ABSTRACT: Since March 2020, measures to control the transmission of COVID-19 - suspension of activities, social isolation, masks, and mass testing of the population - have had consequences in Education: suspension of face-to-face classes, organizational instability, precarious pedagogical responses to the emergency phase, and migration to digital methodologies, with negative and segmented results in the student population. Students were forced to adapt their domestic reality - spaces, routines, family dynamics, available digital media - to the Emergency Remote Learning, deepening exclusion and inequality. The pandemic exposed the Brazilian structural problems sedimented from its class division. The pandemic and the socioeconomic problems described favored a climate of anxiety and distancing within universities. Even those that had been working with active methodologies, mediated by technology, ran into a lack of planning, education for the use of digital media, and the precariousness of the material conditions of existence of a significant part of the students, who stopped participating in classes due to problems related to the situation: insomnia, panic and depression.

aprofundando a exclusão e a desigualdade. A pandemia escancarou os problemas estruturais brasileiros sedimentados a partir de sua divisão de classes. A pandemia e os problemas socioeconômicos descritos favoreceram o clima de ansiedade e distanciamento dentro das universidades. Mesmo aquelas que já vinham trabalhando metodologias ativas, mediadas pela tecnologia, esbarraram na falta de planejamento, na educação para o uso dos meios digitais, na precariedade das condições materiais de existência de parte significativa dos alunos, que deixaram de participar das aulas devido a problemas correlatos à situação: insônia, pânico e depressão.


RESUMEN: Desde marzo de 2020, las medidas de control de la transmisión del COVID-19 - suspensión de actividades, aislamiento social, uso de mascarillas y pruebas masivas a la población- han tenido consecuencias en la Educación: suspensión de las clases presenciales, inestabilidad organizativa, precariedad de las respuestas pedagógicas a la fase de emergencia y migración a metodologías digitales, con resultados negativos y segmentados en el público estudiantil. Los estudiantes se vieron obligados a adaptar su realidad doméstica -espacios, rutinas, dinámicas familiares, medios digitales disponibles- a la Educación de Emergencia a Distancia, profundizando la exclusión y la desigualdad. La pandemia dejó al descubierto los problemas estructurales brasileños sedimentados en su división de clases. La pandemia y los problemas socioeconómicos descritos favorecieron un clima de ansiedad y distanciamiento dentro de las universidades. Incluso aquellos que ya venían trabajando con metodologías activas, mediadas por la tecnología, se encontraron con la falta de planificación, de educación en el uso de los medios digitales, la precariedad de las condiciones materiales de existencia de una parte importante de los alumnos, que dejaron de participar en las clases por problemas relacionados con la situación: insomnio, pánico y depresión.


Introduction

Since January 2020, the respiratory disease outbreak COVID-19 - an international Public Health emergency - was defined by the World Health Organization (WHO) as a pandemic of community and planetary dissemination. According to Oliveira et al. (2021), to minimize the spread and number of deaths, social isolation, treatment of identified cases, massive testing, and social distancing were recommended.

Brazil's social inequalities add to the pandemic, and the consequences of COVID-19 have a class nature, as emergency remote education has led many students to show a decline in learning due to economic issues.

The WHO (2020) highlighted South America - with emphasis on Brazil - as the epicenter of the disease, pointing out the need for measures to contain the number of cases. One of them
was the suspension of face-to-face classes to avoid transmission in crowds, an action that has generated immediate consequences and future impacts.

The pandemic of COVID-19 has impacted the world in many spheres: social, economic, and political. Due to the actuality of the pandemic, it is still difficult to predict its long-term impacts. However, in the Brazilian society of deep social asymmetries, the pandemic has assumed its perverse character. The old structural problems that plague a significant portion of Brazilians, such as hunger, lack of treated water, and difficulty in accessing public policies, are now added to the new risks inherent to the virus (FALQUETE; BOTELHO MORA; MATELLI, 2021, p. 41, our translation).

The authors argue that the pandemic exposes Brazilian structural problems. The health crisis is accentuated in the peripheral, riverside, indigenous and quilombola populations, due to social inequalities. Regarding education: "The impacts identified were linked to the interruption of the pedagogical agenda, as well as the migration from face-to-face teaching to the remote teaching format" (ROCHA; LIMA, 2021, p. 380, our translation), amplifying the learning difficulties, and the challenges concerning remote, distance learning, and their respective methodologies in and for this current educational scenario.

The research, problematizing possible impacts of the pandemic and social isolation on education and remote teaching, highlights that three school semesters of remote teaching have gone by without immunizing vaccines being available to the Brazilian population: thus, serious consequences for the student's education in the teaching and learning process are observed.

The text is based on a bibliographic review of recent articles (2020 and 2021) on education and the pandemic (COVID-19). It also pays attention to publications that address the relationship between education and technologies, with a bias toward quantitative data analysis on the access of socioeconomically differentiated college students.

It was observed that Higher Education, since the beginning of the suspension of in-person classes, has opted to provide full or partial continuity of the subjects with the use of non-face-to-face learning strategies in order not to jeopardize the school calendar (ACI UNESP, 2020).

"Amidst the global pandemic of COVID-19, still ongoing in Brazil, it becomes difficult to predict what its long-term impacts will be on Brazilian society" (FALQUETE et al., 2021, p. 42, our translation). The literature survey reflects, however, repercussions and consequences of social isolation during the pandemic, both in Emergency Remote Learning for face-to-face courses, and for those offered in distance learning or hybrid model.
The education system has become more exclusionary due to the difficulty in accessing the internet, equipment, and an adequate place to study, causing not insignificant side consequences such as emotional reflections on the students and faculty.

If, on the one hand, remote teaching enables, through DICT, important active methodologies for student learning, encouraging students and teachers to constantly search for feedback strategies, facilitating the interaction and dialogue between teacher and student; on the other hand, there are uncertainties about the discriminatory effects caused by the concrete material environment required by these methodologies, a situation that is laid bare with the pandemic, but points to challenges for future debates and reflections in the field of Education.

**Remote learning and its impacts**

Fistarol, Silveira and Fischer (2021) note that the pandemic forced all courses in the world to interrupt face-to-face classes and migrate, with no time to prepare for such a change, to a model of remote emergency classes, mediated by digital platforms. In this way, entire families had to adapt to the school transformations, both in Basic Education, with family members mediating the learning, and in Higher Education, with students adapting to the domestic reality and its characteristics of space and routine, in addition to the equipment needed to follow the classes, emphasizing that the impacts are different according to the abysmal inequalities that prevail in society.

For Oliveira *et al.* (2021), the suspension of classes caused changes in the students' education, in the students' lives and in their families. This adaptation of face-to-face class in remote teaching and the adaptation of the pedagogical format of face-to-face activities to the virtual learning environment is a challenge for teachers and students (ROCHA; LIMA, 2021).

Besides the risks that "remote education brings of deepening social and educational inequalities and the adoption of virtual training strategies, supported by technologies, post pandemic" (BONOTTO; CORRÊA; CARDOSO; MARTIN, 2020, p. 1735). Falquete, Botelho, and Martineli (2020, p. 47) state that already existing inequalities are not overcome and are still overlaid by new social disparities, "hunger has not been eradicated, nor have accesses to treated water basic sanitation and literacy become universal."

"Such problems are added to the uberization and precariousness of work, the withdrawal of rights and, at this current moment, the Coronavirus pandemic, reflecting directly in the number of deaths by income, race, and ethnicity" (FALQUETE *et al.*, 2021, p. 47, our translation).

The social inequalities accumulated throughout Brazilian history now add up to the pandemic. The effects of COVID-19 have shown a class character, since social, economic, and
racial asymmetries have determined the so-called "risk group" of the disease. With the suspension of face-to-face classes, many students face a decline in learning and difficulty in accessing technologies due to economic issues, making the education system more exclusionary.

Wenczenovicz (2020 [web], our translation) reports that in 2019:

- 44% of households in rural Brazil had Internet access, while in urban areas the rate was 70%;
- In classes A and B, 96.5% of the houses have internet signal;
- In classes D and E 59% cannot surf the net, and among the population with family income below one minimum wage;
- 78% of people with Internet access have been using the Internet exclusively through their mobile device.

The Brazilian Institute of Geography and Statistics (IBGE, 2019) reports that 9 million Brazilians between the ages of 0 and 14 live in extreme poverty; of these, 207,000 are children under the age of five who suffer from severe malnutrition.

Social distance, with the impossibility of being in the school environment, favors the exposure to violence (sexual, physical, or psychological) of students, since teachers are routinely the ones who observe and point out the acts of violence against adolescents and children, as well as increases the risk of growth of child labor and early pregnancy. Duque and Durán Vasquez (2020, p. 31, our translation) suggest designing an inclusive school system in which "the school becomes responsible for adapting the curriculum to its students and making choices that it considers most effective in order to ensure the success of students, in a special way, of those who manifest some kind of fragility."

During the pandemic and the urgency to define methods and processes, this has not occurred optimally. The emergency situation has not favored the planning of the assertive use of the available tools. The application of Information and Communication Technologies (ICT), from or through the Internet and broadcast TV, was the selected alternative to give continuity to the teaching and to reach "democratically" the largest number of students in the Brazilian territory amidst social distancing.

GARCIA et al. (2015, p. 69, our translation) have noted: "The transition from face-to-face to virtual, in teacher training, presents challenges to the tutor, because his workplace is no longer the same, his students are usually not children or young people, the content to be developed requires differentiated skills."

With social distance, contact, communication, and teaching have suffered losses, noise, and student autonomy stands out as an essential aspect.
The current context demands from teachers new practices in front of knowledge, with a focus on preparing new generations of individuals for critical thinking, as opposed to the thoughtless, frenetic and assiduous use of technological apparatus, with blunt familiarity and interactivity (CUNHA et al., 2017, p. 682, our translation).

For Geraldi and Bizelli (2017), the development of society depends on the ability to generate, transmit, process, store and retrieve information efficiently. The school needs to have access to these tools and the capacity to produce and develop knowledge using Digital Information and Communication Technologies (DICT).

One of the characteristics of distance learning is student autonomy. In addition, organization is necessary to search the available content and its learning mediated by the content and tutoring. In other words, in an inverse methodology, the student manages his study time, reflects on the content outside the classroom, and the teacher explores these learning objects. Active methodologies are essential, but in this adapted and emergent distance learning modality, the DICTs have led teachers to a search for students. Thus, an active search stood out as a need to constantly seek feedback from students, participation, presence in the virtual class, performance of assessments and delivery of the activities proposed by the teachers.

The distance learning as a teaching methodology needs to make the DICTs become resources, materials, which from the pedagogical intentionality of the teacher can promote the construction and socialization of knowledge in the relationships that are built and constitute themselves from this new virtual educational scenario. The relevance of the study material is exposed by the Ministry of Education (BRASIL, 2007), in a document that establishes that the Political Pedagogical Project of a distance learning course must contain in an adequate and elaborate way: conception of education and curriculum in the teaching and learning process; communication systems; didactic material; evaluation; multidisciplinary team; support infrastructure; academic-administrative management; financial sustainability. Elements that could not be planned in the emergency process caused by the pandemic, thinking about Basic Education and Higher Education.

The Brazilian Institute of Geography and Statistics (IBGE, 2018) shows that the average monthly work income of 1% of the richest population was 34 times greater than of the poorest half. In other words, the most economically privileged earned an average of R$27,744 per month, while the less favored 50% earned R$820 (IBGE, 2019).

In public Higher Education, the scenario of inequality is also perpetuated, showing that, although the lower class (with per capita family income below R$ 291) represents 23% of the Brazilian population, in the student body they represent only 8%.
The upper class (with per capita family income over R$ 1010), being 25% of the population, represents 46% of the university students in public universities.

One of the main problems with the implementation of the emergency remote activity, based on this non-presence model in public universities, is the concern in aggravating inequalities by requiring students who cannot afford internet access, or who do not have a computer, to attend classes and deliver activities remotely. This implies that these students have
the option of dropping out of the course, since this is yet another obstacle to accessing and completing higher education.

The dismantling of the public university is one of the concerns of the student movements, since the implementation of emergency distance learning can lead this method to become permanent inside the institutions - making this environment even more elitist, classifying, and excluding.

Regarding students' mental health, Cao et al. (2020) developed a survey among medical students at Changzhi College in China, and 24.9% of the student body experienced some type of anxiety related to COVID-19. Living with parents, having financial stability, and living in urban areas were noted as protective factors among students, while economic problems, sick relatives, and difficulty keeping up with studies were identified in the survey as anxiety-prone sources.

In 2020, the National Association of Graduate Studies and Research in Education (ANPED) released the survey "Teacher Work in Times of Pandemic", prepared by the Study Group on Educational Policy and Teacher Work of the Federal University of Minas Gerais (UFMG), with the support of the National Confederation of Education Workers (CNTE). The data was collected between June 8 and 30, 2020, with 15,654 teachers from all over Brazil, from Kindergarten, Elementary School, and Youth and Adult Education.

From the teachers who are teaching from their homes:

- 82% stated that the workload had increased;
- 84% mentioned that student involvement decreased somewhat or sharply during the pandemic.

About the students' main difficulties:

- 80% said that the main difficulty for students is access to the Internet and computers;
- 74% pointed out that it is difficult for them to have family support for their studies;
- 53% mentioned the students' lack of motivation;
- 38% stated that students are unfamiliar with the use of technological resources.

Kapasia et al. (2020) state that 76% of Higher Education students surveyed in India believe that the pandemic will cause disruption to their studies if teaching continues in this format. Changes are needed in order for universities to seek to maintain higher education by making educational systems resilient.
Malganova et al. (2021, p. 589, our translation) suggest the following recommendations based on their research:

a) the authorities should focus on developing strategies for the rapid implementation of specific measures to support students and teachers throughout the forced pause in the educational process;
b) technical and organizational support is needed for the population of Russian regions for various reasons, lack of necessary equipment, internet connection and other online tools;
c) protect the rights of high school and college employees;
d) ensure social equality and inclusion, avoiding further social stratification;
e) protecting the personal information of students and teachers, preventing or minimizing the risks arising from interaction in the virtual space, including cyberbullying.

There are many problems arising from this situation: the pandemic has caused transformations in the social organization all over the world. In education, the teaching and learning processes have gone through a scenario of uncertainty: not even teachers are able to evaluate the content taught, they feel insecure and pressured by the administration, families and students. In pedagogical actions, the DTIC favor opportunities, but also accentuate barriers (WENCZENOVICZ, 2020).

Conclusions

It is important to note that the consolidation of digital teaching and learning processes requires an active, autonomous attitude from the student, a protagonist, critical subject, transformer of the society in which he is inscribed, but who is subjected to the historical conditions of material existence. Thus, the inverted methodology, which would be a viable possibility in remote teaching, needs the active involvement of students in the learning processes, which did not occur during the Covid-19 pandemic, a result of the stress caused by the absence of material means and the mental pathologies associated with the situation.

The inverted methodology works methodologically with the student having access to the content at home, via the internet; with the possibility of him taking his doubts and solving them at school, with the help and intermediation of the teacher. It is important, therefore, that the student gets involved in the pedagogical process: participates and interacts. Lack of access to DICT and favorable mental conditions make the whole process of autonomous learning impossible. It remains for the teacher - also pressed by professional, social, and personal crises - to rescue the stimulus and motivation of the student through exercises, activities, tests, virtual
classes and lives, spaces mediated by the camera, which, even turned on, is not a sign of virtual presence.

The work showed the importance of the teacher assuming a mediating posture in the teaching and learning processes, since one cannot abandon students to their material conditions of existence, learning and educational development. The teacher's role is fundamental when there is awareness of the difficulties faced by students and the community, and the adverse structural effects, aggravated by this pandemic, fall on the teaching staff even if there is support from school managers and involvement from the students.

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