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Educational management and evaluation in the context of covid-19 pandemic

Gestão educacional e avaliação no contexto da pandemia da covid-19

Gestión y evaluación educativa en el contexto de la pandemia covid-19

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Abstract

In the context of the covid-19 pandemic, universities adopted emergency remote teaching (ERT) as an alternative to ensure the continuity of educational process. This study shows results from a research that has investigated the ERT implementation process in a higher education public federal institution, identifying the monitoring and evaluation actions undertaken. Regarding methodology, this is a qualitative, exploratory case study. Results evidence that the pandemic has affected undergraduate courses. Teachers and students have undertaken new movements of knowledge appropriation and pedagogical relationship reconstruction.

Keywords: Higher Education. Educational Management. Monitoring. Evaluation. Emergency Remote Teaching.

Resumo

No contexto da pandemia da covid-19, o Ensino Remoto Emergencial - ERE foi adotado pelas universidades como alternativa para garantir a continuidade do processo educacional. Este artigo apresenta resultados de uma pesquisa que investigou o processo de implementação do ERE em uma instituição de Educação Superior pública federal, identificando ações de monitoramento e avaliação. Quanto à metodologia, trata-se de um estudo de caso do tipo exploratório de abordagem qualitativa. Os

resultados atestam que a pandemia da covid-19 promoveu impactos nos cursos de graduação. Com isso, docentes e estudantes empreenderam novos movimentos de apropriação do conhecimento e de reconstrução da relação pedagógica.

Palavras-chave: Educação Superior. Gestão Educacional. Monitoramento. Avaliação. Ensino Remoto Emergencial.

Resumen

En el contexto de la pandemia covid-19, las universidades asumieron la Enseñanza Remota de Emergencia (ERE) como una alternativa para asegurar la continuidad del proceso educativo. Este artículo presenta resultados de una investigación sobre la implementación de la ERE en una institución pública federal de Educación Superior, identificando las acciones de monitoreo y evaluación implementadas. En cuanto a la metodología, se trata de un estudio de caso de tipo exploratorio con enfoque cualitativo. Los resultados presentan el impacto de la pandemia en los cursos de pregrado. Docentes y estudiantes realizaron nuevos movimientos de apropiación del conocimiento y reconstrucción de la relación pedagógica.

Palabras clave: Educación Superior. Gestión educativa. Monitoreo. Evaluación. Enseñanza Remota de Emergencia.

Introduction

On March 11, 2020, the World Health Organization (WHO) announced the covid-19 global pandemic and authorities in several countries implemented measures to contain the disease. The temporary suspension of face-to-face classes in universities was one of the measures adopted, which aimed to minimize the spread of the epidemic and thus, reduce the risk of contagion and the proliferation of the virus among teachers and students (Couto et al., 2020; Ventura et al., 2020; Santos, 2020a).

Since then, universities have faced complex challenges due to the pandemic, a health emergency that has affected multiple dimensions of educational and university systems, strongly affecting educational management, the teaching-learning process, and relations between universities and society (Jung et al., 2021; Barbosa et al., 2020; Hodges et al., 2020).

Given this scenario, we can claim that this health crisis highlights the role of science and digital technologies in coping with the pandemic and accelerates discussions about possible post-pandemic effects. In higher education, the pandemic crisis has promoted the growing number of studies on the scenario that may emerge as a result of the influence of the pandemic on education systems and on universities (Organisation for Economic Co-operation and Development [OCDE], 2020; United Nations Educational, Scientific and Cultural Organization (Unesco), 2020; Brasil, 2020a; 2020b).

In this epidemiological context, emergency remote teaching (ERT) is a concrete possibility to ensure the continuity of higher education students' teaching-learning process. However, adopting this teaching format has demanded reflections on the pedagogical processes that constitute teaching and evaluation practices in the different disciplines of undergraduate courses, in addition to the guarantee of means and material conditions for implementing the proposal.

Thus, to meet these new requirements, the pandemic scenario required the rethinking of teaching practices. Therefore, teachers were encouraged to incorporate teaching alternatives that mediated, in their bases, communication via digital technologies, thus creating opportunities for student access, permanence, and learning (Panizzon et al., 2020; Padilha & Zabalza, 2016).

In full dialogue with this context, this article brings results of a research that investigated the ERT implementation process in a federal public institution, identifying the monitoring and evaluation actions implemented. This is a qualitative, exploratory case study whose methodology involved literature review, documentary research, and the application of a questionnaire.

This study is organized into six sections to facilitate understanding: the first shows and contextualizes the theme. The second refers to the methodological path of the study. The third briefly reviews the use of digital technologies in higher education. The fourth section discusses educational management, monitoring, and evaluation in higher education. Finally, in the fifth section, we show and assess data, collected with students, on ERT monitoring and evaluation and analyze and discuss our results. We conclude this study with our final considerations.

Methodology

This is a qualitative, exploratory case study whose methodology involved literature review, documentary research, and the application of a questionnaire. Research began with the Undergraduate Chamber of the Council for Teaching, Research, and Extension (CEPE) at the Universidade Federal de Minas Gerais (UFMG). A working group (WG) was established at its 10th ordinary meeting, held on 08/27/2020, to monitor and evaluate ERT in undergraduate courses. Undergraduate Chamber counselors, teachers, students and technical-administrative staff (TAS) participated in the WG.

The first phase of this study was composed of a literature review and a documentary research via searches with the following descriptors: Higher Education; Educational Management; Evaluation; Monitoring; Technologies; and Emergency Remote Teaching on the databases of the Scientific Electronic Library Online (SciELO) and the digital library of the Coordination for the Improvement of Higher Education Personnel (Capes). Finally,

results were used to organize a guide, made available to the academic community, which aimed to present ERT guidelines and, consequently, provide support grants so teachers could resume their teaching activities amidst the pandemic (UFMG, 2020a).

In the second phase of our research, questionnaires were applied. Their empirical data were collected in two phases. First, we aimed to monitor and evaluate ERT implementation in undergraduate courses and to seek elements to support the elaboration of phase two data collection instruments. To achieve this, an exploratory form was sent to collegiate bodies and structuring teaching cores (STC) of the undergraduate courses. In the script questions, the challenges and successful actions faced in the following domains were included: pedagogical processes, teacher-student relationships, technological resources, infrastructure, and care of disabled students (UFMG, 2020b; 2020c).

Then, phase 2 aimed to monitor and systematize the ERT information obtained for the 2020 school period. Thus, one questionnaire was applied to each segment of the academic community: teachers, students, and technical-administrative staff. They were applied between December 2020 and January 2021, evaluating the end of the school period, as provided for in the manual guidelines (UFMG, 2020a).

The following participation indices were found in phase 1: 97% of collegiate bodies and STC, 72 out of 75 courses; 26% of undergraduate students, 8,406 out of 32,334; 68% of teachers, 2,168 out of 3,189; and 10% of technical-administrative staff, 427 out of 4,272. In phase 2, data showed the following participation percentages: 48% of teachers, 1,726 out of 3,597 active in 2020/2021; 41% of students, 12,203 out of 29,764 actively enrolled in 2020/2021; 24% of technical-administrative staff, 1,010 out of 4,211 active in 2020/2021.

Moreover, the collected data was analyzed, which allowed us to find that most collegiate bodies and TSC showed successful experiences and actions during ERT. Even amidst a complex scenario, all three segments showed issues that should be considered in the return to face-to-face teaching, such as: experiences lived in ERT; adoption of new teaching practices that explore technologies and platforms; improvement of didactic material and of evaluation practices.

We must highlight the challenges reported by participants in both phases. Among them are: absence of technological resources by significant percentage of students; lack of access to good-quality internet connection; worsened difficulties due to high rates of emotional problems; fear; insecurity; and loss of relatives and friends due to the health crisis. Due to space limitations, this study chose to show and analyze data obtained from students, and articulate them with the data collected from teachers, allowing us to crosscheck information. The next section provides some notes on the use of digital technologies in higher education in the ERT context.

The use of digital technologies in higher education during the pandemic

Due to the covid-19 pandemic, using Information and Communication Technologies (ICT) in higher education became compulsory to safeguard students and teachers' lives and ensure the pedagogical interaction necessary for formative assessment.

Following the trend of what was already happening in other countries of the world, basic and higher education institutions suspended face-to-face classes and began a teaching experience mediated by digital technologies which received different nomenclatures: distance learning, emergency remote teaching, hybrid teaching, and online teaching, among others (Hodges et al., 2020; Williamson et al., 2020; Couto et al., 2020; Gusso et al., 2020).

Due to the epidemiological context, the Ministry of Education (MEC) established specific norms to support the transition from face-to-face education to technology-mediated education. Thus, on March 17, 2020, via Ordinance No. 343, MEC suspended face-to-face classes and provided for remote higher education classes in the federal sphere of education during the pandemic (Brasil, 2020a). Subsequently, Ordinance No. 544, of June 16, 2020, provided for the replacement of face-to-face classes by classes taught digitally for as long the pandemic lasted (Brasil, 2020b). Then, the publication of several ordinances extended the deadlines for this transposition until the forecast of total coverage for 2020.

In view of this, these measures offered remote teaching as distance learning (DL), though as an emergency, which hardly corresponds to a DL-specific pedagogical approach (Hodges et al., 2020; Lopes Sanchez Júnior & Silva, 2020), which would require time and the transformation of curricula to integrate technologies into a corresponding political-pedagogical project. Moreover, subjects' compliance with this teaching format would take place in a voluntary and planned manner, and not as a compulsory action initiated by the pandemic.

Thus, using technologies in ERT required, as the first condition for the performance of activities, that students and teachers access equipment and the internet from their homes. For Castioni et al. (2021), estimates suggest that 2% of the student universe of higher education courses lack internet access, a relatively small and localized issue. However, in this percentage, "digital exclusion reflects and reinforces inequalities" since the most affected students are precisely those who suffer from opportunity disadvantages due to socioeconomic conditions (Castioni et al., 2021, p. 411).

Based on the contributions of Castioni et al. (2021) and Gusso et al. (2020), we can affirm that the institutional decisions of public universities to launch their own student digital inclusion policies, via the distribution of data packages and equipment, constituted a promotion of equity.

Once these conditions were safeguarded, the use of technologies in ERT constituted a radical change to guarantee students' access to education, involving various decisions in Brazilian higher education institutions, such as: teacher support and training for the use of technologies and adoption of new teaching methodologies, student support programs, access to equipment and the internet, and further flexibility of academic norms by specific ERT regulations to preserve the right to education with safety, quality, and equity (UFMG, 2020a; 2020b; Gusso et al., 2020; Barbosa et al., 2020).

In this perspective, the interactive nature of digital technologies and their openness to network collaborative reconstruction and shared information and knowledge is a facilitating learning element. However, this is not due to the technology itself, but rather to the accesses, interactions, and appropriations built in its networks (Conte, 2021; Silva et al., 2020; Padilha & Zabalza, 2016).

In this sense, it is important to consider that technologies are not neutral, but productions that bring socio-political and cultural knowledge with, as well as perspectives that require that their choices and uses consider their production base and their repercussion on users (Santos, 2020b; Conte, 2021; Rodrigues, 2020).

In teaching practices based on the use of digital technologies, pedagogical mediation constitutes the necessary link between teachers and students allowing "dialogue, guidance and monitoring of the learner subject in his learning trajectory" (Oliveira, 2011, p. 199). In other words, it is active, dialogical, and comprehensive communication in favor of the construction of knowledge.

We can claim that, in this context, communication is intrinsic to the educational process and presupposes a conception, such as that proposed by Freire (1983, p. 47): "Education is communication and dialogue. It is not the transference of knowledge, but the encounter of Subjects in dialogue in search of the significance of the object of knowing and thinking."

In this sense, the pedagogical relationship built in the teaching-learning process demands an alliance between digital technologies and the methodologies proposed to organize a learning environment which produces pedagogical virtualities, allowing interactivity, collaborative production of knowledge, and critical and significant formative processes for students and teachers (Silva et al., 2021; Veiga & Silva, 2020; Santos, 2020b; Oliveira, 2011).

Consistent with this perspective, the virtual environments developed for online teaching allow interactions among teacher-student-knowledge, regardless of their context. They are, therefore, space-times that allow the creation of opportunities to access, at any time, the content to be studied; the performance of the proposed activities, access to virtual libraries, text files, videos, audios, and images; and the promotion of peer interaction via

different languages and productions (Barbosa et al., 2020; Lopes Sanchez Júnior & Silva, 2020).

For Modelski et al. (2019), the teaching procedures to be developed by virtual environments are numerous and can happen both synchronously and asynchronously. Thus, interactions can be favored individually and/or collectively, both in unidirectional (one-to-many) and collaborative (many-to-many) relationships.

In these circumstances, using digital technologies in education demands that resources and procedures be chosen, requiring teachers' technological and pedagogical appropriation, so they clearly understand how to achieve the purpose of their pedagogical relationship with students.

Educational Management, Monitoring, and Evaluation in Emergency Remote Teaching

The covid-19 pandemic required adaptation to new health protocols, demanding changes in all sectors of society. In higher education, many universities adopted ERT to avoid losses due to interruptions of face-to-face teaching. UFMG, for instance, suspended its academic activities in March 2020. However, based on scientific evidence, it resumed its classes via ERT in August 2020, aiming to continue the school year and minimize damages to the teaching-learning process (Panizzon et al., 2020; Barbosa et al., 2020).

The pandemic intensified the educational crisis and required investment in evaluative practices linked to critical and transformative educational projects, and a commitment to a culture of evaluation, recognizing the need to plan and build proposals that would enable new ways of thinking about teaching practices in undergraduate courses.

Thus, the complexity and uniqueness of the learning evaluation process configured pedagogical scenarios filled with expectations, values, and ways of taking responsibility for teaching-learning procedures in its different dimensions and possibilities (Modelski et al., 2019; Gomes & Melo, 2018; Luckesi, 2018; Padilha & Zabalza, 2016; Holy Spirit & Light, 2012).

In this study, we found the coexistence of at least two disputing paradigmatic conceptions in the academic context. One centered on the amount of information and another that emerged to institute a pedagogy of the question, open space-times for critical and reflective thinking, and sow epistemological doubt between teachers and students, thus allowing intellectual autonomy as an indispensable criterion for the dialogue between universities and the problems experienced in society (Freire, 2001; 2010).

Aligned with this perspective, face-to-face teaching plans underwent changes. Their implementation, especially via ERT, complied with the standards of MEC and international organizations (Brasil, 2020a; 2020b; Unesco, 2020; OECD, 2020).

Given this context, educational management encouraged teachers to carefully analyze their teaching plans. This guidance required reviewing and selecting contents to avoid overloading students with activities. In the ERT programming, reformulating objectives, considering the available pedagogical and technological resources, and defining criteria for qualitative and quantitative evaluations according to this new academic and pedagogical organization were also important. (Menezes, 2021; Panizzon et al., 2020; Silva et al., 2020; Aranda et al., 2020).

The complexity of the challenges to be faced required a flexible and exceptional educational management that considered the context of the pandemic and teachers and students' objective working conditions, fundamental in ensuring pedagogical mediation in teaching practices (UFMG, 2020a; 2020b; 2020c).

Thus, this complex scenario required monitoring and evaluation actions that meant, among others, the collection, analysis, and interpretation of data on all aspects of the planned educational actions to support those involved in their execution, with the necessary subsidies for the greater effectiveness of the implemented actions (Aranda et al., 2020; Dourado et al., 2016; Lück, 2013).

For Thomas and Pring (2007) and Shapiro (2008), monitoring and evaluation aim to produce knowledge about implemented educational actions, their processes and contributions which, when shared, can generate a development environment that emancipates all those involved in critical and reflexive actions assumed collectively.

Understanding education as a joint construction of teachers and students emphasizes the practice of formative evaluation as an ally of both. Since it is carried out collectively, it not only evaluates students' performance but also education and teaching practices. Within universities, this is part of their internal institutional evaluation (Garcia & Garcia, 2020; Gomes, 2017; Batistti et al., 2017; Cunha, 2005).

In line with this perspective, evaluation processes that seek students' participation and dialogue in making decisions will aim the formation of critical citizenship, among others. Thus, planning evaluations is a continuous and collective process of reflection on different aspects, which includes the analysis of central questions such as: what conception of evaluation to adopt? What is intended with the results of the evaluation? Who will participate in the planning and evaluation process? What proposal of pedagogical intervention will result from monitoring and evaluation? (Veiga & Silva, 2020; Batistti et al., 2017; Lück, 2013).

In pandemic times, the challenge is to adopt evaluative practices based on reflection, creativity, partnership, self-assessment, and autonomy, principles that refer both to teachers and students' academic work. This pedagogical posture gains another meaning since students become the subjects of learning. These are changes not only to the

evaluation but also to the organization of education in universities, its courses, disciplines, and activities proposed, and especially in the relationship between teacher, student, and knowledge. Thus, we can claim that the changes in evaluation practices will be due to changes in educational management and in the organization of pedagogical work (Menezes, 2021; Garcia & Garcia, 2020; Gomes, et al., 2019; Gomes, 2017).

Emergency Remote Teaching in UFMG Undergraduate Courses

This section aims to show the data obtained during ERT monitoring and evaluation, conducted with students of undergraduate courses at UFMG. Out of 29,764 active students in undergraduate courses, 12,203 answered the questionnaire, representing 41% of participation.

Table 1 shows the data on platform use. We can see that 94.7% of respondents chose to use Microsoft Teams; 29.5%, Google Meet; and 25.2%, Zoom. We must highlight that Moodle is the standard virtual learning environment (VLE) in the institution. It is a learning platform designed to provide a secure and integrated system that allows the creation of customized learning environments. In another survey on navigability, 47% of respondents considered it good; 26.8%, regular; and 14.8%, great.

Table 1

Platforms used in synchronous classes

	No.	%
Microsoft Teams	11,607	94.7
Google Meet	3,614	29.5
Zoom	3,090	25.2
Other	600	4.9
Jitsi	538	4.4
RNP Web Conference	282	2.3

Source: the authors.

We considered relevant for the research to evaluate internet access, described in Table 2. We found that 59.4% of respondents reported stable access; 35.3%, regular access; and 3%, unstable access which prohibited the regular performance of online activities.

Table 2

Quality of internet access

	No.	%
Good, stable access	7,281	59.4
Regular, unstable access	4,322	35.3
Poor, unstable access	370	3.0
No answer	287	2.3

Source: the authors.

Regarding teachers' activities, we tried to find out if they were excessive in relation to the time provided to perform them, as Table 3 shows. Overall, 48% of respondents answered "yes for some disciplines;" 19.5%, "yes for a few disciplines;" and 16.5%, "no."

Table 3

Too many activities in the estimated time

	No.	%
Yes for some disciplines	5,886	48.0
Yes for a few disciplines	2,385	19.5
No	2,026	16.5
Yes for all disciplines	1,509	12.3
No answer	454	3.7

Source: the authors.

In the same survey, we also tried to obtain data on ERT teacher-student relationships, showed in Table 4. Analysis showed that 39% of respondents faced no challenges; 30.4%, faced them in a few disciplines; and 23%, faced them in some disciplines.

Table 4

Challenges in ERT teacher-student relationships

	No.	%
No	4,784	39.0
Yes, in a few disciplines	3,733	30.4
Yes, in some disciplines	2,824	23.0
No answer	496	4.0
Yes, in all disciplines	423	3.5

Source: the authors.

Table 5 shows data on the adequacy of evaluation methods of the disciplines. For 48.4% of respondents, methods were adequate in some disciplines; for 38.1%, in all disciplines; and 7.4%, in a few disciplines.

Table 5

Adequacy of evaluation methods

	No.	%
Yes, in some disciplines	5,936	48.4
Yes, in all disciplines	4,669	38.1
Yes, in a few disciplines	909	7.4
No answer	474	3.9
No	272	2.2

Source: the authors.

It was also important to know if synchronous meetings were recorded and made available for further reference, described in Table 6. For 51.2% of students, recordings were made available for all disciplines; for 36.9%, for some disciplines; and for 6.8%, for a few disciplines.

Table 6

Recording of synchronous meetings

	No.	%
Yes for all disciplines	6,272	51.2
Yes for some disciplines	4,527	36.9
Yes for a few disciplines	837	6.8
No answer	454	3.7
No	170	1.4

Source: the authors.

Table 7 shows data on the difficulty students experienced following asynchronous activities. Among the respondents, 28.7% reported a low level; 26.6%, medium; and 23.8%, very low.

Table 7

Difficulty of following asynchronous activities

	No.	%
Low	3,516	28.7
Medium	3,256	26.6
Very Low	2,913	23.8
High	1,450	11.8
Very high	647	5.3
No answer	478	3.9

Source: the authors.

Table 8 shows if students had any health problems during ERT. Overall, 46.5% reported no health problems; 31.4%, mental health ones; and 12.2%, mental and physical ones.

Tabela 8

Did you have any health problems during ERT?

	No.	%
No	5,703	46.5
Mental health	3,855	31.4
Both	1,490	12.2
Physical health	601	4.9
No answer	611	5

Source: the authors.

UFMG student data show that they needed to commit to adapting to ERT. Teachers' openness, flexibility, dialogue, and follow-ups in their interactions with students were essential to ensure conditions for the continuity of academic activities in a new format; actions that minimized insecurity, fears, and resistance, thus creating learning opportunities in an atypical context.

Considering the analytical data and limits of this study, the next section shows the main categories of analysis extracted from the survey with students compared to the data obtained from teachers.

Result analysis and discussion

In this section, we highlight some categories of analysis extracted from the results of the survey conducted with students and teachers in phases 1 and 2, analyzed by the contributions of Bardin (2009), including: technological resources, teaching-learning process; teaching-learning methodologies and resources; evaluation; and teacher-student relationships.

Technological Advances

Based on the contributions of Castioni et al. (2020); Lopes Sanchez Júnior and Silva (2020), we can affirm that students reported, in the first phase of ERT monitoring, that the challenges they faced in using technological resources were partly due to the lack of familiarity with multiple platforms and instability of their domestic internet. The data in Table 1 attest that teachers used different platforms in their synchronous classes. Microsoft Teams was the most popular platform, followed by Google Meet and Zoom. We can see that teachers had to quickly learn how to use these platforms while organizing themselves to remotely develop their teaching practices.

Overall, 11% of students claimed that the UFMG digital inclusion policy awarded them equipment. Of these, 52% said that the equipment was complete and had good internet access. We must say that on June 30, 2020, UFMG, via the Prorectorate of Student Affairs (PRAE), launched the Prae/FUMP/UFMG Notice no. 1/2020 (UFMG, 2020d) to assist students socioeconomically positioned at levels I, II and III in the Student Assistance Policy to acquire equipment. A second PRAE/NAI/FUMP/UFMG no. 4/2020 Notice (UFMG, 2020e), with the participation of the UFMG *Núcleo de Acessibilidade e Inclusão* (Accessibility and Inclusion Center - NAI), also dated June 30, 2020, was specifically launched for the acquisition of assisted technology equipment. Both initiatives are part of the policy to digitally include UFMG students and were important to allow the implementation of ERT in the institution.

Teaching-learning process

About 92% of the initially planned classes for the first school period of 2020 migrated to ERT. Among the theoretical disciplines, only about 2% were canceled. Practical and theoretical-practical disciplines had 13% and 10% cancellation percentages, respectively. On average, only 7.7% of the disciplines were cancelled for class resumption in the ERT model. This datum shows that the UFMG educational community significantly supported this new teaching format.

In phase 1 of the monitoring, students and teachers frequently reported an increase in activities during ERT, which was the students' second most frequent complaint. These students indicated an increase in the volume and complexity of readings, videos, and evaluative activities, which required a lot of dedication and effort from them (Menezes, 2021; Panizzon et al., 2020; Gomes, 2017).

We found that the migration to ERT required teachers to reevaluate their teaching plans, adapt discipline contents, methodologies, and forms of evaluation. However, as reported, most students rated the content and activities as excessive, whose volume increased compared to face-to-face teaching. In phase 2 of the monitoring, 79% of teachers stated that they intended to make changes to their disciplines and/or academic activities in the coming semesters.

Teaching methodology and resources

Synchronous and asynchronous VLE and digital platforms allowed the adoption of different teaching procedures. Interactions also occurred collectively or in small groups.

In phase 1 of the monitoring, we considered relevant to know the challenges to the pedagogical processes during the period. Of the 75 courses that participated in the research, 87.01% of respondents claimed that they did face challenges. Students cited excessive activities and content; lack of updating of didactic material on Moodle; and insufficient time to carry out the evaluations, whereas teachers indicated difficulties in adapting practical classes to ERT; less interaction with students; and the change from exhibition classes to recorded classes.

In phase 2, we asked teachers about the challenges to ERT implementation. Overall, 65.2% highlighted overload in preparing didactic-pedagogical materials; 46.8%, students' low interaction and involvement in the activities; and 27.9%, connectivity problems.

Among the set of possibilities, selecting teaching methodologies and resources to be carried out required teachers to appropriate technology and education and to be clear on the purposes to be achieved in their relationship with students since it would be impossible, or even undesirable, to only transpose face-to-face teaching to remote teaching. In this context, planning ERT to ensure communication and dialogue with students required teachers' dedication and time to prepare and mediate the teaching-learning process.

Learning Evaluation

The UFMG Resolution 2/2020 (UFMG, 2020b) recommended formative conception in learning evaluation, thus ensuring the continuous dimension in the regulation of the

teaching-learning process, diversification of the forms of evaluation and respect for the time necessary for students to adapt to new forms of studies (UFMG, 2020a; 2020b; Garcia & Garcia, 2020; Menezes, 2021; Gomes, 2017).

In this respect, data attest to the change in the evaluation process between the beginning of the school semester and its end since students more positively perceived the methodology adopted and time for performing the evaluations in phase 2 than the challenges found in phase 1.

Teacher-student interaction

In phase 1 of ERT monitoring, it was important to know whether there were issues regarding teacher-student relationships during the period. Of the 75 participating courses, 84.21% said yes. Students highlighted as difficulties some teachers' non-compliance to aspects of ERT resolutions and guidelines; some teachers' lack of flexibility toward demands that could improve teacher-student relationships; evaluations and activities that were not returned, among others. Teachers highlighted the lack of general knowledge in using the platforms; students' low interaction in synchronous meetings; students' restricted participation in asynchronous activities; the overload of teaching tasks; and some students' aggressive attitudes.

For Silva et al. (2020), this is a relevant aspect to be considered in any teaching context, whether remote or face-to-face, because teacher-student relationships can affect the results of the teaching-learning process. Thus, this interpersonal relationship demands care, attention, and the construction of educational bonds, especially in the context imposed by social distancing (Williamson et al., 2020; Lopes Sanchez Júnior & Silva, 2020; Gomes & Melo, 2018).

Physical and mental health

Physical and mental health was object of observation in the monitoring process. However, it is important to emphasize that the effects observed may relate to several factors, including ERT itself and, especially, the pandemic crisis (Jung et al., 2021; Ventura et al., 2020; Couto et al., 2020).

Data show the overload the ERT caused in teachers and students due to the increase in activities to prepare and implement education. Challenges also arose in reconciling domestic demands with work and learning. Thus, we can affirm that this context increased anxiety and stress in the academic community. Our research also showed that students suffered from more mental health problems than teachers. Approximately one

third reported this type of suffering, evidencing a critical point that deserves attention in future academic decisions.

Final Considerations

In full dialogue with this context, this article brings results of a research that investigated the ERT implementation process in a federal public institution, identifying the monitoring and evaluation actions implemented.

The complex scenario of the pandemic, which required ERT implementation, was initially marked by many uncertainties for both teachers and students. However, via educational management, and monitoring and evaluation actions, far from being paralyzing, teachers and students accepted ERT as an emergency and challenging alternative for the entire educational community. It is a proposal that required the dedication of all involved and was, therefore, an opportunity for learning and for living academic experiences in a new format.

In this experience, it is essential to highlight that ERT monitoring and evaluation favored a reading of how UFMG established the directions of this form of education. The collected data showed important aspects in this teaching context and evidenced learning, limits, and weaknesses that the educational community should assume to safeguard equity, safety, and quality.

These data also indicated the consolidation of access and use of technological equipment and internet for teaching, which also ensured digital inclusion. We found the development of technological and pedagogical appropriation for teaching that requires the continuity of individual and collective formative actions to be effective.

Based on these data, we can affirm that ERT had teachers and students' support as an emergency alternative during this crisis, demanding efforts and investments to maintain minimum teaching conditions. During the covid-19 pandemic, the CEPE Resolution No. 02 (UFMG, 2020b) brought the exceptional regulation of ERT in UFMG undergraduate courses. This guidance stimulated teachers to search for teaching methodologies and resources, configuring a unique and challenging opportunity for them to rethink teaching practices in the pandemic scenario. Sensitized and committed to this new reality, many teachers incorporated teaching alternatives that contemplated communication mediated by digital technologies, aiming to ensure access, permanence, and learning (Pinto & Leite, 2020; Barbosa et al., 2020; Padilha & Zabalza, 2016).

However, teachers increased the production of resources and activities, which students deemed excessive since it required greater time and dedication to their studies. This condition is understandable, but requires that the planning carried out in an emergency context be changed and readjusted to achieve a qualified pedagogical production,

considering that there are still no prospects of returning to face-to-face teaching. Moreover, the distribution of ERT activities will have to be allied to a pedagogical approach consistent with study conditions and teaching objectives in students' academic education in the atypical context of the pandemic.

Regarding the implemented ERT format, it is important to maintain its distinction from other teaching modalities and ensure the planning of actions to transition back to face-to-face teaching. From ERT, we can extract the experience of using digital technologies and pedagogical mediation as a path to adopt hybrid education.

This study shows that this education model has limits and possibilities. On its limits, it is important to highlight that ERT is a new model and, considering its emergency condition, does not allow the transposition of experience from one institution to another due to the differentiated dynamics of their contexts. Furthermore, our data were collected and analyzed with ERT in progress. However, this study inspires the discovery of new questions and new analytical ways of understanding reality. One possibility would be to know and analyze the teaching and evaluation practices adopted by teachers via digital technologies and platforms during ERT implementation, seizing lessons to be explored in face-to-face teaching.

To conclude this study, we reaffirm the institutional commitment to ensure actions in defense of the quality of education; educational management, intervention, and student monitoring along the academic trajectory.

It is a challenging process, marked by different experiences and learning. On the one hand, the covid-19 pandemic showed ills, limits, and challenges, but on the other, it stimulated academic reorganization, methodological innovation, and learning opportunities. As human beings, we are in the process of building new knowledge and always learning.

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