DISTANCE LEARNING: E-LEARNING IN PANDEMIC TIMES

EDUCAÇÃO REMOTA: REFLEXÕES ACERCA DO ENSINO A DISTÂNCIA EM TEMPOS DE PANDEMIA

EDUCACIÓN A DISTANCIA: APRENDIZAJE A DISTANCIA EN TIEMPOS DE PANDEMIA

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ABSTRACT: In January 2020 an outbreak of respiratory disease began; by March 11, the COVID-19 pandemic had reached the entire world. To contain it, social isolation was recommended. Since then, public schools in Brazil are adopting remote teaching. The aim of this paper is to present some reflections about the possibilities and difficulties observed in the teaching and learning process of remote teaching in the COVID-19 pandemic. To this end, bibliographic references from the field of Education will be used to corroborate the discussions undertaken here. Distance Learning already existed, and several methodologies were developed, but not specifically aimed at Basic Education. Thus, it is observed that with the pandemic there was no collective methodological applicability of good practices for remote teaching. Until the present moment, May 2021, there are three school semesters without regular face-to-face classes and there is still no vaccine to immunize everyone. Upon returning in person, teachers are expected to resume the content that should have been taught and learned by the students in record time. In this way, it is necessary to focus on the teaching and learning practices in remote teaching and on the methodologies already discussed and implemented in distance learning in other levels of education to (re) think the educational events in the pandemic period in Brazil.

KEYWORDS: Pandemic. COVID-19. Education. E-learning.

RESUMO: Em janeiro de 2020 houve o início de um surto de doença respiratória; em 11 de março, a pandemia COVID-19 atingia o mundo todo. Para contê-la, foi recomendado isolamento social. Desde então, escolas públicas no Brasil estão adotando o ensino remoto. O objetivo do trabalho é apresentar algumas reflexões acerca das possibilidades e dificuldades observadas no processo de ensino e aprendizagem do ensino remoto na

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pandemia do COVID-19. Para tanto, serão recrutadas referências bibliográficas da área da Educação para corroborar com as discussões aqui empreendidas. O Ensino a Distância já existia e diversas metodologias foram desenvolvidas, mas não voltadas especificamente para o Ensino Básico. Assim, observa-se que com a pandemia não houve aplicabilidade metodológica coletiva das boas práticas para o ensino remoto. Até o presente momento, maio de 2021, são três semestres letivos sem aulas presenciais regulares e ainda não há vacina para imunizar todos. No retorno presencial, espera-se dos docentes a retomada do conteúdo que deveria ter sido ensinado e aprendido pelos escolares em prazo recorde. Dessa forma, há que se debruçar acerca das práticas de ensino e aprendizagem no ensino remoto e das metodologias já discutidas e implementadas no EaD em outros níveis de ensino para que se (re)pense os acontecimentos educacionais no período de pandemia no Brasil.

PALAVRAS-CHAVE: *Pandemia. COVID-19. Educação. EaD.*

RESUME: *En enero de 2020 se produjo el inicio de un brote de enfermedad respiratoria; el 11 de marzo, la pandemia de COVID-19 afectó a todo el mundo. Para contenerla, se recomendó el aislamiento social. Desde entonces, las escuelas públicas de Brasil están adoptando la enseñanza a distancia. El objetivo de este trabajo es presentar algunas reflexiones sobre las posibilidades y dificultades observadas en el proceso de enseñanza y aprendizaje de la teledocencia en la pandemia de COVID-19. Para ello, se reclutarán referencias bibliográficas del área de Educación para corroborar las discusiones aquí realizadas. La enseñanza a distancia ya existía y se desarrollaron varias metodologías, pero no dirigidas específicamente a la educación básica. Así, se observa que con la pandemia no hubo una aplicabilidad metodológica colectiva de buenas prácticas para la enseñanza a distancia. Hasta el momento, mayo de 2021, hay tres semestres escolares sin clases presenciales regulares y aún no hay vacuna para inmunizar a todos. En el retorno presencial, se espera que los profesores retomen los contenidos que deberían haber sido enseñados y aprendidos por los alumnos en un tiempo récord. Por lo tanto, es necesario abordar las prácticas de enseñanza y aprendizaje en la educación a distancia y las metodologías ya discutidas e implementadas en la EAD en otros niveles de educación para (re) comprender los eventos educativos en el período de la pandemia en Brasil.*

PALABRAS CLAVE: *Pandemia. COVID-19. Educación. Aprendizaje a distancia.*

Introduction

> 2020 began with an outbreak of respiratory disease, declared a Public Health Emergency of International EaImportance by the World Health Organization (WHO) in late January. On March 11, the WHO characterized as a pandemic the picture of the community spread of COVID-19 that was already reaching all continents. To contain the disease and minimize the number of deaths, three basic actions were recommended: isolation and treatment of identified cases, massive testing, and social distancing (OLIVEIRA *et al.,* 2021, p. 84, our translation).

Since March 2020 until today (May 2021), public schools in Brazil are adopting remote teaching, according to the Opinion No. 5/2020 of the National Education Council

(CNE), approved by the Ministry of Education (MEC), which suspended face-to-face classes throughout the country (BRASIL, 2020). In this scenario, many didactic-pedagogical transformations have occurred. For Lago *et al.* (2021), changes have occurred in most of the educational institutions in the world, bringing unexpected transformations and challenges, mainly due to the context, as well as changes in important factors for learning in this period.

Thus, the "[...] identified impacts 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). And, with this, the challenge of giving continuity to the classes through virtual, synchronous, and asynchronous classes grew. Furthermore, Malganova, Dokhkilgova, Saralinova (2021) point out that the pandemic context is only overcome through the vaccination of the population. As long as students are not immunized, the school awaits solution and maintains its responsibility over the present and future of society. In this regard,

> Social isolation has imposed a confinement on us that reveals how difficult it is to live in isolation (to the brain it is the same as being hungry), but it has not prevented us from sharing more knowledge than ever before. As it seems, our future depends directly on collaboration, and right now, on shared and collaborative knowledge so that we don't become immobilized and can seek the remedy. Now, collaborating implies trust: in our work, in our peers, co-workers, students, leaders (LEMES; SANTOS CRUZ, 2021, p. 295, our translation).

In this context, several possibilities of use of Digital Information and Communication Technologies (ICT) have been listed to corroborate with remote teaching. According to Wenczenovics (2020), these are alternative ways to maintain the teaching and learning process during the pandemic and, thus, applications and online platforms have become means of excellence in educational spaces.

From the above, the objective of this paper is to present reflections on the possibilities and difficulties observed in the teaching and learning process of remote teaching in the pandemic of COVID-19. To this end, bibliographic references from the field of education will be used to corroborate the discussions undertaken here.

Distance Learning

The social distancing, a consequence of the pandemic, implied the closure of spaces that brought many people together, including school institutions. For Oliveira *et al.* (2021), the suspension of classes produced relevant effects in the education of students, in the lives of

students and their families, and in educational performance, in which schools became responsible for minimizing the impact of the lack of face-to-face classes.

The authors also highlight aspects about the use of technologies, emphasizing that teachers cannot be the starting point for analysis, that there is institutional and curricular weakness linked to the continuing education of teachers to qualify, to build training strategies that integrate the ICTs (OLIVEIRA *et al.,* 2021).

Rocha and Lima (2021) state that there have been changes in social behavior by the experience of remote learning subsidized by ICTs, especially web conferences. The need generated by COVID-19 fostered the use of technology, changing people's habits and uses: although the technology of web conferencing platforms already existed before the pandemic, not all users were able to use it assertively and with education in mind.

Despite the available ICTs, face-to-face teaching, and distance learning walk on different paths. For Rocha and Lima (2021), it is essential to avoid the dichotomous path of face-to-face teaching *versus distance learning,* and the comparative value judgment between the two modalities. The adaptation of the pedagogical format of face-to-face activities to the virtual environment is challenging for teachers and students, both because of the technology and the imposition.

Lago *et al.* (2021) analyzed the effect of factors on student learning during remote time and found that direct classes contribute more to student learning than asynchronous ones, i.e., there is a preference for working dynamics through live streaming platforms such as *Google Meet.*

The construction of knowledge currently goes through technologies. According to Levy (1999), the advances in technology favor the access to education and democratize knowledge, but it is necessary to filter information and share interests and ideas, promoting a collective intelligence in cyberspace, a space that favors these interactions, exchange of ideas through connections and virtual communities. In this way, ideas are elaborated, as well as new ways and possibilities of learning and teaching, with the use of the technologies already available and new ways to apply them in everyday education.

It is also worth noting "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 *et al.*, 2020, p. 1735, our translation). In addition, Silva, Goulart and Cabral (2021) address the ways of personal organization of time, the process of study autonomy, skills of using digital resources or the unfeasibility of access to

the internet network, therefore, which generated impacts on the students' learning process and training contexts.

Duque and Durán Vasquez (2020) propose rethinking the school system, a determinant in the formation of the individual, and the education system, so that it is truly inclusive. According to the authors:

> We have reached the true epicenter of the earthquake that is shaking education and that will require profound changes to the school subsystem within the educational system. The school thus becomes responsible for adapting the curriculum to its students and making options that it considers most effective to ensure the success of students - of all students especially those who show some kind of weakness (DUQUE; DURÁN VÁZQUEZ, 2020, p. 31, our translation).

Kenski (1998) points out the impact of ICT on teaching practice and the need for the school to build a new logic of procedures, in which the teacher goes from being a transmitter of content to a mediator and promoter of the co-construction of knowledge, focusing his efforts on guiding the student in the learning process.

Garcia, Silva, and Riedo (2015), on the other hand, highlight the discussion about the transformations that pedagogical practice undergoes when developed in virtual teaching and learning environments, with the use of new technologies. In the words of the authors:

> The transition from face-to-face to virtual, in teacher training, presents challenges to the tutor, since his workplace is no longer the same, his students are generally not children or young people, the content to be developed requires differentiated skills and the predominant form of communication is no longer oral but written (GARCIA; SILVA; RICARDO, 2015, p. 69, our translation)

From the above, it is considered that the pandemic brought the aggravating factor of including children and adolescents as Distance Learning students in the problematic, in addition to the problems faced in relation to the precariousness of the teaching work, present in both modalities. Despite the discussions, the authors used affirm their belief in Distance Learning and in the possibility of developing a significant practice, transforming, and committed to the success of the students.

Remote Learning

Promoting student learning is a challenge for the teacher. In the face of the pandemic, teaching takes place remotely and the challenges get worse. In the face of this, the solution

may come from three aspects: planning, focus on research and project development, and the use of technologies. Regarding the first aspect, planning, two things cannot happen: planning without flexibility and disorganized creativity (MORAN, 2012). Teaching requires student autonomy and responsibility to the point of going after their needs, curiosities and interests, and the ICTs favor this autonomy as a tool to improve their knowledge.

In *online* environments, part of the guidance will be carried out via adaptive platform system with semi-structured scripts. The main guidance will be provided by tutors and experts, who will direct students in the most difficult and profound questions in teaching and learning (MORAN, 2012). In turn, students can actively act in digital media, having a central role in the process, in their own time and pace in a personalized and meaningful way.

According to Cunha, Santos Cruz and Bizelli (2017, p. 680, our translation), to achieve success requires attitude, support, knowledge, skills, experiences, methods, and context. Moreover, in the authors' words, "Attitude alone is not enough, one must have the right attitude, and to distinguish it, knowledge is necessary. The contemporary world brings countless opportunities, and on the other hand, it changes already consolidated paradigms.

Remote teaching allows teachers and students to use digital technologies to reinvent the time and space for learning. Active methodologies are essential so that students can learn among peers, research, carry out projects, diversify their ways of learning, and in this moment of physical social distance, the use of technology is extremely relevant.

The flipped methodology is also a viable possibility for remote classes, but it requires student involvement in the process, autonomy, and interest. In the inverse methodology, the student has access to the content at home, via internet, and can take the questions and solve the exercises at school, relying on the help and intermediation of the teacher, so it is important that the student is involved in the process, participates, and interacts.

Moreover, affectivity and involvement in the process greatly influence the student's learning because affectivity is essential for beyond learning the overall cognitive development: the individual learns through feelings, emotions and experiences that are exchanged in interaction with others. Piaget (1968) recognizes that in the processes of assimilation and accommodation, the affective aspect is translated by the individual's interest in the objects of knowledge, thus, the role and importance of affectivity are functional in intelligence, are the source of energy that cognition uses for its operation, the human behaviors have as a driving force the affection, and the structure of how they are, and function constitutes the intellectual element. Affectivity comes as a commitment from the teacher to

pay attention to the student and foster means for learning to take place; on the other hand, the involvement stimulates the student's interest in the content learned.

With the physical and social distance, the human contact ends up suffering losses, some noise occurs in communication and a new role of family members in the training of students is solidified, in many cases of mediator between teachers, technologies, content and their children. For Moran (2012, p. 33, our translation), "The teacher's role - the main role - is to help the student to interpret this data, to relate it, to contextualize it. The educator's role is to mobilize the desire to learn, so that the student always feels like knowing more." Cunha, Santos Cruz, and Bizelli (2017, p. 682, our translation) also discuss the theme and point out that:

> The current context demands new practices from teachers in relation to knowledge, with a focus on preparing the new generations of individuals for critical thinking, as opposed to the thoughtless, frenetic, and assiduous use of technological equipment, with blunt familiarity and interactivity.

For the aforementioned authors, in contemporary times there is a growing demand from teachers for new practices to qualify students with a view to developing critical and reflective thinking.

Geraldi and Bizelli (2017, p. 127, our translation) also highlight that ICTs bring new ways and methods of knowledge production, including in the school environment. For them, the "Technological innovations allow improving the relationship School/teacher; teacher/student and student/student". The authors indicate the importance of investments in innovations and digital literacies through the training of educators able to review their methods and teaching practices and the expectation of the use of technologies to promote various educational aspects that already existed even before the development of technical resources that have demonstrated their viability.

> The development of society today depends on the ability to generate, transmit, process, store and retrieve information efficiently. Therefore, the school needs to have opportunities to access these instruments and acquire the capacity to produce and develop knowledge using ICT. The "new generation teachers" - label given by their own colleagues - have also learned the craft of teaching through tools considered obsolete, but learning from innovations, they are holders of knowledge that, in its amplitude, expand networks of relationships whose main element is the exchange of information, whether spoken or written, whether inserted in technological multiplatform (GERALDI; BIZELLI, 2017, p. 203, our translation).

Still about the use of ICT regarding the social, cultural, and financial contexts, they are related between the user and the technology, because the teacher and the student are users of

these ICT. However, before the pandemic, it was already observed that schools, especially public schools, "were not yet prepared to incorporate different forms of learning through these technologies" (GERALDI; BIZELLI, 2017, p. 203, our translation).

For the authors, reference is made to teachers, students and school managers who can be considered viewers of technology and not disseminators of knowledge through it. As already argued by Serres (2013), the knowledge made available by the Internet causes the teacher to be subtracted from the position of sole holder of knowledge. For the author of Little Thumb, "consider having your own head in your hands and in front of you" (SERRES, 2013, p. 35, our translation), in an allusion to the infinity of information available in cyberspace accessible by smartphones. Thus, the teacher needs to deal with a new reality, which presupposes learning, knowing, and exercising practices using the new technological resources, stimulating student participation, and favoring these interactions, in which "the new technologies force us to leave the spatial format inspired by the book and the page" (SERRES, 2013, p. 41, our translation).

Caram and Bizelli (2017) reported before the pandemic that in several countries Distance Learning was already recognized as a means of quality education and as an alternative to the face-to-face modality, although initially for higher education. The authors also highlight that in Brazil, despite advances in recent years, there is still a long way to go before Distance Learning can have a prominent place in the educational environment at all levels, including overcoming prejudices. In addition, the authors argue that the democratization of access to education could be accomplished through DL, but that there is a lot of work to be done in this direction.

According to Resende and Costa (2019), Distance Learning is an education modality in which ICTs become teaching materials (resources) when used intentionally for the educational process, promoting the construction and socialization of knowledge. Distance Learning requires interactivity and relationship between teacher and student, presenting as a gain the acquisition of knowledge (NISKIER, 1999). Therefore, a:

> [...] distance education is planned learning that usually takes place in a different location from teaching and, because of this, requires special course design techniques, special instructional techniques, special methods of communication through electronics and other technologies, and essential organizational and administrative arrangements (NISKIER, 1999, p. 50, our translation).

The definition of the above-mentioned author encompasses aspects of Distance Learning in methodological issues and in the planning of the teaching and learning process

using technologies. For Remote Learning based on these characteristics of DE, it is necessary to maintain the educational principles and avoid the projection of production and industrialization of knowledge that does not relate scientific knowledge to the political and social aspects of society. Distance Learning can contribute as a social role to the equality of opportunities and the development of citizenship. These two points characterize the educational action, a process of integral formation, only differentiating the space and time of learning that are replaced by a technology, where regardless of the design of the material, in the textual content it is as if it were in the presence of the teacher (NISKIER, 1999).

The valorization of the material for autonomous and explanatory study facilitates the organization, comprehension and use by the student and, although it does not replace the teacher-student relationship, the socialization and argumentative exchanges in person can complement the dialogue and the virtual learning, at a distance, and stimulates the student's autonomy, research, and attendance by a tutor teacher. And, even remotely, and how this will develop are essential to the educational process.

The relevance of the study material, as well as the ways to disseminate it to students, the definition of the pedagogical system, the conception of teaching and learning methods are defined in the document "Quality Benchmarks for Distance Higher Education", established by the Ministry of Education in 2003 and updated in 2007. According to the material, "in the context of the permanent policy of expansion of higher education in the country, implemented by the MEC, Distance Learning is placed as an important modality in its development" (BRASIL, 2007, p. 3, our translation). The document establishes that the Political Pedagogical Project of a distance learning course must fully present the elements described below:

> • Design of education and curriculum in the teaching and learning process:describe your epistemological choice of education, curriculum, teaching and learning. The definition of the development of the processes of teaching material production, tutoring, communication, and evaluation will be based on these aspects of the project, thus outlining principles and guidelines to underpin the development of the teaching, and learning process. The epistemological option is responsible for guiding the organization of the curriculum (discipline, module, theme, area) and its development. ☐ Communication systems: the innovative use of technology applied to education should be based on a learning philosophy that provides students with effective interaction in the teaching-learning process, through a communication system that can enable the development of shared projects and the recognition and respect for different cultures, as well as the construction of knowledge. In this way, the principle of interaction and interactivity (between teachers, tutors, and students) is fundamental to the

communication process and must be guaranteed in the use of any technological means to be made available.

• Teaching material: it must be developed, in terms of form and content, in line with the epistemological, methodological, and political principles established in the pedagogical project, facilitating the construction of knowledge and mediating the dialogue between student and teacher. This material should promote the development of specific skills and competencies, using a set of media compatible with the proposal and the socioeconomic context of the target audience.

• Evaluation: the evaluation of a Distance Learning project should have two dimensions:the one related to the learning process and the one related to the pedagogical project of the course. The learning assessment model needs to help the student to develop more complex degrees of cognitive competencies, skills and attitudes, providing the achievement of the proposed objectives. Regarding institutional evaluation, the Institutions must plan and implement those evaluation systems that provide quality improvements in the conditions of the courses offered and in the pedagogical process. This evaluation is a permanent process, and, consequently, it subsidizes the improvement of the management and pedagogical systems.

• Multidisciplinary team: the human resources consist of a multidisciplinaryteam with roles in the planning, implementation, and management of distance learning courses, in which three professional categories are essential for a quality offer: teachers, tutors, and technical-administrative staff. Support infrastructure: to support the development of courses, it is necessary to set up a material infrastructure proportional to the number of students, the technological resources involved and the extension of the territory to be reached. This infrastructure is configured in the academicoperational coordination in the Institutions and in the face-to-face support centers.

• Academic-administrative management: an Distance Learning system requires academic management that is integrated to the other processes of the institution, in which the student is provided with the same conditions and support (enrollment, registrations, requests, access to institutional information, secretariat, treasury, etc.) that a face-to-face course student has. Financial sustainability: financial sustainability in Distance Learning is based on two main elements, namely: short and medium-term investment and costs. In this type of education, the initial investments involved are high and intended mainly to cover the following aspects: production of teaching materials, training and qualification of multidisciplinary teams, implementation of face-to-face support centers, availability of other educational resources, implementation of methodology and management team of the Distance Learning system (BRASIL, 2007, p. 4, our translation).

Although the document does not have the force of law, it is considered a guideline. It is a document that, in 2007, updated the first official MEC text on Distance Learning, from 2003. In this sense, it emphasizes that

> The changes implemented here are justified because of the changes brought about by the maturation of the processes, especially regarding the different pedagogical possibilities, especially regarding the use of information and communication technologies (BRASIL, 2007, p. 4, our translation).

The text also argues that applying Distance Learning in a systematic way to improve the quality, effectiveness and efficiency of education is a challenge that can generate advances in education. The debates about Distance Learning bring resignifications of some paradigms related to education, school, curriculum, student, teacher, evaluation, school management, and learning. In this way, these discussions are not consolidated, but have been deepened for years, and could reflect adequate conditions at a time when the use of ICT has become the main tool for teaching. However, this is not exactly what is happening now.

According to a survey by the Lemann Foundation (2021), based on the announcement made on its website, "[...] while in the world the average delay in education is three to nine months, in Brazil, the setback caused by the coronavirus context can be up to four years. According to the Foundation, the number of study hours dedicated to non-presential activities can make the difference, and it estimates that the loss of learning varies from 33% to 72% according to the time used for study. It also highlights that the impacts of the prolonged closure of public schools go beyond the academic content, encompassing the role of social protection, nutrition, and emotional security, and therefore argues that remote education does not guarantee the necessary learning of children and adolescents, but it can be a complement of studies, to account for learning problems.

Therefore, the discussion raised by Lemes and Santos Cruz (2020, p. 295, our translation) stands out:

> Brazil is one of the countries with community transmission of COVID-19 and has confirmed 114,715 cases and 7,921 deaths from the disease as of the afternoon of May 5, 2020. (after the closing of the WHO bulletin number 106). On 05/11/2020, we passed 10,500 cases, and today, 05/27, we passed 20,000 officially confirmed cases, with clear evidence of underreporting. On 05/06 we exceeded 32000 deaths, the contagion curve trajectory is ascending and the public power starts looking for subterfuges so that the information is not disseminated. For several days, the official data has been released later than usual, where the media reaches a minority of the population. With the new deaths, above 1000/day, we have accumulated 35026 registered cases of deaths and more than 645,700 infected. Here begins, out of hypocrisy or villainy, to blame the thermometer for the fever. However, it seems that this denialist blatancy, in a tone of disqualification of the facts, on the part of certain attitudes of governments and governors, is an atavistic part of our political history.

Final considerations

The objective of this paper was to present some reflections about the possibilities and difficulties observed in the teaching and learning process of remote teaching in the pandemic

of COVID-19. To this end, some authors were recruited to corroborate the discussions undertaken. The purpose of these reflections is not to end the possibilities of discussions that can be listed, but to contribute, for the moment, to (re)think daily aspects experienced in the teaching and learning processes that involve various social actors, such as teachers, students, families, community, and government.

Distance Learning has been thought about, developed, and problematized for a long time, since the advent of ICTs and the worldwide expansion of access to digital technologies. However, until before the pandemic, distance learning was mostly thought of for teaching and learning in the context of higher education in Brazil. In this way, definitions and elements that make up Distance Learning could also be applied to remote teaching at the primary and secondary school levels. What can be observed is that, despite the existence of documents that guide Distance Learning, there has been no methodological applicability of best practices for remote teaching collectively, at a time of pandemic. Thus, Brazilian public education has been without regular classes for three school semesters, with obstacles to the effectiveness of teaching using ICTs with quality, and still without a vaccine to immunize the entire population.

In the return face-to-face, teachers are expected to resume the content that should have been taught and learned by the students in record time. In this way, it is necessary to focus on the teaching and learning practices in remote education and the methodologies already discussed and implemented in Distance Learning in other levels of education to (re)think the educational events in the pandemic period in Brazil. This, because there are socio-historical aspects that need to be considered, such as the unequal access to ICT by teachers, students and families, and the impact of Distance Learning, in general, on the economic, educational, and cultural conditions of Brazilians.

In this way, and in an attempt to share with the students the interest and possibility of building their own knowledge, one can excel in developing the autonomy and motivation of the students.

In addition, strategies for post-isolation recovery with the return to face-to-face classes are being thought by teachers, again autonomously: the proposals for the return mix review and reinforcement of the content already covered and resumption of upcoming content. One of the problems while the population is not immunized will be the maintenance of remote teaching, in parallel to face-to-face teaching, and it's worth pointing out that for many students the teaching will continue to be only remote, since the children are not immunized yet, and

many conscious family members will not send them to social coexistence in the middle of the pandemic.

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