

**REMOTE TEACHING IN THE PANDEMIC CAUSED BY COVID-19:
PERCEPTIONS OF TEACHERS AT A COUNTRYSIDE SCHOOL**

***O ENSINO REMOTO NA PANDEMIA CAUSADA PELA COVID-19: PERCEPÇÕES DE
PROFESSORES DE UMA ESCOLA NO CAMPO***

***LA ENSEÑANZA A DISTANCIA EN LA PANDEMIA POR COVID-19:
PERCEPCIONES DE LOS PROFESORES DE UNA ESCUELA DE CAMPO***



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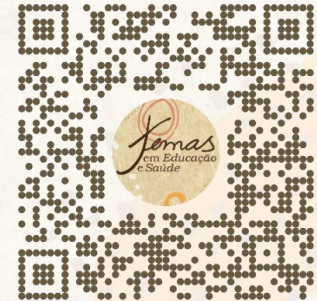


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ABSTRACT: This study focuses on the experience with remote teaching in a school in the Rural Community of São Lourenço, Felipe Guerra – RN, during the pandemic period caused by COVID-19 (2020 – 2022). Thus, the study's central objective is to analyze teachers' perceptions of the School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, regarding remote teaching. The study used a qualitative approach and was classified as field research in methodological parameters. Three teachers who teach at the referenced school in Early Childhood Education and in the early years of Elementary School participated in the study. As a technique for constructing the data, semi-structured interviews were used, which were carried out in June 2022. It is concluded that the pedagogical practice with the objective of teaching children to read and write during the pandemic period caused by COVID-19, more specifically between the years 2020 and 2022, intensified the work routine of teachers. The lack of continued training for the use of digital technologies was also highlighted, however, teachers, through continuous planning, produced pedagogical strategies that added to the teaching-learning processes with students in the context of the pandemic.

KEYWORDS: Remote Teaching. School in the Countryside. Pandemic. Rural Education.

RESUMO: Este estudo centraliza-se para a experiência com o ensino remoto em uma escola na Comunidade Rural de São Lourenço, Felipe Guerra – RN, no período da pandemia causada pela COVID-19 (2020 – 2022). Dessa forma, o estudo tem como objetivo central analisar as percepções de professores da Unidade Escolar X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, a respeito do ensino remoto. Em parâmetros metodológicos, o estudo fez uso da abordagem qualitativa e se tipificou como uma pesquisa de campo. Do estudo, participaram três professores que lecionam na escola referenciada na Educação Infantil e nos anos iniciais do Ensino Fundamental. Como técnica para a construção dos dados, utilizou-se de entrevistas semiestruturadas, as quais foram realizadas no mês de junho de 2022. Conclui-se que a prática pedagógica com o objetivo de alfabetizar crianças no período da pandemia causada pela COVID-19, mais especificamente entre os anos de 2020 e 2022, intensificou a rotina laboral dos docentes. Destacou-se, ainda, a ausência de formação continuada para o uso das tecnologias digitais, porém, os docentes, por meio do planejamento contínuo, produziram estratégias pedagógicas que somaram aos processos de ensino-aprendizagem com os estudantes no contexto da pandemia.

PALAVRAS-CHAVE: Ensino Remoto. Escola no Campo. Pandemia. Educação do Campo.

RESUMEN: Este estudio se centra en la experiencia con la enseñanza a distancia en una escuela de la Comunidad Rural de São Lourenço, Felipe Guerra – RN, durante el período de pandemia provocada por el COVID-19 (2020 – 2022). Así, el objetivo central del estudio es analizar las percepciones de los docentes de la Unidad Escolar X Profesor Antônio Amarildo de Souza, Felipe Guerra – RN, sobre la enseñanza a distancia. En parámetros metodológicos, el estudio utilizó un enfoque cualitativo y se clasificó como investigación de campo. En el estudio participaron tres docentes que imparten docencia en el colegio referenciado en Educación Infantil y en los primeros años de Educación Primaria. Como técnica de construcción de los datos se utilizó entrevistas semiestructuradas, las cuales se realizaron en junio de 2022. Se concluye que la práctica pedagógica con el objetivo de enseñar a leer y escribir a los niños durante el período de pandemia provocada por el COVID-19, más específicamente entre los años 2020 y 2022, la rutina laboral de los docentes se intensificó. También se destacó la falta de capacitación continua para el uso de las tecnologías digitales, sin embargo, los docentes, a través de una planificación continua, produjeron estrategias pedagógicas que sumaron a los procesos de enseñanza-aprendizaje con los estudiantes en el contexto de la pandemia.

PALABRAS CLAVE: Enseñanza remota. Escuela en el Campo. Pandemia. Educación Rural.

Introduction

The Ministry of Health (BRASIL, 2021) pointed out that COVID-19 is characterized by a severe acute respiratory syndrome disease caused by the SARS-CoV-2 virus, which emerged in China at the end of 2019. With the spread of the virus, social distancing measures were necessary for the protection of society and to prevent its proliferation. As a result, several sectors of society were affected, starting with health and education.

Due to this reality, schools were “forced” to stop their in-person activities. Given this situation, the Ministry of Education (MEC) guided the modification of the educational organization, in which emergency remote teaching was adhered to, following the measures recommended by health orders with social distancing as a form of protection in the face of emergency needs given the pandemic caused by COVID-19.

It is common knowledge how serious the pandemic caused by the virus has become. With the suspension of face-to-face activities, we understand that rural students have become disengaged from the school environment. Experiencing this new reality made the school, teachers, and students adapt to a new way of building classes.

Therefore, the change adopted in schools made us think about teaching-learning processes remotely, especially when it comes to rural schools. This research sought to

investigate the effects of the pandemic caused by COVID-19 in a school located in a rural perimeter based on the teachers' perceptions.

Thus, this study is about the experience of School Unit X *Professor Antônio Amarildo de Souza* with remote teaching during the period of the pandemic caused by COVID-19, more specifically between the years 2020 and 2022⁴. Thus, the study was anchored in the following investigative problem: What are the perceptions of teachers at the School Unit X *Professor Antônio Amarildo de Souza, Felipe Guerra – RN*, about remote teaching?

Regarding the general objective of the investigation, we emphasize “analyzing the perceptions of teachers from the School Unit X *Professor Antônio Amarildo de Souza, Felipe Guerra – RN* regarding remote teaching”. For us, talking about this topic is essential, since we understand the need to think about teaching-learning processes in rural schools, considering the pandemic and its effects on Rural Education.

In methodological parameters, we rely on the qualitative approach and note that the study was classified as field research. The research locus was the School Unit X *Professor Antônio Amarildo de Souza*, located in the community of *São Lourenço, Felipe Guerra – RN*. The study involved three teachers who teach at the referenced school (two females and one male⁵), in Early Childhood Education and in the early years of Elementary School. As a technique for constructing the data, we used semi-structured interviews which were carried out in person in the space in June 2022.

After discussing the introductory aspects of this study (first section), we emphasize that we have organized the rest of the text into three more sections and final considerations. In the following section, we introduce the reader to concepts such as rural education and rural education, as well as presenting a brief discussion about remote teaching and the pandemic caused by COVID-19.

Next, we reference the methodological procedures of the study. In the fourth section, we present the results learned in the research. In the final considerations, we list the main reflections produced throughout the text, based on our understanding of the object under investigation.

⁴ In May 2023, the World Health Organization (WHO) declared the end of the COVID-19 pandemic. Therefore, this study covers 2020 to 2022 as a time frame.

⁵ We did not define any criteria for participation in the study in terms of the gender of the subjects. The teachers make up the total teaching staff at the school.

Rural education and remote teaching: conceptual notes

This theoretical section addresses the concept of Rural Education and remote teaching in two subsections. The first subsection briefly explores the idea of Rural Education and the difference between it and Rural Education.

In the second subsection, we discuss the pandemic caused by COVID-19. As the object of study focuses on the experience with remote teaching in a rural school, we saw it necessary to discuss the classroom further in reconfiguring the face-to-face teaching model for remote teaching.

Rural Education: what education are we talking about?

Rural Education refers to a new concept in the Brazilian educational scenario, as it wasn't long ago that what existed in rural areas was the designation of Rural Education. Distinguishing these teaching modalities is relevant, since Rural Education and Countryside Education have different pedagogical principles, both refer to the education of rural people, however, with different perspectives, which emerge in different historical periods. Regarding Rural Education, Ribeiro (2012, p. 295, our translation) reinforces:

These are peasants, that is, those who live and work in rural areas and receive the lowest income for their work. For these subjects, when there is a school in the area where they live, education is offered in the same way as that offered to populations that live and work in urban areas, with no attempt being made to adapt the rural school to the characteristics of the peasants or their families—children, when they attend

We emphasize that Rural Education was the result of a capitalist-based economic model for many years and that, historically, rural people had their educational rights denied. Regarding Rural Education and its educational model, Azevedo (2007) leads us to defend a reality to be overcome in a school standard evidenced in an education linked to political-economic models committed to elites and oligarchies. We observed that in the trajectory of Rural Education, the countryside was relegated to marginal spaces in the process of construction and implementation of educational policies in the Brazilian reality and that the subject of the countryside was idealized as a parameter of delay, where educational policy was organized in compatibility with the predominant capitalist interests in the social situation (MEDEIROS; FORTUNATO; ARAÚJO, 2022).

The school in the countryside, during this period, did not consider the social diversity of the countryside, since its focus was limited to offering the rural population a pedagogical proposal that was based on an urban conception. In other words, this school perspective postulated the city as a central reference, guiding an education led by the city linked to the commercial-industrial sector.

In parallel to this reality, rural populations that had been excluded from this process began to mobilize through articulations. From these articulations emerged an educational model different from that proposed by the government, and, during this scenario, Rural Education was born (MEDEIROS; FORTUNATO; ARAÚJO, 2022). This educational modality aims to oppose Rural Education; it emerged through the organization of social movements with the intention of fighting and demanding the right of individuals to study in the countryside. According to Caldart (2012, p. 259, our translation):

Rural Education is a phenomenon in the current Brazilian reality, led by rural workers and their organizations, which aims to influence education policy from the social interests of peasant communities. Objectives and subjects refer to issues of work, culture, knowledge, and social struggles of peasants and the (class) clash between field projects and between agricultural logic that has implications for the country and society project and the conceptions of public policy, education, and human formation.

We understand that rural education was born based on the needs of individuals living in and around the countryside and seeking a new educational paradigm through the struggle organized by social movements. Rural people sought in their struggles to produce an education policy consistent with their realities. In other words, it is an education aimed at the working class that has the countryside as an instrument and reference for life.

We reaffirm that Rural Education emerged to break paradigms, starting with transformations in the Basic Education plan for the rural population in a way that guaranteed improvements for the subjects in the offering of Basic Education that promoted the necessary adaptation in the education system as per the peculiarities of the lives of rural people. Thus, the consolidation of Rural Education results from the struggles of protagonist people who were faced with the absence of the right to education for their subjects. The struggle of these actors in the face of this reality sought to build alternatives that met their needs.

Through the holding of two national conferences, Rural Education and social movements found space. These conferences gave rise to the expression Rural Education, initially born as Basic Rural Education through the 1st National Conference for Basic Rural

Education, held in Luziânia, Goiás 1998. In the year 2002, in November, at the national seminar in Brasília, it came to be called Rural Education, a deliberation reaffirmed at the II National Conference held in July 2004 (CALDART, 2012).

Regarding what underpins the concept of Rural Education, Caldart (2012, p. 259, our translation) once again, highlights:

As a concept under construction, Rural Education, without detaching itself from the specific movement of the reality that produced it, can now be configured as a category of analysis of the situation or educational practices and policies of rural workers, even those that are developed in other places and with other denominations.

Thus, we understand that the concept of Rural Education is associated with an educational modality with its characteristics, as well as with a national education movement produced by different people and social organizations in the countryside. From this, we understand that when we discuss the concept of Rural Education, we have to believe in an education built from the struggles of rural social movements in a way that reaffirms the process of emancipatory education, which incorporates the human and critical formation of the subjects in the field.

Remote teaching and the pandemic caused by COVID-19

As we discussed earlier, COVID-19 is the name given to the disease associated with a virus that has affected millions of people worldwide. According to the description of the Ministry of Health (BRASIL, 2021, p. 7), COVID-19 is characterized as an “acute respiratory infection caused by the coronavirus SARS-CoV-2, potentially serious, highly transmissible and globally distributed”.

At the end of 2019, the first cases of transmission of the coronavirus (SARS-CoV-2), initially identified in China, occurred. However, in a continuous act, the virus spread rapidly across the planet through transmission from one infected person to another.

Given this reality experienced by society, due to the large increase in contamination by the disease, the government suggested adopting emergency measures to try to reduce the spread of the disease. In this sense, with the spread of the virus, it was necessary to adopt isolation and social distancing to prevent mass spread, and the implementation of this deliberation consequently affected many sectors, especially the educational sector.

According to the conception of Aquino *et al.* (2020, p. 2425-2426, our translation), several measures were adopted to stop the transmission of the virus, which included “the closure of schools and workplaces, the suspension of some types of commerce and the cancellation of events to avoid crowding of people”.

In this flow, among the changes in social life, the school routine was one of the most impacted, as schools suspended face-to-face activities for an indefinite period. Considering the pandemic scenario, the Ministry of Education (MEC) advised the modification of face-to-face teaching by the emergency remote teaching model, in which, through ordinance no. 343, of March 17, 2020, it was established “the replacement of face-to-face classes by digital classes for as long as the New Coronavirus - COVID-19 pandemic situation lasts” (BRASIL, 2020, p. 1, our translation). As a result, teachers and students suddenly found themselves faced with another teaching format.

Regarding the discussion, Moreira, Henrique and Barros (2020, p. 352, our translation) emphasize that with remote teaching:

Teachers became YouTubers recording video classes and learned to use video conferencing systems like Skype, Google Hangout, or Zoom and learning platforms like Moodle, Microsoft Teams, or Google Classroom. However, in most cases, these technologies were [...] used from a purely instrumental perspective, reducing methodologies and practices to merely transmissive teaching.

The way remote teaching was organized made it clear that this modality arrived unexpectedly, causing teachers and students to migrate to another reality. This migration led to the incorporation of digital technologies, which called for transforming pedagogical practices and teaching-learning methodologies, making teachers rethink new ways of teaching and connecting with people.

It is known that remote teaching became the solution in the face of the health crisis we experienced. With this perspective in mind, the urgent use of digital technologies was decided upon. In these circumstances, there was a need for educators to transform the ways of thinking about education, with the need to introduce new pedagogical instruments driven by this reality, in which the use of digital tools such as home office, digital platforms, virtual meetings were demarcated, the recording of video classes, among others, to reduce the harm caused to students affected in the teaching-learning processes.

Faced with the changes imposed in the way of teaching-learning, the need to recognize that there are peculiar difficulties in this type of teaching emerged, as stated by Ferreira and Santos (2021, p. 2, our translation):

The educational system was not prepared to face a pandemic, not only in terms of health but also regarding access to education. Many schools and their students, especially in rural areas, do not have access to the internet or lack the technological equipment to use it. Considering that teachers had no knowledge of remote classes, they lacked qualifications, as the vast majority did not use technological resources to teach their classes.

We highlight that the sudden change in the teaching model brought pedagogical challenges due to the lack of skill and experience of teachers to use digital technologies in the classroom, as with the beginning of social isolation, many teachers did not have the necessary continuing training to the use of technological tools in remote teaching. However, they also faced the students' unwillingness to deal with classes from this perspective, especially students who live in the countryside.

We start from the premise that rural populations were among the most affected by how remote teaching developed since maintaining links with this public was a challenge, given that many students did not have a computer, internet, cell phone, and a favorable environment for studies.

Study methodology

To carry out this research, we used a qualitative approach. According to Medeiros, Varela and Nunes (2017), this type of approach has as its reference the interpretation and understanding of the social world, this means that the qualitative researcher focuses on social phenomena from the perspective of the social actors involved, aiming for understanding.

To corroborate this understanding, Chizzotti (2006, p. 28, our translation) states that “the term qualitative implies a dense sharing with people, facts and places that constitute objects of research, to extract from this coexistence the visible and latent meanings that are only perceptible to a sensitive attention.”

Seeking to achieve the objective set for this work, we based ourselves on field research. We understand that this research was classified as field research because it allowed us to enter the social environment where we carried out the study to observe the phenomenon we proposed to analyze. To argue our conception, Piana (2009, p. 169, our translation) says: “field research

is the type of research that intends to seek information directly from the researched population. It demands a more direct encounter from the researcher.”

To produce the data, we used semi-structured interviews. According to Fraser and Gondim (2004), this type of interview is understood in academia as a flexible investigation technique. The researcher develops the interview based on a script composed of previously established questions (open and closed). However, he builds a horizontal dialogue between the researcher and the researcher. Thus, new questions can be included based on the reality experienced at the time.

In this investigation, we developed a script composed of 12 open questions, six of which will be analyzed in this text as they directly meet our central objective of the study. We note that the interviews took place during June 2022. The interviews were scheduled with prior contact, with the day and time scheduled according to the availability of the interviewees.

Three teachers who teach at the *X Professor Antônio Amarildo de Souza* School Unit, located in the community of São Lourenço, Felipe Guerra – RN, were invited to participate in the research. We note that to participate in the study, the teachers signed the Free and Informed Consent Form, a document prepared by us that authorizes the disclosure of the information provided by the participants.

To protect the identity of the teachers who contributed to the research, we name the teachers throughout this writing as Professor “A”, Professor “B” and Professor “C”. We highlight that we had authorization from the school to carry out the study through informal contact, specifically with the director. Furthermore, we note that the three teachers represent all the teaching staff at the institution (the school only has three teachers on its teaching staff. It is a multi-grade school).

Below, we present analytical reflections based on the dialogues produced with the study's teachers and participants.

Perceptions of teachers from a rural school about remote teaching

This section intends to present the analysis of the results constructed in the research. From this perspective, part of the data we produced with semi-structured interviews will be analyzed in that section. Six of the 12 questions that made up the semi-structured interviews will be discussed from now on.

Regarding the first question, we emphasize what teachers understand by remote teaching. Let's look at your statements:

Remote teaching is those recorded classes where the teacher does not have personal contact with the student, the teacher can either record their classes and put them on the system for the students to view, or they can also do synchronous classes which are live classes where we are watching students and they can receive the class at the time we are recording⁶ (Teacher “A”, School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

It is a distance learning between teacher and student, in which the teacher goes over his content and receives the activities he requests from the students (Teacher “B”, School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

Remote teaching is an adaptation of teaching/learning with technology. The contents are developed online, and the teacher's face-to-face contact with the student becomes distant (Teacher “C”, School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The three teachers who participated in the research stated that remote teaching can be understood as an online teaching modality whose contents and activities are carried out in virtual environments using technological tools. Teacher “A” highlighted that there is no personal contact between the teacher and the student in remote teaching. In practice, classes are taught in two ways, either through live or recorded broadcasts.

Teacher “B” pointed out that remote teaching involves teaching based on physical distance between teacher and student. In this way, the teacher can remotely work on curricular content while receiving pedagogical activities.

Teacher “C”, in turn, stated that remote teaching could be seen as a teaching-learning process suited to technology, in which all prepared content is made available online. Therefore, contact between teacher and student remains distant.

In the three statements, we saw approaches to the understanding of remote teaching in terms of its implementation in a non-face-to-face manner. Linked to this are physical distance and technology as mediation instruments in the teacher-student relationship.

According to Moreira and Shlemmer (2020, p. 8, our translation), the education model, called remote teaching, can be considered “a type of teaching or class, which presupposes the geographic distance of teachers and students [...]”. It is configured using technology to transmit curricular content and pedagogical activities from teachers to students. Thus, this teaching format mainly uses digital technologies so that people in different and distant locations can

⁶ We inform you that after recording and transcribing the interviews, we reviewed some aspects related to language, aiming to adapt the records produced to the standard of the Portuguese language.

access and interact simultaneously, through digital platforms, to communicate and dialog.

Regarding question two, we asked teachers to describe how the teaching-learning activities carried out during the pandemic caused by COVID-19 were planned through remote teaching at a school in the countryside. They scored:

This issue of planning classes was very difficult, mainly because we couldn't have face-to-face time. The school's pedagogical coordinator studied materials for information about how we would continue in the face of the pandemic brought together all the teachers virtually, and told us how to plan and continue with classes. It was decided that the content would follow the textbook, and we would record videos based on this content to make it available to students. I did not follow the contents of the textbook, as the students were experiencing great difficulty in terms of learning; many did not know how to read, so I decided that I would provide content related to their deficiency in reading and writing, I researched the contents on the internet and recorded video classes. And it was with this planning that I managed to stand out during these two years of the pandemic (Teacher "A", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The activities were planned with the student in mind, we made the lesson plan every day to see how we would carry out that class and pass on the content to the students. We did our best to make them understand. The planned content was through the textbook, and from this content, we recorded videos and gave them activities about the content for them to respond to. If we saw that the vast majority would not be able to do so and would have difficulty responding, we would replay the activities (Teacher "B", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The planning was done through the textbook, which had to be worked on even online through calls via WhatsApp, with the help of some parents we were able to carry out the proposed activities (Teacher "C", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

When analyzing the record of teacher "A", we realized that the school's pedagogical coordinator directed the pedagogical perspective of following the textbook. However, the teacher highlighted that he followed another way of planning and managing remote classes, crediting the needs of his students and seeking to meet the particularities of each student. Thus, he validated reading and writing as a central aspect of the proposed activities. The complexity of teaching remotely is challenging for everyone, it requires the classroom mediator to have knowledge and skills to work with methodologies that facilitate teaching-learning.

Regarding the above, Kato (2020, p. 20-21, our translation) indicates:

We are immersed in so much information and extensive communication in real time that adopting consistent and specific pedagogical practices is essential for students, even more so when they are in the alphabetization and literacy cycle, and for teachers to remain in daily contact.

Through planning, the teacher was able to think and develop pedagogical practices that would enable daily assistance to the student during the pandemic. Teachers “B” and “C” followed similar pedagogical perspectives regarding planning and execution. They took the textbook as a reference with the help of technological resources to record the content and meet each class's needs.

We understand that with the emergence of remote classes, the creation and adaptation of classes to the educational reality within the scope of COVID-19 brought out the creativity of several teachers. Thus, through planning, new methodologies were developed. Cordeiro (2020, p. 6, our translation) records:

The creativity of Brazilian teachers in adapting to the new reality is indescribable when it comes to creating media resources: creating video classes so that students can access asynchronously in addition to classes through videoconferencing to carry out synchronous activities as in the classroom.

We understand that planning new pedagogical strategies for classes was essential given the context experienced and the commitment teachers had to education. The adaptation of the classroom to digital platforms promoted a collective effort never thought of in education in terms of materializing the teaching-learning processes, but with the creativity, zeal, and responsibility of teachers, the difficulties were not enough for education not to be resolved or promoted.

In the continuity of the analysis, we led the teachers to narrate their experiences in teaching classes in the remote teaching modality. In the same question, we emphasize the main teaching methodologies they developed. Let's read your records:

Difficult! Very difficult! I had many difficulties, like the vast majority of teachers, but I managed to stand out. I stood out precisely because I always didn't let my deficiencies bring me down. During this period, I taught children literacy, which was a great achievement for me, and I hope to continue this perspective at school. I used the simplest methodologies possible, I used WhatsApp a lot to talk to students and send content since if I did it via Google Meet, I wouldn't have as much participation. I achieved good results, precisely, because I used the easiest methodology, I know each person's reality, so there was no point in using advanced methods. I recorded simple and short videos, using language that was easy for students to learn, posted

photos about the content and even with the pandemic, I went to my students' homes to deliver printed activities to those who didn't have access to a cell phone (Teacher "A", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The experience was challenging and complicated; we worked twice as hard in person because, as it was in rural areas, the reality was very difficult and different from the city. If we wanted to achieve the objective, we had to be available. I, personally spent the day working and serving students and parents of students. We were instructed to have the right time to start and end the class, but as we know the students' reality, so they could follow the classes, I made video calls at other times than my work hours. During this period, I also brought students with more difficulties teaching at home. The methodologies I used were video classes; I recorded videos explaining the class and passed them on, and sometimes I made video calls via WhatsApp to interact and answer questions, I also recorded and posted some audio in the class group about the content. WhatsApp was our means of communication, it was through it that I received photos of some of the students' activities, so basically, the methodology was this (Teacher "B", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

Challenging [...], it was a very difficult adaptation, I would say one of the most difficult I have ever had as a teacher, as it took a whole day to serve all the children. Not all had access to the internet, and not all parents knew how to teach their children the proposed activities. The methodologies were online classes, we sent video classes to students who had access to their cell phones and made video calls via WhatsApp to talk. For those who didn't have a cell phone, I printed the activities and delivered them to school (Teacher "C", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

Teachers describe the practice of experiencing classes in remote teaching as something difficult, complicated, and challenging. We know that organizational changes are often difficult and arise in painful contexts, such as the pandemic caused by COVID-19. These changes imply major institutional, personal, and collective challenges (MOREIRA; HENRIQUE; BARROS, 2020). They require new efforts and skills from professionals during their workday.

Regarding methodologies for conducting classes, we observed that teachers used recorded classes to display and explain curricular content. Thus, classes became asynchronous, in which teachers produced videos, photos, and assessment activities and sent them to students via the WhatsApp messaging application.

When addressing teaching methodologies, teacher "A" stated that he sought to simplify the curricular contents as much as possible to make learning possible for students, in addition to informing us that even with the pandemic, he went to their homes to deliver the school activities of those who did not have access to the internet (and cell phone). Teachers "B" and "C" highlighted the continuous need for interactivity, they communicated synchronously with

students daily through video calls via WhatsApp to discuss and resolve doubts if they had any difficulty understanding the curricular content.

From this perspective, we observed that there were synchronous (live) and asynchronous (recorded classes) moments to enable students to participate more actively in classes, this is because when there is an interaction regarding the discussion of the topics studied, it helps students to be able to present your ideas and build the knowledge that is important to enhance your cognitive skills.

Considering the methodological procedures used by teachers, we see that they are inspired by what Moran (2018, p. 2, our translation) calls active methodologies, which are “teaching strategies centered on the effective participation of students in the construction of the learning process”. Based on what the participants said, we can see that we sought to work from the perspective of these methodological strategies. We also interpret that the flexibility of curricular content and dialogue with students were prioritized, so that there was their active participation in the teaching-learning process.

Still in relation to the teachers' records, we observed that the use of the WhatsApp messaging application was used by the participants with the functionality of a Virtual Learning Environment (VLE), as it became a tool for mediating the learning process and, therefore, in this way, it contributed to the dissemination of teaching that took place remotely.

The teachers' perceptions allow us to think that this resource can be useful not only as a means of communication, but for carrying out various activities, as it provides opportunities for “[...] the creation of groups of contacts to exchange messages, carrying out voice calls, as well as sharing text, audio, photo and video files” (LUCENA; OLIVEIRA; SANTOS JUNIOR, 2017, p. 263, our translation).

We reflect that no matter how difficult it was to experience classes using remote teaching, the teachers continued their pedagogical work, showing commitment and commitment by creating new methodologies and resources that would continue teaching and seek to maintain the student in a more active learning process.

The fourth question referred to the main digital tools used by teachers in remote teaching during the COVID-19 pandemic. They notified:

At the beginning of 2021, we had an exciting pedagogical week, where a little about digital technologies was presented, but you see, in one day, it was not possible to teach all teachers how to use these tools. It was a very beautiful thing; however, it did not reach its objective during the year because our reality is different, and teachers do not have all the necessary tools. Even if

they did, they didn't know how to use them correctly in the classroom. So, I didn't use these technologies. The main tool I used, and it was quite influential during the period, was the cell phone that helped me record videos and talk to the students (Teacher "A", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The main tool I used was my cell phone to broadcast classes and send materials (Teacher "B", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The cell phone, using video calling (Teacher "C", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

From the oral statements, we identified that cell phones were the main tool used by teachers to assist in remote teaching during the pandemic. As highlighted in the teachers' speech, the pedagogical use of this device was relevant for making video calls, transmitting classes, sending materials, and maintaining communication with students. Alencar *et al.* (2015, p.789), when dealing with the use of technologies in teaching state that "the cell phone has become an ally for the teacher, being used as a tool to support the class". Especially during the period of remote classes, cell phones made it possible, in many cases, to continue classes and educational activities that had to migrate to the internet due to the COVID-19 pandemic.

Given the above, we assess that the cell phone was chosen as a tool because this resource contributes to the teacher's work at a time when he could not be physically with his students, in addition to being known and used even before the pandemic situation and remote teaching. The preference for this tool can be associated with the fact that this technology is part of everyday life and its multifunctionality, considering that it allows "[...] filming, taking photos, producing montages, recording the audio that the user desires, in addition to offering a wide variety of access to applications, programs created by legal entities to meet all types of needs, including educational ones" (LOPES; PIMENTA, 2017, p. 60, our translation).

Following the questions, we asked teachers about the main pedagogical strategies used to resolve the difficulties encountered in the teaching-learning process with students during remote classes. We obtained the following considerations:

The strategies were the simplest, as I already mentioned in the methodologies, I did not determine a fixed time for students to send me the activities, because if I determined the time, few would send them to me, precisely because I could not determine a time without knowing the reality from the students. I also used the strategy of sending little content in simple language. When the students had any questions, we made a call via a video call on WhatsApp, so I think that using these simple strategies, according to my student's reality, made me get a good result in remote classes (Teacher "A", School Unit X Professor Antônio Amarildo Souza, Felipe Guerra – RN, 2022, our translation).

The strategies, we created thinking about how we taught the class and received the students' activities, there were days when we didn't receive the activities, so it was necessary to renew the strategies to see if it would work for us to continue receiving the activities. A strategy that I used a lot was to do xeroxed activities and leave them at school for students to pick up, especially for those students who did not have access to the internet or cell phones (Teacher "B", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

In my strategies, I tried to do didactic activities so that they could respond and the parents could help. It also used the strategy of printing the activities for those students who did not have access to any type of technology (Teacher "C", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

Based on the teachers' testimonies about pedagogical strategies to help students with the difficulties encountered during the period with remote classes, we identified that strategies were used for students with access to technological tools and the internet and those who did not have these resources. Teacher "A" reported that his main reference for helping students was to carry out strategies according to their realities, he stated that he invested in simple strategies, tried not to determine fixed times for sending activities, directed few curricular contents, and used an easy-to-understand language. Teachers "B" and "C", following the same strategy, mentioned that due to the continued receipt of activities from students who did not have internet or cell phones, they made printed activities available to be delivered to the school institution.

The pandemic and remote teaching resulted in the need to think about pedagogical strategies that adapted to the reality of each student, making it the school's duty to observe the limits of students' access to digital technologies and to consider inclusive proposals that did not reinforce social differences.

Sharing this thought, Cardoso, Ferreira, and Barbosa (2020, p. 45), emphasize that "inclusive practices are necessary, the so-called digital inclusion, which allows education to reach all who depend on it, or even educational alternatives to distance that does not include the essential access to technologies".

We realize that thinking about pedagogical strategies that include students is extremely important to respect the specificities of each student and ensure that everyone participates in the teaching-learning processes at different times and spaces.

The last question we discussed in this text asked teachers whether, during remote teaching at the school in the countryside, they received support from the institution or the municipality's education department since it refers to a municipal school. Still, on this issue, we

highlight whether they participated in any formation activities to work with remote teaching and digital technologies. Your records are enlightening:

The municipality's education department always taught us about the prerogatives that we would work on. Every day, if we had any questions, we could get in touch with the institution's pedagogical coordinator, so on the pedagogical side, we did have support, of course, a little deficient, as no one was used to this type of remote teaching, but we did have support both by the municipal education department and the institution. Regarding any training and specific formation to work with remote teaching and use technologies, we didn't have it! Because we didn't have this advanced technology, what we had was basic guidance on how to use a cell phone, but we didn't have any practical teaching on how to work with remote teaching and use digital technologies (Teacher "A", School Unit Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

We did receive pedagogical support, both from the secretariat and the school. Both always guided us and gave us the support we needed to deal with the situation. Our headquarters and pedagogical support took place at the municipality's education department with the school's director and pedagogical coordinator, we went to the headquarters and met, and they guided us in every possible way. I did not participate in any training to work with remote teaching, what I did receive was some guidance on how we were going to work and use the technologies we had, which in our case was the cell phone (Teacher "B", School Unit Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

Yes, the education department and the school worked very responsibly during this period, supporting our pedagogical work. On the school's side, the coordinator and director supported us with guidance on planning and teaching remotely, which was little help, as everyone was in the same boat with the same difficulties. As for training and practice to teach classes, I did not participate, I had to struggle with many challenges to learn to familiarize myself with technologies, I did my work based on past guidance and with the tools I had (Teacher "C", School Unit X Professor Antônio Amarildo de Souza, Felipe Guerra – RN, 2022, our translation).

The teachers' statements are similar, as all three agreed that the institution and the municipality's education department supported, pedagogically, with guidance on how they would organize themselves to develop remote teaching. We know that remote teaching brought a new perspective to thinking about educational processes, students and teachers needed support to deal with the recurring uncertainties of the pandemic, and from what teachers recorded, we observed that there was this support in the commitment of school management, especially the director and the pedagogical coordinator who sought to provide as much support as possible, under existing conditions, so that the rural school, teachers and students could resist in the context of the pandemic caused by COVID-19.

Regarding continued training aimed at remote teaching and digital technologies,

teachers reported not having undertaken any training to work in this context. We understand that in this exceptional moment in education, digital technologies occupy a prominent position; however, they do not promote conditions to make the educational process occur. The teacher needed knowledge and skills for effective pedagogical practice in an environment with digital technologies. Given this, Rocha *et al.* (2020) believe that “[...] the teacher who used DT [digital technologies] to change their teaching methods ended up needing constant training processes, which resulted in a new meaning of their pedagogical practice” (ROCHA *et al.*, 2020, p. 65, our translation).

We understand that changing pedagogical practice from one moment to the next is not an easy task, the constant transformations and the accelerated emergence of new technological devices have required the professional to remain in continuous training to build a capable action with digital technology. To add new perspectives and possibilities for learning. This is reflected in the teacher participants in the study report, who, with the unexpected start of isolation and social distancing, did not receive the necessary continuing training to use digital technologies in emergency remote teaching at a rural school.

Final considerations

The study focused on remote teaching experience in a municipal school in the rural area of *Felipe Guerra, Rio Grande do Norte, Brazil*. The general objective was to analyze teachers' perceptions about remote teaching during the COVID-19 pandemic. The research included three teachers from Early Childhood Education and the initial years of Elementary School as participants. We used a qualitative approach, field research, and semi-structured interviews to produce data. In conclusion, we demarcate that remote teaching requires reinvention and adaptation of teachers' pedagogical practices at schools in the countryside.

We also emphasize that teachers needed to reorganize their teaching methodologies and create personalized strategies based on the students belonging to each class. Furthermore, remote education highlighted social inequalities, especially in public education in rural areas where the lack of technological infrastructure excluded some students. The study contributed to partially understanding schooling during the pandemic caused by COVID-19, highlighting the need to face these educational challenges.

From the research, we observed that remote teaching highlighted the fragility of the education system, revealing gaps such as the lack of professional qualifications of teachers to

use technological tools and the need for greater investment in educational policy to equip schools and offer training for this purpose to teachers. Given this, we highlight that another effect was the difficulty of monitoring and family support, as parents and guardians of students could not balance work with their children's online classes.

Finally, we realized that the difficulties faced went beyond the teaching configuration at school and are linked to several pre-existing factors that prevented teachers and students from accessing essential resources.

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