

Impact Evaluation of an Early Literacy Intervention Program during the COVID-19 Pandemic in Mexico

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Abstract

The COVID-19 pandemic resulted in widespread school closures, prompting governments to implement distance learning strategies. In Mexico, the government implemented the “Learn at Home” initiative as a nationwide strategy to ensure educational continuity. Limited access to the Internet and electronic devices in Mexican households posed challenges, especially for children in their first two years of primary school. The “Distance Early Literacy Program” emerged to involve families in the literacy process within a school zone in Querétaro, Mexico. This study investigates the impact of this alternative Literacy Program on the learning outcomes of participating children. To assess the program’s effectiveness, one year after its implementation, we compared three groups of students: the Participant Group (PG) actively involved in the program, Control Group 1 (CG1) starting school in the same year, and Control Group 2 (CG2) following the “Learn at Home” program. The evaluation encompassed the aspects of reading and writing skills using a comprehensive evaluation instrument. The results revealed significant differences between PG and control groups, indicating the program’s success. PG students achieved higher results in writing, reading, and metacognitive skills. While not all aspects achieved equal success, this study underscores the importance of family participation, clear communication, and adaptable strategies. This study contributes to our understanding of the design of strategies for early literacy in crisis and post-pandemic contexts, showing the value of a psychogenetic approach in pedagogical design and mediation.

Keywords

COVID-19, Distance Education, Literacy Program, Psychogenetic Pedagogical Design

1. Introduction

The COVID-19 pandemic has placed unprecedented pressure on educational systems worldwide. During the critical phase of the crisis, governments in numerous countries were compelled to close schools to mitigate infections and save lives. This led to over 1.6 billion students leaving classrooms (United Nations Educational Scientific and Cultural Organization [UNESCO], 2020).

To address the exceptional challenges of health emergencies, governments have adopted various strategies to ensure the continuity of education. Importantly, these strategies lacked the necessary time for thorough planning and evaluation. Consequently, certain strategies may have been implemented without undergoing a review process or establishing systems to monitor and document their effects (Organization for Economic Co-operation and Development [OECD], 2020).

The long-term implications of distance-learning strategies remain relatively unknown three years after these school closures. Identifying the effects of educational decisions at the national or local level is challenging, especially in the post-pandemic context, because of the absence of a reliable official source that addresses this question (Donnelly & Patrinos, 2022).

Empirical evidence is necessary to assess the effectiveness of distance learning strategies implemented during extended school closures, both on a large and small scale. This is particularly important in Latin American countries such as Mexico, where school closures lasted for 53 weeks.

This concern is magnified when considering the context of early literacy, a fundamental stage that has a significant impact on educational achievement throughout each student's life. Focusing attention on the initial acquisition of written language at a distance places children's right to literacy at the center (UNESCO, 2020). Literacy is a progressive and lifelong process not limited to simply learning the alphabet, but it also involves children becoming engaged readers and writers with active integration into the written culture (Ferreiro, 2013). This allows them to use these skills to advance their studies, projects, and personal interests (Lerner, 2001). Through this understanding of literacy, children develop the knowledge and skills necessary to enter and participate in the culture of print.

In Latin American countries, such as Mexico, there is a notable lack of official studies related to government strategies, particularly those that investigate whether children who attended the first grades of school at a distance managed to acquire reading and writing skills.

This study analyzes the learning outcomes of children who participated in a program designed to encourage families to play an active role in facilitating literacy at home. To assess the project's impact, a comparison was made between the performance of the participating children and two control groups one year after implementation.

2. Background of the Evaluated Literacy Program

Mexico's primary response to ensuring continued basic education during the

pandemic was the implementation of the “Learn at Home” initiative. This strategy was based on the transmission of educational programs through television, the Internet, and radio, which provided scheduled classes for the primary and secondary grades.

The content of the “Learn at Home” strategy was aligned with the official national curriculum. Additionally, the government established an agreement with Google for Education to use the G-SUITE platform, which included access to a dedicated website, email accounts for educational actors, and video tutorials (Hevia et al., 2021). However, these strategies were limited by the lack of widespread access to the Internet and electronic devices in Mexican households (Instituto Nacional de Estadística y Geografía [INEGI], 2019).

In addition, this government strategy prioritized progress through curriculum content over educational companionship. This role was transferred from the teachers to their family members. In response, teachers began looking for alternative approaches that emphasized learning fundamental content and promoted closer collaboration with families. This is especially relevant for early literacy in the first grade of primary school (Cervantes & Rojas, 2021).

3. The Distance Early Literacy Program

In the absence of specific strategies to guide children’s early literacy in the first two grades of primary school in distance mode, the “Distance Early Literacy Program to Address Educational Lag” (hereafter, the Program) emerged in response to a request made by a school zone supervisor in the city of Querétaro. This program was remotely coordinated by Dávalos and Soto (2022a) and aimed to ensure that children could learn to read and write, even during the pandemic.

A total of 161 children participated in the study, with 82 in the first grade and 79 in the second grade. Within the Program, each child at home has at least one family educational companion, such as a parent or relative. A total of 258 accompanying persons were registered.

The families came from diverse backgrounds and experiences, representing the middle-class economic sector. The median income for these families falls within the lower middle-class range in terms of income distribution. The average monthly salary of the head of the family during the program implementation period was \$4.91k MX.

The adults in these families had a wide range of professions, showcasing the diverse career options available within the middle class. These professions included store employees, industrial workers, administrative assistants, healthcare professionals, teachers, and accountants. Most of the participants were employed full-time, while a smaller percentage of individuals were either employed part-time or self-employed¹.

Out of all the accompanying adults, 61.26% had a bachelor’s degree, 11.71%

¹These data align with the demographic profile of the residents’ area as reported by the Encuesta Nacional de Ocupación y Empleo [ENOE] from INEGI, 2021. This can be consulted at: <https://www.inegi.org.mx/programas/enoe/15ymas/>.

had a baccalaureate degree, 1.80% had a postgraduate degree, and 1.80% had only primary and secondary education².

3.1. Epistemic Approach to the Intervention Program

The understanding of children's literacy possibilities, challenges, limitations, and achievements are closely linked to the epistemological stance taken by educational policymakers. This position influences how we perceive both the subjects and the objects involved in the teaching and learning processes.

The proposed literacy program for the children incorporates elements of the psycholinguistic theory of psychogenetic orientation, developed by *Ferreiro and Teberosky (1979)*, and the constructivist approach to the Didactics of Written Language.

The psycholinguistic theory of psychogenetic orientation is notable for its emphasis on the development of children's ideas about the writing system and its social nature. Writing is a multifaceted practice that encompasses social, cognitive, linguistic, and political aspects and is rooted in a system of language representation (*Ferreiro, 1998*). This perspective differs from the simplistic notion of writing as a simple oral transcription code. Although children are taught in school to associate certain letters with specific sounds, this simplified relationship does not fully capture the complexity of the writing system, which involves more intricate relationships among its elements.

In terms of the relationship between the subject of learning and the object of writing, during the literacy process, children develop hypotheses about how the elements that constitute the writing system are related (*Ferreiro, 1984*). Rather than simply decoding written texts or pronouncing letters in isolation, children attempt to interpret texts by coordinating visual information with their knowledge of topics and assumptions about what might be written. When they assume the role of writers, they make decisions about which letters to use, how many, and in what order, as well as what content to incorporate into a text. This involves making decisions about both the representation of the writing system and textual content (*Ferreiro & Teberosky, 1979*).

The didactics of written language are grounded in psychogenetic theory and aim to create teaching situations that align with children's learning processes. It addresses both initial literacy and other aspects of written language (Lerner and Castedo in *Alegría & Cisternas, 2018*).

The design and analysis of reading and writing didactic situations, researched in Latin American countries (*Alvarado & Vernon, 2004; Castedo et al., 2020; Castedo & Molinari, 2008; Kaufman & Lerner, 2015; Nemirovsky, 1999*) have provided a detailed understanding of how various teaching situations function, the necessary conditions for their implementation, and the most effective interventions to support children's knowledge development.

²These data coincide with the educational level trends of the population of Querétaro according to INEGI data (2020), which can be consulted at:

<https://www.inegi.org.mx/programas/ccpv/2020/#Microdatos>.

This perspective highlights the significance of offering students opportunities to develop reading and writing skills and comprehend the writing system (Castedo & Molinari, 2008). It recognizes the need for intentional interventions that guide children and encourages reflection on written language (Cuter, 2011). This includes offering various opportunities for reading and writing, valuing children's interpretations and creations, encouraging peer interaction, and guiding reflection on the writing system and language through targeted interventions.

In terms of teaching, this perspective emphasizes the importance of providing opportunities for students to develop reading and writing practices and understand the writing system (Castedo & Molinari, 2008). It recognizes the need for intentional interventions that guide children and encourages reflection on written language (Cuter, 2011). This involves providing multiple opportunities for reading and writing, respecting children's interpretations and productions, promoting peer interaction, and facilitating reflection on the writing system and language through precise interventions.

Despite the limitations imposed by confinement and family circumstances, these conditions were considered important factors in ensuring the success of the Program. The inclusion of children's understanding of the writing system and the social and communicative aspects of language were prioritized, while still considering the restrictions.

Learning complex content, such as understanding the writing system, requires children to reflect on their actions. In the school setting, teachers play a crucial role in facilitating this opportunity. This mediating figure is essential to guide the psychological processes involved in literacy and translate them into planned interventions that promote the construction of strategies that allow children to understand the characteristics of the writing system.

As part of the project, the parents were given written recommendations to guide their children's reflective work. These recommendations played a central role in program development.

3.2. The Design and Mechanics of the Distance Literacy Program

The theoretical principles served as the basis for the design of various activities, which were organized into four categories according to their didactic purposes. The family educational companion plays a central role in the design and development of the program (Dávalos & Soto, 2022b). Each activity category required specific interventions from the companions.

*Category A. Activities in which the adult reads and writes texts that are shared and circulated socially.

The family's educational companion was tasked with reading and composing various types of texts, including messages, invitations, greetings, and instructions. This endeavor aimed to ensure that the students understood the texts' communicative objectives, recognized their formats, and grasped their discursive structures while experiencing reading behaviors in real-life communicative con-

texts.

These activities provided opportunities for students to build knowledge about written language long before reading and writing conventionally.

After the adult's reading or writing, the accompanying person provided spaces for exchanges about what was read/written to facilitate the student's progress toward understanding the messages conveyed by the text.

*Category B. Activities where the child reads and writes texts of social circulation.

The selected texts presented challenges for the readers, requiring them to locate specific information, determine if certain information is stated or not, and make predictions about the meaning of a fragment based on their knowledge of the texts and writing elements.

The family educational companion helped children find cues to interpret text, then connect texts with prior knowledge, understand information, express opinions, and share communication strategies.

Regarding writing, the texts assigned were brief compositions, including lists, labels, or adaptations of familiar texts such as stories. The facilitator encouraged unrestricted writing and refrained from dictation or corrections. Instead, they asked questions to help the student think about how to choose and arrange letters and to make sure the text met the content requirements for its intended purpose and audience.

*Category C. Activities to aid comprehension of the writing system.

Challenges were posed that required children to identify graphic similarities between words; complete initial, final, or intermediate letters in known words; compare their writing with that of others; and copy texts in meaningful contexts, such as titles of stories read in a Reading Passport or new words in their Word Notebook for future reference.

Mentors guided these reflections by encouraging finger reading, providing comparison strategies, and offering relevant information about writing to help children determine which letters were needed.

* Category D. Activities to play with writing. During these activities, children participated in games that required the use of their knowledge of the writing system and their ability to make inferences about what might be written from the context provided by the game itself, such as name bingo, memory games with known words, and word-finding searches.

In this context, the companion intervened with questions and comments designed to encourage the students' autonomous participation in the game.

Each activity took the form of an instruction card, a unit of work well-known to Mexican teachers, which also facilitated its circulation on mobile devices. The cards were circulated through the WhatsApp group. A daily communication system was established to send cards to families and provide feedback to coordinators on the audiovisual recordings of activities sent by families.

The project spanned 16 consecutive weeks, commencing at the end of Sep-

tember 2020 and concluding in February 2021. The duration of this time block was not predetermined, but rather determined based on the time it took for the children to engage in independent reading and writing activities.

During the period analyzed here, each family received nine activities per week, intending to maintain a constant and manageable rhythm of daily activities. The weekly schedule of activities is structured as follows:

At the beginning of the week, two cards of Category A activities were provided, which involved the exploration of various texts of domestic circulation, such as birth certificates, receipts for payment of services, recipes, greeting cards, calendars, restaurant menus with home delivery services, and stories from the official textbooks from the previous school year. These activities encouraged the children to explore these texts and then they were given up to three Category B cards, which allowed them to read specifically what they had identified in the texts explored, such as names in the minutes and days of the week in calendars or ingredients in recipes or served as a basis for creating their writings.

In the middle of the week, the children received three cards from Category C activities that contained games aimed at using previously acquired information. These activities promoted the interpretation and production of text at the word level.

On the last days of the week, a Category D card was sent, which consisted of a reading card featuring a carefully selected short story or fable. These cards were created to promote children's active engagement in reading. They began with questions aimed at anticipating the story's content, which stimulated reflection before reading. The text was accompanied by an audio story, allowing children to listen to the narration while reading the text. At the end of the reading, there were opportunities for discussion about the children's expectations. Creative writing activities were also provided, such as creating epigraphs for the characters' images, completing repetitive sentences, or freely rewriting the story. These closing cards not only promoted reading comprehension but also invited the children to express their ideas and creativity through writing.

Each child had the opportunity to work with a set of 144 pedagogical cards over 16 weeks. These cards were divided into four categories: 32 Type A cards, 48 Type B cards, 48 Type C cards, and 16 Type D cards.

These cards were assigned according to both the developmental and recursive criteria. The evolutionary criteria were based on the resolution of the problems that children pose about writing in the three major periods of written language acquisition described in the psychogenetic theory.

However, the recursivity criteria were oriented towards the diversity of reading and writing situations, both in terms of autonomy and participation with others, to allow children to approach and reflect on the same problems in different contexts. This would provide them with the opportunity to construct and reformulate their knowledge, moving towards more advanced hypotheses in their learning process (Molinari & Brena, 2008).

4. Methodology

4.1. Participants

To investigate the effect of the didactic intervention program and determine the long-term impact of the intervention program on the reading and writing skills of the participating children, we included three different groups of students:

The first group, referred to as the “Participant Group” or PG, consisted of 45 students who attended 1st grade and participated in the didactic intervention program during the 2020-2021 school year. The students lived in a suburban neighborhood in Querétaro City and attended a public school in the morning. Most of their parents had completed tertiary education, primarily in higher technical university studies.

The second group, referred to as “Control Group 1” or CG1, comprised 48 children who started their first year of primary school in the 2021-2022 academic year. They served as a control group for comparison purposes.

The third group, also a Control Group, referred to as “Control Group 2” or CG2, consisted of 20 children who started their second year of primary education in the 2021-22 academic year. However, these children were not part of the intervention program. They implemented the “Learn at Home” strategy recommended by the Mexican Ministry of Public Education. We do not have any evidence of CG2 children participating in the program. Our knowledge is limited to the fact that they did not receive any additional materials or interventions during the 2020-2021 school year.

It is important to mention that both CG1 and CG2 attended the same public elementary school as the PG children, suggesting that the family socioeconomic conditions of all participants in the three groups were similar³.

4.2. The Instrument

To assess the impact of the intervention program, we selected the “Exploración de habilidades básicas en lectura, escritura y conteo. Herramienta para la escuela” (Cárdenas et al., 2018) in the areas of reading and writing. The instrument was designed to assess children’s progress in the initial literacy process from various perspectives, aligning with the approach used in the intervention program.

1) Self-writing. We assessed the students’ ability to write their names and three Spanish words (GUAYABA [guava], PIÑA [pineapple], and MELÓN [melon]) without any prompts. We then asked the children to explain their answers to assess their comprehension of the writing system, as outlined by Ferreiro and Teberosky (1979).

³Regarding research ethics, we obtained informed consent from both the parents and the participants boys and girls themselves. The information in this study involved students from the same school; therefore, the instruments were previously presented to the school authorities. Informed consent was also obtained from the participants (parents and children themselves). Likewise, the researchers committed to delivering the information resulting from this study to all participants and authorities.

2) Self-reading. It involved two tasks. First, we instructed the students to identify the written form of four different words that were presented alongside similar words. For instance, the words LEÓN (lion), LEONCITO (little lion), and LEONA (lioness) were shown to the children, who were then asked to identify which word said “LEONA”.

In addition, we evaluated the children’s understanding of reading directionality, their ability to comprehend the content on a picture page, and their proficiency in turning pages in a storybook.

3) Use of reading strategies: students read an album-type story (“Iba caminando”) by Machin and Vivas (1995), which features reiterative sentences. We created questions for students to anticipate and predict information from the text and illustrations. Additionally, we asked them to identify the title on the cover of the story and infer the content of the cover page.

4) Recognition of different textual types: we provided the children with various types of texts, including a storybook, newspaper, animal magazine, cookbook, and party invitation card. The evaluator read aloud excerpts from the materials while the children observed the holders to determine which one was being read from.

Although this instrument is designed to evaluate children in the 3rd year of preschool, we chose to use it because it allows us to understand the processes of written language acquisition. These processes are relevant not only for preschool but also for the first two years of primary schooling. For instance, it evaluates children’s understanding of how the writing system works (based on Ferreiro & Teberosky, 1979), as well as their ability to write alphabetically and their level of phonological awareness. Since we assessed school-aged children in their homes and the intervention program’s nature, we found it convenient to use this instrument.

4.3. Analysis Method

Once the three participant groups were identified, we individually assessed each participant in sessions that lasted an average of 35 minutes. The evaluation of three groups (PG, CG1, and CG2) took place in November of the 2021-22 school year, as the children started returning to school in a staggered manner.

After forming three study groups (PG, CG1, and CG2), we analyzed the impact of the intervention program. To accomplish this:

1) We compared the reading and writing skills of first-grade students in CG1 with those of PG children. We hypothesized that at the start of 1st grade, the PG children may have been in a comparable situation to the CG1 children.

2) We determined the impact of the intervention program by comparing the evaluation results between the program group (PG) and the control group 2 (CG2).

3) We used an evaluation rubric to assess the responses of all participants. This involved weighting the scores to ensure comparability across all aspects evaluated and to distinguish the most basic aspects of the evaluation. The test

had a maximum total score of 40 points, with each section of the instrument worth 10 points.

5. Results

5.1. Overall Results

The evaluation results varied among the groups in our study. The average score for the PG was 35.91 out of a maximum total of 40, while CG1 scored 27.43 and CG2 scored 28.87. If we consider that the PG and CG2 consisted of children who had started the 2nd year of primary school, it may seem logical that these participants would have obtained the highest scores.

The analysis comparing the means between groups revealed no statistically significant difference between CG1 and CG2. When comparing the means of the PG group against the CG2 group, a significant difference was found (independent groups T-test with bilateral sig. = .002). Similarly, there was a significant difference between PG and CG1 when comparing them using a T-test for independent groups with bilateral sig. = .000.

When analyzing the responses of all evaluated children (PG, CG1 and CG2) we discovered significant correlations (through the contingency coefficient) between participation in the intervention program and the score achieved on the overall test (approximate sig. = .001).

5.2. Children's Performance in the Evaluated Aspects by the Sample Group

We used a 4-part instrument to evaluate the children's performance in writing and reading assignments. The aspects included writing independently, making inferences while reading, using reading strategies, and identifying different types of texts.

The maximum score for each aspect was 10 points. When evaluating all 116 children, we found that reading from inferences was the aspect in which they scored the highest (8.78/10), while identification of textual types was the aspect with the lowest score (5.43/10). **Table 1** summarizes this information.

As indicated in **Table 1**, the PG children consistently outperformed the control groups (CG1 and CG2) in all evaluated aspects. All aspects of the three groups of children exhibited similar behavior, except for the reading strategies score obtained by PG. When analyzing the responses from each group, the aspect that received the lowest score was the identification of textual types. The next lowest score was for writing independently, followed by reading strategies. The highest score was achieved in reading from inferences, except for the PG children who scored the highest in reading strategies.

When analyzing the responses of all the evaluated children (PG, CG1, and CG2), we found significant correlations (using the contingency coefficient) between participation in the intervention program and the scores obtained in each aspect evaluated, as well as the overall test score. This information is summarized in **Table 2**.

Table 1. Average scores obtained from the aspects evaluated for each participant group and in the total sample.

Aspects evaluated	CG1	CG2	PG	Average per aspect/10	% Of achievement per task in the total sample
Self-writing	7.42	7.17	9.65	8.08	80.8%
Reading from inferences	8.06	8.60	9.70	8.78	87.9%
Reading strategies	7.65	7.90	9.76	8.43	84.4%
Identification of the text types	4.30	5.20	6.80	5.43	54.3%
Total sum. per group/40	27.43	28.87	35.91		
% Of achievement over the total evaluated of the group	68.58%	72.18%	89.78%		

Table 2. Summary of symmetric measures: contingency coefficient for participation in the intervention program (N = 116).

Aspect considered nominal by nominal	Value	Approximate Sig.
Self-writing	.422	.000
Reading from inferences	.321	.010
Reading strategies	.406	.006
Identification of the text types	.452	.000
Total test score	.521	.000

It is important to mention that when analyzing each aspect of the evaluation for each sample group and performing comparisons between means using a T-test for independent groups, no statistically significant differences were found between the two control groups (CG1 and CG2) in any of the evaluated aspects.

The results of the T-tests (for independent samples) indicate a statistically significant difference between the PG and CG1 groups when comparing their results. The results of the study showed significant findings for several variables: “Writing by themselves” ($p < .001$), “Reading from inferences” ($p < .001$), “Reading strategies” ($p = .004$), and “Identification of textual types” ($p < .001$) (bilateral sig. = .000); “Reading from inferences” (bilateral sig. = .000); “Reading strategies” (bilateral sig. = .004) and “Identification of textual types” (bilateral sig. = .000).

When comparing the results of the PG and CG2 groups using T-tests (for independent samples), we found statistically significant differences in their behavior. This was true for both the total test score and when considering each of the evaluated aspects. This was so when considering the results of “Writing by themselves” (bilateral sig. = .001). The statistical analysis showed a significant difference in reading comprehension scores ($p < .001$). The statistical signific-

ance of “Reading strategies” was not significant ($p = .002$). The statistical significance for “Identification of textual types” was not reported ($p = .000$). The value is .001.

5.3. The Most and Least Complicated Aspects in the Assessment of Children Who Participated in the Intervention Program

We have already identified the distinctions between the children who participated in the intervention program and the two control groups. We would like to discuss the relationship between the intervention program and the complexity of the aspects assessed by the instrument we used.

As mentioned in “The Design and Mechanisms of the Distance Literacy Program”, the PG children had the opportunity to work with a set of 144 pedagogical cards that were distributed into four categories.

- 32 cards of type A: activities in which adults read and write texts that are commonly used in society.
- 48 cards of Type B: that provide activities for children to practice reading and writing texts commonly used in social situations.
- 48 cards of type C: activities to enhance the understanding of the writing system.
- 16 cards of type D: activities to play with writing.

Based on the evaluation results of the children, we observed that the most beneficial activities for them were those that involved reflecting on how the writing system works and gaining experience in making inferences about reading and writing. The activities, referred to as “play with writing”, were found to be particularly beneficial.

However, even with the use of activity cards type A and B to introduce children to various texts in social circulation, they still require additional experience in this domain. The scores for “identification of the textual types” indicate that this is the most challenging aspect.

It is crucial to consistently analyze the design of activity cards to identify necessary modifications that will improve the clarity of instructions. The literacy level of participating adults should also be considered. The design of educational materials can encourage meaningful reflections among learners, but the environment in which children interact with literacy is also essential. Adults play a vital role in bridging the gap between the culture and the learners. The didactic intervention should not only benefit the learners but also enrich the adults, helping them improve their literacy skills.

The “identification of textual types” was the least preferred aspect among all three participant groups. This is understandable because all three individuals came from similar socio-educational backgrounds.

6. Discussion and Conclusions

After evaluating the distance literacy program and conducting a comparison

with groups of children who did not participate, it was determined that it achieved a success rate of 89.78%. This contrasts with the success rates of 72.18% and 68.58% observed in the control groups, as presented in **Table 1**.

These results underscore the effectiveness of the constructivist approach with a psychogenetic orientation employed in the intervention program. Children belonging to the Participant Group (PG) consistently demonstrated superior performance compared to their peers in all assessed areas. However, it is essential to note that not all evaluated aspects yielded the same level of success. Specifically, only 68% of the PG children successfully identified textual types. This finding emphasizes the need for more in-depth analysis through pedagogical activities (pedagogical cards), as advocated by **Cuter (2011)** and **Castedo & Molinari (2008)**. These activities can provide children with enhanced opportunities to identify the distinguishing features of different written texts.

Despite the variations in scores between the PG and the other groups, it is noteworthy that all children faced the most significant challenge in identifying different types of text. It is imperative that future research delves deeper into this issue, which may be associated with the limited exposure to diverse written texts in the daily lives of Mexican individuals, as indicated by **Cervantes and Rojas (2021)**. This is particularly crucial due to its potential implications for societal participation and performance across various communicative contexts involving written language (**Lerner, 2001; Mora et al., 2021**).

As noted by **Cervantes and Rojas (2021)**, the analysis of the writing system's functioning emerged as the central focus due to the PG's results. From this perspective, our reflections can be directed in two ways. Firstly, we can explore more effective strategies to engage children with the literate culture, as suggested by **Ferreiro (2013)**. Secondly, we should recognize that the didactic bias may be a result of the unique experience of the pandemic, where parents have become actively involved in their children's education, leading them to prioritize understanding how the writing system works.

It is worth mentioning that the implementation of teaching cards as a means of providing guidance to families in their role as companions appears to have yielded positive results. This study does not specifically analyze the individual performance of each accompanying adult. However, it highlights the advantages of their involvement in the program. This perspective aligns with the viewpoint presented by **Castedo and Molinari (2008)**, who emphasize the beneficial outcomes of purposeful interventions that aim to guide children and foster their ability to engage reflectively with written language. Our study provides empirical evidence that substantiates this viewpoint, as we have observed significant improvements in multiple facets of literacy consequent to the intervention provided by the adult companion.

Despite the limited resources for evaluating the distance literacy program, the implementation of control groups enabled us to assess the program's impact. It is noteworthy that both the intervention program and the evaluation instrument

concentrated on comparable facets of written language, ensuring the use of consistent evaluation criteria. The assessment of the children's skills was conducted by evaluating their participation in specific activities, thereby improving the accuracy of the evaluation. Both the program and the evaluation instrument were designed within the same theoretical framework.

Within the scope of our evaluation, several recommendations arise for the future: 1) the activities in the intervention program's didactic cards could be adapted for use in traditional face-to-face school settings; 2) considering the literacy level of those facilitating child literacy, whether professional teachers or accompanying adults, is crucial, as illustrated by the evaluated intervention program; 3) involving family members with clear instructions can greatly facilitate children's learning; and 4) the development of evaluation instruments measuring learners' progress in various aspects of the literacy process is imperative.

This study provides validation for the innovative utilization of a didactic solution rooted in the psychogenetic approach in formulating distance education strategies amidst the pandemic. The flexibility of this approach, combined with its understanding of how children develop literacy abilities, holds significant potential in addressing future educational challenges while remaining committed to UNESCO's (2023) primary goal of protecting children's literacy rights.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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