. Education for Global Development.

USAID (2020). ELP: the Future of Reading in the OECS.

Vercellino, S. (2016). Ampliación del tiempo y dispositivo escolar: Oportunidades y resistências. Educação e Realidade, 41(4), 1005-1025. http://dx.doi.org/10.1590/2175-623661082

Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. (2013). Using grounded theory as a method for rigorously reviewing literature. European Journal of Information Systems, 22(1), 45-55. https://doi.org/10.1057/ejis.2011.51

World Bank (2018). World Development Report 2018: Learning to Realize Education's Promise. https://doi.org/10.1596/978-1-4648-1096-1

NOTES

1. https://escuelafundacioncarvajal.org.co/

2. Definition taken from the website of the GPE-KIX Project: https://www.gpekix.org/project/teaching-right-level-learning-how-improve-teacher-support-through-mentoring-and-monitoring

3. The organization's website can be found at: https://www.pratham.org/

4. The analysis and interpretation of the data were mainly based on the 12 selected cases, although several additional examples resulting from previous readings by the authors were also included.

5. Tutoring, mentoring, and accompaniment are terms that are used interchangeably.

6. In such cases, the program often offers specific training.

7. Programs of the first type tend to be private and are hard to fund at the public-school level.

8. This roadmap is inspired by the model proposed by Bardach and Patashnik, 2016.