A new reality emerges: the experience of elderly teachers with remote teaching[a]

Uma nova realidade se apresenta: o ensino remoto na experiência de docentes idosos

Una nueva realidad se presenta: la teleenseñanza en la experiencia de los profesores mayores

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Abstract

Objective: to learn about the experiences of elderly teachers in remote teaching at different levels during the COVID-19 pandemic. **Method**: qualitative research with 15 elderly teachers from different levels of education in Rio de Janeiro, Brazil. An in-depth interview was conducted via video call with image and sound, from May 2022 to July 2023. Psycho-sociodemographic data were analyzed by absolute frequency and percentage, and lexical analysis was applied to the interviews using Alceste software. **Results**: work overload was identified, with consequences for physical and emotional well-being, affecting sleep, diet, and visual health, as well as causing stress and fatigue. The development of new teaching skills was crucial for adapting to the new reality of the workplace brought about by remote teaching. There were clear contrasts with greater participation in events and the unveiling of social inequalities, as evidenced by difficulties in accessing and handling the available technological resources. **Final considerations and implications for practice**: the challenges were met with external help in handling the platforms and learning, with efforts on the part of the elderly teachers to meet the demands of remote teaching. Continuing education programs are needed to introduce them to processes that require technological devices and virtual platforms.

Keywords: COVID-19; Teachers; Teaching; Elderly; Pandemics.

Resumo

Objetivo: conhecer as experiências de docentes idosos no ensino remoto, em diferentes níveis de ensino, durante a pandemia da COVID-19. **Método:** pesquisa qualitativa com 15 docentes idosos atuantes em níveis diversos de ensino, no Rio de Janeiro, Brasil. As entrevistas em profundidade foram realizadas por videochamada, entre maio de 2022 e julho de 2023. Os dados psicossociodemográficos foram analisados por frequência absoluta e percentual, e as entrevistas submetidas à análise lexical com o software Alceste. **Resultados:** identificou-se uma sobrecarga de trabalho com consequências no bem-estar físico e emocional, afetando o sono, a alimentação, a saúde visual, além de provocar estresse e cansaço. O desenvolvimento de novas habilidades docentes foi essencial para a adaptação à nova realidade do espaço laboral trazida pelo ensino remoto. Evidenciaram-se os contrastes com a maior participação em eventos e no desvelamento de desigualdades sociais, objetivadas nas dificuldades de acesso e no manuseio dos recursos tecnológicos disponíveis. **Considerações finais e implicações para a prática:** os desafios foram enfrentados com apoio externo para o uso das plataformas e aprendizagens, com esforços dos docentes idosos para atender às demandas do ensino remoto. Mostra-se que os programas de educação permanente são necessários para inseri-los nos processos que exigem aparatos tecnológicos e plataformas virtuais.

Palavras-chave: Covid-19; Docentes; Ensino; Pessoas Idosas; Pandemias.

Resumen

Objetivo: Comprender las experiencias del profesorado de mayor edad en la docencia remota, en diferentes niveles educativos, durante la pandemia de COVID-19. **Método:** Investigación cualitativa con 15 docentes de mayor edad que trabajan en diversos niveles educativos en Río de Janeiro, Brasil. Se realizaron entrevistas en profundidad por videollamada entre mayo de 2022 y julio de 2023. Los datos psicosociodemográficos se analizaron mediante frecuencia absoluta y porcentual, y las entrevistas se sometieron a análisis léxico mediante el software Alceste. **Resultados:** Se identificó la sobrecarga laboral, con consecuencias para el bienestar físico y emocional, afectando el sueño, la nutrición y la salud visual, además de causar estrés y fatiga. El desarrollo de nuevas habilidades docentes fue esencial para la adaptación a la nueva realidad laboral derivada de la docencia remota. Se destacaron los contrastes con el aumento de la participación en eventos y la revelación de desigualdades sociales, reflejadas en las dificultades para acceder y utilizar los recursos tecnológicos disponibles. **Consideraciones finales e implicaciones para la práctica:** Estos desafíos se abordaron con apoyo externo para el uso de plataformas y el aprendizaje, y con los esfuerzos del profesorado de mayor edad para satisfacer las demandas de la docencia remota. Así se demuestra la necesidad de que los programas de educación continua los integren a los procesos que requieren dispositivos tecnológicos y plataformas virtuales.

Palabras clave: COVID-19; Docentes; Anciano; Enseñanza; Pandemias.

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INTRODUCTION

In today's world, technologies are constantly improving, whether to develop faster and facilitate actions, such as improvements in access to healthcare, or to facilitate and/or enable work activities, studies, among others. The transformations observed in technological advances are also reflected in the increase in life expectancy, bringing about new ways of living, relating, and communicating. The adaptation of older adults to new technologies requires the acquisition of specific knowledge, which plays a significant role in today's world. Therefore, it is necessary to develop effective skills to enable them to participate in society, especially in virtual environments.[1]

This technological advancement is new to some older adults, and for others, it is far from practical, due to beliefs that modern technology is not designed for this population.[2] For a long time, older adults did not live with many technological devices, and the lack of skill development hinders their interaction with technological interfaces. It should be noted, however, that before the COVID-19 pandemic, almost half of the elderly population used the internet, and data from 2020 and 2021 indicated higher expectations for use, with cell phones being the most accessible due to familiarity with Digital Information and Communication Technologies (DICTs).[3]

When one thinks of technology, it is common to associate young people with greater ease of use. However, nowadays, in addition to young people, there are also older people who are embracing technology and developing their skills to communicate, use smartphones and other devices to search for information, and interact with others.[1] Increasingly, we see older people using technology intelligently, in light of a new perception of the current image of old age, transforming themselves into active individuals and participants in society.[4]

A review study indicated the need for older adults to be better prepared to access and use DICTs.[2] It is understood that, for older adults, communication technologies applied in everyday life are something new, and this novelty emerged decisively in the reconfiguration of teaching work during the COVID-19 pandemic, with the implementation of emergency remote teaching, made possible by electronic/digital technologies.

The reorganization of educational institutions, without the presence of students and teachers, while maintaining quality, would only be possible through the reconfiguration of ways of teaching and learning, working, giving classes, and applying tests and assessments, in a transition that was not easy and required skills, knowledge, and competencies for online teaching.[5]

A survey conducted in Brazil and Portugal with 259 teachers aged 60 or older investigated the use of digital technologies in teaching during the pandemic and found that half of them reported difficulties, feelings of uncertainty, and insecurity in handling different technological interfaces. This is because their professional training prepared them for teaching in face-to-face environments.[6]

Another survey, conducted in the Philippines based on YouTube news reports about the work of older teachers in emergency remote teaching, revealed that these professionals faced technical challenges, a need for support, health problems, and resilience, demonstrating persistence in adapting to the new reality.[7]

In general, older people may have difficulties adapting to digital technologies. For older teachers, it was necessary to develop new knowledge, assimilate the use of these technologies, learn them, and face their challenges with resilience and persistence to adapt to the new reality of online teaching.[7]

Online teaching did not emerge with the COVID-19 pandemic, as there were already different events and courses made possible by virtual tools, in synchronous and/or asynchronous formats, especially in the form of Distance Learning (DL). What happened during the pandemic was the adoption of remote teaching on an emergency basis, following DL guidelines with live, real-time online classes.[8]

Remote teaching, in the context of COVID-19, emerged with some peculiarities due to its connection to a global public health emergency (pandemic). Institutions were immediately required to organize themselves to continue courses, without teachers and students being sufficiently prepared, in terms of possession or skills in handling DICTs, to enable teaching in this format. In view of this, the objective of this article is to learn about the experiences of older teachers in remote teaching at different levels of education during the COVID-19 pandemic.

METHOD

This is a qualitative, descriptive, and exploratory study, following the guidelines of the Consolidated Criteria for Reporting Qualitative Research (COREQ), in the preparation of the research report.[9]

The qualitative approach was applied to elucidate knowledge, experience, and human action in the context of a work that presented itself as a daily novelty, being a good choice for studying phenomena that react to routine and seek to renew themselves, valuing human achievement and participation in the production of knowledge that is meaningful not only for individuals but also for society.[10-12]

Access to the target population was achieved using the snowball sampling method, considering the difficulty of proposing an initial probabilistic sample.[13] The "seed" was an elderly high school teacher, recommended to the principal investigator by her network of personal and professional contacts. Participants who teach in higher education were recruited by another "seed," recommended by a researcher from the research team working in the field of nursing, and from there, other participants were recruited.

Data collection was completed with the participation of 15 teachers from different subjects, upon reaching the saturation point.[14,15] As this was an exploratory study, whose purpose was to understand the nuances and general characteristics of the phenomenon under investigation, no specific teaching area or subject was selected, and care was taken to ensure that participants came from different levels of education, so that information could be gathered from different contexts and teaching experiences. The recruitment of participants was completed with three high

school teachers, one elementary school teacher, and 11 higher education teachers. None of those who agreed to participate withdrew.

The inclusion criteria were elderly teachers aged 60 years or older,[16] who worked or were teaching during the pandemic, remotely, in online classrooms. The exclusion criteria were those who worked in Distance Learning (DL) or hybrid modalities before 2020; teachers who were absent from work due to illness that prevented them from participating in online interviews. There were no exclusions.

The principal researcher collected data between May 2022 and July 2023, using online interviews. The structured questionnaire gathered data on sociodemographic, occupational, and psychosocial profiles, as well as on the technologies used and prior training in their use. The semi-structured questionnaire explored their experience of teaching online, potential advantages and difficulties, solutions found, student engagement, differences in teaching methods during the pandemic, among other topics. The interviews were recorded and lasted an average of 30 minutes. All were transcribed and organized into electronic files using Microsoft Office Word® software.

The data collected from the structured questions were statistically analyzed, applying absolute and percentage frequencies. The data from the semi-structured questions was compiled into a file with 15 Initial Context Units (ICUs), corresponding to the total number of participants. This file was processed using Alceste® software (version 2012), which performed a lexical analysis of the processed text segments, combined with calculations of the co-occurrence of words present in those segments. This procedure identifies word classes in their discursive contexts and lexical oppositions that help the researcher identify the different ideas circulating in the discourses and the knowledge of the groups.[17]

The grouping occurs based on the semantic roots of the words contained in the texts, and from there, the software generates figures, called dendrograms, which organize the classes of words into a Descending Hierarchical Classification (DHC), with the words with the highest statistical association expressed as a *Phi* value.

In the DHC, words are identified along with their frequency of appearance in the Lexical Class, measured by *Phi*. The set of words shows the meanings conveyed in the respective Lexical Class, but the meanings that enable the interpretation of the data are understood when exploring the Elementary Context Units (ECU), which are fragments of discourse selected by the software from the lexicons and statistically processed words. Lexical Class 3 highlighted the experiences of elderly teachers in remote teaching, in line with the objective.

The project was submitted to the Research Ethics Committee (REC) of the Anna Nery School of Nursing (EEAN) and the São Francisco de Assis Health Care Institute (HESFA) of the Universidade Federal do Rio de Janeiro (UFRJ) and was approved on March 18, 2022. The lead researcher presented the research to the guests, and upon acceptance of participation, the Free and Informed Consent Term (FICT) was signed.

RESULTS

Thirteen (87%) women and two (13%) men participated, aged between 60 and 78 years. Regarding educational levels, three (20%) had completed high school, one (7%) had completed elementary school, and 11 (73%) had completed higher education. The majority of the data were: nine (60%) with a *Stricto Sensu* postgraduate degree, nine (60%) worked in public institutions, 13 (87%) worked more than eight hours a day, and 11 (73%) worked in higher education.

The content of Lexical Class 3 highlighted the contrasts between the opportunities and challenges of remote teaching. Due to the profile, the ECUs in this class are mostly participants in higher education. The ease of quickly and easily participating in events that took place in other states and even other countries was evident, and there were challenges for students to attend classes due to poor Internet access, among other difficulties, and even the suspension of enrollment because they needed to work to generate income for their families.

Lexical Class 3 accounted for 10% of the total ECUs that make up the analysis corpus and consisted of 88 reduced forms of full words. The analysis of the lexicons associated with Class 3 highlighted teachers' concerns about how knowledge/information reaches students and the extent to which social inequality was present in this context. Remote teaching and participation with closed cameras made it impossible to know if students were really paying attention to classes. On the other hand, it was easier to access conferences, courses, and seminars online.

The UCEs in Class 3 help in understanding the contexts in which the lexicons are inserted, considering the relationship between these words expressed through DHC. The lexicon most associated with this Class refers to "students," with Phi 0.36, as can be seen in Table 1.

Social distancing has led to a restructuring of work, with the workplace shifting to the home, and has contributed to increasing the participation of teachers and students in academic and scientific activities carried out in different geographical locations.

> *We do see presentations, but master's and doctoral thesis examinations are still happening remotely. So that's it, it has made things much easier, conferences, symposiums, which we can access from all over Brazil, remotely.*
>
> (ICU 11, higher education teacher).
>
> *It promotes international dialogue or dialogue across the country, so in that sense, it contributes* (ICU 8, higher education teacher).

The quality of interaction encompassed both relationships and resources. The quality of the internet had an impact on students' ability to connect and maintain their connections. The simultaneous use of all resources, such as cameras and microphones, affected the quality of transmission and reception and influenced the quality of interaction.

Table 1. Representative words from Class 3, according to the descending hierarchical classification dendrogram generated by Alceste. Rio de Janeiro (RJ), Brazil, 2023, (n=15).

Words	F	Phi
Students	24	0.36
Fact	6	0.34
Interaction	7	0.34
International	6	0.31
Brazil	6	0.28
Relationship	8	0.26
Meaning	7	0.24
Examinations	4	0.24
Participate	14	0.24
Congress	7	0.24
Behavior	4	0.24
Program	5	0.22
Access	15	0.20
Example	9	0.20
Follow up	6	0.20
Difficulty	14	0.20
Great	3	0.20
See	4	0.19
To	4	0.19
Return	6	0.19
Postgraduate	5	0.18
Generate	4	0.17
Guidance	4	0.15
Can	8	0.15
Language	4	0.15
Point	3	0.15
Pleasant	3	0.15

Source: Detailed report generated by Alceste® software 2023.

We couldn't really tell how much they were participating and how many were participating more effectively. I taught classes and managed to develop my content well, but now the relationship with the students has been totally compromised, which ends up limiting things. It's not the same in person; it was a complicating factor. Even because of the internet, most cameras were off, microphones were off, and we lost track of how much they were actually participating, so those who were always participatory, I think, maintained that level of participation. In terms of monitoring how much they were actually developing, face-to-face teaching is undoubtedly the best and most

enjoyable, as it allows me to interact more with the students (ICU 7, higher education teacher).

The pandemic has further highlighted social inequalities in internet access. Participating teachers highlighted these inequalities, identified in students' and their families' realities, with the scarcity of computer resources and access to a good Wi-Fi connection, for example. Teachers identified these inequalities as one of the drawbacks of this teaching modality, in addition to the necessary adaptation of language and attention to writing.

Among Brazilian students, it is very precarious. I had students whom I followed more closely, whom I tutored, who had difficulties with their internet package, who lived in a community where the internet was, let's say, clandestine. The problem with remote learning is that it is not inclusive; it does not ensure the same equality for everyone, as not everyone has the same access to units (ICU 8, higher education teacher).

They went back to work right away, like nurses and IT technicians; they had to work, and they worked in shifts. So, this was very difficult for parents in terms of the change in behavior that their children had to adopt with regard to going to class, which would be remote classes (ICU 9, high school teacher).

The mothers lost their jobs, and then they also had to resort to strategies to generate income, and so many dropped out of school to earn money to survive (ICU 7, university professor).

We had a large number of students dropping out of university in general, a general dropout rate in Brazil. But, specifically in the program I taught, I didn't see it. In graduate school, it was much better (ICU 13, higher education teacher).

They have a lot of difficulty writing. I saw this a lot in their writing and behavior, so much so that, for example, to do the teleconsultation, I had a meeting with the whole class to explain the procedures. But you see a gap. Basic knowledge, communication skills. This behavioral issue. When I was the program coordinator, I introduced content on literacy because the use of language, especially in the discussion of care and guidance, is fundamental, especially with the elderly. In principle, when you do remote work, it is not so easy to adapt the language adapt the material; there are a number of issues. I really had help in this regard (ICU 10, higher education teacher).

The results of Class 3 revealed contrasts concerning free and broad access to the internet, the quality of the equipment available to people, and mastery of the tools that strongly affected students. Difficulties in behavior in the new (virtual) space and written communication were evident. On the other hand, teachers'

satisfaction with access to events stands out, creating new opportunities for participation.

DISCUSSION

The Ministry of Education (MEC) in Ordinance No. 544, dated June 16, 2020, provided for the replacement of face-to-face classes with digital classes during the pandemic. Teachers and students across the entire education system had to adapt to the new class format, and teaching platforms had to be improved to meet the emerging demand.

Many public and private schools and universities adopted remote learning to ensure the continuity of educational activities. Students attended classes regularly via computers, tablets, or cell phones connected to the internet using platforms such as Zoom, WhatsApp, Skype, YouTube, and Google Meet, following the established calendar.[18]

The problems that affected teaching on virtual platforms were diverse, as online teaching differs from offline teaching. In both cases, institutions depend on teaching platforms and network services, but if there is a failure in the online mode, classes are automatically suspended. In addition, teachers are accustomed to the traditional form of teaching, which involves physical proximity, and this alone is an important difference between virtual and traditional classrooms.[19] The results clearly showed a preference for physical classroom teaching, particularly because of the direct interaction between teacher and student.

In addition, motivating students to develop the attention and interest necessary for learning in a virtual classroom environment was a laborious task for teachers. Monitoring each student's learning process became difficult, as teachers couldn't watch students interacting with each other and with the teacher. Some students may also have stopped attending classes to engage in other activities, such as playing games, watching movies, and so on,[19] as shown by the results on the difficulty of verifying effective participation through attendance. Therefore, this monitoring by teachers also needed to be reconfigured to suit the virtual environment, due to remote teaching.

Participation in remote classes requires those involved (students and teachers) to have a technological device (cell phone, tablet, or laptop) and internet access. Some students did not have an internet connection available in their homes, or when they did, the quality was unsatisfactory. In some families, technological devices were shared among members, which made individual access difficult. Another issue concerns the need to support or supplement family income, which led many students to enter the labor market. These situations resulted in low attendance, reduced participation in online classes, and even enrollment suspensions.

A systematic review of the literature that sought to assess the challenges of remote learning during the COVID-19 pandemic showed that some of the major challenges during that phase were the lack of conditions and resources, such as computers, tablets, or cell phones, internet with the capacity to support online classes, and personal skills to handle new technologies.[18]

In Brazil, 84% of households—about 64 million homes—are connected to the internet, with advances mainly observed among people in the C class; however, access is still unequal and restricts the development of digital skills, as well as the enjoyment of the benefits that the internet offers.[20]

These data highlight the inequality of access to the global computer network and, in line with a documentary survey conducted in 2020,[21] corroborate the reflection on the exclusion that remote learning can produce. The authors also highlight the damage caused to the quality of public education and the increase in educational inequality. Based on the results of the documentary research, the following measures are suggested to minimize exclusion: training teachers in the use of information and communication technologies, providing equipment to students who cannot afford it, and offering internet packages to students in vulnerable situations.[21]

A study conducted in Chile showed that the lessons learned from remote teaching during the pandemic covered instrumental issues, such as the expansion of digital technologies to address content and interaction, and innovations in assessments. One of the contributions was the development of an empathetic attitude among teachers to understand the situations faced by students.[22] This Chilean study did not involve older teachers, but its results dealt with teaching experiences similar to those presented here with older teachers.

Even with the challenges of remote learning, tech tools helped teachers expand opportunities to participate in events in Brazil and abroad. This teaching modality proved to be a favorable alternative during the pandemic, with technologies being used to the advantage of those who knew how to use them, enabling knowledge to reach many students.[23] Teachers experienced new realities and opportunities for interaction provided by this unusual experience.

Remote learning has enabled the use of platforms that are available and open for other purposes, not just education, as well as introducing auxiliary tools and innovative practices. Therefore, it is known that remote learning has its potentialities and challenges, and with these come people, technologies, expertise, and infrastructure.[24]

Thus, digital literacy is necessary for technological resources to be used effectively in favor of education at all levels. The concept must be understood in the plural, as each platform, application, and network imposes different forms of communication, reading, and writing. The teaching-learning process enabled by digital resources requires the development of new mindsets and attitudes, innovative thoughts and actions that encompass techniques, ethics, and practices, the understanding of new languages, and the formation of new types of readers.[25]

The problems faced by older teachers are similar to those experienced, in general, by teachers in the public basic education system. In the face of the COVID-19 pandemic, there was an abrupt shift from face-to-face to virtual teaching, without technical support or prior planning for the implementation of this new modality. The precariousness of students' access to the virtual environment,

coupled with work overload and the need to develop new teaching skills, became evident in this new reality of the teaching-learning workplace.[26] As for work overload, consequences were observed in physical and emotional illness, with significant impacts on sleep, nutrition, visual health, stress, and fatigue.[27]

The sudden change in working practices, combined with the handling of new equipment and the mastery of devices that were previously little or not used by older teachers, emerged as a novelty that required adaptation and new learning,[1] so that teachers had to undergo processes of transforming knowledge from what was previously familiar to them — in the physical classroom and face-to-face interaction with students — to learn how to deal with an unfamiliar space that requires new learning and meanings to carry out their practices incorporated into this new daily routine.

To adapt to new demands, it is necessary to expand knowledge about the new features incorporated. In the case of teaching mediated by virtual environments, this is no different, especially when those responsible for teaching are older people who are not yet so familiar with so many technological advances, which they see in their daily lives as novelties to be explored.[2]

Remote teaching during the COVID-19 pandemic has emerged as a fertile field for the formation of new knowledge for older teachers, as it identifies the efforts these teachers have made in (re)constructing reality, to guide them in their interpretations and organization of a new reality that has presented itself in their field of work.[28,29] This interpretive effort has a practical function and helps individuals and social groups to guide their decisions, justifying their positions regarding the object/phenomenon being interpreted.[11]

The results reinforce statements found in other studies, such as those indicated in a review study, which, among other proposals, stated that teachers' resistance to new technologies should be addressed by institutions through training.[30] And, in the case of this review, there were no specifics regarding older teachers, but it should be noted that resistance may also be linked to the fact that teachers belong to a generation that did not grow up immersed in a digital culture, and this fact may intimidate or create discomfort for them in dealing with new digital technologies in teaching.[30]

It should be noted that the survey results with older teachers reinforce the existence of social inequalities in the population, which was strongly evident in the field of education when remote learning was offered.[31] They also show that, although the older people participating in this survey had higher education and worked as teachers, they also needed updates and skills related to DICTs.

In the meantime, a phenomenological approach study was conducted to explore the attitudes of older teachers toward the integration of technological innovations in teaching. It should be noted that, although the objective of this research was focused on the category of older teachers, the participants in the research were between 45 and 48 years old, which, in light of the classification adopted in this article, classifies them as

adults and, in this discussion, as experienced teachers. Even so, the results were interesting, as there was cognitive, behavioral, and affective resistance to change, such as fear of becoming obsolete, of being fired, nostalgia, difficulties in assimilating new methods, and high consumption of time and energy. It is also noteworthy that the incorporation of new technologies in teaching was perceived as an obligation rather than an individual desire. To face the challenges, they reported that they needed support, especially from educational institutions, so that the incorporation of innovations would be perceived as a positive measure.[32]

In the midst of this debate, in light of the studies that served as references, it was identified that the difficulties inherent to remote teaching do not seem to be exclusive to older teachers, but can be exacerbated by this condition, considering so many other issues that people already face in the social and work world due to being over 60 years of age.

What is identified as a common suggestion is that educational institutions should promote strategies that meet teachers' needs, and digital inclusion should not only be offered in extension activities for the external population, but also within the scope of the teachers themselves.

FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

The difficulties faced by older teachers are similar to those faced by other older people (non-teachers) and younger teachers, which shows that this is a common problem for this population and professional group. Adapting to the new teaching reality was urgent, and the challenges were met with external assistance in handling the platforms and promoting learning, with efforts made by older teachers to meet the demands of remote teaching. The contrasting faces of remote teaching were evident in the expansion of opportunities to participate in events and in the unveiling of social inequalities, expressed in the difficulties of accessing and handling the available technological resources.

It is worth noting how hard older teachers worked to meet the demands placed on them, which showed that this population group has great potential to contribute to productive work, with the ability to adapt and learn new things, contrary to stereotypes that sometimes marginalize them from new contemporary demands.

There is a clear need to promote continuing education for teachers, especially those in the older age group who are still active in the workforce and need to update their skills to manage new teaching and learning technologies so that, through new learning, they can more effectively and confidently engage in processes that require technological devices and virtual platforms.

The COVID-19 pandemic and its consequences on the reconfiguration of teaching work have highlighted the urgent need to implement policies in this regard, given the efforts made by older teachers to meet the demands of their profession, which are likely to increase due to the aging of the world's population.

In light of the results presented, the debate, and the reflections fostered, it can be observed that contributions to the achievement

of sustainable development goals were also glimpsed, with regard to the promotion of quality education, health and well-being, decent work, and economic development.

As limitations, it is noted that the method did not include qualitative sampling by variables of educational levels and gender. Such variables would contribute to an in-depth analysis of the similarities and differences between the experiences of teachers in elementary, secondary, and higher education, while the gender variable would make it possible to highlight specific issues faced by women and men concerning remote work in the context of the pandemic. This indicates potential areas for future research.

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DATA AVAILABILITY RESEARCH

The content underlying the research text is included in the article.

CONFLICT OF INTEREST

No conflict of interest.

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