



Teaching literacy in elementary school in times of pandemic. Case studies

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Summary

Objective: to identify emerging forms and strategies implemented by teachers who developed the teaching of literacy with children between 4 and 9 years of age during the pandemic, as well as the challenges faced in order to provide continuity to the educational process.

Originality/ contribution: Establishing challenges and the innovative and pertinent way in which the challenges were assumed by teachers who taught reading and writing during Covid-19 from different contexts, offers information as a contribution for future moments related to emergency situations.

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Method: the methodological design was descriptive, since it describes experiences and facts lived by teachers in the urban and rural context of Guatemala², as well as exploratory, since it is a subject that has not been studied or approached much, allowing us to know in a more familiar way³ the situation faced during Covid-19; therefore, the case study was used as a method.

Strategies/information collection: Interview and observation were the research techniques employed and which facilitated the information for the development of the study.

Conclusions: The teaching of literacy during the Covid-19 pandemic evidenced changes in the way of accompanying the process, causing teachers, students and their families to face challenges related to the strategies and time the children needed for the achievement of competencies; undoubtedly, teamwork between teachers and parents was key and made a difference in the infants' learning.

Keywords: *Literacy; teacher; parents; learning.*

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Abstract

Objective: to identify emerging forms and strategies implemented by teachers who developed literacy teaching with children between 4 and 9 years old during the pandemic, as well the challenges faced to give continuity to the educational process.

Originality/contribution: Establishing challenges and the innovative and pertinent way in which the challenges were assumed by teachers who taught reading and writing during Covid-19 from different contexts, offers information as a contribution for future moments related to emergency situations.

Method: the methodological design was descriptive, as it describes experiences and events experienced by teachers in the urban and rural context of Guatemala, as well as exploratory as it is a little studied or addressed topic, allowing to know in a more familiar way the situation faced during Covid-19; therefore, the case study was used as a method.

2 Cortés Cortés, Manuel and Miriam Iglesias (2004). Generalities on Research Methodology. Universidad Autónoma del Carmen. México. First Edition. ISBN 968-6624-87-2. p. 20.

3 *Ibid*, 1, 20



Strategies/information collection: The interview and observation were the research techniques used and that facilitated the information for the development of the study.

Conclusions: The teaching of literacy during the Covid-19 pandemic showed changes in the way of supporting the process, causing teachers, students and their families to face challenges related to the strategies and time that children needed to achieve competencies; without a doubt, teamwork between teachers and parents was key and made a difference in children's learning.

Keywords: *Literacy; teacher; parents; learning.*

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Resumo

Objective: to identify emerging forms and strategies implemented by teachers who developed literacy teaching with children between 4 and 9 years old in times of pandemic, as well as the challenges faced to give continuity to the educational process.

Originality/contribution: Establishing challenges and the innovative and relevant way in which the challenges were assumed by the professors who taught reading and writing during Covid-19 in different contexts, offers information as a contribution for future moments related to emergency situations.

Method: the methodological approach was descriptive, because it uncovered experiences and events experienced by teachers in the urban and rural context of Gua- temala, as well as exploratory because it is a topic that has been little studied or approached, allowing us to know in a more familiar way the situation faced during the Covid-19; therefore, the case study method was used as a method.

Strategies/information gathering: The interview and observation were the research techniques used that provided the information for the development of the study.

Conclusions: The teaching of literacy during the Covid-19 pandemic presented changes in the way the process was accompanied, making teachers, students and their families face challenges related to the strategies and time that the children needed to achieve competencies; undoubtedly, teamwork between teachers and country was fundamental and made a difference in the children's learning.

Palavras-chave: *Literacy; teacher; country; learning.*



Introduction

In 2020, the world society faced an unprecedented event, which unexpectedly and with great fears transformed the lives of human beings in the different spheres of the continent, since all countries with the arrival of Covid-19, which was originated by SARS-CoV.2019, experienced changes that had a negative impact the evolution of poverty and on the different social sectors, including health, education and employment⁴. In this sense, Covid-19 accentuated social inequalities related to access to food, timely health services and connectivity, to mention a few; but it also generated learning and opportunities to innovate and transform societies. , after living differently and the economic, cultural, social and educational life of human beings were impacted by this different way in which people lived together, attending to a social confinement and distancing, they continue to face challenges related to access to services and the unequal improvement of the economy⁵.

In this sense, it is important to recognize that the pandemic brought with it , and in the particular case of the literacy acquisition process, it had an impact on the achievement of competencies and the time required to reach them. Social conditions such as poverty, work, health, food and contexts in situations of poverty and vulnerability, with limited access to electricity, internet, equipment, parents' level of schooling and nutrition to mention a few, determined the access to strategies, inputs and care materials, which could have facilitated the accompaniment in the process of acquiring the initial stage of literacy.

The teaching of literacy within the framework of Covid-19 was a complex process for teachers, students and their families, since the different modalities adopted to provide continuity to educational services, such as virtual education, distance education or the hybrid model, provided an effective and assertive response for few, which led to a lack or loss of learning and diverse progress in students. Preserving life was one of the main concerns, to which was added the question of how to maintain educational processes with the greatest proximity to reality and quality, and which would have an impact on access to services with equity. In this sense, it is important to remember that the study was exploratory in scope, because it is a topic that has been little researched and that seeks to offer, from the experience of the cases studied, relevant information on how the process of learning to read and write was developed, as well as the challenges and ways of assuming them, which may become a reference for history.

Regarding the research topic, some studies refer as part of their analysis that the socio-economic factor is one of the factors that had the greatest impact on the educational process during Covid-19, as well as the family factor that considers housing infrastructure and the differences in the educational process during the Covid-19 period.

4 United Nations Educational, Scientific and Cultural Organization (2020). Education in times of the Covid-19 pandemic. ECLAC-UNESCO Covid-19 Report.

5 Venkat Gopalakrishnan, Divyanshi Wadhwa, Sara Haddad and Paul Blake (2021). Summary of the year 2021 in 11 graphics: the pandemic of inequality. World Bank Group.



different family dynamics⁶; in fact, reference is made to the fact that children from disadvantaged homes were the most affected. In addition, Anderete Schwal (2021) refers that in the continuity of the educational process during the pandemic, not only economic and technological factors had an impact, but also the time parents had available to accompany their children's process made a difference⁷.

Another study highlights that teachers used different and diverse models for teaching literacy, which does not seem to be the most important factor in children's learning, being, on the contrary, family support; it also highlights that a greater delay in literacy learning is identified in students from vulnerable contexts⁸. These studies, as will be seen in the development of the article, coincide in some elements such as the importance of parental involvement literacy learning, as well as the innovation that teachers put into through a diversity of forms or modalities to give continuity to the learning process of their students, adding to , that children from rural, poor and more vulnerable contexts were the most affected and showed the greatest lags.

Given the situation described above, the study sought to answer key questions, including the following: How did teachers teach reading and writing during the pandemic caused by Covid-19; what emerging and successful experiences did teachers from urban and rural areas and from different educational sectors implement to teach reading and writing to their students; what were the main challenges in teaching reading and writing in times of pandemic; and what will be the main post-pandemic challenges faced by teachers and students. To answer these questions, the study was carried out in two different contexts and realities:

- Case A: Teachers with a bachelor's degree in education and at least 7 years of experience in teaching reading and writing. Both of them from the urban area of Guatemala City, accompanied the literacy learning process of children between 4 and 6 years old in a private sector educational center that serves by stages or grades. The predominant culture of the educational community of this school is ladino, not mestizo, and the socioeconomic condition is of medium level. As part of the conditions, they had: 1) access to an electronic device (tablet, laptop, computer or cell phone), internet and the accompaniment almost always of an adult, most of whom have intermediate level education (high school diploma, secretary, teacher, among others); 2) suitable infrastructure conditions at home (electricity, drinking water, concrete construction); 3) food security; 4) timely health services; and 5) care and protection.

6 Formichella, M and Krüger, N. (2020). Pandemic and educational gaps: Reflections from the economics of education. Institute of Economic and Social Research of the South.

7 Anderete Schwal, M (2021). Educational inequalities during the pandemic in primary education in Argentina. *Andean Journal of Education* 4(1). p. 5-10.

8 Barrios González, Ericka, Ana Karen Jimon and David González (2023). The process of teaching reading and writing. during the COVID-19 contingency. *Conciencia EPG Magazine* Vol. 8 No. 1



- Case B: Teacher with an intermediate level of academic training (high school) with higher intermediate studies (professorship)⁹ specialized in primary education, with 10 years of teaching experience and of these, four (4) in the teaching of reading and writing. She teaches in the rural area, specifically in the village of El Carrizal in the municipality of San Antonio La Paz, Department of Progreso, Guatemala; she accompanied the literacy learning process of boys and girls between seven and eight (7 and 8) years old, as well as between nine and twelve years old (9 and 12), since she teaches in a multigrade public school¹⁰. The predominant culture of the educational community of this school is Ladino, not mestizo, and the socioeconomic condition is one of poverty and extreme poverty. As part of the conditions of the community, it does not have electricity, drinking water, connectivity and there is little access to technological equipment (only a few have an analog telephone), parents at most attended school until third grade and know how to read and write, the houses are made of used tin, do not have toilets and the food is scarce and unbalanced for the age of the children.

THEORETICAL FRAMEWORK

1. Children in Guatemala

Coverage data¹¹ for 2018 revealed that in Guatemala there were 2.7 million girls and boys under 6 years of age, of these 1.8 million lived in poverty and 800,000 in extreme poverty; 1 out of every 2 children suffered from chronic malnutrition, especially those who are part of the indigenous population. In addition to the , for children under 5 years of age, 7 out of 10 children suffered from chronic malnutrition, which suggests the abandonment and lack of attention to early childhood, especially indigenous children between 0 and 6 years of age. In addition, only 1% of children between 2 and 3 years of age had access to early education and only 3% of children between 3 and 4 years of age had such access. At the pre-primary level, only 13% of children between the ages of 4 and 5 had access to the education system and educational services.

It is also important to know the reality of the second educational stage of early childhood care in Guatemala, which is the pre-primary education level, which had a net coverage rate of 51.17%¹² for 2019. Of this last percentage, it is worth noting that it is the indigenous population in rural areas that has the least access to these services.

9 In Guatemala, there is an intermediate level - university technician - called profesorado in the case of education.

10 In Guatemala, a multigrade public school is one in which teachers attend two or more grades at the same time and within the same space, due to factors such as the number of teachers appointed, the number of students and the distance from departmental capitals.

11 Ministry of Education of Guatemala, *Anuario Estadístico Guatemala*, 2018).

12 Oscar Hugo López Rivas, *Informe de Logros Gestión Administrativa 2016-2020 Guatemala*, 2020), 12.



education. Finally, the net coverage rate for the primary level, which comprises the 7 to 12 group, was 77.53% for 2019⁽¹³⁾.

The data shared above offer a general overview of the situation Guatemalan children at the pre-primary and pre-primary levels, who in turn develop the process of reading and writing between the ages of 4 and 7, specifically in the emergent or pre-literacy and initial stages, which will be explained below.

2. Stages of literacy and the Guatemalan educational context

The human, social and cultural development of human beings finds its conceptual basis in the acquisition of literacy¹⁴ and in the development of this, different psychological processes come into play such as "perception, memory, cognition, metacognition, inferential capacity and consciousness among others¹⁵".

According to Montealegre (2006), literacy in its development involves steps of the process of cognitive awareness, being these¹⁶:

First, to go from the non-consciousness of the relationship between writing and spoken language; to associate writing with spoken language; and to the mastery of written signs referring directly to objects or entities. Second, to move from the process of conscious operations such as the individualization of phonemes, the representation of these phonemes in letters, the synthesis of letters in the word, the organization of words; to the automation of these operations; and to the mastery of the written text and written language. (p. 26)

In fact, according to Vygotski, who is quoted by Montealegre (2006) "Learning written language consists of appropriating a determined system of symbols and signs whose mastery marks a crucial moment in the 's cultural development" and undoubtedly this puts them in direct contact with the world and society, which are dynamic and changing; besides putting within their reach and in different ways, a large number of written materials that represent a window of opportunity for knowledge and achievement of personal and professional goals. In fact, reading means more than deciphering letters, it implies understanding what is read, using the information and enjoying reading¹⁷. According to the quoted meaning of reading, this is a process that goes beyond simple decoding and invites to fully develop the different aspects of the initial reading stage, one of them being comprehension to make effective use of the information and also to experience pleasure and enjoyment.

Always in the same line of study and with the desire to learn about the development of writing, Luria, who is cited by Montealegre (2006), developed an experiential situation in which the development of writing is a key factor in the development of the child's ability to write.

13 López Rivas, *Achievements Report*, 12.

14 Montealegre, Rosalia (2006). Literacy Development: Acquisition and Mastery. *Revista Acta Colombiana de Psicología*. Catholic University of Colombia. Colombia. p. 25

15 *Ibid*, 14, p.25

16 *Ibid*, 14, p. 26

17 Leer y Aprender, *Aprendizaje de la Lectoescritura* Guatemala, USAID, (2016), 9.



This consisted of "proposing to children who did not know how to write, to remember by writing (in some) four or five series (4-5) of 6 to 8 , but simple and short sentences", the purpose of which was to establish "the extent to which the written signs become useful signs for the recall of information"¹⁸. The results obtained allow Luria to specify the genetic line of development of writing, which is structured by phases, being these:

the first phase is pre-instrumental, in which writing is a game, that is, an object-thing that in itself is a purpose, young children (3 to 5 years old) do not relate to writing as an auxiliary means, although they clearly recognize the activities of adults in relation to writing, they imitate them as an action that in itself has meaning, but it is definitely not a means to remember. The next phase of undifferentiated (meaningless) mnemonic writing corresponds to various strokes with subjective meaning for the child, which serve to remember something that was intended to be recorded. It is the first firm link to reach the future writing, reproducing all the phrases by means of scribbles or lines that do not mean anything. The marks recall that there is a sentence to remember, but they do not outline what the sentence says. The last phase, necessary in the acquisition of written language, is to convert that sign with subjective meaning into a cultural sign whose meaning is objective, differentiated and stable over time. This change is first evidenced in the characteristics of the production, where the marks are different for words of different lengths; and a relationship is observed between the rhythm of the pronounced phrase and the rhythm of the written sign, for example, when representing a short phrase with short lines. Second, the shift towards objective meaning is evident in the emergence of the pictographic phase, supported by the child's drawing. When the situation arises of representing something complex and pictographically it is very difficult, he chooses to draw another related object or a conventional mark; this option is the basis of symbolic writing. When the essential idea of writing as an auxiliary sign is mastered, the necessary bases are given to rely on written language as an instrument in the acquisition of new knowledge (p. 27-28)¹⁹.

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After learning about writing and its phases, which are named differently by different authors, but which coincide in elements that characterize them, it is important to talk about reading, which is a complex process that develops through the interaction of other subprocesses such as attention, memory, language and motivation²⁰; in this sense, learning to read and write is important for the integral development of human beings, since it allows them to achieve their goals and improve themselves.

Particularly reading, which is developed from an early age in human beings, starts with oral language and benefits from the stimulus that adults can generate in children, which can have a positive impact on the development of competencies throughout life. Reading is of utmost importance for integral development, as shown in the following figure.

18 Ibid, 14, p. 27

19 Ibid, 14, p.27-28

20 Reading and Learning, *Literacy Learning*, 9.

Figure 1. Importance of reading




Note. Read and Learn (2016, p. 13).



Considering the importance of reading and writing, it is necessary to delve into the stages that human beings must develop in order to achieve literacy competence. In this sense, it develops through three specific stages, which, according to Camargo, Geraldina, Raquel Montenegro, Sophia Maldonado and Justo Magzul (2016) are: 1) emergent; 2) initial; and 3) established. These are directly related to the phases of human development and are not exclusive to the school as such; since it begins through the emergent stage, which is especially stimulated from birth at home and becomes preparatory for the initial stage. The parents, from the home and within the framework of the first phase of early childhood, are in charge of developing it.

The following table shows and explains each of the stages of reading and writing:

Table 1. Stages of reading and writing

Stage	Features
 <p>Emerging</p>	<ul style="list-style-type: none"> • It refers to the initial and preparatory process for the acquisition of reading and writing. • It is so called because it occurs when reading and writing emerge and emerge. • It begins at birth and can be used to achieve learning that precedes and develops reading and writing. • The objective of this program is for children to develop their oral language and expand their vocabulary, as well as to become familiar with printed materials and understand that words are used to name objects. • It is important because it forms the basis for future learning of the written code.



Stage	Features
<p data-bbox="261 280 323 305">Initial</p> 	<ul style="list-style-type: none"> • Refers to the process of teaching and learning to read and write. • At this stage of learning to read and write, it is important to develop: <ul style="list-style-type: none"> – Phonological awareness – Knowledge of the alphabetical principle – Fluency – Vocabulary – Management of text comprehension strategies – Writing
<p data-bbox="229 620 355 646">Established</p> 	<ul style="list-style-type: none"> • It occurs after the learning of literacy and when the initial literacy skills have been achieved. • At this stage it is necessary for teachers to encourage children to continue developing reading, especially through the expansion of vocabulary, reading comprehension, improvement of fluency and increase of reading speed. • Reading is developed to learn about other curricular areas or about the world in general.

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Note. Own elaboration according to Camargo, Geraldina, Raquel Montenegro, Sophia Maldonado and Justo Magzul (2016). *Aprendizaje de la Lectoescritura. Proyecto Leer y Aprender*. p.p. 18-20.

Particularly, this study has focused on the second stage, known as the initial stage in the process of literacy acquisition; in this stage, children attend preschool and/or elementary school and develop competencies related to the acquisition of reading and writing. The school, with parental support, plays an important role, since it is where reading and writing are taught, considering and developing phonological knowledge, knowledge of the alphabetic principle, fluency, vocabulary, and text comprehension and writing strategies²¹.

The third stage of the reading and writing acquisition process is established and occurs when the initial stage is reached. In this stage, the school seeks to expand vocabulary, strengthen and improve reading comprehension, as well as fluency for production through writing, which will allow him/her to be a reader and even a writer with autonomy and independence in the medium and long term.

It is important to note that in the specific case of Guatemala, the National Education Law, Decree 12-91²², establishes in Chapter VIII, Article 29, the educational levels of the School Subsystem of the Guatemalan Education System and defines the following grades or

21 Camargo, Geraldina, Raquel Montenegro, Sophia Maldonado and Justo Magzul (2016). *Aprendizaje de la Lectoescritura. Proyecto Leer y Aprender*. pp. 18-19.

22 Congress of the Republic of Guatemala, *Ley de Educación Nacional* (Guatemala, 1991).

The cycles that make up each of the levels, however, do not refer to the ages for each one of them. In this sense, in the Guatemalan context, the acquisition of literacy is presented in the pre-primary and primary levels, which are directly related to the emergent and initial stages of the literacy process, which have been explained above.

At present and within the Guatemalan educational environment, the task of teaching a child to read and write has been advanced by virtue of the type of educational center where they are enrolled or in which they study; that is, whether these educational centers belong to the public or private sector and whether they are in urban or rural areas. In addition, the materials produced by the Ministry of Education and the National Base Curriculum -CNB-, contemplate the following -CNB-, contemplate the acquisition of literacy in the first grade of primary school (6-7 years), however, the reality, especially in the private sector, is far from this curricular and methodological reality, since it is acquired at the pre-primary level (4-6 years).

Within the process of literacy acquisition, the different members of the educational community cannot be left ; parents should contribute at home as co-responsible for their children's learning process, since it is important that the school principal promotes various activities and the involvement of several community actors in the literacy process²³.

METHODOLOGY

The research process of the study is based on the hermeneutic paradigm, since it follows the interpretation of the facts experienced by teachers who developed the teaching of reading and writing during the period of the Covid-19 pandemic, understanding this as that which, according to the fidelity of the interpretation, makes it possible to understand and arrive at a deep and broad knowledge of an initial knowledge²⁴. Within this paradigm, the qualitative approach favored the study of reality from a natural context²⁵, which contributed to obtaining information and made it possible to interpret the behavioral, affective, beliefs, thoughts and evaluations of the people who were subjects of the study, this from the observation, analysis and interpretation of facts, situations, interactions and behaviors.

As part of the methodological design, this was descriptive, since it described the experiences and facts lived by the teachers of the urban and rural educational centers considered as case studies with exploratory scope, considering that the subject investigated at that time had been little studied or approached, which would favor the knowledge regarding how the teachers faced the challenge of teaching reading and writing in the midst of a pandemic.

23 Reading and Learning, *Literacy Learning*, p 7.

24 Ballina Ríos, Francisco (undated). Paradigms and Theoretical and Methodological Perspectives in the Study of Administration. p. 4.

25 *Ibid*, 1, p. 32



Considering the , it is important to highlight that the case study was used as a research tool, which in turn was supported by interviews, observation, videos, audios and photographs of the process implemented by teachers for the teaching of literacy in times of pandemic; perception of students, parents and/or caregivers. In addition, similarities and differences were established among the cases studied and that have been previously characterized.

Collection of information

The participants were identified as appropriate, being pre-school and primary school teachers from the public and private sectors in urban and rural areas of Guatemala. In order to collect the information, it was necessary to develop:

- a. *Interviews*: Those that demanded the design and use of a guide of questions, as well as informed consents that allowed video and audio recording. These, understood as the instrument that allows the collection of information from different areas and actors, which are related to the problem under investigation and whose success lies in the communication and link established between people ²⁶.
- b. *Observation*: It required the design and use of an observation guide as well as informed consent for video and audio recordings and taking photographs. According to Olabuénaga and Ispízuza, quoted by Cortés Cortés and Iglesias (2004), observation is understood as the systematic and careful contemplation of facts and situations that are developed as part of life, without being manipulated or modified, as they occur⁽²⁷⁾.

RESULTS

The research allowed for the development of two case studies, A, which corresponds to the private sector, urban area at the pre-primary level and which serves an age group of children between 4 and 6 years of age; and B, which belongs to the official sector, rural area and primary level, which considers children between 6 and 7 years of age who attended first grade of primary school.

The two cases represent different and completely opposite contexts, which shows the reality of Guatemalan society, as well as the fact that children have access to educational services according to the economic capacity of their families. The following are particular data and descriptions of cases A and B studied. In this sense, it is important to emphasize that a single case study was used, which according to Stake (1999), is an intrinsic and instrumental study, of case selection, formulation of generalizations and importance of the research⁽²⁸⁾.

26 Ibid, 1, p. 37

27 Ibid, 1, p. 35

28 Stake, Robert E (1999). Case Study Research. Ediciones Morata. Madrid p. 15

1. Case A: School in the private education sector, urban area at the pre-primary level.

This case had the particularity of being able to learn about the experience and reality of two teachers who worked on the process of developing reading and writing skills with children between the ages of 4 and 6 years old.

Teacher A1	Teacher A2
<p>Code: CA1</p> <p>Educational level: Pre-primary Grade: Kindergarten (kindergarten 2) Area of intervention: Urban</p> <p>Education sector: Private Modality: Intercultural (bilingual L3-English) Years of teaching experience: 16 Years of experience in literacy teaching: 7 years</p> <p>Academic: Bachelor's Degree Department: Guatemala Municipality: Villa Nueva Number of students served: 19</p>	<p>Code: CA2</p> <p>Educational level: Pre-primary Grade: High School Area of intervention: Urban Education sector: Private Modality: intercultural (bilingual L3-English)</p> <p>Years of teaching experience: 17 Years of experience in literacy teaching: 8</p> <p>Academic degree: Bachelor's Degree Department: Guatemala Municipality: Villa Nueva Number of students served: 25</p>

Characterization of the case
<p>The case considers the experience of teachers at the pre-primary level in the private sector, urban area as mentioned in the informative part. It has been important to study this case, because in Guatemala, unfortunately, according to the socioeconomic level of the families, access to training opportunities is offered, which are directly linked to the type of motivation and formal and non-formal stimulation that the children receive at home and/or in an early care or stimulation center; to which is added the degree of schooling that the parents or caregivers may have and that affects timely stimulation processes. In this sense, within Guatemalan society, these types of socioeconomic circumstances affect the moment or age at which children learn to read and write.</p> <p>Particularly, the children who are attended by the teachers in this case come from upper middle class homes and have had the opportunity to be motivated and stimulated at home or in schools that offer early education in Guatemala and have developed the emergent literacy stage in favorable conditions, which is directly related to learning to read and write at the pre-primary level, as well as enjoying or living within socio-affective, maturity and cognitive conditions that allow them to do so.</p> <p>The modality used for the formative development of the students during the years 2020 and 2021 was completely virtual and the teachers say they feel privileged because all the children in their care have access to technological equipment (computer, <i>laptop</i>, <i>tablet</i> or smartphone), which they do not share with a sibling or other family member; in addition, they have had stable and permanent connectivity, as well as the direct support and interest of their parents or an adult who accompanied them in the process. It is important to mention that this does not guarantee that all students would develop the same progress in learning to read and write, which invited them to reflect and study pertinent and active strategies that favored the children's attention and learning, in addition to establishing a process of curricular adaptation in different elements of the curriculum, such as content, activities, evaluation and achievement indicators. To this was added the emergent adaptation of the materials the students had at home (textbooks, workbooks, etc.).</p>

and reading books), as well as of the school's own methodology used for children to develop the initial stage of learning to read and write.

According to the , the adaptations and efforts made by teachers did not allow all children to reach the same level of progress, which led them to attend to students virtually in groups of no more than 10 students and in a period of time no longer than 45 minutes because attention spans at that age are relatively short. The development of the class sessions through virtual classrooms was not always functional or not everyone responded at the same pace, which demanded very careful attention from the teachers and accompaniment from an adult at home. During the class sessions, the teachers developed the different moments demanded by the methodology, in fact, they have adapted in their homes, spaces to develop their classes with literate and attractive environments for the children, from there they developed exercises that allowed the phonetic development of the phonemes (developing 2 phonemes per week) and writing through the strokes of these.

It should be noted that the support of parents in this process was fundamental; , they were permanently involved, the biweekly planning was shared with them so that the children would have the necessary materials and that parents would be involved in the feedback or review of what was seen in the virtual sessions; in addition, the children would be supported in uploading to a virtual platform mediated for children, the evidences of what they had worked on.

As part of the methodology developed by the teachers in this case, synchronous and asynchronous moments were assumed, the latter through videos prepared mainly for review (which were mainly used in the middle of the week); therefore, in general, two synchronous sessions and one asynchronous session were developed. The teachers stated that, although most of the parents motivated and got involved in children's educational process, not all of them did, highlighting that the youngest parents were the ones who showed the greatest resistance in supporting their children.

Within the process experienced by the mentors, it became evident that the learning of reading and writing was modified in terms of the time that the methodology demanded in classroom mode, since this process required a school cycle (10 months) for the development of the different phases of the initial stage, which was achieved during preschool, specifically in *kindergarten* (nursery 2), and then in the next grade, which is high school, to strengthen and consolidate fluency, comprehension and writing.

Today, as a consequence of the Covid-19 pandemic and the adoption of the virtual modality, the need was generated to develop this process in double the time in which it was developed during the classroom; that is to say, children learned to read and write in two school cycles and not in one as it happened years ago. In addition to this phenomenon, students who were promoted to the next level, which in the case of Guatemala is Primary Education, demanded the strengthening of some areas, which little by little could be leveled to reach the achievement of literacy competencies in the emergent and initial stages. In this sense, the teachers referred to the need to have a remedial or recovery plan for the post-pandemic return, which, with equity, relevance and inclusion, could be based on diagnosis, communication between the teachers who promote them and those who receive them in the following grade or level, attention to the socio-affective aspect and curricular adaptation to the elements of the curriculum that require it.

The present case does not seem to present extraordinary efforts because it was developed in a favorable socioeconomic context in which the basic health conditions were covered, however, the teaching task was emergent and managed to go beyond what was expected, generating specific materials for the learning of literacy in times of pandemic, demanding a study of the context, the needs of children, the differences in how they learn and how they learn. to offer activities that favor the socio-affective aspect of their students and their families.

2. Case B: School in the public education sector, rural area, primary level.

This case had the particularity of being able to learn about the experience and reality of a teacher who worked on the process of developing reading and writing skills with children between 6 and 9 years of age.

Teacher B
Code: CB Educational level: Primary Grade: First grade Area of intervention: Rural Education sector: Public Modality: Intercultural - multigrade school Years of teaching experience: 10 years Years of experience in teaching reading and writing: 4 years Academic degree: Technician (teacher) Department: El Progreso Municipality: San Antonio la Paz - Aldea El Carrizal Number of students served: 10 in first , 6 in second grade and 3 in fifth grade.

Characterization of the case
<p>The teacher in this case, develops her function in a rural school that operates through the multigrade modality (classroom that serves children of different ages and grades), serving students in first, second and fifth grade of primary school. The community where the school is located belongs to a low socioeconomic stratum where poverty is the common denominator of its inhabitants. A high percentage of the students' parents know how to read and write, but have a low level of schooling; most of them did not complete more than the third , which made it difficult for them to accompany their children.</p> <p>The community does not have potable water and because of the topography it does not have connectivity, in fact, in this community there is little signal for phone calls and text messages, which sounds unlikely and unrealistic as it is not far from the main road. The school has no plumbing, drinking water or sanitary services, being this part of the basic conditions for the proper development of learning and reduction of diseases, which made the return of children to school even more distant due to the lack of basic sanitary conditions in times of pandemic Covid-19.</p> <p>In 2020, the teacher accompanied students in the same grades and, unlike in 2021, she had the opportunity to meet her students for two months and a week, which allowed her to initiate the process of teaching reading and writing with her first students in person, reporting having completed the preparation process and identified the level of development in the emerging stage that occurs in the first years of life, from birth and that basically takes place at home, since not all of them had the opportunity to attend preschool.</p> <p>This allowed her, according to the teacher, to have a level of progress in the initial stage of reading and writing and to know directly the learning characteristics of her students in order to be able to guide the parents so that the children would learn to read and write when the school was closed and the distance learning modality was adopted.</p> <p>Unfortunately, as he refers, in 2020 the provisions of the Ministry of Education, as the governing body, gave way to the closure of the school and the non-permanence of teachers in them, except for the delivery of school meals, spaces in which they took the opportunity to deliver work guides and guide parents on how to develop them. He says it was</p>

It was quite complicated to be able to reach all her students, because she could not have contact with them and their parents. He tried to generate orientations and record videos to send via *WhatsApp*, but unfortunately the lack of a smartphone in every home, the scarce resources to be able to count on internet and even the poor signal to receive phone calls in the community further complicated the process.

It shows that 2020 was more difficult than 2021, because in the latter, with the backing and support of parents, was established as a school and every Monday from 8:00 to 12:00 hours, in the courtyard of the house of a member of the community and only if the departmental Covid-19 traffic light allowed it. In this space and time, the students' homework was received from the parents and following the established biosafety protocols. In fact, from there, results and progress achieved by the students were evaluated, according to the tasks presented and then delivered again to the parents, work guides accompanied by guidance on how to develop each task with their children.

The guidance given to parents, says the teacher, consisted of modeling how they should motivate and develop exercises with the children, from how each phoneme sounded, to how to form syllables and words to develop their reading and writing. The distance modality demanded the support of the parents, which is why in cases where progress was not evident, the students were summoned on Mondays and with the corresponding distance and the use of masks, they were attended in a personalized way.

The mentor of this case highlighted that, without the support of the parents, it would have been impossible to develop the learning of reading and writing, considering that not all the aspects considered in the initial stage of this would be developed. In this sense, phonological awareness and knowledge of the alphabetic principle would be one of the aspects that would be achieved, but she reflects that the development and/or strengthening of the aspects of fluency, vocabulary, reading comprehension and writing would still need to be strengthened, which would become one of the great challenges to be faced as teachers in the medium term, in addition to the diverse progress of the students, because each one received different support from the reality of their homes.

The Ministry of Education of Guatemala, as the governing body, generated guides with practical guidelines for the teaching of literacy aimed at , whose purpose was to facilitate in theory the use of the L1 Communication and Language textbooks, which are aimed at learning to read and write; however, the teacher says that this complicated the process because they arrived late and were little or not contextualized for the rural area, causing them not to fulfill their purpose.

The teacher mentioned that, as an emerging strategy, she developed personalized materials for each student, which were based on the principle of playfulness to achieve the learning of her students, using concrete materials with images and colors that motivated and encouraged the children's learning. To this was added the personalized process of modeling with respect to the progress and development of activities per student. All of the above, as the teacher refers, was based on a process of prioritization of content and adaptation to the different elements of the curriculum.

The teacher explained the importance of reflecting and working together with the teachers who would receive the students in the next and following school cycles, in order to build a remedial plan for the return, in which the diagnosis per child would be prioritized and from there, the most appropriate adjustments for the achievement of literacy skills and that could influence the children to experience school success and remain in school.

For some, this case may not be innovative or extraordinary, but it is important not to lose sight of the fact that according to the context in which the school is located and the families who have their children in it, the teacher made pertinent efforts that responded to the needs and reality of the context, in addition to having developed unique and specific materials for each student.

The strategy adopted allowed parents, with the simple cell phones they had, to videotape the children reading and if they did not have the option to record video, they made audio recordings, which made it more complex to establish whether the student was really reading or had memorized the reading and was only reciting it.

The teacher highlighted as achievements, the ability to maintain communication with the students through their parents, whom she was able to motivate in most cases, referring that the greatest challenges were faced with young parents; in addition to the fact that the students were able to achieve literacy skills with diverse progress despite the distance.

The cases presented in this study were coded according to the context to which they belonged, the coding elements being understood as follows:

- C= case (teacher)
- A= urban area
- B= rural area
- 1= teacher 1 of the context
- 2= teacher 2 of the context

This coding allowed the researcher to adequately and timely organize the information according to each case, as well as to keep and protect the confidentiality of the participants.

DISCUSSION OF RESULTS

1. The achievement of expected competencies in the literacy learning process as part of the initial stage and as an effect of the pandemic, regardless of the educational level or socioeconomic status of the students and their families, evidenced a diverse progress in the students and was slower than expected with respect to the learning and achievement indicators achieved in previous years. Teachers in the public and private sectors reported that the learning process of children, instead of developing in one year, took twice as long during the pandemic as it usually took, i.e. two years. Particularly in rural areas and in conditions of greater economic disadvantage, marked by poverty as in case B, it was reported that the process took more than double the time mentioned above. The economic factor had a strong impact on the students' learning, as has been referred to, being this a point of coincidence with what was referred to by Formichella, M and Krüger, N. (2020) in their article *Pandemic and educational gaps: Reflections from the economics of education*, which was considered as part of the studies reviewed in the framework of the topic of the study.
2. Phonological awareness and knowledge of the alphabetic principle, aspects of the initial stage of literacy development, were developed with great teaching efforts, which demanded the decisive and responsible support of different members of the family (father, mother, grandmother, older siblings or even caregivers). The experience shared by teachers indicates that the level of support or responsible commitment assumed by the family through some of the family members, such as parents, grandmothers, older siblings or even caregivers, was

This was a determining factor for student learning, which was reflected in the diverse progress of students who are part of the same group or class. This transcendent role of parents in accompanying their children made a substantive difference in the achievement of their learning indicators and the pace to reach them; a similar situation is referred to by Anderete Schwal (2021), author reviewed in this study, through his article "Educational inequalities during the pandemic in primary education in Argentina" since he refers that in giving continuity to the educational process during the pandemic, not only the economic and technological factors influenced, but also the time that parents had available to accompany the process of their children, made a difference.

3. Fluency, vocabulary, reading comprehension and writing as aspects of literacy development and subsequent to phonological awareness and knowledge of the alphabetic principle, have been in a high percentage, the most affected aspects and that show lags in different forms and levels in students, being more evident in those in rural areas and in conditions of poverty, not having direct support from an adult to accompany them at home and in an assertive way in the process; This was compounded by the lack of timely and relevant materials despite the efforts made by teachers, which had a significant impact on student learning.
4. Teachers assumed the implementation of different educational modalities to give continuity to the learning process, which allowed the development literacy in their students. The most implemented modalities were virtual, distance and hybrid; the latter determined by the Covid-19 traffic light of Guatemala and the guidelines provided by the Ministry of Education as the governing body in coordination with the Ministry of Public Health and Social Assistance. The modalities, in spite of having been emergent and of the teachers' efforts to make them innovative and pertinent to the context and reality of the students, turned out to be partially effective, especially in the public sector and rural areas.
5. Guatemala, like most countries in the region, did not have a national strategy to develop an educational process in emergency situations such as the one caused by Covid-19. Faced with this reality and in particular for the development of literacy, the private sector, although not in a generalized manner, offered strategies and modalities, such as the virtual one, which allowed the progress, although diverse, of its students; not so in the official sector, where the teacher refers to the lack of pertinence in the materials generated and transferred by the Ministry of Education to the educational centers, which offered poorly mediated, pertinent and difficult to understand orientations for parents or caregivers, who have little or no schooling.
6. The materials used by public and private sector teachers, such as textbooks and reading books that they regularly used in the classroom, demanded a process of curricular adaptation in the different elements of the curriculum (competencies, content, activities, evaluation, achievement indicators) and a prioritization that would favor the acquisition of literacy in their students. The adaptation allowed for significant progress, although with varying degrees of progress in the following areas

The teachers say that this will lead to a direct, responsible and conscious communication process with their teaching peers who will receive the students in the next grade or educational level in order to favor the continuity, even personalized, of each student. The communication process, according to the teachers, will be essential to develop a recovery or remedial plan, which should be based on the diagnosis of the students in order to define the curricular adjustments in the next grade or level.

7. Access to technological devices per student and connectivity were almost nonexistent for children in the public sector who were learning to read and write, because the educational centers did not have them provide them to the students and their families; in addition, parents did not always have a smart cell phone that would allow them to develop synchronous or asynchronous processes of their children with the teacher, and in many cases to share this with siblings who are also in school. In fact, in some cases, the cell phone was available but there were no economic resources for the daily or weekly purchase of an Internet package or connectivity was not possible due to the topography of the country. Finally, for case A in the private sector, urban area, the teachers reported that although the children they attended had access to a personal device (*laptop*, computer, *tablet* or smartphone) and fluid and permanent connectivity, virtuality was a challenge to achieve learning, especially in literacy, because in some way it demands close and personalized accompaniment.
8. The economic, social and cultural conditions, according to the teachers of the cases studied, made a significant difference in the development of the emergent or pre-albetic stage in the children's literacy learning, being a basis that can even become a predictor of school and life success; This could be evidenced in those children who came from or were learning in homes of parents with little or no schooling and who regularly live in rural areas in conditions of poverty, in addition to poor nutrition or malnutrition, who have also been little motivated or stimulated in oral language, which facilitates the acquisition of a broad vocabulary and contact with visual reading materials that favor the comprehension of words, all this as a preparatory phase for the initial stage of reading and writing. In this sense, the teachers in case A, from the urban area and private sector, said they felt privileged because the children they accompanied come from a context in which family processes or experiences were developed that favored the emergent stage, unlike the teacher in case B, who accompanies children from the rural area, public sector.
9. The socio-affective aspect of the students has been and was an ally or detractor of the students' learning process and of the motivation and commitment assumed by the families and particularly by the family member or members who offered support to the children. The teachers of cases A and B referred that the socio-affective aspect was one of the key elements to work on through the return plan because their ability to relate to others and their willingness to work with others depended on it.



and continuity, particularly in literacy skills.

Families, regardless of the type of environment to which they belonged, were key and the main strategic ally in the children's literacy learning. As an effect of the pandemic, parents have shown greater involvement in their children's learning, especially those who are not so young. The time that the pandemic lasted and the virtual or distance modality caused parents to feel overloaded or to believe that they were performing the role of the teacher with little patience and little knowledge to support their children.

CONCLUSIONS

1. Children generally learn to read and write in the first grade²⁹ of primary school in Guatemala; however, the socioeconomic level, and with it the opportunities and type of motivation and formal and non-formal stimulation received at home or in an early care or stimulation center, make a difference in Guatemalan society as to when children learn to read and write.
2. The pandemic, as referred to in the Covid-19 report, CEPAL UNESCO (2020) and confirmed by the teachers in the case studies, evidenced and social inequalities, inequity and exclusion. This is reflected in the distant and opposite reality of the children attended by the educators in cases A and B, where there was a marked difference in the progress of their students in time and quality with respect to access to conditions such as technological equipment (computer or other devices) and connectivity for the virtual modality, as well as relevant and timely printed materials for the implementation of blended or hybrid modalities that favored the conditions for learning to read and write; the latter because they depended on the Covid-19 traffic light to make them a reality.
3. It is indisputable that the teacher who developed the process of teaching reading and writing at the pre-primary and primary levels during the Covid-19 pandemic demanded close and daily support from at least one member of the family so that learning could develop and with it the different competencies demanded by the process. In this sense, the socio-affective aspect of the family played a transcendental role that motivated and generated interest and emotional stability for the child who was learning to read and write.
4. The students, regardless of socioeconomic level, educational level, sector or area of residence, were able to develop phonological awareness and knowledge of the alphabetic principle as basic aspects of the initial stage of literacy development; however, it is important to note that the timing for the achievement of these specific competencies, not all developed them in the same way or in the same time. The above allows us to conclude that the children in cases A and B studied

29 In the Guatemalan context, the primary level is made up of six years and what in other countries is known as basic education or elementary education, among other names.



According to their teachers, within the same group of students, they showed diverse progress and all of them required at least double the time to learn to read and write, with fluency, vocabulary, reading comprehension and writing still to be developed and strengthened.

5. The teachers in cases A and B studied have established from their experience that their commitment, vocation and training allowed them to study and reflect on the reality of their students in order to create or adapt emerging, pertinent and inclusive strategies that would allow them to reach all their children and thus develop the literacy process.
6. Case B from the rural area and public sector, allowed us to establish that, in the case of some students, their parents had little schooling, which made it difficult for them to support them; in addition, some parents did not know how to read or write, which made the learning situation even worse. Particularly the study of this case, in which the teacher modeled with the parents the way in which they should motivate and develop the tasks and processes with their children, resulted in both the parents and their children learning to read and write.
7. Parents in general sought to support the development of their children's literacy learning, they did it directly with low or high educational level, or they identified within or outside their family nucleus, allies who would help them help their children learn to read and write. The parents of cases A and B studied reported that, as a consequence of the pandemic, they were more involved and involved in their children's learning, as compared to how they did it in the face-to-face modality; however, they admitted not having the patience, knowledge and/or time necessary to accompany them. In addition, there was a higher prevalence of young parents who said they were tired of doing the work of teachers and as a consequence, regardless of whether they were from urban or rural areas or from the public or private sector, they were less interested and less supportive of their children, which was reflected in the results and achievement of competencies.
8. The work of the teachers in the cases studied intensified and demanded more time for the planning, design and elaboration of materials, which above all were very graphic and playful to be used virtually or at a distance.
9. The process of teaching reading and writing for the teachers of the cases studied demanded a process of curricular adaptation to the different elements of the curriculum, as well as the adaptation of materials in the students' possession (textbooks or reading books, for example) according to the curricular accommodations developed.
10. Despite the great challenges faced by teachers, students and their families, the learning of literacy was developed, although not in the time defined as required for such process, nor reaching completely the expected level of achievement for the aspects demanded by the initial stage of literacy learning. In this sense, the return, either in a hybrid or face-to-face manner after the pandemic, should demand a remedial plan or a

The remedial plan should be based on a diagnosis per student, communication between teachers of the previous grade or level with respect to the one being promoted, curricular adaptation to the elements of the curriculum that demand it, periodic review of the effectiveness and positive impact of the remedial plan to recover learning and level the diverse progress of the students, thus achieving equity in learning in the medium term.

11. The teachers in the cases studied, in spite of teaching literacy in different realities, contexts, levels and educational sectors, have a common factor in common, which is the commitment and vocation for the teaching career and the responsibility for the learning of literacy of their students. They agree that one of their greatest fears was that their students, not knowing them physically, but only through the screen in the case of virtuality, or the distance without knowing a face, would not allow them to establish affective ties with their children and that these in turn would not have favorable conditions to be affectively well.

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