TEACHER LONELINESS IN ONLINE BASIC EDUCATION: TEACHERS' PERCEPTIONS OF CHALLENGES AND OVERCOMING

A SOLIDÃO DOCENTE NA EDUCAÇÃO BÁSICA ON-LINE: PERCEPÇÕES DE PROFESSORES ACERCA DOS DESAFIOS E SUPERAÇÕES

SOLEDAD DOCENTE EN LA EDUCACIÓN BÁSICA EN LÍNEA: PERCEPCIONES DE DOCENTES SOBRE DESAFÍOS Y SUPERACIÓN

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ABSTRACT: The focus of this article is on the perceptions of Basic Education teachers regarding teacher loneliness in online classes under the emergency remote model, which occurred during the COVID-19 pandemic. The objective was to understand teacher loneliness in online classes, with a view to identifying the main challenges and possible overcomings encountered by teachers. For this, the research used a qualitative approach, with the application of an open questionnaire. The participants were six Basic Education teachers, initial, final, and secondary education, from public and private schools. The analysis was carried out using Discursive Textual Analysis. As a result, three final categories emerged, through which it was possible to understand the difficulties faced by teachers during online classes, their strategies to overcome them, and the feelings involved in this process.

KEYWORDS: Teacher Loneliness. Basic education. Online Classes.

RESUMO: *O foco deste artigo recai sobre as percepções de professores da Educação Básica a respeito da solidão docente nas aulas on-line do modelo remoto emergencial, que ocorreu durante a pandemia da COVID-19. O objetivo foi compreender a solidão docente nas aulas on-line, com vista a identificar os principais desafios e possíveis superações encontrados pelos professores. Para isso, a pesquisa teve abordagem qualitativa com a aplicação de um questionário aberto. Os participantes foram seis professores da Educação Básica, anos iniciais, finais e nível médio, da rede pública e privada. A análise foi realizada por meio da Análise Textual Discursiva. Os resultados emergiram em três categorias finais, por meio das quais foi possível compreender as dificuldades enfrentadas pelos docentes durante as aulas on-line, suas estratégias para superá-las e os sentimentos envolvidos nesse processo.*

PALAVRAS-CHAVE: *Solidão Docente. Educação Básica. Aulas On-line.*

RESUMEN: *El foco de este artículo está en las percepciones de los docentes de Educación Básica respecto a la soledad docente en las clases en línea bajo el modelo remoto de emergencia, ocurrido durante la pandemia de COVID-19. El objetivo fue comprender la soledad docente en las clases en línea, con miras a identificar los principales desafíos y posibles superaciones encontradas por los docentes. Para ello la investigación tuvo un enfoque cualitativo con la aplicación de un cuestionario abierto. Los participantes fueron seis docentes de Educación Básica, educación inicial, final y secundaria, de colegios públicos y privados. El análisis se realizó mediante Análisis Textual Discursivo. Como resultados surgieron tres categorías finales, a través de las cuales fue posible comprender las dificultades que enfrentan los docentes durante las clases en línea, sus estrategias para superarlas y los sentimientos involucrados en este proceso.*

PALABRAS CLAVE: *Maestra Soledad. Educación básica. Clases en línea.*

Introduction

In the years 2020 and 2021, all nations had to face a very challenging pandemic, COVID-19 (Coronavirus Disease). Social isolation, necessary to combat the disease, changed personal, professional, and school configurations and relationships. According to Silva, Neto, and Santos (2020, p. 31, our translation):

> With the emergence of this pandemic worldwide, the return to what we considered normal life is much further away. Social relations have been modified, and a new social conduct has emerged, altering behaviors, forms of learning, and interpersonal relationships, and consequently, this has been reflected in teaching strategies.

Regarding changes in education, educational institutions throughout Brazil needed to reorganize, as face-to-face classes would no longer be possible for an indefinite period, as stated by Silva, Neto, and Santos (2020, p. 36, our translation): "With the spread of the virus, politicians and managers had to take emergency measures such as suspending face-to-face classes." The Federal Government authorized non-face-to-face teaching in Basic Education with Law No. 14,040, of August 18, 2020, during the duration of the state of public calamity due to the pandemic.

Article 6 states: "The return to regular school activities will observe the guidelines of the health authorities and the rules established by the respective education system" (BRASIL, 2020a). The National Council of Education (CNE) issued national guidelines for the implementation of this law through Opinion CNE/CP No. 19/2020, of December 8, 2020. In Article 14, of Section V, it states:

> For non-face-to-face pedagogical activities in Basic Education, it is understood as the set of activities carried out with technological mediation or by other means, in order to ensure essential school attendance during the period of restrictions on students' physical presence in the educational unit (BRASIL, 2020b, p. 10, our translation).

Thus, new nomenclatures and modalities of teaching in basic education emerged, such as emergency remote teaching, bimodal teaching, and online classes, among other names. Although distance education is not something new, as it has existed for years through printed correspondence, television, and radio, according to Tori (2010, p. 4), the use of technologies has brought an innovative character to this modality. In any case, meetings between teachers

and students started to take place remotely through applications/software used for online meetings. In the first year of the pandemic, educational networks sought ways to adapt to the new reality, each in its way and pace.

> Indeed, the suspension of face-to-face teaching activities worldwide has led to the necessity for teachers and students to migrate to the online reality, transferring and transposing methodologies and pedagogical practices typical of physical learning territories, in what has been designated as emergency remote teaching (MOREIRA; HENRIQUES; BARROS, 2020, p. 352, our translation).

With the emergence of a new panorama in education, triggered by the pandemic, various challenges have arisen that were not previously faced, such as the closure of school activities and the urgent need to provide students and teachers with appropriate resources, as well as access to the internet. According to Silva, Neto, and Santos (2020, p. 40, our translation): [...] it is observed that there are many challenges faced by schools in this pandemic scenario, such as the lack of training and information for teachers, students, and families about the use of ICTs as knowledge mediation." Therefore, it was necessary to find means for remote classes to take place, obtaining equipment, internet access, and training for the use of resources. There were many difficulties, but the persistence in ensuring education continued was remarkable.

Given this scenario, the guiding question to be investigated arose*: How do teachers in Basic Education perceive teacher loneliness in online classes?* Thus, the fundamental objective was to understand teacher loneliness in basic education, in online classes, identifying challenges and overcoming them. For this purpose, some key concepts of this theme are presented in the following section.

Theoretical Framework of the Investigation

Initially, it is necessary to define and determine the difference between synchronous and asynchronous encounters, which are different categories of online activities. According to Lencastre and Araújo (2008, p. 4, our translation) there are two categories of online learning: "[...] synchronous events that occur for all students simultaneously [...]. Asynchronous learning occurs at different times for each student, according to each one's time and need." In this work, online classes refer to synchronous moments of teaching, that is, moments when students and

teachers are connected at the same time, with online education being that which occurs through electronic means (LENCASTRE; ARAÚJO, 2008, p. 2).

Communication is understood as a process of exchanging information among individuals, which is essential for learning. Communication can be verbal, spoken, written, or non-verbal (gestural), and a significant part of human communication is understood and interpreted through gestures (LEONARD, 2020, [s.p]). According to D'Ambrósio (2007, p. 24, our translation): "The process of generating knowledge as action is enriched by the exchange with others immersed in the same process, through what we call communication [...]." Similarly, for Lévy (1999, [s.p.], our translation): "To communicate is by no means to transmit a message or receive a message. That is the physical condition of communication. It is true that to communicate, one must send messages, but sending messages is not communicating. Communicating is sharing meaning."

Interaction is a fundamental movement in learning, according to Moran, Masetto, and Behrens (2013, p. 28, our translation): "We learn when we interact with others and the world and then, when we internalize, when we turn inward, making our synthesis, our reunion of the external world with our personal re-elaboration."

In the process of physical distancing provoked by the pandemic, the contact between students and teachers had to occur entirely remotely. This change happened abruptly, unexpectedly, and without preparation. Education is a human process in which feelings and emotions are involved (SANTOS, 2007, p. 174). According to Valente (2003, p. 140, our translation), it is crucial to understand the role of the teacher in distance education as:

> In this educational modality, the educator's intervention becomes even more important, as interaction is mediated by technology, and there are no gestures, eye contact, or elements used in face-to-face situations that the learner can use to compensate for certain communication deficiencies. In distance education, the quality of interaction between teacher and student and among students is fundamental and determines which pedagogical approach is being used.

From the teachers' perspective, the teaching process without direct and in-person contact with students generated considerable strangeness. This phenomenon was not limited to courses in which remote teaching was already established but extended to all levels of education. Teachers who had never experienced distance learning now found themselves in front of computer screens and mobile devices.

> [...] The challenge was not only for the teachers to reinvent themselves to produce content, deliver online classes, and organize assessments of students' activities in situations of social isolation, psychological pressure, and family responsibilities at home. The student, in the same situation of social isolation, also encountered difficulties with internet access, quality equipment to access, study space, adaptation to online classes, and excessive amounts of activities to complete (ALVES; FARIA, 2020, p. 5, our translation).

And this technology brought yet another challenging novelty: in the meeting apps used in classes, students could turn off their cameras and remain silent, thus impairing the non-verbal communication that is essential for interaction (KUBRUSLY *et al*., 2021, p. 6). So, teachers accustomed to classes full of "curious faces" and lots of conversations suddenly found themselves in silent virtual rooms with thumbnails of photos, avatars, or just initials of names.

According to Alves and Faria (2020), this happens because web conference meetings have started to be used for the development of expositional classes, which are sometimes lengthy, and thus, students end up getting distracted or not staying attentive all the time. Furthermore, for the aforementioned authors (2020, p. 7, our translation):

> With this, we have, on one hand, the teacher who strives exhaustively to deliver the class in a cold and silent environment. On the other hand, the students who, most of the time, are just marking their attendance in the classes, with their cameras and microphones turned off. This form of class makes both teacher and student feel demotivated by the results.

This distancing between teachers and students has led to the emergence of new feelings and anxieties not previously experienced. Among them, one can highlight the loneliness of teachers for not being in direct contact with their students. The word "loneliness" is defined by Abbagnano (2007, p. 918, our translation) as:

> Isolation or search for better communication. In the first sense, loneliness is the situation of the sage, who traditionally is self-sufficient and therefore isolates himself in his perfection (see SÁBIO). Apart from this ideal, isolation is a pathological fact: it is the impossibility of communication associated with all forms of madness. In the proper sense, however, loneliness is not isolation, but a search for different and superior forms of communication: 'It does not dispense with ties to the environment and daily life, except in view of other ties with men of the past and future, with whom it is possible to have a new or more fruitful form of communication. The fact that loneliness dispenses with these ties is an attempt to free oneself from them and become available for other social relations.

This technology brought yet another challenging novelty: The feeling of loneliness is subjective and can be defined in different ways. The author Ellison (1978 apud PINHEIRO; TAMAYO, 1984, p. 32, our translation) "claims to have observed that loneliness always involves a central quality of isolation, whether it be emotional, social, or existential." In this research, loneliness is related to the feeling of isolation, distancing from interaction with others, and the lack of communication among the individuals involved in the educational process, directly related to the fact that teachers and students cannot hear or see each other in many of the remote contacts.

Methodological Procedures

In this research, participants were invited to answer questions regarding online class communication and interaction. The motivation for these inquiries was the period of remote teaching, generated by the COVID-19 pandemic in the years 2020 and 2021. During this period, Brazilian teachers had to reinvent themselves and face various challenges to continue with non-face-to-face classes. This is a qualitative research. This is because: "Qualitative research does not concern itself with numerical representativeness, but rather with deepening the understanding of a social group, an organization, etc." (SILVEIRA; CÓRDOVA, 2009, p. 33, our translation).

The teachers come from public and private schools, mostly in municipalities around Greater Porto Alegre (RS), working both in the early and final years of elementary school and in high school. It is worth noting that this research did not require submission to the ethics committee, as it involved data collection from classroom activities widely developed in disciplines of postgraduate programs Stricto sensu, in the training of researchers.

This technology brought yet another challenging novelty: To conduct this research, an open questionnaire (CHAGAS, 2000) with five questions was administered to six teachers of Basic Education, students in a Postgraduate Course in Science and Mathematics Education from a community institution in the state of Rio Grande do Sul. According to Chagas (2000, p. 12, our translation), "the order in which the questions are presented can be crucial to the success of the research. [...]". He adds that starting the questionnaire with open-ended questions or asking about the participants' opinions can make them feel more comfortable and willing to collaborate.

The questions were as follows: a) What role does communication and interaction play in teaching practice and student learning in Science and Mathematics in online classes?; b) How do you experience communication and interaction in your online classes?; c) What are the main difficulties regarding communication and interaction in your online Science and Mathematics classes?; d) What solutions do you propose for these difficulties?; e) For example, narrate a situation from your experience as a teacher or student that demonstrates the relationship between communication and interaction with students in Science and Mathematics in online classes.

The participants in this research can be characterized as follows: three female and three male teachers; ages ranging from 26 to 37 years, with an average of 32 years; teaching experience ranging from 3 to 14 years, with an average of 7 years; weekly workload ranging from 20 to 53 hours, with an average of 31.5 hours; professional activity in Elementary School I (two), Elementary School II (four), High School (2), and Normal Course (one). Two of these teachers work in more than one level of education simultaneously. Five of them graduated in Mathematics, and one in Pedagogy. These participants were identified as: P1, P2, P3, P4, P5, and P6.

This technology brought yet another challenging novelty: The analysis of the texts was conducted through Discursive Textual Analysis (DTA) (MORAES; GALIAZZI, 2016). According to these authors, the four essential procedures of DTA are: Unitarization, Categorization, Construction of Metatexts, and Communication. Still, according to Moraes and Galiazzi (2016, p. 33, our translation), DTA "[...] does not aim to test hypotheses to prove or refute them at the end of the research; the intention is understanding, the reconstruction of existing knowledge about the investigated themes." Based on the responses to the questionnaires, the 29 texts obtained were organized for subsequent reading and fragmentation. DTA "[...] is based on the idea that writing and thinking go hand in hand and that one writes to think" (MORAES; GALIAZZI; RAMOS, 2013, p. 871, our translation).

In the first movement of this DTA, unitarization, all responses were read and then fragmented into units of meaning (UM). Each unit was identified with the participant's letter and number, followed by the unit number, for example: P1.5 - Participant 1, unit of meaning number 5. The fragmentation resulted in 120 UMs. According to Moraes and Galiazzi (2016, p. 71, our translation): "Unitarizing a text is to break it down, transforming it into elementary units, corresponding to discriminating elements of meaning, significant for the purpose of the research, called units of meaning."

Next, the categorization of the units of meaning was carried out. The initial categories totaled 48, and the intermediate ones 24. The construction of the metatext is an important phase of the DTA process. According to Moraes and Galiazzi (2016, p. 229, our translation):

> The actual writing of a text is guided by categorization. [...] At the same time, theoretical and empirical interlocutions are established with different subjects in order to construct the validity of the texts produced.

Furthermore, according to Moraes, Galiazzi, and Ramos (2013, p. 873, our translation):

> The final text emerges from recursive movements of categorization and expression of new understandings, always in dialogue with theorists and empirical reality, aiming to obtain valid arguments accepted by communities of experts in the treated themes.

The final stage of DTA is communication, an important step in which new knowledge is brought to light through written production. This, according to Moraes and Galiazzi (2016, our translation), is a process of both learning and communicating. For them, writing can be understood in two ways: through the learning aspect and the communication aspect, with the latter being understood "[...] as an exercise in expressing the understandings and learnings that are being constituted." In the next section of this article, the final categories that emerged from the reading and unitarization are highlighted, presenting the relationships between the information found and the new knowledge constituted.

Results and Discussions

Three final categories emerged from the reading of the units of meaning: the importance of interactions in online classes and their challenges; strategies and possibilities for overcoming difficulties in online classes; and perceptions and feelings involved in participating in online classes. The following graph shows the percentage of the units of meaning in relation to each final category.

**Graph 1** – Relationship between the final categories and the quantity of UM[4]

Relação Categoria Final x Quantidade de US

- Categ 1 ■ Categ 2 ■ Categ 3
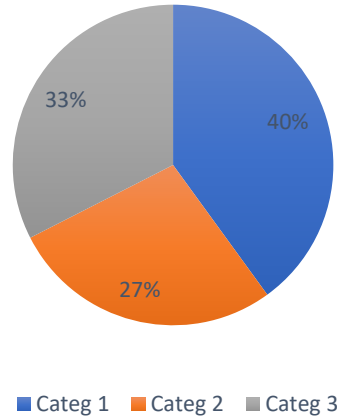
Source: Organized by the authors.

The quantity of units of meaning fragmented, based on the responses of each participant, can be seen in the following graph.

Graph 2 – Quantity of UM per Research Participant

Amount of UM per Participant
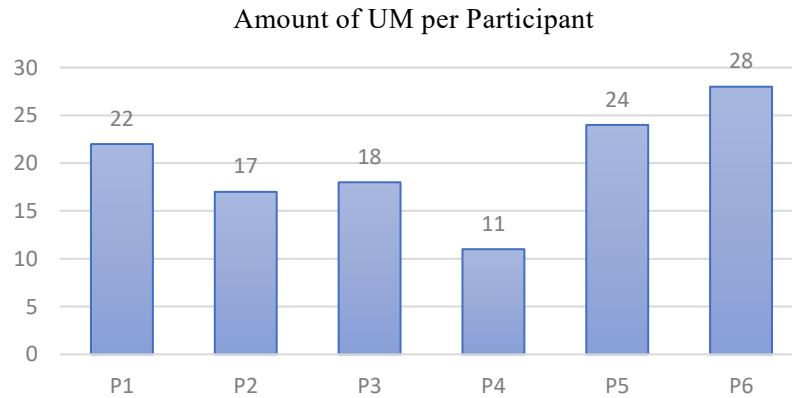
Source: Organized by the authors.

[4] Translation of the graph: Title - Final Category x Quantity of UM; Blue color: Category 1; Orange color: Category 2; Gray color: Category 3.

Category 1: The importance of interactions in online classes and their challenges

This technology brought yet another challenging novelty: For the research participants, interaction and communication in online classes are important for learning development. According to Laguardia *et al.* (2010, p.1, our translation), "Levels of participation and human interaction are critical elements in the success of learning experiences in virtual environments." Also, according to Faria (2004, p. 57, our translation), "What is really important to emphasize is interaction, participative engagement that is necessary in any type of class, with or without technology." This is evident in a response from P2: "Communication serves to connect teachers and students, creating a constructive class." Furthermore, according to P2: "This connection between teachers and students is directly related to learning." Participants express, in their responses, concern that students and teachers stay in touch, and that this communication needs to be consistently encouraged. According to P3: "Communication and interaction need to be stimulated within the virtual environment." Also, according to P4: "Dialogue between teachers and students becomes fundamental, in any teaching modality."

> In the process of distance teaching and learning, communication between teacher and student becomes even more essential, as it is through this that teachers receive feedback from the class and can thus assess how the student's teaching and learning process is progressing, allowing them to analyze and subsequently make the necessary changes to ensure that the student is truly learning (FERREIRA, 2020, p. 34, our translation).

However, this interaction faces several challenges that interfere with relationships and learning. For P1: "Without communication and interaction with students, online teaching becomes an unknown." For P4: "It is difficult for students to participate, as many do not have internet access and cannot communicate." Also, for P2: "Teacher-student communication, in the online format, has a lot of interference that hinders effectiveness in this communication." In this way, they demonstrate that interaction does not occur due to a series of technical factors and lack of interest. The technical factors involved in the difficulties were the lack of internet access and the noise from simultaneous speech, as in the applications used in online classes, the sound is apparent only when one person speaks at a time.

This technology brought yet another challenging novelty: Regarding the internet, not all students have good machines for access or a stable internet network with good speed. As for the issues of lack of interest, students demonstrate this when they do not submit assignments or remain silent during classes. As stated by P1: "It is difficult to get students to respond to the

questions proposed in online meetings." Also, for P4: "It is challenging to maintain student participation, with few activities completed and submitted, and delays in submission." Even with the encouragement of teachers, sometimes students' responses do not occur or are not sustained, as described by P1: "But not always do attempts to engage students produce satisfactory results." Participant 2 summarizes the challenges in the following unit of meaning, P2: "The main difficulty is knowing if the student is there and dealing with the problems reported."

Another challenge is the difference in interaction between the early years of Elementary School and the later years (Middle School and High School), as written by P5: "There are two distinct realities, where the difficulties encountered are opposite – early and final years." Participants pointed out that in the early years, the class needs to be planned to address all students' contributions, as described by P5: "It is impossible to listen to all younger students within the class period and perceive the skills that need to be developed during activities." Similarly, P5 notes: "Younger elementary students tend to want to interact more." In the case of the later years and High School, teachers classify these two groups similarly regarding interaction, meaning these older students remain silent, with cameras off, pressuring teachers for lecture-style classes.

P2 writes: "Of course, my standpoint is the later years of Elementary School, which differs from the reality of the early years." Also, for P4: "The lack of interaction in synchronous meetings, with cameras off and some students silent, is a difficulty." In addition to this lack of interaction, Participant 5 describes that "This lack of interaction makes communication one-sided, without access to discussion and hypothesis formulation to solidify reasoning" (P5). It is noticeable that the challenges are different for these two groups of students: on one side, for younger students, classes need to allocate ample time for interactions; on the other, for older students, classes end up being monologues where only the teachers speak and are seen.

Category 2: Strategies and possibilities for overcoming difficulties in online classes

Participants in the study identified some strategies aimed at overcoming the difficulties encountered. It is possible to highlight actions aimed at encouraging participation, where teachers create relaxed moments to make students feel comfortable speaking, which needs to be done with older students, from the later years onwards. As stated by P5: "The proposed solution for students in the later years of Elementary School and High School is to have an

informal conversation on any subject that attracts the student to give an opinion." In the case of the early years, the strategy needs to focus on a longer planning time for so many student interventions. According to P5: "With students in the early years, the proposal is to experience a reduced class time already foreseeing possible interventions, aiming to maximize the interaction of positions and hypothesis formulation about the class being developed." In other words, the didactic proposals of teachers in the early years cannot take up too much time, as the space for all students to speak needs to be allocated.

> In this regard, reflecting on the teacher-student and teaching-learning relationships during the pandemic or after it, considering the increasingly pervasive participation of digital technologies in education, implies thinking, as Sibilia (2012, 184-185) suggests, about truly innovative pedagogical projects, capable of "reconcentrating the attention of the group of students on learning" (MÁXIMO, 2021, p. 244, our translation).

Actions regarding technical issues and technological resources were also highlighted. For example, Participant 4 suggests that free internet could be provided to students. As for P3: "The use of available technological resources to assist in the organization and dynamism of classes is a solution." However, the language of the internet and social media, such as emojis, memes, and stickers, is also seen as a way to bring teachers and students closer, making classes more engaging and fun. For P6: "Strategies such as the use of emojis, commented videos during the presentation, memes, animated gifs, or audio with sounds familiar to students, at times when students seem to have been absent, have fostered spontaneous reactions and momentary engagement."

In this regard, games can also be used to improve classes, as described by P5: "I understand all the difficulties encountered, and that's why games are used to make the class more playful and dynamic, allowing for a greater sense of inclusion." Participant 1 describes an activity where they used the expression #opencamera to encourage students to participate. This way of writing, using the symbol # before a word or phrase, is quite common on some social media platforms.

> One of the actions I develop, especially with the class I am advising, is the so-called #opencamera call. We created this hashtag so that, when the teacher or a colleague launches it in the chat, we all have to open the camera, especially when there is a group discussion or presentation of activities (P1, our translation).

Strategies for holding families accountable were also identified so they could demand students' participation and camera openings, as schools cannot legally make such demands. According to P2: "The solution would be for families to be able to demand that students keep their cameras open." For P4: "One solution is encouragement, motivation, and accountability for students to do school tasks." Thus, they point out that responsibility for demands should not solely fall on the school and teachers.

In their research, Souza, Petroni, and Andrada (2013) report on the feelings of the surveyed teachers regarding their profession. When relating the feeling of loneliness, the teachers emphasize how much they need to seek solutions to problems, often without support.

> While they express enjoyment of the profession and the relationship with students, teachers highlight feeling unsupported and lacking pedagogical or emotional support to solve the problems they face, which often leads to other feelings such as despair, frustration, and helplessness (SOUZA; PETRONI; ANDRADA, 2013, p. 530, our translation).

Despite pointing out some solutions to the challenges of online interaction, the participating teachers also emphasized that it is not easy to reduce difficulties and overcome challenges, as the lack of interaction has different explanations. However, like P6, they emphasize that patience is necessary, or like P4, that "One solution is to raise students' awareness of the importance of interacting with teachers during synchronous classes." According to P1: "Thus, I continue with attempts for greater presence and effective participation, with image, audio, and studies occurring." So, teachers remain dedicated to seeking new solutions to the challenges that have arisen.

Category 3: Perceptions and feelings involved in participation in online classes

One highly relevant aspect identified in the participants' accounts was the emotions associated with the online class process. It is possible to distinguish these emotions between those expressed from the teachers' perspective regarding students and those experienced by the teachers themselves.

Participants reported that students feel embarrassed by exposure in front of their peers (audio or video), as well as the close presence of family members, household noises, or the appearance of their homes. As described by P1: "At times, students do not wish to

participate/interact in meetings due to external factors, such as the presence of family members, or noises in the surroundings." Similarly, according to P1:

> I believe that the lack of communication and interactions, on the part of the students, is closely related to the issue of image, aesthetics (for example, not being 'well-dressed' for the meeting, or not having organized the space they are in to be presented on screen) (P1, our translation).

Some reports indicate that there are internal emotions affecting student interaction, as stated by P2: "More than ever, students hide behind their closed cameras and prefer not to participate." For an educational process to be effective, it is necessary for something more to permeate this student-teacher relationship, and affectivity, through a closer relationship between student and teacher, can help (DE PAULA; FARIA, 2010). However, once again, the difference between younger and older students can bring an issue to light, as younger ones want to speak up and be heard, generally opening their cameras, while older teenagers hide with their cameras off. In the case of younger students, for P3: "During the remote period, children are eager for interaction with others, with their peers (friends, classmates of the same age group)."

From this, we can hypothesize, deserving investigation, about the reason for this need for interaction among children in online classes. After all, compared to teenagers, does interaction decrease over the school years? Or is adolescence responsible for the insecurity of older students? Still, for younger students, Participant 3 emphasizes that being at home increases dispersion and that students become frustrated having to wait their turn to speak. Participant 5 reports, regarding older students, that: "Shyness and fear of making mistakes restrain the responsive stimulus of veteran students" (P5). It is necessary to note that adolescent students demonstrate internal conflicts, about insecurity and shyness, and that hiding behind cameras may be an indication of fragility and suffering.

> [...] the creation of bonds is understood as fundamental for the retention of students in distance learning, given that affectivity, combined with technological tools, can enable a sense of belonging and contribute to the learner's motivation; an inherent factor in every educational process (CARVALHO; LIMA, 2015, p. 201, our translation).

It is important to highlight that "[…] affectivity is central in the construction of knowledge and the individual" (Gratiot-Alfandéry, 2010, p. 37, our translation). The reports provide information in this regard, reinforcing that feelings are inherent in learning

relationships. According to Lima (2020, p. 19, our translation) "Affectivity is present in school, in the classroom, in the teacher-student relationship, that is, in all dimensions of people's lives."

Teachers, on the other hand, report their feelings, showing that they feel alone due to the lack of interaction from students. According to Ferreira (2020, p. 24, our translation) "The teacher throughout the teaching practice experiences numerous feelings, resulting from the complexity of the profession." In the reports, loneliness appears for teachers, mainly in the final years of elementary school or high school. One account from Participant 4 illustrates this feeling well:

> One day, I had a synchronous class with a 9th-grade class. Only 8 students attended this online class. Even though I talked and asked, no student turned on their camera. The class was lecture-based. At various points, I asked if there were any questions, but unfortunately, I received at most a 'no' response in the chat. I finished explaining the content and opened up space for questions and conversation. A constraining silence took over the online room. After a few minutes of unsuccessful attempts at dialogue and questions, I ended up giving up and ending the class earlier than I would have liked. I cannot explain the extent of my frustration, but I left this class feeling very sad and very alone (P4, our translation).

Similarly, Participant 5 writes that they mention to the students the longing they feel and "With this talk (longing), some students sympathize by turning on the camera, responding through the microphone, and even via chat." Loneliness is also evident in Participant 6's account: "During almost all of my synchronous meetings, via video conference, the classes took place through conversations with images of avatars or thumbnails of students' portraits." Furthermore, according to Participant 2: "In general, most classes keep their cameras closed, and teachers end up being alone." It is noticeable in these units of meaning that the feelings of teachers are the same: isolation and loneliness. By not turning on their cameras, students put their teachers in an uncomfortable situation of teaching to thumbnails of photos, letters, or avatars, without eye contact and human expressions.

> However, as the "lockdown" extended and the predictions for the resumption of face-to-face classes became more uncertain, this relative euphoria gave way to exhaustion and dissatisfaction in the face of a situation that quickly proved to be more than contingent. Cameras were turned off, teachers started teaching with minimal interaction with students, and, in parallel, posts, tweets, and memes about the "tragedy" of remote teaching multiplied on social networks (MÁXIMO, 2021, p. 237, our translation).

Another distressing point for teachers, because of the closed cameras, is not knowing what the students are doing at that moment. As they are at home, with internet access and often without direct supervision from a family member, participants report that it is not possible to know if students are actually paying attention in class or doing parallel activities. According to Participant 6: "And the moderation of the use of devices with internet access is under the guidance of each student, providing parallel online activities." Furthermore, according to Participant 6: "As an example of parallel activity, one can point out the common practice of conversations among students, both from high school and elementary school, during online classes, through chats in private groups, where the teacher's participation is not requested." A report from Participant 2 also demonstrates this discomfort of not knowing what the students were doing:

> On a Friday at 5:30 PM, with 25 minutes left for the class to end, students had 15 minutes to do the activities, and we corrected them in the final 10 minutes. During the realization, I was calling the students, but about 15% of the class responded. At the time of correction, I called the students, and no one responded, so I redid the call only two students responded; the rest did not open the microphones or even opened them and said they did not know what they should do (P2, our translation).

In Grandisoli *et al.* research (2020, p. 12), it was pointed out that the insecurity of teachers regarding the shift in education to a technology-mediated model represented the majority of participants (50.8%). In the same survey, when questioning the feelings of teachers regarding technology-mediated education, the majority (62%) expressed positive feelings such as challenge and learning. This demonstrates that despite the insecurity and difficulties, teachers continue to try to do their job and face this new moment with perseverance.

Teachers seek to demonstrate to students the importance of interaction, of being seen and heard, but as P1 wrote, respecting the moment of each individual. According to Máximo (2021, p. 237, our translation), "Turning on the cameras, as a metaphor for 'being together' participating in classes, was a necessity for teachers, but not necessarily for students." Also, according to P1: "In addition to sensitizing students about, just as it is important for them to see and hear us, it is also important for teachers to see and hear them."

For teachers, the lack of interaction with students weakens, demotivates, and generates loneliness. Furthermore, these issues modify the way classes are conducted. For P6: "The lack of visual interaction together with unanswered questions or monosyllabic responses that strain the online class to almost become a monologue are recurrent difficulties in my online classes."

Teachers demonstrate, therefore, that the silence of students directs pedagogical practice towards an expository class, where only the teacher speaks.

Therefore, the research participants emphasized that some feelings and emotions are involved in online classes. In the case of the early years, the feelings are more related to the concern regarding the time to listen to the contributions of all students. Therefore, we can perceive that teachers feel affection for the students in these classes since they speak and appear. For P3: "Interaction occurs effectively and affectionately, even if physically distant, in the early years." Overall, teachers report that the presence of students is essential to them. According to P4: "Actually, it's wonderful to receive feedback from students and have their presence in synchronous moments." Therefore, the need for the presence and participation of students in online classes is evident for teachers.

Final considerations

This article presented research developed with teachers experienced in basic education who answered a questionnaire about their difficulties, challenges, and overcoming strategies regarding online classes. The 29 responses obtained were read and fragmented according to the methodology of Discursive Textual Analysis (DTA), presented by Moraes and Galiazzi (2016) and detailed previously in the Methodological Procedures. The unitization of the corpus obtained resulted in 120 units of meaning, which, after categorization, resulted in three emergent categories, named The importance of interactions in online classes and their challenges; Strategies and possibilities for overcoming difficulties in online classes; Perceptions and feelings involved in participation in online classes.

The problem to be addressed with this research was: how to overcome teachers' loneliness in online courses from the perspective of teachers. The analysis based on the final categories provided important information for solving this problem.

In Category 1 - Units of meaning emphasizing the importance of interactions in online classes and the associated challenges were identified in the reports of participating teachers in the research. They highlighted the relevance of interaction to establish an effective connection between teachers and students. Additionally, they pointed out that for learning to be satisfactory, there must be exchanges between the individuals. Regarding the challenges, they highlighted technical issues such as lack of internet and equipment, as well as students'

disinterest, demonstrated by failure to submit assignments and silence even when called upon in class.

In Category 2 - Strategies and possibilities for overcoming difficulties in online classes, some ideas from teachers to overcome challenges were pointed out, such as creating relaxed moments to generate interaction, using games and internet language, with memes, gifs, or emojis. It was also highlighted that there is a significant difference between students in the early years and those in the later years of elementary and high school. Early years students participate actively in classes, and therefore, teachers need to include more time for conversations and exchanges in their planning. In the case of students from the later years onwards, interaction does not occur, and cameras remain off, prompting teachers to persistently seek strategies to engage students, making classes more playful, attractive, and relaxed.

In Category 3 - Perceptions and feelings involved in participation in online classes, it was possible to highlight teachers' views on students and the teachers' feelings. Regarding students, ideas about shyness, insecurity, and frustration emerged. With regard to teachers, some reports from research participants made their loneliness evident in the face of turned-off cameras and lack of interaction. Even though, in the early years, students interact and are affectionate, the behavior change when considering adolescents raises some questions, as it would be interesting to further investigate to understand what changes over the years, causing students to become silent and hide. After all, aren't adolescent students also lonely and insecure?

Certainly, teachers sought solutions to the problems that arose in online classes. Social distancing, necessary due to the pandemic, generated changes that will likely need to be monitored in the coming years. Computer-mediated classes altered the dynamics of face-to-face classes – physical contact, non-verbal communication, and simultaneous and collective conversation, all normal in the classroom. This had impacts on both students and teachers. As classes return to the pre-pandemic state, we can point to new studies to monitor what this remote period has left behind in terms of changes in relationships, methodological shifts, and pedagogical changes. At this moment, we can say that the challenges of online classes were significant and that over time, positive legacies from the learning and adaptations may emerge.

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