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## CHILDHOOD EDUCATION – DIFFICULTIES OF SCIENCE TEACHERS IN USING REMOTE TEACHING

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**Abstract:** Remote education was a necessary emergency plan for all types of education, however, early childhood education was the most affected, due to the age group, as parents are the ones who must play the role of mediator throughout the entire education process. learning, and they are not always at home, they do not always have two cell phones for two or more children, and they do not always have internet at home or have the money to put credit, and those who keep them do not always know how to read to follow the activities sent by teachers. The perspective of this work was to evaluate the challenges of early childhood education teachers in schools in the city of Beberibe-CE, in adapting to remote teaching, aiming to understand how the process is going and understand the main difficulties that these early childhood education teachers are facing and analyze your perspectives regarding the positive and negative points regarding remote teaching. A questionnaire was used as a study through Google Forms, passed on to teachers through WhatsApp, and data collection through emails, however, given the responses obtained and shown in the figures, it was realized that educators had to return to studying to continue teaching their classes through digital media. Fortunately, the method they used reached all students, but they were not always able to monitor all students' learning in a satisfactory manner, they had to adapt the content for remote teaching. Along the way, science teaching improved with online classes, as did communication between family/school. In this sense, it is considered that the teachers were true warriors who, despite experiencing situations that were completely out of the ordinary, managed to continue their work with mastery.

**Keywords:** Child education. Remote teaching. Teachers.

## INTRODUCTION

Due to the current situation that the municipality of Beberibe-CE and the entire world is experiencing due to the COVID-19 pandemic, the remote teaching system was immediately adopted where classes that were previously in person were made available remotely, through the media. and social networks. On March 17, 2020, through Ordinance, number: 343, the Ministry of Education (MEC) expressed its opinion on the replacement of face-to-face classes with digital classes, while the COVID-19 pandemic situation lasts (BRAZIL, 2020).

The objective of this research is to understand the difficulties and challenges faced by teachers during the pandemic and how they fared with their methodologies aimed at children, the challenge brought by families being mediated by families, how the adaptation to the new teaching modality took place, the main difficulties in the municipality from Beberibe-CE. faced, and the positive and negative points of remote teaching in times of pandemic for early childhood education teachers.

From studies on the internet and interviews carried out with teachers, online, it was observed that educators quickly adapted to the new form of teaching, however they had to reorganize the way of teaching, adapting to distance learning.

It was found that this teaching did not reach all children, monitoring of learning was lacking, teachers adapted the content that would be taught in person to a remote format, most teachers had difficulties because they did not know how to handle the media digital.

According to the educators, the science curricular component improved with remote teaching, but in their impressions, they reported that it was difficult to carry out experiments, and the family/school relationship improved as there was direct

contact with the students' families to pass on information. classes. Attendance was not 100% in the delivery of activity returns, and the Department of Education was offering support to educators through online training, to continue their work during the quarantine caused by COVID-19.

It is undeniable that remote teaching is crucial to minimize the losses caused by the absence of in-person classes, however, at the same time that the proposal for digital teaching and technology present themselves as drivers of new pedagogical activities (SAMPAIO, 2020).

## **BASIC INFORMATION**

### **CHILD EDUCATION**

In Brazil, education in daycare centers and preschools was only recognized after the 1988 Constitution and by the Child and Adolescent Statute – ECA, Law number: 8.069/90 (BRAZIL, 1990), which aligned with each other and other documents says that: Article 4: it is the duty of the family, the community, society in general and the public authorities to ensure, with absolute priority, the realization of rights relating to life, health, food, education, sport, leisure, professionalization, culture, dignity, respect, freedom and family and community coexistence (BRAZIL, 1990).

Currently, according to the BNCC (National Common Curricular Base), Early Childhood Education is the first stage of Basic education, thus the beginning of a young child's education being the first separation of the family emotional bond for insertion into society. Institutions have the mission of welcoming the experiences and knowledge constructed by children in the family environment and in the context of their community, articulating them in their pedagogical proposal, with the aim of expanding the universe of experiences, knowledge and skills, diversifying and

consolidating new learning, complementing family education.

### **DISTANCE EDUCATION**

Education is defined by two modalities: face-to-face and distance, where the first is conventional teaching, in which teachers and students meet in the same physical location called the classroom, and at the same time, distance learning takes place when teachers and students are physically separated in space and/or time, characterized by the intense use of information and communication technologies, and may or may not have face-to-face meetings (ALVES, 2020).

Of the various segments that guide EaD, decree number: 9,057, of May 25, 2017, which regulates Article 80 of the LDB of 1996, says in Article 1 (...) distance education is characterized as an educational modality in which didactic-pedagogical mediation in teaching-learning processes occurs with the use of information and communication means and technologies, with students and teachers developing educational activities in different places or times (BRAZIL, 2017).

### **REMOTE TEACHING**

Emergency remote teaching was a strategy regulated by the MEC (Ministry of Education) to comply with social distancing measures during the pandemic period. The main objective of remote education currently is that the student of in-person education does not have too large losses in education (ALVES, 2020)

In remote teaching, it is necessary to take into consideration, that school tasks need to be carried out by family members. It is a difficult situation, since most parents work in their specific activities and do not have teaching training and preparation (GAROGALO, 2020).

## **DIGITAL METHODOLOGIES AND TOOLS**

Digital tools as well as active methodologies have become inseparable in the teaching and learning process at this time when the new coronavirus (COVID-19) pandemic is being faced. They are effective resources for remote mediation in a society where more than 5 billion people use a cell phone and, therefore, information becomes increasingly faster. In this sense, it is essential to rethink the use of ICT (Information and Communication Technology) in the classroom as a mediation instrument for learning (DOS SANTOS JUNIOR and DA SILVA MONTEIRO, 2020).

## **METHODOLOGY**

To meet the objective of this study, an analysis was carried out of the trends and perspectives of the teachers' challenge in teaching science classes for early childhood education in the remote teaching modality in the municipality of Beberibe-CE. A survey of bibliographical productions in the area of early childhood education was carried out, making a retrospective, in the distance learning modality and in the remote teaching modality.

After surveying the subjects, studies were carried out to list the research, and from there formulate the questions that would be asked with the teachers in the municipality, and as there was no possibility of personal contact, the questions were asked on Google Forms and sent to teachers in the municipality via WhatsApp, where they were invited to participate in the research. Still in 2020, precisely from November to December, the questionnaire was administered, sent via WhatsApp to early childhood education teachers, and feedback was received through the emails that participants registered when answering the questionnaire.

The responses were collected in real time

and calculated by the system, facilitating the collection of collected data, helping to provide comfort to participants who were able to contribute in some way and reflect on the moment they were experiencing in the face of COVID-19.

## **RESULTS AND DISCUSSION**

Remote teaching was a masterstroke, a form of teaching that helped ensure that education did not stop during COVID-19, and that played an irreplaceable role during the pandemic, as through this modality education did not stop, it only gained more space and early childhood education gained momentum, because despite everything not always being perfect, it gained more visibility, teachers sought and managed to show their work with families on a daily basis through various means of communication.

## **ANALYSIS OF THE QUESTIONNAIRE APPLIED TO TEACHERS**

The questionnaire consisted of 10 questions about the new reality experienced by the Early Childhood Education teacher, due to the social isolation imposed by COVID-19. The access link to the Google Form was sent to public school teachers in the municipality of Beberibe-CE. The WhatsApp messaging system was also used. In the questions, early childhood education teachers were asked about their performance and difficulties in the face of remote teaching.

The responses were collected by email for 2 months (November and December 2020), where for each response received it was recorded and calculated immediately using the Google Form application, the graphs even obtained in the Google Form were made in Excel for better export to the work described here. In total, 13 responses were received.

The results observed were:

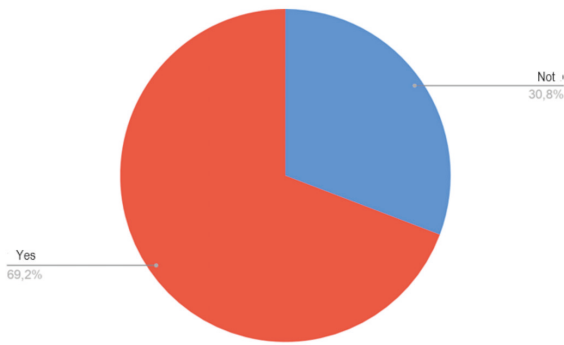


Figure 1 – Teacher adaptation to remote teaching

Source: prepared by the authors.

As can be seen in figure 1, the teacher’s adaptation to remote teaching was quick without many problems, leading to the conclusion that the teachers in the Municipality of Beberibe-CE were well updated in terms of technology or had support from the institution where they work.

**Teacher, did you have to go back to studying due to remote teaching?**

Faced with the question, the answer was 100%, making it very clear that all teachers felt the need to update themselves in order to continue teaching their classes remotely in remote education.

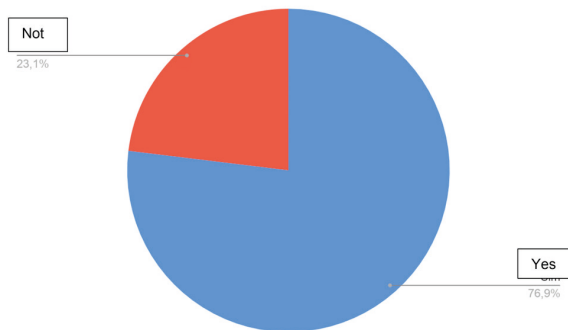


Figure 2 - Does the way you teach classes reach all students in your class?

Source: prepared by the authors.

In figure 2, it can be understood that the classes taught by teachers mostly reach all students, as the methodology used can reach the vast majority.

In the case of Early Childhood Education, it is important to consider that there was a need to establish links with families, who are the link between educators and children (BERNARDO, 2020)

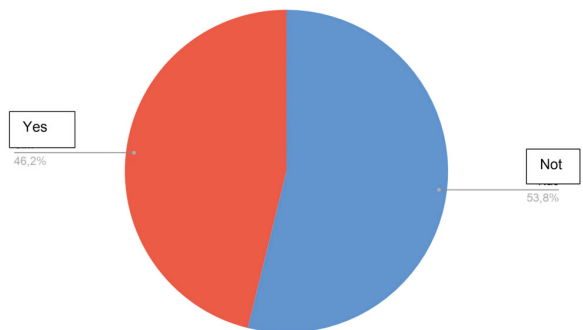


Figure 3 - Can you monitor student learning satisfactorily?

Source: prepared by the authors.

Looking at figure 3, it can be considered that most teachers do not consider that the form of remote teaching provides satisfactory monitoring of learning, considering that they do not witness the children’s progress and difficulties and only observe photos and ready-made activities.

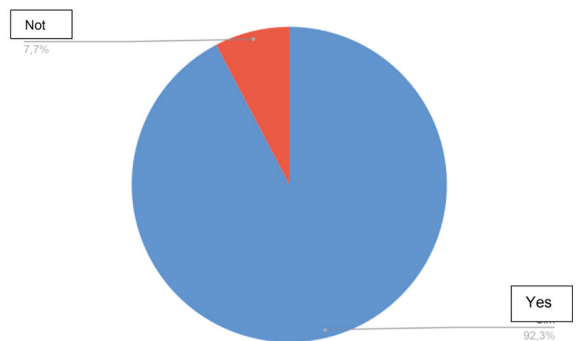


Figure 4 - Were you able to adapt the content for Remote Learning?

Source: prepared by the authors.

Reading figure 4, it can be said that almost 100% of teachers adapted content proposed from face-to-face teaching to remote teaching, in order to facilitate the understanding of the mediators who did the teacher’s work at home

with the children.

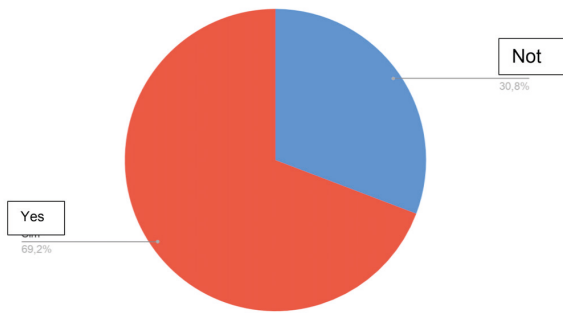


Figure 5 - Did you have difficulties with Remote Learning?

Source: prepared by the authors.

In figure 5, the teacher had difficulties in the form of remote teaching, for the most part yes with 69.2% and for 30.8% no, as it gives him the opportunity to spend time with his family so he can teach his classes from afar, the Sometimes with a noisy house to record videos, it can even be stressful and not having enough memory on your mobile phone to store your produced/researched material for your classes, or even the fact that the internet is not very good, these could have been some of these causes.

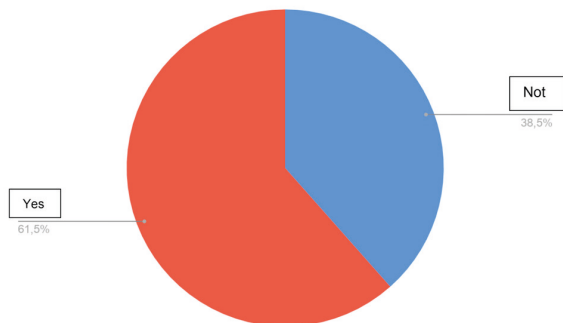


Figure 6 - Has Science Teaching improved with remote teaching?

Source: prepared by the authors.

In figure 6, science teaching improved with remote teaching with 61.5% against 38.5% according to the responses. The guidance for daycare and pre-school is that managers seek a virtual approach between teachers and

families, in order to strengthen bonds and make suggestions for activities for children, parents and guardians.

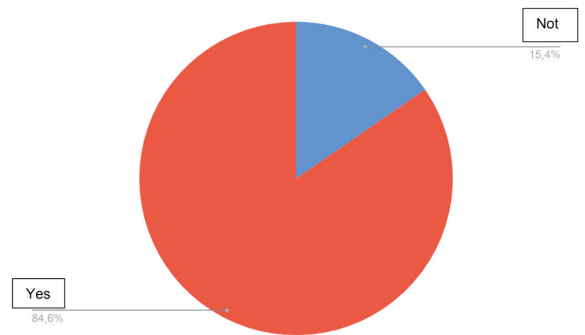


Figure 7 - Has communication between family/school improved with remote learning?

Source: prepared by the authors.

In figure 7, it is very evident that communication between family and school improved with remote teaching by 84.6% against 15.4%. With the closure of schools, traditional dynamics of the school environment changed radically: if before it was enough for the student to raise their arm to ask questions and then an explanation, or if the main school information was disseminated to parents and guardians through face-to-face meetings, now these dynamics are mediated by screens, with the use of tools and applications daily as it is families who mediate children's teaching (SANTOS, 2020).

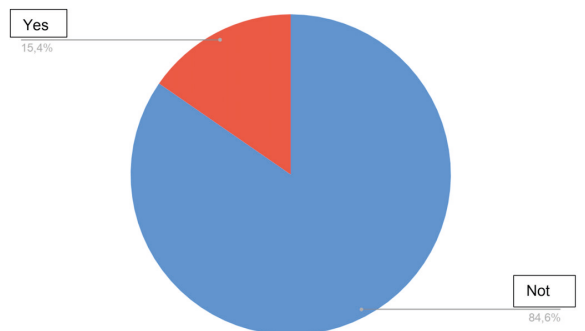


Figure 8 - Is the frequency in relation to the return of activities considered 100%?

Source: prepared by the authors.



In figure 8, the majority of responses were no, with 84.6% versus 15.4% and, therefore, teachers do not see a good frequency of feedback (name given to activities sent to be done by students and returned to the teacher for correction and other records) of students.

## FINAL CONSIDERATIONS

It is considered that the objective was achieved and that adapting to this new teaching modality for the majority of teachers was quite challenging, both for those who already had skills with electronic media and for those who had none, everyone in general had to go back to studying and taking courses. Teachers faced the challenge head on and sought with their family, friends and professional colleagues a way to reinvent themselves, in addition to the support of the education department, ways to continue serving families and children remotely with the resources they had at home, i.e. their own equipment, taking into consideration, children's right to education.

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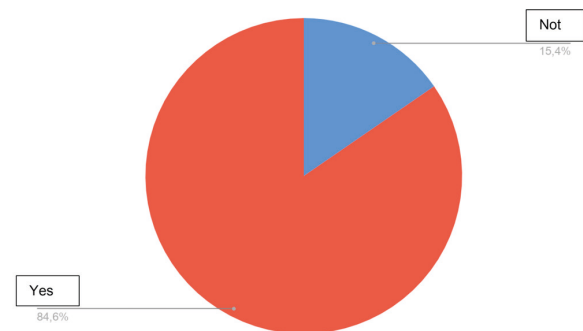


Figure 9 - The Secretariat provided Training to Assist in Remote Teaching

Source: prepared by the authors.

Figure 9 shows that the Secretariat of the Municipality of Beberibe-CE provided training to assist teachers in remote teaching, contributing significantly to their work in remote teaching in 84.6% against 15.4% who may not have been satisfied with the training.

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