

TEACHING PRACTICE IN A PANDEMIC TIME: A STUDY WITH TEACHERS OF PROFESSIONAL, SCIENTIFIC AND TECHNOLOGICAL EDUCATION OF RONDÔNIA, CAMPUS COLORADO DO OESTE

PRÁCTICA DOCENTE EN TIEMPO DE PANDEMIA: UN ESTUDIO CON DOCENTES DE LA EDUCACIÓN PROFESIONAL CIENTÍFICA Y TECNOLÓGICA EN RONDÔNIA, CAMPUS DE COLORADO DO OESTE

PRÁTICA DOCENTE EM TEMPO DE PANDEMIA: UM ESTUDO COM OS PROFESSORES DA EDUCAÇÃO PROFISSIONAL CIENTÍFICA E TECNOLÓGICA DE RONDÔNIA, CAMPUS COLORADO DO OESTE

Francinei de Jesus Ribeiro ¹
Diego Soares Carvalho ²
Gean Carlos de Souza Albuquerque ³

Manuscript received on: November 29, 2022.

Approved on: November 24, 2023.

Published on: January 1, 2024.

Abstract

Education in times of a pandemic is seen as a perspective of sudden change in educational reality, under this view the objective of this work was to carry out an investigation into the Digital Information and Communication Technologies (TDIC) and the difficulties faced by teachers at the Federal Institute of Education, Science and Technology of Rondônia, *Campus Colorado do Oeste* in their teaching practice in times of a pandemic and instigate new studies seeking a better adaptation of the current educational society, in view of the use of digital platforms as well as the use of available technologies. The research is of the mixed type and was carried out with the application of a questionnaire. The results obtained demonstrate the need for the use of TDIC by the teachers interviewed to adapt to remote teaching. In addition, we evidenced the need to further expand discussions on the lack of use of digital tools in the transposition of content for teaching and learning during remote teaching. Through this, we believe it is possible to identify the main educational difficulties to be improved and the possibilities that can be adopted by teachers and school managers.

Keywords: Remote learning; Pandemic; Education.

¹ Specialist in Mathematics and Biology Teaching Methodology at Faculdade Venda Nova do Imigrante. Member of the research group Member of the Education and Integrated Practices research group.

ORCID: <https://orcid.org/0000-0002-5679-9320> Contact: francinei.ribeiro1999@gmail.com

² Doctorate in Pharmacology from the Federal University of São Paulo. Professor in the Postgraduate Program in Professional and Technological Education at the Federal Institute of Education, Science and Technology of Rondônia. Member of the Education and Integrated Practices research group.

ORCID: <https://orcid.org/0000-0001-5982-3798> Contact: diego.carvalho@ifro.edu.br

³ Master's student in Science Education at the State University of Western Paraná. Specialist in Higher Education Planning and Teaching at Escola Superior Aberta do Brasil. Member of the Education and Integrated Practices research group.

ORCID: <https://orcid.org/0000-0001-8696-3294> Contact: geancarlosalbuquerque@gmail.com

Resumen

La educación en tiempos de pandemia es vista como una perspectiva de cambio repentino de la realidad educativa, desde este punto de vista el objetivo de este trabajo fue realizar una investigación sobre las Tecnologías Digitales de la Información y la Comunicación (TDIC) y las dificultades que enfrentan los docentes del Instituto Federal de Educación, Ciencia y Tecnología de Rondônia, *Campus Colorado do Oeste* en su práctica docente en tiempos de pandemia y impulsar nuevos estudios buscando una mejor adaptación de la sociedad educativa actual, teniendo en vista el uso de las plataformas digitales así como el uso de las tecnologías disponibles. La investigación es del tipo mixta y se realizó con la aplicación de un cuestionario. Los resultados obtenidos demuestran la necesidad del uso de las TDIC por parte de los docentes entrevistados para adaptarse a la enseñanza a distancia. Además, destacamos la necesidad de ampliar aún más las discusiones sobre la falta de uso de herramientas digitales en la transposición de contenidos para la enseñanza y el aprendizaje durante la enseñanza a distancia. A través de esto, creemos que es posible identificar las principales dificultades educativas a mejorar y las posibilidades que pueden ser adoptadas por los docentes y directivos escolares.

Palabras clave: Enseñanza remota; Pandemia; Educación.

Resumo

A educação em tempo de pandemia é vista como uma perspectiva de mudança repentina da realidade educacional, sob essa visão o objetivo deste trabalho foi fazer uma investigação sobre as Tecnologias Digitais da Informação e Comunicação (TDIC) e as dificuldades enfrentadas pelos professores do Instituto Federal de Educação, Ciência e Tecnologia de Rondônia, *Campus Colorado do Oeste* em sua prática docente em tempo de pandemia e instigar novos estudos buscando uma melhor adaptação da sociedade educacional atual, tendo em vista o uso de plataformas digitais bem como o uso das tecnologias disponíveis. A pesquisa é do tipo mista e foi realizada com a aplicação de questionário. Os resultados obtidos demonstram a necessidade de utilização das TDIC pelos professores entrevistados para adaptação frente ao ensino remoto. Além disso, evidenciamos a necessidade de ampliar ainda mais as discussões sobre a carência do uso das ferramentas digitais na transposição dos conteúdos para ensino e aprendizagem durante o ensino remoto. Através disso, acreditamos ser possível identificar as principais dificuldades educacionais enfrentadas pelos docentes na prática do ensino remoto e as possibilidades de melhorias a serem adotadas pelos professores e gestores de escolas.

Palavras-chave: Ensino Remoto; Pandemia; Educação.

Introduction

The crisis caused by COVID-19 triggered the disruption of regular face-to-face classes, and consequently the emergence of a new emergency educational organization (Dias; Pinto, 2020). Around 90% of students were directly affected by the abrupt suspension of classes (UNESCO, 2020). There is no doubt that the pandemic caused by SARS-CoV-2 has disrupted various segments of society and especially the functioning of contemporary societies (Marques, 2020).

We know that COVID 19 has taken everyone by surprise and changed our routines in literally every way. Adaptation has been necessary more than ever in recent months. Investing in remote education and using the new technologies available has become one of the ways to maintain academic activities, given that this reality of remote learning is no longer just an alternative and is now seen as a strategy and a priority (Dubeux et al., 2007). Before COVID-19, educational managers already had in mind the need to use the virtual environment as a link to learn, which makes it clear that this thinking has only accelerated its implementation, turning this type of distance education from a necessity to a reality (Dubeux et al., 2007).

Along with the alternative of new educational attitudes and new teaching strategies came challenges. There was a huge concern on the part of the Ministry of Education (MEC), teachers and even students' parents as to how they would achieve teaching quality during the remote period. Realizing this concern, the use of Digital Information and Communication Technologies (DICT) in teaching has become a reality and there has been a great intensification, forcing all sectors to become hostages to technology (Santos; Carvalho; Azevedo, 2021). This new reality has required teachers to completely adapt their methodologies and has caused major impacts (Santos; Carvalho; Azevedo, 2021), making it a major challenge to be faced.

This new reality demanded, especially from teachers, the total adaptation of their methodologies and caused significant impacts (Santos; Carvalho; Azevedo, 2021), becoming a major challenge to be faced. The implementation process of these technologies is challenging, but according to Silva, Alves, and Fernandes (2021, p. 10), the use of technological resources in education is "necessary, enriching, transformative, and urgent".

The change in the educational process is challenging for everyone: administrators, students, and teachers (Silva; Alves; Fernandes, 2021). Faced with this new educational perspective, the situation of teachers has become even more concerning because it demanded an abrupt adaptation from educators in the face of the installed calamity, leading to exhaustion, concern, stress, and compromising the mental health of teachers (Semis et al., 2020).

Thus, several educators have expressed their concerns about the challenges faced in relation to remote teaching. As evidence of this, Godoi et al. (2020) depict the difficulty teachers encountered in adapting to new tools for remote teaching. According to the authors, it was necessary to step out of the comfort zone, dedicate more time to lesson planning, and experience an overload and fatigue in their day-to-day lives in this new reality.

Against this backdrop of difficulties, several institutions have sought alternative means of better conducting remote teaching. One example of this was opting for the use of TDIC. These technologies can be understood as a set of media that use digital technology, among which we can mention the use of virtual learning environments, digital platforms such as YouTube, Google Classroom, Moodle, OBS studio, among others (Godoi et al., 2020). The choice of the best technology to be used by the teacher is reflected in the need to prepare a virtual classroom that captivates and holds the students' attention (Godoi et al., 2020).

This study proposes a survey of data on the DICTs used by teachers and the possible difficulties during the pandemic based on the situation of higher education and high school teachers at the IFRO Campus Colorado do Oeste, aiming above all to reach and evaluate the main methods that teachers used for the proper development of classes during the pandemic period.

Methodology

The project that generated this article was submitted to the Research Ethics Committee (CEP) and approved under opinion no. 5.351.796. The work is a mixed investigation which, according to Creswell (2007), combines quantitative and qualitative parts in the same research. The quantitative part of this research comes from the intention to find and quantify the tools, platforms and difficulties faced by teachers in the pandemic period and the qualitative part is given by the analyzes that bring depth to the data extracted.

The research sought to understand and describe the difficulties faced by public school and college teachers during the pandemic. The research was carried out using a questionnaire which, according to Gil (1999), can collect data based on situations experienced by the respondents. The questionnaire was made using Google Forms, a platform provided by Google, which proved to be effective for the research carried out since it could reach a large number of teachers in a short space of time.

The questionnaire consisted of 18 questions. The first four questions sought to characterize the teacher's gender, academic background, subjects taught during the research period and which IFRO course they were teaching. The following questions asked about the DICTs known and used in remote teaching, about training to work in this type of teaching, about student engagement with these DICTs, about learning with these technologies during the period, about support from school/academic management, about the difficulties encountered during the period of remote teaching and, finally, a self-assessment of performance at the end. Before being submitted to the participating teachers, the questionnaire was validated by the authors' research groups.

The public chosen for the research were all the teachers who taught in higher and secondary education at the IFRO Campus Colorado do Oeste. The specific campus was chosen because it is where the researchers work. No minimum selection criteria were established for the sample of teachers due to the number of respondents who were willing to take part in the survey.

According to the People Management Coordination (CGP) of the IFRO Colorado do Oeste Campus, the number of teachers working at the time of the survey is 92. The campus is in the rural area of the municipality and is a farm school. According to the CGP, it has more than 1,200 students enrolled. The courses available at the Campus are a technical course (Agricultural Technician) integrated with secondary education, five higher education courses, one of which is a degree (Biological Sciences), one is technological (Environmental Management) and three are bachelor's degrees (Agronomic Engineering, Veterinary Medicine and Zootechnics), as well as postgraduate courses and courses offered by Distance Education (EaD).

Firstly, the IFRO Office was asked to publicize the research to the teaching staff via an institutional e-mail addressed to all teachers at the same time. The Informed Consent Form (ICF) was attached to this e-mail. Once the signed informed consent form had been received, the questionnaire was made available to those who confirmed their participation.

To analyze the data, we used the platform on which the questions were proposed. This choice was made because the platform already quantitatively presented the data from the answers organized by Figures. There was no need for a qualitative analysis methodology. The open questions were specific to understand directly what the teachers' answers showed. In this way, the qualitative part of the research will be carried out by discussing the quantitative results in relation to the answers to the open questions. The teachers were represented in this research by letters of the alphabet A-M.

Results and Discussions

There were 92 teachers eligible to take part in the survey, but only 13 answered the questionnaire. The questionnaire began with a brief characterization of the teacher respondents. By characterizing the academic background of the respondents (table 01), the teachers would choose their highest degree at the time of the survey. Among the participating teachers, the highest number of teachers with a doctorate (06), followed by a master's degree (05) and an undergraduate degree and post-doctorate (01). It is worth noting that all the teachers who took part had worked in remote teaching during the pandemic.

Table 01: Academic Background of the respondents

Academic Background	Number of teachers
Specialization	01
Master's degree	05
Doctorate degree	06
Pos-doctorate degree	01

Source: Prepared by the authors (2022).

Regarding the question asking which subject or subjects the teachers taught, the teachers interviewed could choose more than one subject, as shown in table 02.

Table 02: Courses taught by teachers

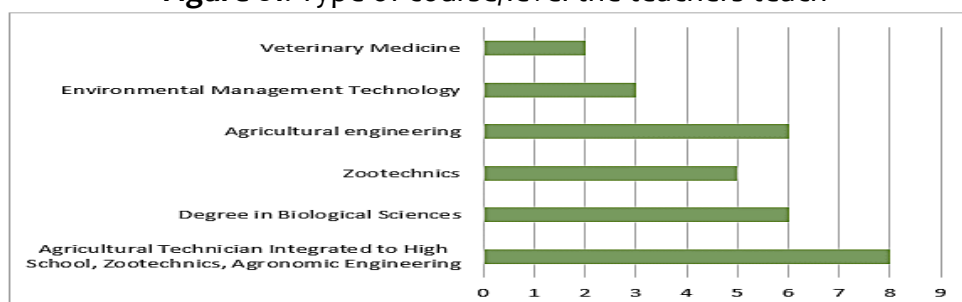
Teachers	Courses
Teacher "A"	Biology, Parasitology, Embryology, Histology, Microbiology
Teacher "B"	Sociology, Rural Sociology, Politics and economics of natural resources and agro-environmental conflicts
Teacher "C"	Cell biology, Extension Project Methodology, Paleontology and Systematics of algae and cryptograms
Teacher "D"	Arts
Teacher "E"	Biology, Immunology, Human Anatomy, Biology and Systematics of Phanerogams, Basic Genetics and Plant Physiology
Teacher "F"	Inclusive Education, School Management, Libras and Teaching Methodology for EJA
Teacher "G"	Genetics, Cell Biology, Plant Biotechnology
Teacher "H"	Portuguese language
Teacher "I"	Biology – 1st, Biology – 2snd, Zoology and Parasitology and Wild Anima Production
Teacher "J"	Basic Mathematics, Fundamental Mathematics, Calculus I, Fundamentals of Calculus
Teacher "K"	Courses related to teacher training and CBT
Teacher "L"	Biology
Teacher "M"	Soils and Production of Rice, Cotton, Coffee and Cassava

Source: Prepared by the authors (2022).

The largest number of respondents, as seen above, is related to the area of Biological Sciences, but there is also participation from teachers in teacher training, Sociology, Art, Portuguese Language, Mathematics and Agronomy. These teachers can work in different areas within the campus, since both the higher education courses and the technical courses integrated with secondary education cover most of the areas described.

As we saw earlier, the Federal Institute of Rondônia Colorado do Oeste Campus offers technical education integrated with secondary education, as well as higher education. Figure 1 below shows in which higher education courses the teachers in the survey work.

Figure 01: Type of course/level the teachers teach

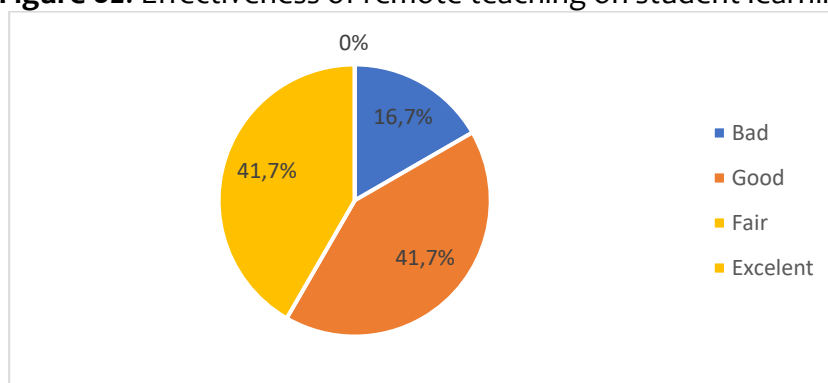


Source: Prepared by the authors (2022).

There are more teachers on the Agricultural Technician course. The campus has the largest number of students on this course, so it needs a larger number of teachers. The figures for the Biological Sciences Degree, Agronomic Engineering and Environmental Management Technology are also justified by Table 2, which shows a greater number of teachers in the biology area. The Agronomic Engineering, Zootechnics and bachelor's degree courses are courses in which teachers trained in this area can work concurrently. The Veterinary Medicine course would also fit into the previous classification, but at the time of the survey the course was still in its first classes, requiring a smaller number of teachers, which reflects the small number of teachers participating in the survey in the results.

Having characterized the teachers taking part in the survey, we asked them about the effectiveness of remote teaching in student learning. A scale from very poor to excellent was proposed so that we could obtain a dimension of the teachers' perception of this effectiveness. The results can be seen in figure 02.

Figure 02: Effectiveness of remote teaching on student learning



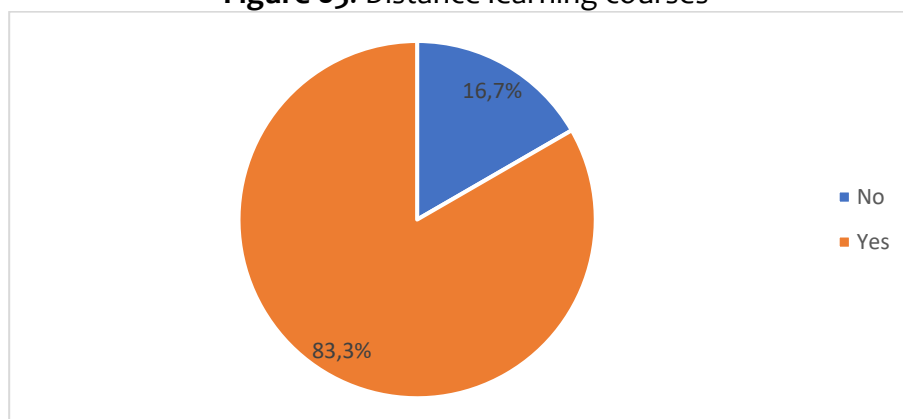
Source: Prepared by the authors (2022).

Among the teachers, 16.7% consider remote teaching to be terrible, i.e., there is no learning during the remote period or it has taken place minimally. 41.7% of the teachers said that remote teaching was good and 41.7% of the teachers said that remote teaching was reasonable and none of the interviewees said that it was excellent, showing that remote teaching does not meet the educational needs of face-to-face teaching. Behar (2020) points out that in face-to-face teaching there is monitoring of the cognitive and emotional trajectory of students, providing interaction within a

geographical space, and it is precisely this abrupt change that has led to greater attention to the "social being" that the author highlights in her study on emergency remote teaching and distance education. According to the author, if there is to be harmony in teaching, adaptations and the growing reinvention of all education professionals are needed to organize and make hybrid education possible.

In response to the previous question, it was necessary to investigate among the teachers interviewed whether they had taken any distance learning courses, be they for further training, undergraduate, postgraduate, master's, doctoral or post-doctoral courses. As shown in figure 3, we saw that 83.3% of the teachers had already taken online courses and only 16.7% had not taken any distance learning courses, justifying that they had never been interested in taking non-face-to-face courses.

Figure 03: Distance learning courses

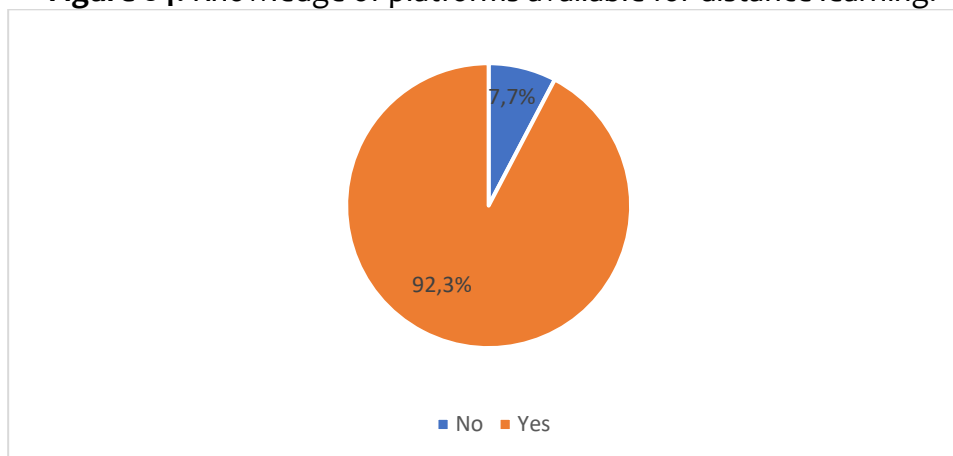


Source: Prepared by the authors (2022).

According to figure 3, the virtual world aimed at improving learning is present in teachers' training, making it clear that distance learning can offer a knowledge base and that, unlike face-to-face teaching, it offers a basis for self-learning, with interaction only between subject and material or teacher and student (SANTOS, 2009). Although most of the answers, as we see in figure 02, suggest that remote learning has not achieved the objectives that teachers had hoped for until then, they have also opted to take non-face-to-face courses at some point in their lives. It is therefore worth looking more closely at the issue of learning during remote teaching to understand what factors lead to and influence this possible ineffectiveness of this type of teaching.

Turning our gaze now to remote teaching, we understand that this modality requires education professionals to be skilled with digital tools and platforms. To investigate and better understand their knowledge of the existence of these tools and platforms, we asked the teachers about their knowledge of them, as shown in figure 04.

Figure 04: Knowledge of platforms available for distance learning.



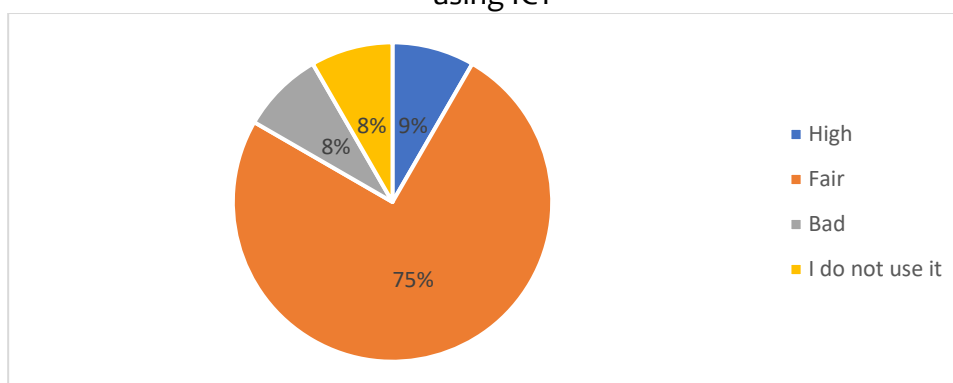
Source: Prepared by the authors (2022).

Among the respondents, 92.3% said they knew of digital platforms that would help with remote teaching, while 7.7% said they did not. This large number is reflected in the use of the platform used concurrently with face-to-face teaching at IFRO, the *Virtual Learning Environment* (moodle), known on campus as the AVA platform. This platform is optional for teachers to use during face-to-face classes.

The second question asked what platforms/tools they were familiar with. Among the answers were moodle (AVA platform) from IFRO's own network, *Google Classroom*, *Google sites* and *Google meet*. Analyzing the answers, the *Google Meet* platform was the most mentioned by the teachers, given that it is one of the tools that was recommended during the remote period. The IFRO Colorado do Oeste Campus does not specify which platform the teacher should use, leaving it up to the teacher to select the tool that best suits them to make their lessons available. As well as *Google meet*, which was used for synchronous classes, i.e. with live student participation, moodle and *Google Classroom* were used to provide content, articles, links and even classes recorded on other platforms.

Our questionnaire also sought to find out the teacher's perception of student engagement during the remote period. It ranged from poor engagement to high engagement. Figure 05 shows that engagement was mostly average. We know that just as teachers need to master the basic functionalities of the platform used in their classes, students also need to do the same.

Figure 05: Degree of engagement attributed by the teachers interviewed to students using ICT



Source: Prepared by the authors (2022).

Of the respondents, 8.3% said that the students had a high level of engagement, 75% said that their engagement was average, 8.3% said that it was terrible and 8.3% said that they didn't use any ICT in their classes. This engagement is linked to the students' participation in the class and for many can only be related to their presence during the synchronous period.

Some platforms allowed the teacher to check student participation in the proposed activities even asynchronously, checking the student's time to complete the activity. Another factor that deserves attention and can influence this engagement is the student's presence in synchronous classes. Due to the reality of the students at the Colorado do Oeste Campus, attendance at synchronous classes was not compulsory.

According to Santos (2009), although TIC are indispensable resources during the remote period, what influences learning are not only the tools and platforms used, but also the ways in which they are used pedagogically. In addition to this, we face the challenge, for the learning process, of a lack of student participation in both synchronous and asynchronous moments, as well as a lack of preparedness among students for the new tools (Souza, et al., 2023).

According to Santos (2009), although DICTs are indispensable resources during the remote period, what influences learning is not only the tools and platforms used, but also the ways in which they are used pedagogically. The results showed a minimum percentage of non-use of DICTs, and we understand that non-use of DICTs makes teaching during the remote period impossible. In this way, there is the possibility of some other method being used that was not covered in the survey, but we also considered the fact that the teacher may not know what an ICTD is and/or how to classify it.

Regarding which TDIC we present in table 03 which tools/platforms were used to teach classes during the pandemic period.

Table 03: Platform used by the teacher to deliver lessons.

Plataform	Number of teachers
Google Meet	13
OBS Studios	04
Google classroom	03
Moodle	10
Powerpoint	01
Whatsapp	02
Kahoot	01
Google sites	01

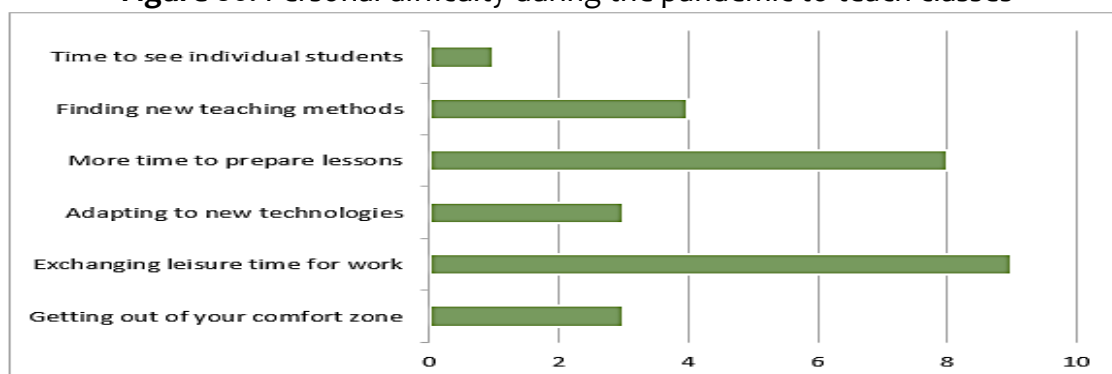
Source: Prepared by the authors (2022).

All the participating teachers mentioned using *Google meet*, a tool that enabled synchronous classes and which was suggested as a tool during meetings about remote teaching. Ten teachers used moodle - it's worth noting that IFRO has already made the moodle platform available to teachers since 2016 - and nine teachers said that in addition to moodle they also used *Google meet*. In addition, four teachers said they used OBS studios, three *Google Classroom* and two *Whatsapp*. Many teachers already used distance learning methodologies in their classes), *Power Point for Windows* (classes recorded directly in Power Point), *Kahoot* and *Google sites*.

The use of Meet in remote teaching, as the results show, is justified by the license purchased by the institution, its suggested use and its ease of use and available resources, which can be accessed via a computer browser or via applications available on cell phones or tablets. Knowing the reality of the students on campus, this was one of the best solutions found for remote teaching.

The answers to the following questions give us an idea of the difficulties faced by teachers during the COVID-19 pandemic. "With the advent of this new teaching modality, there was a great discomfort among the teachers" (SOUZA, et al., 2023). To provide a moment of reflection on their teaching practice and all the adaptations they have had to implement during the pandemic, we asked the teachers what the greatest difficulties they have experienced during the lockdown period were. Among the alternatives available, teachers could choose one or more answers, including: dedicating more time to preparing lessons; adapting to new technologies; leaving their comfort zone; exchanging leisure time for work; finding new teaching methods; time to attend to students individually, and we also provided an answer box if they felt comfortable reporting other difficulties, as can be seen in figure 06 and the answers below.

Figure 06: Personal difficulty during the pandemic to teach classes



Source: Prepared by the authors (2022).

As for the open field, two of the interviewees said:

"I like to separate work and living at home. That was a difficulty for me, having to isolate myself from my family at home. In addition to my home not having the ideal conditions to carry out my work" (PARTICIPANT M).

"Time to attend to students individually" (PARTICIPANT L).

Analyzing the answers, we noticed that exchanging leisure time for work was the difficulty most chosen by the interviewees, showing that they had to give up time with family and friends in order to adapt to the abrupt changes. These changes relate not only to the home, but also to health and the loss of family and friends. According to

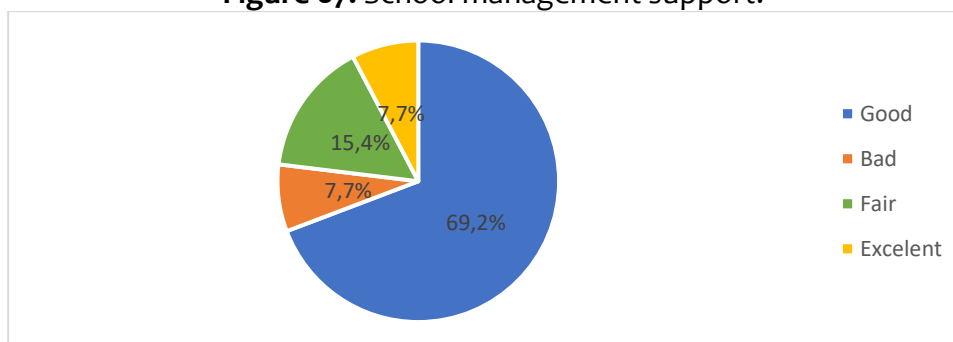
Santos and Zaboroski (2020), teachers' health (especially their emotional health) must be considered in view of the major adaptations they face, such as knowing how to deal with the various losses of friends, family and work colleagues. In their research, Semis et al. (2020) point out some of the difficulties faced by teachers.

The stress involved in the need to learn quickly in order to adapt planning, the risk of contamination, insecurity about the future, lack of recognition from families and managers, increased time spent preparing lessons and dedicating to students and the feeling of not being able to cope with all the domestic, family and professional demands are among the factors highlighted by teachers (SEMIS et al., 2020, p. 14).

Behar (2020) also points out that teachers have had to leave their families and reinvent themselves and adapt their educational methodologies in order to prepare their lessons. This adaptation is related to the difficulties pointed out, such as taking more time to prepare lessons, finding new teaching methods, adapting to new technologies and leaving their comfort zone, as well as the two answers in the open field. Souza et al. (2023) indicate that, in addition to the training sessions conducted, there was also a need for a process of familiarization with unfamiliar platforms before their use. However, due to the emergency demands of the period, this was not feasible.

During so many difficulties, the school management's support for the teachers was essential in trying to achieve the success of the pedagogical proposals planned by the teachers. Figure 07 shows the teachers' opinion of the support provided by the IFRO Colorado do Oeste Campus school management.

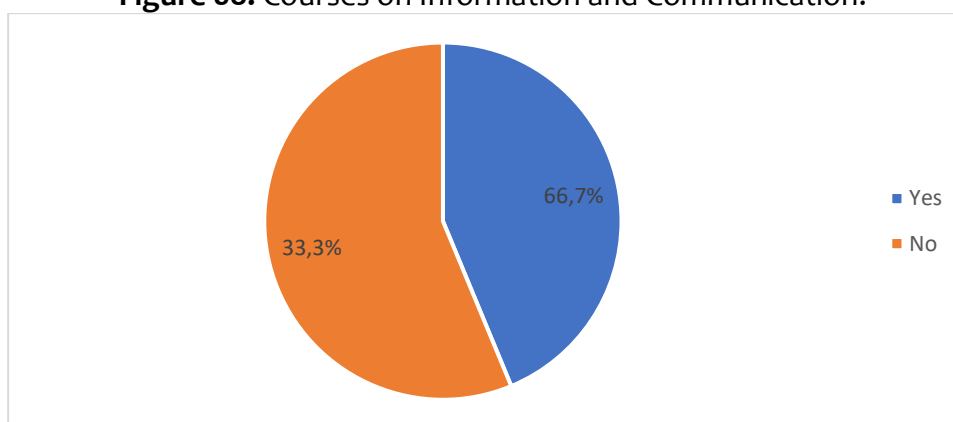
Figure 07: School management support.



Source: Prepared by the authors (2022).

About management support, 69.2% of teachers rated the service as good, 15.4% as reasonable, 7.7% as terrible and 7.7% as excellent. Management was present throughout the period, holding meetings, training and providing support on issues relating to the pandemic period. This support also took the form of training through continuing education, whether through online meetings to discuss ideas or even by offering courses made available by the management and pedagogical weeks. This statement is reflected in Figure 08.

Figure 08: Courses on Information and Communication.

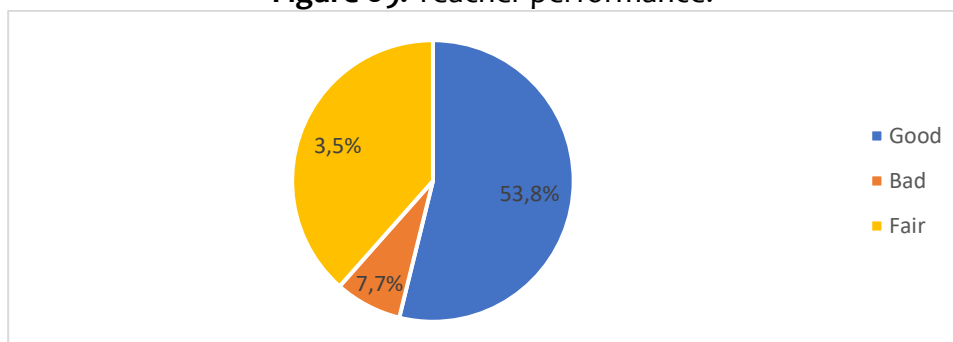


Source: Prepared by the authors (2022).

Through the responses of the interviewed teachers, we identified that the educational institution where the teachers are working offered courses on Information and Communication Technologies (ICT) as a means of improvement and continuous education (66.7% of respondents). Similar to the findings of Souza et al. (2023), these training courses aimed to prepare teachers to attend to students in the most effective manner possible during this period. We correlated the negative responses with a lack of knowledge about ICT terminology and non-attendance at meetings and pedagogical weeks.

In addition to the support provided by management, it is also necessary to understand how teachers evaluate their own performance, given that even with all the support and resources, it also takes a lot of effort and commitment from the teacher. Teachers were therefore asked how they considered their own performance during the pandemic. The answers can be seen in figure 09.

Figure 09: Teacher performance.



Source: Prepared by the authors (2022).

At this specific point, no parameters are set to understand why teachers classify themselves within each of these evaluations, but it is information that corresponds to the teacher's self-assessment. About this question, we found that the majority of teachers consider their performance to be positive, with 53.8% of teachers responding that their performance during the pandemic was good; 38.5% as reasonable and 7.7% as terrible. The good performance in this case may be linked to teachers' prior knowledge or familiarity with ICT (Information and Communication Technologies) (SOUZA et al., 2023) or even the support provided by the management.

Teacher performance is essential during the pandemic, as corroborated by the authors Gonçalves and Constantino (2020) when they proposed that the quality of the use of DICTs can contribute to the development of students' teaching and learning, allowing teachers to identify their shortcomings to improve their teaching performance amid the various difficulties imposed by the pandemic.

Conclusion

During the pandemic, there was a clear need to reinvent ourselves, make mistakes, ask for help and share experiences in order to help others experience the change from face-to-face teaching to remote teaching. It has been more necessary than ever to learn from the new, from the different, looking for motivations to engage and reach out to students and coworkers, highlighting our capacity for creativity, courage, perspective on the future and teamwork in the face of the challenges imposed by COVID-19.

Faced with the difficulties encountered, it became clear that we must adapt to the changes in today's educational field. The new technologies that mark a major new movement and investment define new educational policies, as well as versatile methodologies to achieve effectiveness in the teaching and learning process.

Since the beginning, the current pandemic has left its mark, including on teachers. Teachers have had to adapt and reinvent themselves throughout the process. Digital literacy in this case, through ongoing training and meetings, has allowed them to adopt digital resources as an aid in the teaching and learning process and to be able to face this pandemic period.

Even with all the help and support possible, there are still difficulties related to changes in environment, attitudes and routines. These changes, along with all the insecurity and fear, can lead teachers to view their performance as poor or average. We understand that during this period the comparison of remote teaching with face-to-face teaching is recurrent, but that these are incomparable situations. The teacher's performance can be considered ineffective even if it is the best possible for the moment.

Finally, from the analysis carried out, we have seen the need for the teachers interviewed to use ICT as a way of adapting to remote teaching and, on the other hand, we have seen the importance of further expanding discussions on the lack of use of digital tools in the development of content as a way of teaching and learning during remote teaching. We also found that the difficulties they face are not only linked to the use of Digital Technologies, but also to all the changes caused to their routines during the COVID-19 pandemic.

References

BEHAR, P. A. O ensino remoto emergencial e educação a distância. **UFRGS**, 6 jul. 2020. Disponível em: <https://www.ufrgs.br/coronavirus/base/artigo-o-ensino-remoto-emergencial-e-a-educacao-a-distancia/>. Acesso em: 03 jun. 2022.

CRESWELL, J. W. **Projeto de pesquisa: método qualitativo, quantitativo e misto**. Tradução: Luciana de Oliveira Rocha. 2 ed. Porto Alegre: Artmed, 2007.

DIAS, E.; PINTO, F. C. F. Educação e sociedade. **Ensaio: Avaliação e Políticas Públicas em Educação**, v. 27, n. 104, p. 449-454, 2019. Disponível em: <https://www.scielo.br/j/ensaio/a/MGwkqfpsmJsgjDcWdqhZFKs/?lang=pt&format=pdf>. Acesso em: 15 abr. 2022.

DUARTE, K. A.; MEDEIROS, L. S. Desafios dos docentes: as dificuldades da mediação pedagógica no ensino remoto emergencial. In: CONGRESSO NACIONAL DE EDUCAÇÃO, 7, 2020, Maceió. **Anais eletrônicos** [...]. Maceió: CONEDU, 2020. Disponível em: <https://editorarealize.com.br/edicao/anais-vii-conedu---edicao-online/pesquisa?autor=Kamille+Ara%C3%BAjo+Duarte&titulo=&modalidade=&at=>. Acesso em: 15 abr. 2022.

DUBEUX, L. S. *et al.* Formação de avaliadores na modalidade educação a distância: necessidade transformada em realidade. **Revista Brasileira de Saúde Materno Infantil**, v.7, n.1, p.47-52. 2007.

GIL, A. C. **Métodos e técnicas de pesquisa social**. 5 ed. São Paulo: Atlas, 1999.

GODOI, M. *et al.* O ensino remoto durante a pandemia de covid-19: desafios, aprendizagens e expectativas dos professores universitários de Educação Física. **Research, Society and Development**, v.9, n.10, p.1-19. 2020.

GONÇALVES, A. P. O.; CONSTANTINO, P. R. P. Desafios para avaliação do desempenho docente em tempos de pandemia da Covid-19: o contexto do IFSP. In: SIMPÓSIO DOS PROGRAMAS DE MESTRADO PROFISSIONAL, 15., 2020, São Paulo. **Anais eletrônicos** [...]. São Paulo: CPS, 2020. Disponível em: <http://www.pos.cps.sp.gov.br/files/artigo/file/1021/af27676bb72caa1f12cd095da789837e.pdf>. Acesso em: 09 jun. 2022.

MARQUES, L. A pandemia incide no ano mais importante da história da humanidade. Serão as próximas zoonoses gestadas no Brasil? **Unicamp**, 5 mai. 2020. Disponível em: <https://www.unicamp.br/unicamp/noticias/2020/05/05/pandemia-incide-no-ano-mais-importante-da-historia-da-humanidade-serao-proximas>. Acesso em: 15 abr. 2022.

MONTEIRO, S. S. (Re)inventar educação escolar no Brasil em tempos da COVID-19. **Revista Augustus**, v.25, n.51, p.237- 254, 2020.

SEMIS, L.; *et al.* (Coord.) **A situação dos professores no Brasil durante a pandemia**. 2020. Disponível em: <https://www.andes.org.br/diretorios/files/renata/junho/ne-pesquisa-professor-final-1.pdf>. Acesso em: 01 abr. 2022.

SANTOS, E. Educação online para além da EAD: um fenômeno da cibercultura. In: CONGRESSO INTERNACIONAL GALEGO-PORTUGUÊS DE PSICOPEDAGOGIA, 10, 2009, Braga. **Actas** [...]. Braga: Universidade do Minho, 2009.

SANTOS, J. R.; ZABOROSKI, E. A. Ensino remoto e pandemia COVID-19: desafios e oportunidades de alunos e professores. **Interacções**, v.16, n.55, p.41-57, 2020.

SANTOS, K. V.; CARVALHO, L. F.; AZEVEDO, A. A. A importância da tecnologia nas atividades de ensino durante a pandemia de COVID-19: relato de experiência na residência integrada em saúde coletiva. In: ENCONTRO CEARENSE DE RESIDÊNCIAS EM SAÚDE, 3., 2021, Fortaleza. **Anais eletrônicos[...]**. Fortaleza: Even3, 2021. Disponível em: <https://www.even3.com.br/anais/ecrs2020/325216-a-importancia-da-tecnologia-nas-atividades-de-ensino-durante-a-pandemia-de-covid-19-relato-de-experiencia-na-res/>. Acesso em: 05 abr. 2022.

SILVA, E. A. P.; ALVES, D. L. R. MARINALVA, N. F. O papel do professor e o uso das tecnologias educacionais em tempos de pandemia. **Cenas Educacionais**, v.4, n.10740, p.1-17, 2021.

SOUZA, A. V. P. *et al.* Reorganização do trabalho docente em tempos de pandemia: desafios e superações. **Cenas Educacionais**, v.6, n.e15535, p.1-19, 2023.

UNESCO. A Comissão Futuros da Educação da Unesco apela ao planejamento antecipado contra o aumento das desigualdades após a COVID-19. **UNESCO**, Paris: Unesco, 16 abr. 2020. Disponível em: <https://pt.unesco.org/news/comissao-futuros-da-educacao-da-unesco-apela-ao-planejamento-antecipado-o-aumento-das>. Acesso em: 15 abr. 2022.

VIEIRA, L.; RICCI, M. C. C. A educação em tempos de pandemia: soluções emergenciais pelo mundo. **OEMESC, Observatório do Ensino Médio em Santa Catarina**, 2020. Disponível em: https://www.udesc.br/arquivos/udesc/id_cpmenu/7432/EDITORIAL_DE_ABRIL___Let_cia_Vieira_e_Maika_Ricci_final_15882101662453_7432.pdf. Acesso em: 03 jun. 2022.