PEDAGOGICAL SUPPORTING DURING THE COVID-19 PANDEMIC: EXPERIENCE REPORT FROM IFSULDEMINAS –MUZAMBINHO CAMPUS

ENFRENTAMENTO PEDAGÓGICO DURANTE A PANDEMIA DA COVID-19: RELATO DE EXPERIÊNCIA DO IFSULDEMINAS - CAMPUS MUZAMBINHO

ENFRENTAMIENTO PEDAGÓGICO DURANTE LA PANDEMIA DEL COVID-19: RELATO DE EXPERIENCIA DE IFSULDEMINAS – CAMPUS MUZAMBINHO

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ABSTRACT: This article aimed to describe the experience of one pedagogical supporting during COVID-19 pandemic, from the perspective of school managers at IFSULDEMINAS - Muzambinho Campus. The Education Design Research (EDR) methodological approach was used due to (i) modeling of the proposal; (ii) communication and information management; (iii) regulation and guidance; and (iv) monitoring the permanence and success of students. The study took place during the 2020 and 2021 school years. As a result, it was observed that the proposed model favored the positive reports achieved, which are due to the intertwined involvement of the pedagogical, human and Information and Communication Technologies (ICT) aspects. This experience will surely leave deep pedagogical, administrative and life scars. We intend to apply all pandemic learning in a context of "new normal", but a "new normal, really new".

KEYWORDS: Pandemic. Hybrid teaching. Communication and information technologies. Flexible Learning. Emergency remote teaching.

RESUMO: *O presente artigo objetivou descrever a experiência pedagógica de enfrentamento à COVID-19, na perspectiva dos gestores escolares do IFSULDEMINAS - Campus Muzambinho. Foi apresentada a proposta de ensino remoto emergencial denominada aprendizagem no "grão de café". Utilizou-se a abordagem metodológica Education Design Research (EDR) em função da (i) modelagem da proposta; (ii) gestão da comunicação e da informação; (iii) regulamentação e orientação; e (iv) acompanhamento da permanência e êxito dos estudantes. O estudo ocorreu durante os anos letivos de 2020 e 2021. Como resultados, observou-se que o modelo proposto privilegiou os relatos positivos alcançados, os quais se devem ao envolvimento entrelaçado dos aspectos pedagógicos, humanos e das Tecnologias da Informação e da Comunicação (TIC). Seguramente essa experiência deixará profundas cicatrizes pedagógicas, administrativas e de vida. Todo aprendizado pandêmico pretendemos aplicar em um contexto de "novo normal", mas um "novo normal, realmente novo".*

PALAVRAS-CHAVE: *Pandemia. Ensino híbrido. Tecnologias da comunicação e informação. Aprendizagem Flexível. Ensino remoto emergencial.*

RESUMEN: *Este artículo tuvo como objetivo describir la experiencia pedagógica de enfrentamiento a la COVID-19, en la perspectiva de los gestores escolares del IFSULDEMINAS - Campus Muzambinho. Se presentó la propuesta de enseñanza a distancia de emergencia denominada "aprendizaje en grano de café". Se utilizó el enfoque metodológico de Education Design Research (EDR) debido a (i) el modelado de la propuesta; (ii) gestión de la comunicación y la información; (iii) regulación y orientación; y (iv) monitorear la permanencia y el éxito de los estudiantes. El estudio se llevó a cabo durante los años escolares 2020 y 2021. Como resultado, se observó que el modelo propuesto favoreció los reportes positivos logrados, los cuales se deben al involucramiento entrelazado de los aspectos pedagógico, humano y de las Tecnologías de la Información y la Comunicación (TIC). Esta experiencia seguramente dejará profundas cicatrices pedagógicas, administrativas y de vida. Todo el aprendizaje de la pandemia pretendemos aplicarlo en un contexto de "nueva normalidad", pero una "nueva normalidad, realmente nueva".*

PALABRAS CLAVE: *Pandemia. Enseñanza híbrida. Tecnologías de la comunicación y la información. Aprendizaje flexible. Enseñanza remota de emergencia.*

Introduction

On March 17, 2020, with the aim of reducing the transmission of the new coronavirus (SARS-CoV-2) that causes COVID-19, following current guidelines from Brazilian health authorities and after discussion with the crisis committee team To combat COVID-19 in the municipality of Muzambinho/MG, face-to-face classes at the Federal Institute of Education, Science and Technology of the South of Minas Gerais - IFSULDEMINAS - Campus Muzambinho were suspended indefinitely.

The suspension of face-to-face classes was certainly among the most consistently applied health interventions to combat COVID-19 by world political leaders. Although, at that time, scientific information about the virus was limited, decision-making was guided by evidence of other respiratory viruses, such as influenza, and the alarming pandemic situation declared by the World Health Organization (WHO) (CUCINOTTA; VANELLI, 2020). By mid-April 2020, 192 countries had already closed schools, affecting more than 90% of students worldwide (almost 1.6 billion students) (UNESCO, 2020).

In an unprecedented way in the health sector, a true scientific race was launched in search of therapeutic solutions to control the disease. Projections of the transmission dynamics of SARS-CoV-2 when using estimates from time series to inform a contamination model indicated that prolonged or intermittent social distancing could be necessary until 2022 (KISSLER *et al*., 2020). In reality, from a school perspective, although the transmission of SARS-CoV-2 is controlled according to mathematical projections, the educational consequences of the pandemic still persist today and will do so for a period unlikely to be revealed by statistics.

According to the "history of the present time", an expression coined by the authors Silva and Ciavatta (2022), the results resulting from the school years without face-to-face interactivity at school and the full dependence on the use of technologies led to the worsening of situations of social exclusion and helplessness experienced by students, teachers and managers. Certainly, this reflection on student learning is the result of institutional coping strategies already adopted, integrated into each life story of the agents involved in the school routine.

Looking to the past is essential for building a future that finds the school environment a pillar for definitively overcoming the COVID-19 pandemic. In this sense, the management team of IFSULDEMINAS - Campus Muzambinho literally focused on a deep, dynamic and rapid appropriation of the only possibility of maintaining school support and continuing the training

of its students, that is, Remote Education in Emergency Situations (ERE) (HODGES *et al.*, 2020). In the context of ERE, evidence demonstrates the need to plan remote teaching in a broader temporal perspective. ERE's past experiences still suggest that we establish possible scenarios and promote, with flexibility, the replanning of the previously constructed annual calendar (HARRIS; LARSEN, 2018).

A pedagogical proposal called "coffee bean" learning was devised, which was conceived in memory of the main local productive arrangement in the South of Minas Gerais, coffee, and to present the way found to make students' training itinerary more flexible during the exceptional period we have due to the COVID-19 pandemic. This proposal was the result of the collective evaluation and participation of the school community. Likewise, it included alternatives for those students who had difficulties accessing the available education, as well as incorporating ways to remedy students' learning deficits that, for various reasons, could have occurred during the period of remote activities. More than a closed, imposing guideline, openness was allowed, an invitation to reflection, planning, boldness and thinking outside the box (responsibly) throughout the journey.

Inserted in this context, this study appears, which aimed to describe the educational experience of facing COVID-19, from the perspective of school managers who directed and structured all processes of creation, adaptation and adoption of remote teaching activities from March 2020 to December 2021. Finally, the results of this experience are presented based on the main decision-making: (i) modeling of the proposal; (ii) communication and information management; (iii) regulation and guidance; and (iv) monitoring student retention and success.

Methodological design

This is an experience report that presents a pedagogical proposal to combat COVID-19, developed during the years 2020 and 2021, involving all face-to-face courses at IFSULDEMINAS - Campus Muzambinho, and supported by the idea of ERE (HODGES et *al.*, 2020), which highlights the flexibility, mixing and sharing of spaces, times, activities, materials, techniques, and technologies that make up this alternative teaching-learning offering.

From a methodological perspective, this article used an approach centered on *Education Design Research* (EDR) (Figure 1). This research method involves a systematic analysis, design and evaluation of interventions with the aim of generating evidence-based solutions to complex problems in educational practice, and with the aim of advancing the knowledge of the community involved about the characteristics of these interventions. Furthermore, in this

approach it is possible to establish an interactive and iterative process, composed of the following general phases: identification of the context and analysis of the problem (analysis and exploration); development and refinement of interventions (design and construction); continuous assessment, reflection and learning considering all phases (evaluation); final theorization through lessons learned, description of principles, artifacts, among others (implementation and dissemination) (FASSBINDER, 2018).

**Figure 1** – *Education Design Research* generic model
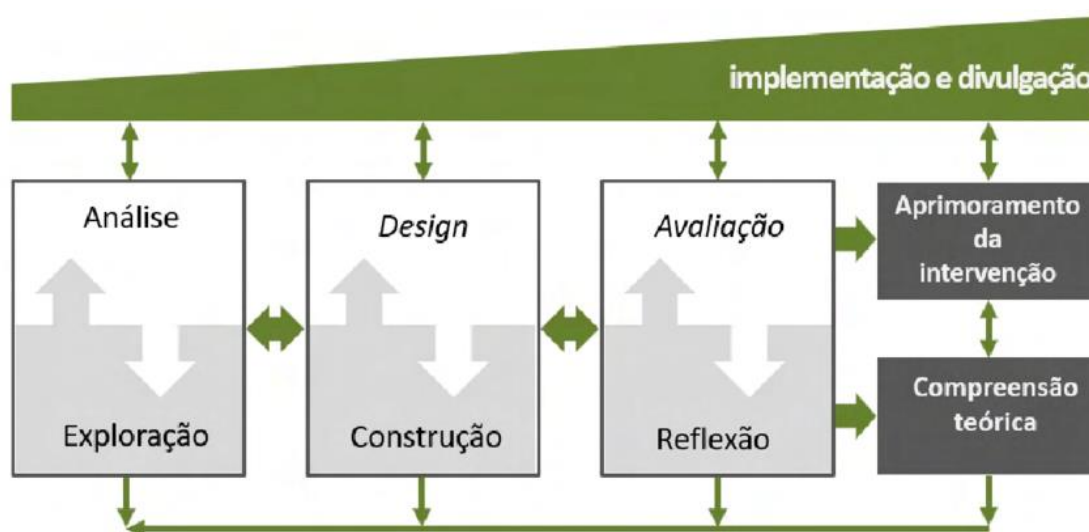
Source: Translated from McKenney and Reeves (2012)

Proposal modeling: the "coffee bean" learning program

The pedagogical proposal of the experience reported here was called "coffee bean" learning. Fundamentally, the proposal integrated remote school activities (B) occupying most of the semesters (during and post-COVID-19) and in-person school activities (A) that occurred when the return to the face-to-face educational routine was allowed (Figure 2).

Figure 2 – Learning on the Coffee Bean
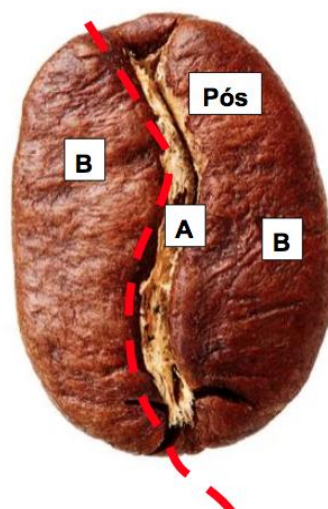
Source: Prepared by the authors

The central region of the coffee bean (A): represents in-person activities, which were the link with the remote activities of the semester. When the pedagogical model was designed, it was not known when these activities could take place and, in practice, they took up the least part of the semester, due to social distancing itself. At the beginning of each ERE semester, teachers listed the practical essence of their curricular units and what could be better explored in person was called the core of the discipline - the *core*. Therefore, if there were sanitary conditions for face-to-face activities, the subjects would already have an organized and systematized itinerary for practical activities (laboratory or field) with alternating students and in hypothetical weeks of classes. This organization also took into account activities to improve possible learning deficits, which, for various reasons, could have occurred during remote activities.

Due to the worsening of the pandemic, face-to-face classes ended up not taking place in 2020 and the contents listed in the *core* of the curricular units were also developed remotely. For 2021, the model guarantees 2 to 10 weeks per semester, depending on the particularities of the courses and always depending on health possibilities.

The peripheral regions of the coffee bean (B): represented remote activities, which occupied most of the academic semester. In practical terms, teachers organized the contents of the curricular units in the Virtual Learning Environment (VLE), using the various possibilities offered by digital information and communication technologies. The VLE used is an instance of Moodle, which already existed to support the virtual activities of face-to-face courses and, for ERE, underwent improvements (inclusion of access analysis plugins, attendance

verification, gamification, among others. Remote activities developed were defined as: (i) asynchronous, in time and space: activities carried out in virtual environments, such as: recorded video classes; training activities, forums, questionnaires, readings, among others; (ii) synchronous: mediated online service by the teacher and simultaneous transmission, such as web conferences and chat (chat rooms). *Google Meet* was adopted for virtual classes and teachers were suggested to record the classes so that they could also be made available in the VLE, either for access by those who did not participate in the synchronous moment or for later review.

Communication and information management

The first actions towards the construction and organization of the ERE model were related to the management of communication and information. For decision-making and initial referrals of the adopted ERE model, a Permanent Consultative Forum (FPC) was created on the Padlet platform with the participation of teachers from the educational institution.

Using the WhatsApp tool, quick communication groups and lists were created (Table 1). According to Tondo e Silva (2016), WhatsApp It is one of the most used tools on smartphones, reaching 55% of the Brazilian population. The accessible and attractive interface, as well as the diversity of quick communication resources, such as sending text, pictures, audio, *links*, in addition to the ease of access through any place and medium (*mobile* and *desktop web versions*) contribute to its popularization. In a preliminary investigation carried out with students at IFSULDEMINAS - Campus Muzambinho, it was identified that 99.5% of them use the application. For this reason, the framework for instant communication was created with WhatsApp as the main tool. The groups served as support for quickly sending information, exchanging ideas or resolving doubts. And the lists, only for sending notices and information.

Table 1 – Quick communication structure through WhatsApp

Group or List Name	Brief Description
Course Coordinators	Group of course coordinators and the school's pedagogical team.
Class Godparents/Godmothers	Group of Teachers and Godmothers of each class. This is an action that already existed in the face-to-face context. These teachers act as mediators in their classes and form a bridge between pedagogical management and students.
Classes	Discussion group with students per class. Within the groups/classes there are also godfather/godmother teachers, class leader, as well as the student virtual mediator of the class. Some groups already existed when in person. Others were created to support emergency remote teaching.
Student Leadership	Discussion group with class leaders, members of Academic and Athletic Centers.
Virtual Mediator Students	Group of students who act as mediators, one per class. This group was part of a project that was created specifically to address emergency remote teaching. Members of the school's pedagogical support team are also part of this group.
Parents and Guardians	List for sending news, meeting notices, etc.
Teachers and Administrative Technicians in Education	List for sending news, meeting notices, etc.

Source: Prepared by the authors

A *hotsite* was created so that the entire school community and external stakeholders could find information about the school's actions during the ERE and about the pandemic itself (Figure 3). *Hotsites* are also known as mini or *microsites*, characterized by having few pages, with visual appeal, specialized in events with a short time spent on the web (GODINHO, 2010). Although widely used for marketing and promotional campaigns for companies, they can also be applied in the educational context.

Figure 3 – Hotsite to support actions against the new Coronavirus
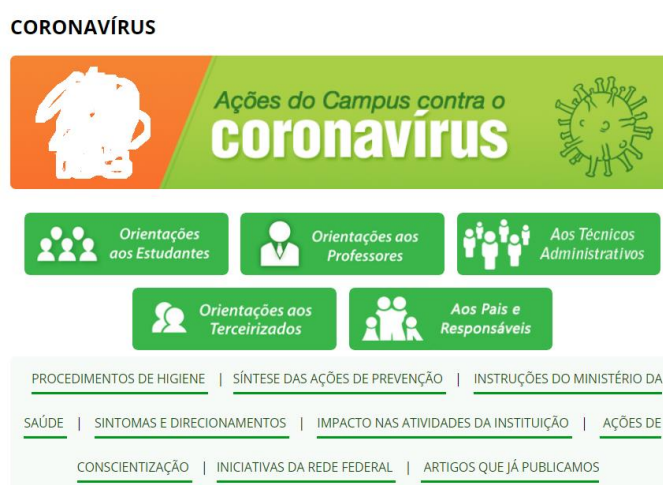
Source: Prepared by the authors

With the aim of supporting the dissemination of official information related to academic processes (lockdown, registration renewal, class schedules, operation of school sectors during

the pandemic period, among other specific information about the ERE), specific news was made available on the AVA.

Regulation and guidance

The entire process of conducting the ERE was based on regulations issued by the Ministry of Education, normative instructions and programs built especially for the ERE in such a way that the replacement of face-to-face classes with remote activities made it possible to not cancel the academic calendar, without replacing days and, more than that, it guaranteed the student's fundamental right to have access to education.

Guidance for the development and production of digital materials and content by teachers was supported within a continuing training program by the educational development department, which offered workshops on the topics: hybrid teaching, web tools, active strategies, synchronous meetings on Google *Meet* and Moodle virtual learning environment for teachers.

Additionally, a summary guide of good pedagogical practices for ERE was also developed collaboratively, which brought together various information necessary for adequate teaching work, such as: how to construct the teaching plan for ERE; adequacy of subject programs; methodological strategies; virtual learning environment; communication and sending notification to students; monitoring students' actions; assessment strategies; good practices for recording and making video classes available; attendance records; special educational needs; and creation or reuse of Open Educational Resources (OERs).

Monitoring student retention and success

Pedagogical support for students was provided by professionals linked to the General Education Coordination (CGE) and Educational Guidance Sector (SOE), such as pedagogues, psychologists/pedagogues, student assistants, course secretaries and teachers involved with administrative issues. In fact, these sectors and employees had to reinvent themselves to adjust work routines or create actions to support students and teachers during the ERE. The SOE, in general, was responsible for (i) monitoring the academic performance and development of students; (ii) subsidize pedagogical intervention actions in courses and classes; (iii) carry out academic monitoring of students using the digital academic system in use, mainly with regard to grades, attendance and conduct in the school space; (iv) contribute to inclusion actions

promoted by the Center for Assistance to People with Special Needs (NAPNE); and (v) manage information relating to students' academic lives, in order to promote the family-school relationship.

The General Coordination of Assistance to Learners (CGAE) was responsible for orchestrating the procedures linked to urban and rural internet aid, promoting actions linked to the well-being and health of students, and supporting ways to overcome problems related to the lack of access or monitoring of students. Activities to encourage Sports, Leisure, Culture and Arts, suitable for the virtual context, were also carried out. For example, the "Quinta Cultural" project, which was already a traditional event at the institution, which always took place on the last Thursday of each month and which sought to value Brazilian culture, as well as the development of a cultural and innovative student profile. The version adapted for the times of pandemic, via *live* on the social network Facebook, was called "Virtual Cultural Farm (QCV)", and was a success story that transformed the form of interaction between school, management, teachers, students and the external community during the pandemic.

The institution also sought to develop virtual support actions regarding the psychological suffering experienced by students and staff. Psychological interventions to support students play a central role in dealing with the mental health implications of the new coronavirus pandemic (SCHMIDT *et al*., 2020). The Psychology Sector sought to adapt to the current reality and offered the internal community a therapeutic listening service during the period of remote classes, as well as virtual conversation circles about mental health. Services via *Google Meet* aimed to welcome those students who were experiencing emotional difficulties related to the pandemic.

A scholarship program called Virtual Mediator Student was established. Among the objectives of this program, the following stood out: (i) cooperate in providing assistance and guidance to students, aiming for their adaptation and greater integration and interaction on the virtual platform to support remote teaching activities; (ii) assist students in carrying out the activities proposed by teachers on the virtual platform, whenever compatible with their level of knowledge and experience; and (iii) collaborate with teachers in identifying improvements in the execution of the teaching process, proposing alternative measures or resources to be implemented on the virtual platform. In this sense, a routine for monitoring and monitoring student access to the institutional Moodle platform was adopted, based on the traffic light colors (green, yellow and red). The green color is assigned to students with regular access (3 or more accesses per week); the yellow color considered for students with irregular access (more than 7

days without access) and the red color for those without access (more than 20 days without access) (Figure 4).

Figure 4 - Detailed monitoring of student performance

Aluno	SITUAÇÃO			DISCIPLINAS				
	Regular/DP/De sistente		Internet	Educação Empreendedor a e Inovação I	Atividades Extensionistas e Integradoras I	Lógica Matemática	Calculo I	Fisica
ALAN... FERREIRA	Regular	SIM						
A... SOUZA	Regular	NÃO						
AND...	Regular	CORES						
D...	Regular							
B...	Regular							
E...	Regular							

Source: Prepared by the authors. Student names were intentionally deleted

To guarantee students access to the internet, logistics were created to send laptops to student applicants. This action was supported by the nursing sector, which defined health and hygiene protocols for the safety of those involved in the delivery and receipt of loaned materials.

Finally, a questionnaire was generated using the *Google Forms* tool to identify students' experiences during the pandemic period. The questionnaire was aimed at all students, teachers, parents/guardians and TAEs of on-site courses on the Campus. Through this tool, confidence in crisis management and the subjective experience regarding students' participation in remote teaching activities were observed.

Results and discussions: lessons learned and future actions

It was not the first time that schools around the world were closed and, even more so, impacted due to crises. Perhaps the biggest educational difference to the pedagogical crisis caused by COVID-19 was the current technological moment characterized by the wide dissemination and popularization of Communication and Information Technologies (ICT), the use of the internet and cell phones. From this perspective, it was impossible not to think of a solution that did not make use of digital resources to guarantee the continuity of teaching at IFSULDEMINAS - Campus Muzambinho.

All the motivation and direction for restructuring pedagogical activities and moving to the virtual environment occurred simultaneously with the impossibility of face-to-face classes, and in just one week of suspension of school activities. To this end, even in an unfavorable pandemic scenario unknown to everyone, it was considered a great opportunity to value guiding principles, which pre - pandemic already supported discussions in this school community (DE SOUZA; FASSBINDER; MARIA, 2021; DE SOUZA; SILVA; COIMBRA, 2018), but which,

for numerous reasons, still encountered resistance and difficulty in being implemented, namely: (i) seeing the horizon of the student-teacher relationship far beyond content; (ii) realize the potential of ERE with a better understanding of the use and application of digital tools; (iii) value socio-affective aspects - *soft skills* - in virtual classes; (iv) prioritize "assessment for learning", to the detriment of just "learning assessment"; (v) maintain and strengthen the student-teacher/school-family interrelationship.

In this sense, almost three years ago it was necessary to readjust and even re-signify the school routine to the new long-term reality that would be established, in order to guarantee the continuity of studies with quality, and mitigate as much as possible the risks generated by the physical distance between the school, teachers and students, including: (i) reorganization of times and spaces, (ii) use and access to virtual technologies, and (iii) adaptation of the work organization of pedagogical and administrative teams.

Seeking a greater approximation, identity and adherence of students and educators to the new pedagogical teaching proposal, we found in the image of the coffee bean, the main commercial product in the southern region of Minas Gerais, a creative way of visually organizing the organizational procedures that have become adopted during the COVID-19 pandemic. It was considered that the regional identity of coffee facilitated the speedy implementation of the new teaching proposal due to the emotional and representative link that this bean has with the territory in which the Muzambinho Campus is located.

From an information management point of view, Ferraretto and Morgado (2020) indicated that the COVID-19 pandemic could not be overcome without strategic planning for the crisis itself and for communication during the crisis. In April 2020, after 1 month of ERE at IFSULDEMINAS - Campus Muzambinho, a synchronous meeting was held on *Google Meet* with the Teachers and Administrative Technicians in Education (TAEs) to deal with the arguments generated in the FPC on the Padlet platform (Figure 5). This forum strengthened dialogical and participatory principles related to democratic school management (VAUTHIER, 2019). Furthermore, this forum gave rise to discussions about which path to take, whether to suspend classes or remote activities, clarifications about the "coffee bean" learning program, pros and cons of the ERE and understanding the legislative matter that supported the remote activity.

Figure 5 – Consultative and Permanent Forum Padlet
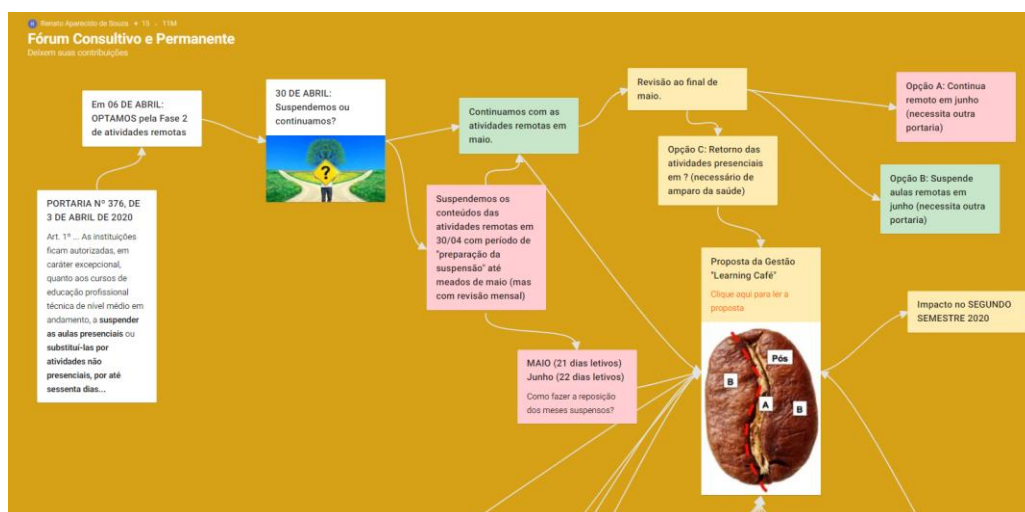
Source: Prepared by the authors

Fundamentally, the suspension or continuation of the ERE was discussed. From this trigger, some reports were exposed on the forum platform:

> *I am in favor of continuing remote activities.... This way, we will be able to develop other skills in students. Another important point, which we cannot dissociate from education, is the mental health of our students, imagine if this lasts until September? Will our students be left without activities? One suggestion would be periodic intervention of a playful/psychotherapeutic/cultural nature, among others, that would be part of this moment!...we will be able to reap good results in the training of our students.*

Due to the routine monitoring and monitoring of students' access to the institutional Moodle platform, it is important to highlight that this monitoring routine subsidized actions that privileged those students who were in the red and yellow status. This environment also allowed checking the number of accesses within a time interval, access dates, activities carried out, as well as other information. In addition to analyzing the platform, telephone and email contacts were established by the team with students with "irregular access" or "no access" status.

Regarding monitoring student access to the AVA, it was identified that over the two years, on average 73.6% accessed the platform daily; 24.3% accessed it weekly; while 2.1% reported having difficulty accessing it regularly, due to lack of time caused by economic issues, anxiety attacks, work, difficulty managing time, among other personal issues caused by the pandemic.

As for the questionnaire generated by the *Google Forms tool,* figure 6 shows the distribution of people from the school community who responded to the questionnaire. It is interesting to note that the respondents significantly represent the community as a whole.

Figure 6 – Distribution of the school community that responded to the questionnaire
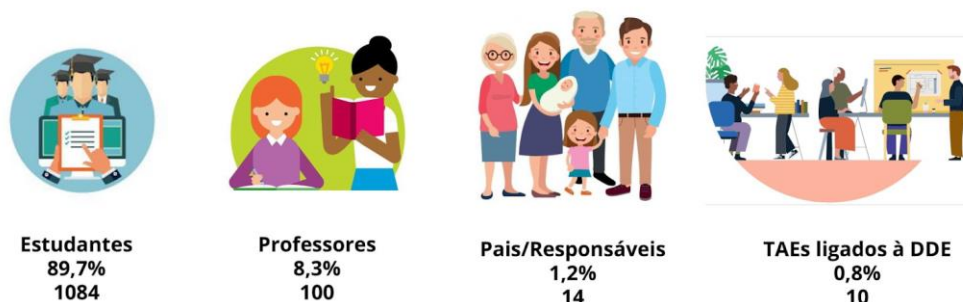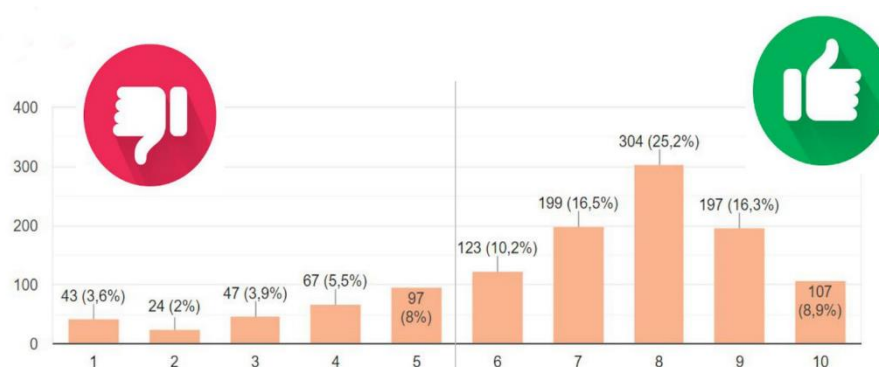

Source: Prepared by the authors

From the perspective of school managers, the peer assessment regarding the management of the crisis generated by the pandemic and, above all, the trust that the school community placed in decision makers was important information that also showed that the path taken was in the right direction. Given the statement: "I am confident in the decisions made and in the pedagogical coping capacity established by the school management of IFSULDEMINAS - Campus Muzambinho", the vast majority of respondents (85.4%) agreed or strongly agreed (Figure 7).

Figure 7 – Confidence in crisis management
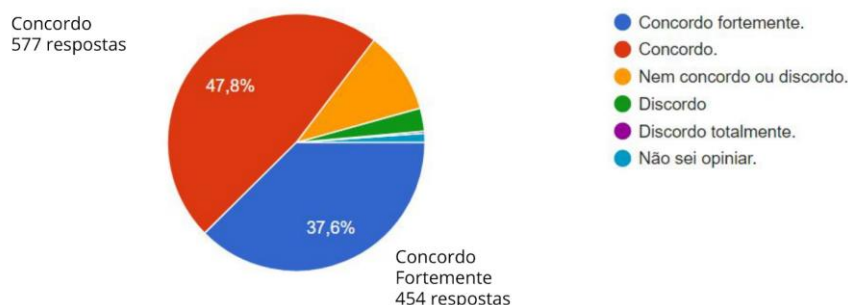
Source: Prepared by the authors

Regarding the experience with participating in remote teaching activities, the majority of respondents (77.1%) rated it on a scale of 1 to 10, a score higher than 6 (Figure 8).

Figure 8 – How was your experience with remote teaching activities?

Source: Prepared by the authors

In addition to the results presented previously, other evidence that favors the understanding of the success in implementing the ERE model adopted at IFSULDEMINAS - Campus Muzambinho are the dropout rate indicators and academic efficiency index (IEA) published on the Nilo Peçanha Platform (PNP). The PNP is a virtual environment for collecting, validating and disseminating official statistics from the Federal Network for Professional, Scientific and Technological Education (Federal Network) [4]. In the two years of the pandemic, the dropout rate at IFSULDEMINAS - Campus Muzambinho was around 10%. By way of comparison, in 2018 - pre -pandemic, the dropout rate was over 50%. As for the IEA, during the pandemic period, we obtained a percentage above 75%, well above the highest range that the Federal Network considers to be of highest quality (>56.48%).

Final remarks

In this article, we report the experience of IFSULDEMINAS - Campus Muzambinho with maintaining teaching, through the use of ICT, during the period of social isolation due to the COVID-19 pandemic. In addition to general actions to support school management in this context, an ERE model was presented that was built and applied from March 2020 until December 2021, when face-to-face classes were suspended at the institution. The academic calendar was not suspended and remote activities were counted as workload and school days for the duration of remote activities. Therefore, there was no replacement of school days at the institution, avoiding rework, interruption of the academic calendar and mainly students' completion and continuity of their academic or professional lives.

[4]Available at: https://www.gov.br/mec/pt-br/pnp .

In general, the teachers themselves learned, in practice, or in the learning style by doing, especially with the identification and understanding of tools that could engage students and minimize the effects of the absence of in-person social interaction. Google *Meet* was the main means used for synchronous classes. Other positive reports included: use of short video classes (around 15 minutes or less) and objective (personal videos, recorded using the OBS tool and edited with resources that make the video more attractive and dynamic); participation of teachers, experts and guests in synchronous activities to talk about the topics covered; evaluation on platforms such as Socrative, Padlet, Mentimeter, and Edpuzzle had good results and good recommendations from students; The use of more playful strategies that encouraged creativity and collaboration, such as mind maps for fixing content, creating videos, podcasts and models on certain topics were also recommended by students.

We hope that in the next steps there will be an increasing deepening of continuous training for teachers with a focus on the *design* of classes based on active strategies, meaningful learning, assessment for learning and hybrid teaching. Future research is also needed to better elucidate the long-term impact of student training during the COVID-19 pandemic.

We conclude this article by highlighting that the proposed remote teaching model favors permanent adjustments arising from dialogues with the academic community and real experiences. Furthermore, it is noteworthy that the positive reports already achieved are due to the intertwined involvement of pedagogical, human aspects and ICT as allies. It is necessary to understand the students' contexts and propose alternatives for participation and adapted delivery of activities/exercises whenever possible. Certainly, this experience will leave deep pedagogical, administrative and life scars, the learning of which we intend to apply in a context of "new normal", but a "new normal, really new".

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