



Education Policy Talk

Latin America and the Caribbean

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Parental Engagement in Early Childhood Development and Preschool Education during the COVID-19 Pandemic: Evidence from Latin America and the Caribbean

Education Division
Social Sector

E. Näslund-Hadley, J. M. Hernández-Agramonte, M. L. Zeta, C. Méndez, B. Peña de Osorio, G. Alpizar, J. F. García Rodríguez, E. Madrigal, O. Montoya, U. Luna, K. Montaña, M. L. Biehl, J. Thomson, and J. Maragall

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KEY TAKEAWAYS

- Caregivers of young children in four countries in Colombia, Costa Rica, El Salvador, and Peru (62,837 households) participated in a survey on pandemic-era learning at home using resources supplied by educational ministries.
- Caregivers with high socioeconomic status (SES) have more time; and low-SES caregivers are resource- and time-stressed. High-SES caregivers invest more time in early childhood development outcomes. Compared with low-SES parents, they also use learning resources more frequently. Before the pandemic, due to lack of time, information and resources, low-SES parents spent less quality time with their children; because of the employment disruptions of the pandemic, they spent even less time during the lockdowns. These disparities in time spent on young schoolchildren in the region exacerbate existing educational gaps.
- Asynchronous learning resources without teacher or caregiver interaction (e.g., TV or radio lessons) are used for longer periods of time than synchronous lessons.
- When teachers communicate with parents, preschoolers complete more hours of at-home learning. Parents appear to respond better to text or WhatsApp messages from teachers than they do to phone or video calls; these appear to elicit more distress and curb the use of official educational resources.
- Caregivers say that, once schools reopen, they want continued access to learning-from-home resources—both synchronous and asynchronous—suggesting that such access should remain an important strategy for preschool education systems in Latin America and the Caribbean.

Introduction

Latin America and the Caribbean (LAC) has the world's highest average school-closure days because of Coronavirus-19 (COVID-19) (UNICEF 2021). Three of five students worldwide who have lost an entire school year owing to the pandemic live in the LAC region. Although the LAC launched emergency remote education with laudable speed, the following education policy questions emerge:

- Who was left out of learning-from-home resources?
- Once resources were accessible, what learning-from-home resources were used with the greatest frequency?
- What interventions could help boost children's learning at home?
- What are caregiver perceptions of different learning-from-home resources?

To begin to explore these questions, the ministries of education in El Salvador, Costa Rica, and Peru, and the Institute of Family Well-being in Colombia joined forces with Innovations for Poverty Action and the Inter-American Development Bank to undertake a regional survey. Respondents in all four countries were asked about their experience with official learning-from-home (LFH) resources. In this note we share this data with the hope of improving caregiver, teacher, and student experiences with LFH resources during school closures —continued and future— or as part of hybrid return-to-school models.

Methodology and instruments

Between July and September 2020, caregivers in Colombia, Costa Rica, El Salvador, and Peru responded to survey questions about their experiences with the emergency distance-education programs offered by national education systems.

The sample comprises 62,837 caregivers of children aged one to seven years—enrolled in early childhood development services and preschool in all four countries.

Educators disseminated the survey online to caregivers, with proportions of respondents ranging from 19 percent of preschoolers nationwide in Costa Rica and 18 percent enrolled in early childhood development services in the department of Valle del Cauca, Colombia; in Peru and El Salvador the survey captured 3 percent of schoolchildren. The online survey skewed the sample toward urban households in Peru and Colombia. For Costa Rica and El Salvador, the opposite was true—households were more rural¹.

Caregivers responded to a self-administered online survey instrument that they filled out mostly on smartphones. The survey collected information that helped us estimate the caregivers' SES, using a composite score

62,837 caregivers of children between one and seven years of age from the countries of Colombia, Costa Rica, El Salvador and Peru responded to the survey on their experiences with distance education programs in emergencies.

derived from factors based on education and income and environment—the quality of the dwelling and access to amenities. Second, the survey asked about strategies for emergency remote education in response to school closures during the COVID-19 pandemic— including parent-teacher communication, means and ease of access, and how frequently they accessed remote-learning resources. In this note, we identify households as either high or low SES by dividing national samples below and above the median. To study the use of learning-

Methodology and instruments

from-home (LFH) resources in select countries of LAC, our descriptive models control for the type of education resources and household characteristics; specific controls are outlined under each model.

Additionally, the survey asks about parental investments and well-being, using a modified version of the Child Behavioral Check List and the Center for Epidemiologic Studies Depression Scale Revised. To evaluate quality-time, the quality-of-care practices and household environments, we used the Family Care Indicators (FCI), an internationally validated instrument for predicting early childhood development (Frongillo, Sywulka, and Kariger 2003). To evaluate self-perceived efficacy, the survey asks parents about their own perceived competence in assisting a child with learning tasks. Finally, to evaluate family well-being, the survey asks parents about their own well-being and that of the child in the household.

Access to learning-from-home resources

All four countries participating in the survey used LFH resources to foster cognitive and socioemotional development during the school closures.

All four countries have dedicated repositories with guides for caregivers of preschool-age children, as well as internet repositories with educational content for young children, teachers, and their families, as well as televised lessons through streaming, cable and over-the-air. Costa Rica and Peru also offered radio content. Colombia stands out for its systematic phone contacts with families with children younger than five years (**table A.1**).

For the purpose of this note, LFH resources were analyzed in the following categories: (1) television or radio lessons, (2) digital lessons and materials, and (3) oral or written classes and instructions provided by teachers. Printed materials were used as a complementary in all countries, but Peru.

A vast majority of sampled households with young children have accessed LFH resources during the pandemic-era school closures. In every country, nine out of ten households

reported that their preschoolers have accessed at least one type of LFH resource provided through the education system. The proportion of urban and rural households having access to at least one type of official LFH resources is the same. Among households that use at least one LFH asset, the most frequently accessed assets are television and radio lessons (37 percent) and teacher instructions and guides (41 percent). Differences across countries are minimal (**table A.2**). Teacher instructions to families include written guidance through electronic messages, physical documents, and phone calls. Across the four countries, digital resources are either synchronous—supplying direct teacher-caregiver interaction—or asynchronous, with no direct interaction.

The synchronous digital resources allow for multiple students to be connected in real time, through a platform or communication channel, in, for example, a video lesson. Asynchronous digital learning, on the other hand, provides

Access to learning-from-home resources

content from the ministry repositories that can be used at different times. The TV and radio resources are asynchronous because no direct interaction takes place with a teacher nor with fellow students. In all four countries, however, some televised content for preschoolers includes a WhatsApp number to an interactive chatbot for parents to get additional learning resources and advice.

What household factors explain preschoolers' access to LFH resources?

Household assets determine how official learning-from-home resources can be accessed by different households. Low-SES rural households own fewer digital devices (tablet and laptop), and their internet connectivity rates are lower. On average, ownership of digital devices is 14 percentage points higher among urban households. The gap is even wider when measured by socioeconomic group. Low-

SES households trail high-SES households by 49 percentage points in possession of tablet or computer. Lack of internet further limits access to LFH resources among rural and low-SES households. The probability of a having a TV is 15 percentage points lower among these households, with important implications for education systems that rely heavily on television for their LFH strategies (**table A.3**). Access to electricity is not, however, significantly limiting preschoolers' access to LFH resources; only 3 percent of sampled households report this as a constraint. The rural-SES link is weak, which indicates that poverty, more than rurality limits access to official LFH resources.

What official LFH resources are used more frequently?

Household access to LFH resources does not guarantee that preschoolers will be exposed to lessons and activities. Among households with access to all official LFH resources, synchronous

instruction requiring parental involvement is less commonly reported. The average access to LFH resources via TV and radio is a little more than four days per week. The average for digital resources and teacher instruction (written or oral) is three days or less. Presumably this difference arises from young children needing more supervision while using synchronous and asynchronous digital devices compared with supervision of television and radio instruction.

Among households with access to any resource, television and radio lessons are used 28 percent more frequently each week compared with printed didactic materials and teacher instruction on the learning activities caregivers can undertake with their children. Similarly, digital learning resources are used 14 percent less frequently than the teacher's written and oral instructions and other resources (**figure 1**).

Access to learning-from-home resources

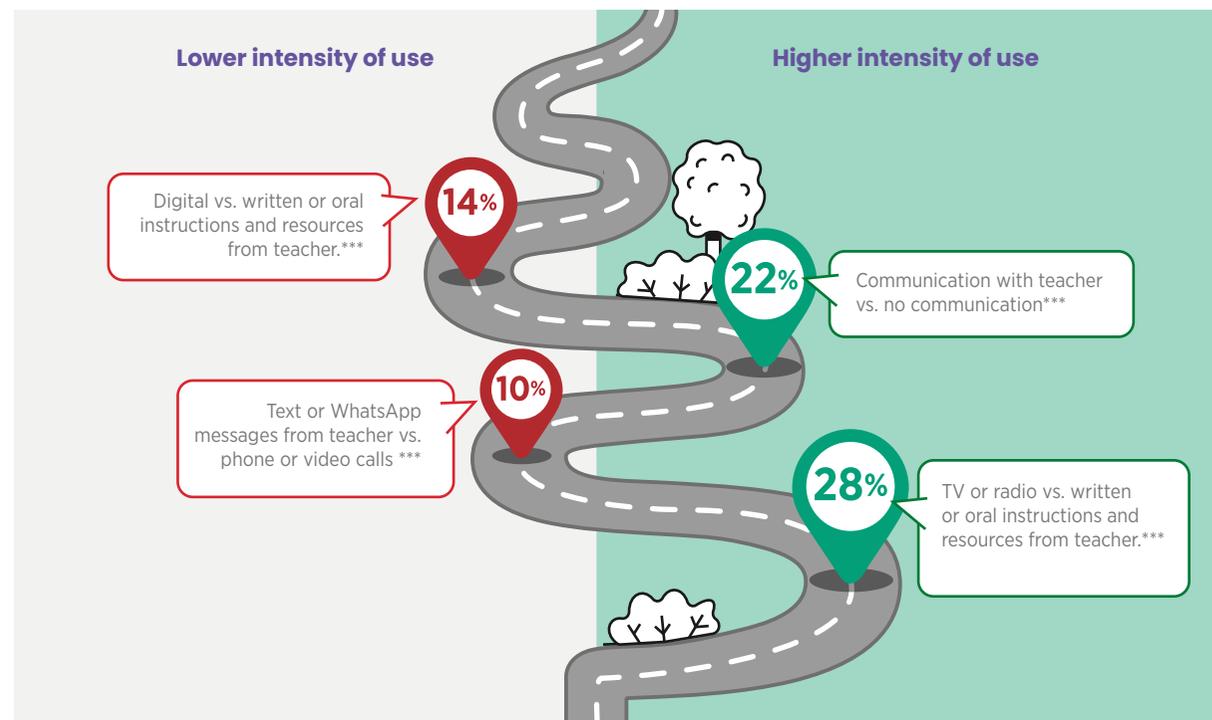
Teacher-caregiver communication boosts the use of LFH resources.

Caregivers receiving any type of communication from teachers use official education resources 22 percent more frequently each week compared with households not contacted in any way by their child’s teacher (**figure 1**). The importance teacher contact during school-closures is consistent with the literature that shows that student engagement increases when teachers communicate with families (Kraft and Dougherty 2013).

The form of communication seems to matter. WhatsApp messages are most common teacher-caregiver communication medium, used in three out of four such exchanges. When teachers reach out through text or WhatsApp, the magnitude of the correlation with usage is larger than when the teacher makes phone or video calls. On average, caregiver reception of text or WhatsApp messages increases

Figure 1.

Intensity of usage of different learning form home resources



Note: To estimate the association of use with the resource type, the model controls for rurality, SES, and the presence of an additional child in the home.
 *** = statistically significant at 1 percent.

Access to learning-from-home resources

LFH instruction by 10 percent compared with caregivers reached by phone or video calls. It is likely, however, that some of the video calls are supplying individualized instruction, thus substituting the use of other LFH resources.

What household factors help explain the intensity of usage?

Among households with access to LFH resources, we find differences in the intensity of usage based on household characteristics. Rural households use the official LFH resources for young children more frequently than their urban counterparts. On average, children in rural areas have 9 percent higher weekly intensity of use compared with their urban peers, after controlling for SES in addition to siblings and other minors in the household. More frequent usage appears to be driven by a far more widespread usage of television and radio resources in rural areas. More intense usage of LFH resources suggests that children

in rural households may have greater exposure to the educational content. The difference in educational quality could be vast, however, between synchronous and asynchronous lessons given the importance of classroom interaction for student engagement and learning (Reyes et al. 2012).

SES and caregiver availability boosts LFH activities among students.

Students from low-SES households use LFH resources less frequently than those in higher-income groups, controlling for rurality and the presence of siblings and other minors in the household. Parents in higher SES groups tend to have more time to assist the schoolchild in educational activities, assistance being central to learning at the preschool level (Ma et al. 2016). High-SES caregivers are 14.5 percent more likely to work from home than low-SES parents. Additionally, high-SES households have a 10.4 percentage point higher index of parental

Text and WhatsApp messages increase the rate at which LFH resources are used-more than phone and video calls.

investment measured through the FCI index³. This group of parents may also be better able to complement educational content with their own knowledge, which in turn may result in greater usage. As recent literature has shown, these household dynamics exacerbate the existing learning gaps between students from low and high-SES households (Azevedo et al. 2020).

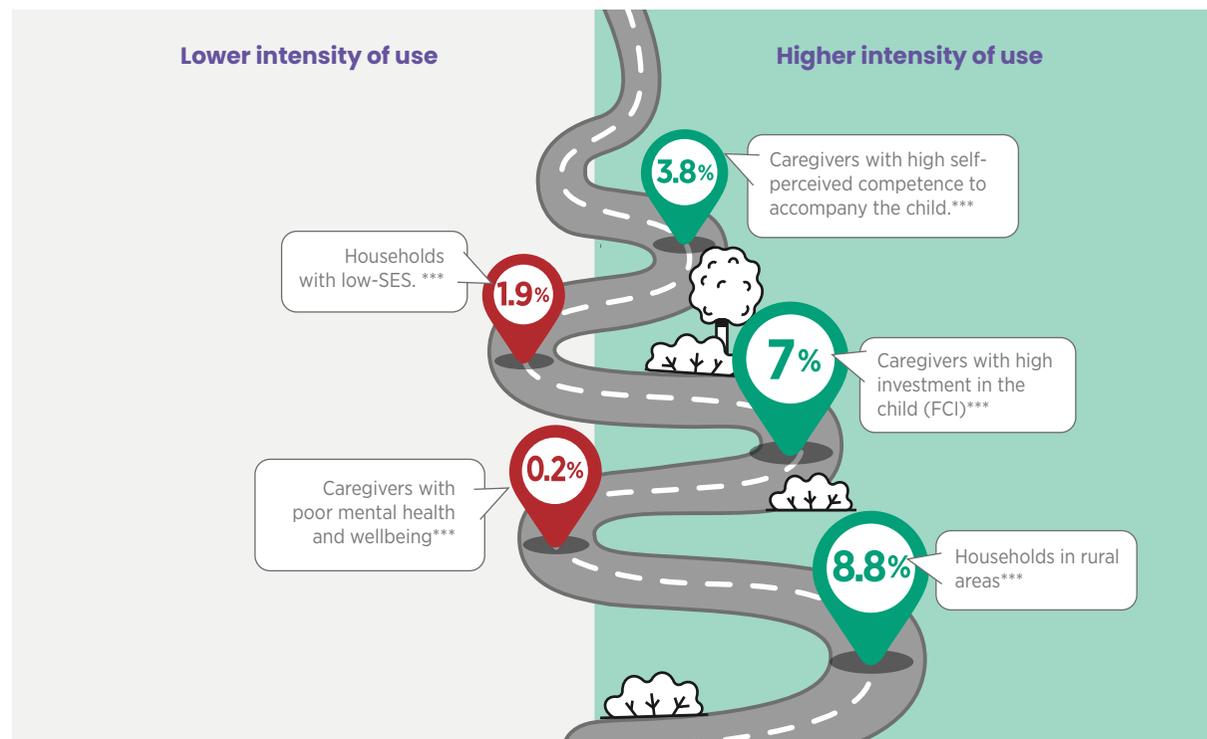
Access to learning-from-home resources

Parents who before the pandemic invested time and resources in their children use official education resources the most.

Doubling the FCI correlates with a 7 percent weekly increase in the use of the official LFH resources. This means that a caregiver who has invested time and resources to read and play with their preschooler uses the learning-from-home resources more than adults who reported lower levels of investment in the children under their care. This finding is robust across all learning-from-home resources—from radio and television programs to printed materials and phone calls from teachers.

Figure 2.

Household characteristics affect frequency of use



Note: To estimate the association of intensity of use with (1) SES and rural area, the model controls for having another child in the home; (2) FCI, self-perceived competence, and well-being, the model controls for SES, rurality, and having another child in the home.

*** = statistically significant at 1 percent.

Access to learning-from-home resources

Caregivers' well-being affects their ability to support their child's learning from home.

We find a positive correlation between caregivers' self-reported well-being and frequent use of LFH resources. The higher a caregiver's reported overall well-being, the higher the weekly frequency of use of official LFH resources. On average, we find that a 10 percent increase in the caregiver discomfort/uneasiness index correlates with a weekly drop of 0.2% in the use of the LFH resources (figure 2, above).

Caregivers' self-perceived ability to assist their child in learning activities affects how frequently LFH activities are undertaken in the household. We observe a positive correlation between the caregivers' self-perceived ability to support a child's learning activities and how frequently LFH resources are used each week. Those caregivers who believe they can assist

their child's studies with no outside help have, on average, 4 percent more frequent use of LFH resources compared with those who report they do not feel competent to support the child, not without help from others. This proportion remains constant across LFH resource types. That is, the proportion of caregivers who feel they lack the competence to support the child in learning from home is the same for preschoolers who use a laptop as those using printed materials.

What do caregivers think about the medium-term usefulness of LFH resources?

Almost all caregivers with access to the official LFH resources (95 percent) believe their children enjoy using them. An overwhelming majority of caregivers (82 percent) say they want continued access to the official synchronous and asynchronous learning-from-home resources after schools reopen for face-

to-face instruction. This perception holds across all types of resources: written and oral instruction and resources from teachers (80 percent), digital resources (82 percent), and TV/radio (85 percent).

Discussion and policy implications



In response to pandemic-related school closures, educational systems throughout LAC launched learning-from-home resources in record time. While this effort is laudable, a range of questions have emerged from the de facto usage of LFH resources. This note begins an exploration of caregivers' reported usage of the resources provided, as well as their perceptions.

Remote learning imposes greater demands on caregivers. During the pandemic they have been expected to take a more active role in organizing, guiding, and motivating the learning their children undertake. These demands become even more relevant for caregivers of young children. Nevertheless, findings from a survey in four LAC countries show that on average usage is high, with nine out of ten young children exposed to the different official LFH resources.

Household characteristics affect the use of LFH resources. Low-SES households use the resources less often, perhaps because of time constraints. High-SES parents are more likely to be working from home than their low-SES counterparts so this household characteristic may explain the difference. Similarly, the well-being and self-perceived competence of caregivers strengthen the likelihood that they will use the learning resources. These findings about caregivers' SES disparities lead us to

expect learning gaps to persist and even widen among young children.

Regarding different types of LFH resources, we find that asynchronous resources requiring less parental involvement, such as TV and radio, are used with greater frequency. Given the literature on interactive learning for young children, synchronous resources, although used less intensely, may produce higher levels of learning. The implication is that although rural households make more frequent use of LFH resources, their reliance on asynchronous learning may produce poorer educational outcomes for the children under their care. We also find that communication from teachers increases caregiver engagement in the form of intensity of use.

The survey reveals that, with the exception of rural households, those households needing the most support—namely, low-SES households and households whose caregivers report diminished

Discussion and policy implications

levels of well-being-use the LFH resources the least. Official LFH resources need to be complemented with interventions. If face-to-face services are an option, these households should be prioritized. If face-to-face services are not available, synchronous learning could be promoted by facilitating free access to devices and connectivity (e.g., by whitelisting platforms that supply official LFH resources). Teacher communication appears to be crucial in boosting caregiver engagement. Policy interventions that ease some of the burdens placed on caregivers (for example, by providing more support and guidance) could move learning from home toward blended models of education.



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Appendix

Table A.1.
Provision of LFH resources by country during the COVID-19 pandemic

Country	Overview	Teacher instructions and printed materials to caregivers	TV	Radio	Digital	Printed materials
Colombia	Content was transmitted through TV and radio. There was also a digital repository. Parents without connectivity received a physical package with learning materials. Additionally, teachers made systematic calls to parents to provide instructions for learning activities.	X	X	X	X	X
Peru	Content was transmitted through TV and radio. A digital repository was also available for caregivers and teachers. Text messages were sent to parents and teachers about learning-from-home resources to motivate participation. The Ministry of Education distributed 800.000 tablets for preschoolers in low-SES households.	X	X	X	X	
Costa Rica	Content was transmitted through TV, radio, and internet lessons, complemented with weekly synchronous lessons with teachers. Teachers made available digital and printed caregiver guide for learning-from-homes. In addition, a digital repository was available for caregivers and teachers, including a website with specific pedagogical mediation strategies for early childhood.	X	X	X	X	X
El Salvador	The main strategy is composed of a digital repository for parents of preschool-aged children. Educational content was also transmitted using TV and radio. A call center answers questions related to the remote learning resources. Printed materials were also available for families with difficulties with connectivity.	X	X	X	X	X

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Appendix

Table A.2.

Household usage of learning-from-home resources

	Full sample	Full sample	Rural	Urban	Colombia	Costa Rica	Peru	El Salvador
	Number				Percent			
TV or radio lessons	20.404	33	36	31	—	10	77	65
Digital lessons and materials	12.016	20	9	24	52	15	10	4
Instruction and resources provided by the teacher	22.774	37	43	33	29	66	6	18
No LFH resources	5.743	9	12	12	19	9	6	12
Total	60.937	100	100	100	100	100	100	100

Table A.3.

Variables that determine access to digital learning-from-home resources (%)

Variable	SES			Geographic Area	
	Overall	Low SES	High SES	Rural	Urban
Tablet/computer ownership	29.6	10.0	58.7	20.3	34.1
Internet at home	63.5	51.7	75.0	45.0	70.0
TV ownership	89.9	83.6	99.1	83.6	92.8
Radio ownership	43.5	25.3	70.6	39.6	45.4
Electricity at home	96.8	94.8	99.8	94.3	98.0

About the Authors



Emma Näslund-Hadley 

Lead Education Specialist at the Inter-American Development Bank

Juan Manuel Hernández-Agramonte 

Deputy Regional Director of Innovation for Poverty Action for Latin America and the Caribbean.

María Luiza Zeta 

Graduate Student, Princeton School of Public and International Affairs.

Carolina Méndez 

Education Specialist at the Inter-American Development Bank

Brunilda Peña de Osorio 

Director of Early childhood Education at the El Salvador National Ministry of Education

Guiselle Alpizar 

Chief of the Early Childhood Department Costa Rica's Ministry of Public Education

Juan Felipe García Rodríguez 

Former Leader of Knowledge Management for Early Childhood Care at the Colombian Institute of Family Welfare.

E. Madrigal 

National Advisor on Preschool Education at the Ministry of Education in Costa Rica.

O. Montoya 

National Advisor on Education at the Ministry of Education in Costa Rica.

Úrsula Luna 

Director of Initial Education at the Peru Ministry of Education

Kelly Montaña 

Research Associate of Innovation for Poverty Action for Latin America and the Caribbean

Loreto Biehl 

Lead Education Specialist at the Inter-American Development Bank

Jennelle Thompson 

Senior Education Specialist at the Inter-American Development Bank

Juan Maragall 

Lead Education Specialist at the Inter-American Development Bank

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