Public education, digital technology access, and remote education in the COVID-19 pandemic in Brazil

Educação pública, acesso às tecnologias digitais e ao ensino remoto na pandemia da COVID-19

La educación pública y el acceso a las tecnologías digitales y la enseñanza remota en la pandemia del Covid-19 en Brasil.

Éducation publique et accès aux technologies numériques et enseignement à distance pendant la pandémie de la COVID-19

ABSTRACT

This study endeavors to provide a comprehensive overview of the availability and utilization of digital technology in elementary education during the COVID-19 pandemic while analyzing the educational policies within the Brazilian public education system. By analyzing relevant documents, the findings expose disparities in internet usage among students from public and private schools, which is attributed to the correlation between digital technology access and family income. In addition, pronounced regional and territorial inequalities in education emerge, notably between the Northeast and South regions, as well as between rural and urban areas. The data further revealed that approximately one million students enrolled in public high schools lacked internet access in 2019, posing major challenges for public educational institutions in implementing remote teaching in 2020. The gravity of the situation is exacerbated by the absence of envisioned public policies aimed at providing extensive and secure digital resources to nurture inclusive education for all.

KEYWORDS: basic education; social inequality in education; public policy.

RESUMO

Este estudo tem por objetivo traçar um panorama referente à disponibilidade e utilização de tecnologias digitais na educação básica durante a pandemia da COVID-19 e analisar as políticas educacionais no âmbito da rede pública brasileira de ensino. Os resultados da análise documental evidenciaram diferenças entre o uso de internet por estudantes das escolas públicas e privadas, devido à correlação entre o acesso às tecnologias digitais e à renda familiar. Além disso, marcantes desigualdades educacionais regionais e territoriais foram observadas, por exemplo, entre o Nordeste e o Sul e entre espaço rural e urbano. Os dados mostraram que cerca de um milhão de alunos da rede pública de Ensino Médio não teve acesso à internet em 2019, o que dificultou estabelecer um ensino remoto nas unidades educacionais públicas em 2020. A situação é ainda mais alarmante porque não visualizaram políticas públicas para ampliar e assegurar a oferta dos
Este estudio tiene como objetivo trazar un panorama acerca de la disponibilidad y el uso de las tecnologías digitales para la educación básica durante la pandemia del Covid-19, así como analizar las políticas educativas en la red pública de enseñanza brasileña. Los resultados del análisis de documentos destacaron las diferencias entre el uso de la internet entre alumnos de escuelas públicas y privadas, debido a la correlación existente entre el acceso a las tecnologías digitales y la renta familiar. Además, fueron observadas otras grandes desigualdades educativas, tanto regionales como territoriales, por ejemplo, entre el Noroeste y el Sur del país, y entre zonas rurales y urbanas. Los datos mostraron que cerca de un millón de alumnos de la red pública de enseñanza media no tuvieron acceso a internet en 2019, lo que dificultó el establecimiento de la enseñanza remota en las unidades educativas públicas en 2020. La situación es aún más alarmante porque no se han concebido políticas públicas para ampliar y asegurar la oferta de los recursos educativos digitales y promover una educación para todos.

PALABRAS-CLAVE: educación básica; desigualdad social en educación; políticas públicas.

RESUMEN

Este estudio tiene como objetivo trazar un panorama acerca de la disponibilidad y el uso de las tecnologías digitales para la educación básica durante la pandemia del Covid-19, así como analizar las políticas educativas en la red pública de enseñanza brasileña. Los resultados del análisis de documentos destacaron las diferencias entre el uso de la internet entre alumnos de escuelas públicas y privadas, debido a la correlación existente entre el acceso a las tecnologías digitales y la renta familiar. Además, fueron observadas otras grandes desigualdades educativas, tanto regionales como territoriales, por ejemplo, entre el Noroeste y el Sur del país, y entre zonas rurales y urbanas. Los datos mostraron que cerca de un millón de alumnos de la red pública de enseñanza media no tuvieron acceso a internet en 2019, lo que dificultó el establecimiento de la enseñanza remota en las unidades educativas públicas en 2020. La situación es aún más alarmante porque no se han concebido políticas públicas para ampliar y asegurar la oferta de los recursos educativos digitales y promover una educación para todos.

PALABRAS-CLAVE: ensino básico; desigualdade social na educação; políticas públicas.

RÉSUMÉ


MOTS-CLÉS : éducation de base ; inégalité sociale dans l’éducation ; politique publique.
INTRODUCTION

In political plans, it is common to resort to the discourse that education is the way to development (in its various dimensions and visions), sustainability, democracy, economic growth, etc. (UNITED NATIONS, 2015; BRAZIL, 1996, 2017a, 2017b, 2018; BAHIA, 2020). Various meanings are attributed to the educational process, perceptible in concepts, theories, investments, and programs. Education involves itself with the different dimensions of society by permeating and being the result of social relations dynamics, geographically and historically situated.

The limits of the educational process are not found in school buildings, in government programs, nor in the classes based on curricular components. Education occurs by and through these means, but it goes beyond them when it continues at home, in the street, among family members and friends, as it remakes itself in the lived experiences of being-in-the-world, whether in physical or virtual contexts. Thus, education is not limited to the different stages of schooling, but constitutes a multiple space, understood by different social agents, formative dynamics, in the systematic and unsystematic processes of knowledge construction (DOURADO; OLIVEIRA, 2009).

Education lists the macro-processual relations of society, derived from the desires and roles assigned, at the intersection of subjecting, conditioning, and liberating the subjects of education, in the cultural, political, economic, and environmental dimensions, among others (MELLO, 1991; MOREIRA; CANDAU, 2003; SILVA; FERREIRA, 2014; DIAS; PINTO, 2019). Therefore, it is an important way to confront social inequalities and all the (re)experienced challenges, in a constant search to reflect upon and requalify human actions in the face of social injustice and the consequent devastating effects of the hegemonic development model adopted worldwide and, consequently, in Brazil (SILVA; HASENBLAG, 2000; SEABRA, 2009; ARAÚJO, 2014).

Faced with the COVID-19 pandemic, the world has experienced economic, social, cultural, environmental, and other repercussions that alter the way in which relationships are conceived and exacerbate the already profound social inequalities (OLÍMPIO et al., 2020; SANTOS, 2020; SANZ et al., 2020). Due to the pandemic, global estimates indicate the reversal of the achievements of recent years in education, which are aggravated for girls, due, for example, to the lack of access to the internet via mobile data network, to microcomputers, and the sharp increase in the time allotted to domestic chores, often only delegated to them (OXFAM, 2021). All this is causing poverty and social contrasts to intensify.

Within the educational context in Brazil, the situations visualized demonstrate unprecedented
implications today, either by the (dis)continuity of formal education, by the abyss deepened by the (in)existence of school classes in public and private institutions, or by the increasingly evident disproportionate ownership of educational resources (DIAS; PINTO, 2019; PEREIRA et al., 2020). Part of the educational process that took place denotes the social contrasts resulting from income concentration and unfair access to goods (OXFAM, 2020), such as those that can be used as educational tools. Many Brazilians do not have the option of using the internet at home, such as the 4.8 million school-age children and young people between 9 and 17 years old, who correspond to 18% of the total population in this age group (STEVANIM, 2020).

From a scientific perspective, there are still discursive spaces to highlight how much inequality there is in public and private education due to Brazilian economic, social, and cultural disparities. Therefore, critiques of the (dis)order created by governmental plans during the COVID-19 pandemic help to establish important concepts and discourses, with the purpose of reflecting about the absence and/or presence of universal and equanimous political actions towards inclusive and quality education in a context of a worsening social crisis.

Given this scenario, some questions emerge to constitute a research problem in a perspective of conceiving the school as a permanent, inclusive, and democratic space for knowledge construction. Do the access rates to the internet and other digital technologies identified among students in Brazilian public schools during the COVID-19 pandemic favor the continuity of knowledge construction from the perspective of formal education in a context of formal education? The analysis of the (in)existence of public policies to promote wide and secure availability of digital resources that can be integrated into the educational process is a way to identify the effects of social inequality in Brazilian education and in the structuring of emergency remote education during the pandemic.

During this period, several educational units located in different global spaces have resorted to emergency remote education for schools to remain present in the lives of millions of students (REIMERS, 2022). Remote teaching/learning is understood as the educational modality performed by teachers and students, without physical contact with each other, and provided by the use of digital technologies, in which synchronous and/or asynchronous activities are developed very close to the routines of face-to-face classes (MOREIRA; SCHLEMMER, 2020). In this context, the internet is a key element for remote education to take place. The term emergency is added, because it is configured as a temporary action, to ensure, for example, the continuity of school activities during the social distancing policies resulting from the COVID-19 pandemic.
Within this perspective, this work aims to draw an overview of the use and access to digital technologies in education during the COVID-19 pandemic; to establish a critical approach on the relationship between education, digital technologies, and social inequality; and, to explore some elements of analysis on educational policies in the context of the public education network. Therefore, the sections discuss the pandemic scenario in Brazil and its educational impacts; the territorial and social inequality of access to digital technologies in education; and the circumstances of the teaching-learning process and public policies in the face of the interruption of face-to-face school classes.

**METHODOLOGICAL PROCEDURES**

The paths to study social inequality in Brazilian education are heterogeneous and complex, due to the difficulties of doing research in Brazil and the lack of institutional data to enable analysis. The limiting factors for scientific research demand creativity and encourage further investigations on these issues, to break with all the elements that crystallize the disparities and increase the gap that separates the ideal of quality education and school reality, especially in the public network.

Initially, a search was conducted in scientifically specialized databases such as SCOPUS, SCIELO, and CAPES Journal Portal, in addition to the Google Scholar search site to obtain foundational knowledge on the theme. Texts were searched based on the use of the, often associated, terms that relate to our study, which included: pandemic, COVID-19, remote education, inequality in emergency remote education, and use of digital technologies. This literature review also served to highlight the discursive gaps and the needs for original studies.

The research methodology was based on document analysis to promote primary reflections on institutional data and information. The Brazilian federal government (BRAZIL, 2020), the Brazilian Institute of Geography and Statistics (IBGE, 2020, 2021), the Anísio Teixeira National Institute of Educational Studies and Research (INEP, 2018, 2019, 2020), the Ministry of Education (MEC 2020a, 2020b, 2020c, 2020d, 2020e, 2020f, 2020g, 2020h, 2021) and the Bahia State government (BAHIA, 2021a, 2021b) were defined as the main institutional data sources. The analysis focused on the content addressed and the data expressed to reveal the indices of educational inequality, the political strategies undertaken for public education in the context of the COVID-19 pandemic, and the issues related to emergency remote education and other pedagogical models with the use of digital resources.

The social data extracted from institutional sources were statistically explored to produce new information. Results show the estimated percentage and absolute numbers of students with and without access to digital technol-
ologies through the proportional relationship of data from IBGE (2020, 2021), which are equivalent to the years 2018 and 2019, respectively, and INEP (2018, 2019). The calculated results are presented through tables, graphs, and maps.

The research time frame corresponded to the year 2020, when the decree of suspension of in-person classes was implemented throughout Brazil (MINISTÉRIO DA EDUCAÇÃO, 2020a), fostering the emergence of political narratives about the strategies of emergency remote teaching and other pedagogical procedures with the use of digital technologies. The scale of analysis concerns the public basic education network offered by the different Brazilian federative entities, with special attention to territorial inequalities in education.

OVERVIEW OF THE PANDEMIC IN BRAZIL AND EDUCATIONAL IMPLICATIONS: is COVID-19 just a little flu?

Before the first case of COVID-19 in Brazil, registered on March 26th of 2020, in the city of São Paulo (SP), the Ministry of Health declared a state of public health emergency of national importance on February 3rd of 2020 due to the situation experienced internationally (BRASIL, 2020). One month after the promulgation of the ordinance, Brazil already had 9,212 infected patients in all federation units, prominently in the states of São Paulo, Rio de Janeiro and Ceará, based on absolute values (GEOCOVID, 2022).

At the end of December 2020, the country had 7,514,592 accumulated cases. In terms of numbers, seven states stood out for having more than 400 thousand infected people (Figure 1), among them, São Paulo, Minas Gerais, Bahia, and Santa Catarina. In December 2021, they added more than 296.6% to this figure, when the number of notifications rose to 22,292,099 (GEOCOVID, 2022). According to the statistics, 616,018 people had died of COVID-19 by the end of 2021, due to complications or lack of treatment. In the world ranking, Brazil is the second country with the highest number of deaths (GAZETA DO POVO, 2021).

Amidst the data daily printed in the media, the Brazilian people faced problems, many resulting from the (in)action of the executive governments (FREIRE et al., 2021). Among them, the pressure to relax, or even to avoid, social isolation policies; the improper investments in public health, which resulted in the lack of medical supplies, such as mechanical ventilators and hospital beds; delays in the construction of hospitals and in the training of health professionals to address the pandemic (MINAYO; FREIRE, 2020; DIAS et al., 2022). In addition, the underreporting of infected patients or deaths caused by COVID-19 generated inappropriate conclusions about risks and prognoses (DIAS et al., 2022).
Federal, state, and municipal managers of public health resources in the country were inadequately integrated (or not integrated) in the planning and management of the pandemic, which possibly disrupted decision making processes and aggravated the effects of the pandemic (HENRIQUES; VASCONCELOS, 2020). The concern was more about economic than health measures (DIAS et al., 2022), the attention continued to be more focused on the market than on the life-death relationship. There were biased statements to recommend drugs without therapeutic effects to combat the disease, widely called the “kit-covid” (FURLAN; CARAMELLI, 2021; SANTOS-PINTO et al., 2021). To make matters worse, the President of the Republic at the time, Jair Messias Bolsonaro, in office between 2019 and 2022, compared at least twice, at one of the peaks of the pandemic in Brazil, COVID-19 to a “little flu” (uma gripezinha) (BBC, 2020; CNN, 2020; EXAME, 2021; FOLHA DE SÃO PAULO, 2021).

This whole process has been aggravated by the striking Brazilian socio-spatial inequality and educational deficits (ALMEIDA et al., 2020). A large part of the Brazilian population had difficulties to perform social isolation, having null or restricted access to basic hygiene, protection, and medical services (BARDI et al., 2020; MINAYO; FREIRE, 2020) - a fertile ground for the propagation and intensification of the effects of COVID-19. Structural racism reigns in Brazil even in a pandemic (SANTOS et al., 2020). The chances of death by COVID-19 among the black population are higher than among the white population (ALMEIDA et al., 2020). Worldwide, the reigning characteristics of the pandemic informed that it had class, gender, and racial dimensions, although there were efforts to camouflage them (HARVEY, 2020).

**Figure 01.** Cumulative cases of COVID-19 in Brazil for the years 2020 and 2021

Elaborated by the authors.
In the future context of the (post) pandemic, the economic and social impacts will occur in space and time according to the contradictions and vulnerabilities that emerge from the hegemonic economic model worldwide (HARVEY, 2020). And such repercussions will be differentiated between poor and rich, black and white, men and women (OXFAM, 2021). The crisis is unequal, as is access to the benefits of our productive system (DAVIS, 2020).

In the circumstances of the pandemic, the exacerbated scenarios of crisis, vulnerabilities and inequalities have marked public education. On March 17th of 2020, the Ministry of Education sanctioned the ordinance on the replacement of face-to-face classes by digital classes (MINISTÉRIO DA EDUCAÇÃO, 2020a). The responsibility to provide the necessary tools for students to follow up the activities at a time of scarce allocation of financial resources to manage education was assigned to educational institutions.

The states followed the federal norms and, between March 11th and 23rd, suspended face-to-face classes without a national coordination to ensure uniformity and articulation in decisions and actions by federal, state, and municipalities regarding formal education - a situation also experienced in health management. All this portrays the striking inequality that plagues Brazilian public education.

**Figure 02.** Household internet usage by region: (A) 2018 and (B) 2019 - in percentage

![Figure 02](image-url)

A survey conducted in May 2020 reveals the full suspension of school activities in 11 states plus the Federal District; 16 planned to consider remote classes as workload for the 2020 school year; along with the Federal District, seven states declared they would not consider remote education in the 2020 school year (G1, 2020). Among these was Bahia State, where state schools closed and discontinued all activities, whether face-to-face, remote and/or at a distance.

INTERNET ACCESS IN BRAZIL: AN INSTRUMENT OF INEQUALITY IN EDUCATION?

The internet and all related tools constitute technical objects that ceaselessly permeate social relations. They consist of technical objects because they enable the realization of activities with purposes of social interests (SANTOS, 2006) and are increasingly present in economic, political, cultural, etc. transactions. In fact, many of these relationships only happen due to the existence of the internet, which projects an essential stage for the actions to take place and make up the virtual plane of the meetings (SILVA et al., 2015).

Like every technical object, access to the internet is not equitable, either in the spatial or social aspects. This heterogeneity, which is already a demarcation that characterizes inequality, originates in the disproportionate insertion of the technical object in space and time, territory, and history (SANTOS, 2006). Given the conjuncture that surrounds techniques, the internet and the technologies that encompass it are circumscribed in power relations, and it would be naïve to believe that they would bring only desirable benefits and for everyone (PORTO-GONÇALVES, 2006).

The Brazilian context is crucial to understand inequality in digital connection and its resulting issues, such as those that shape the educational plot, which demonstrate that education can leave the status of a right and go straight to that of a privilege.

Inequalities in internet use are felt between the country’s regions. Current survey data point to stark differences, for example, between the Northeast and Southeast regions and between rural and urban spaces (IBGE, 2018, 2019). In 2018, households where internet usage occurred in the Northeast accounted for 69.1%; in 2019, it rose to 74.3% (Figure 2).

In the Southeast, on the other hand, the values were 84.8% and 87.3%. When analyzing rural and urban spaces, the contrasts are exacerbated. In Brazil, in 2019, rural households with internet use represented 55.6% whereas urban households represented 86.7%. The situation gets even worse when focusing on the North region, 38.4% for rural and 86.5% for urban households - the value of the difference between these numbers (48.1%) is higher than the percentage of rural households with internet use.

In Brazil, a large contingent of students without internet access was observed (Figure 3). The
average percentage of internet use by students of public institutions for the years 2018 and 2019 corresponded to 86.6% and 88.1%, respectively. The picture worsens when revealing the difference by type of education network in the year 2019, as the percentage of students with access to the internet in private schools represents 98.4%, almost the entirety, while that of public schools represents 83.7% (IBGE, 2019).

Regional differences on this issue are also explicit, especially when addressing students enrolled in public schools. In the North and Northeast, less than 78% of students had access to the internet, while the rate was higher than 83% for the other regions. For comparison purposes, 8.7% of students in the Southern states’ public network had no access to the internet, an already high figure, while for this same public in the Northern region, it was equivalent to 31.6%.

The reality of high school education is emblematic to discuss the situation of the Brazilian education system. In total, more than one million public high school students in remote education did not have access to the internet in 2019, which corresponds to more than 15% of the total number of students. The absolute numbers show an alarming scenario for the Northeast, while the percentages reveal the social disparities experienced in the North region (Table 1). Both circumstances point to the seriousness of public education issues in these two regions, without excluding the others.

This leads to two situations for the 2020 school year: i) in-person classes interrupted throughout Brazil; ii) the non-existence of emergency remote education in several states, such as Bahia. However, the National High School Exam (ENEM), which is used for students to enter many higher education institutions, did not stop. Yet, the candidates’ abstention rate of 55.3%, the highest ever (OLIVEIRA, 2021), signaled the failure of the 2020 edition of ENEM.

The interruption of classes (in-person and remote), the discrepancy in the numbers of internet access in education between

**Figura 03. Utilização de internet em 2019: estudantes da rede pública de ensino por regiões brasileiras – em percentagem**

![Graph showing internet use by students in 2019 by Brazilian regions](image)

Source: based on data from IBGE (2019). Elaborated by the authors.
regions and between public and private educational units point to the assertion that students faced difficulties or found themselves paralyzed when preparing for ENEM. Among many students, the internet is still accessed with inappropriate equipment for study, due, for example, to the size of the screen and the limits in performing tasks. And, again, the social contrasts are evident between the public and the private networks, since most students enrolled in public schools had only a cell phone available (IBGE, 2020). A large part of the explanation for the lack of access to the global computer connection network was found to be associated with income, as the service provision and equipment for internet use were considered expensive for a large contingent of students who did not use it (Figure 4).

Access to digital resources does not necessarily lead to their use, as data shows a lack of interest in using them by about 11% of students (Figure 4). The slow introduction of online activities before the pandemic, especially in public schools, is among the factors that hindered the occurrence of emergency remote learning using digital technologies. The traumatic causes and the abrupt social changes due to the pandemic did not ensure a quick and successful educational re-adaptation, since the teaching-learning relationship is procedural, with different stages of participation, interests, possibilities, and development, as can be observed in the face-to-face teaching context, due, for example, to having or not the necessary equipment for schooling.

The inequality of internet use within the Brazilian society points to the failure in promoting the universalization of education and, especially, quality education in all times and spaces. The normality of past scenarios was the same found in the emergency remote teaching, in which economic precarity prevented many people from taking advantage of social and cultural goods and services. The difficulty encountered by 18.5% of the total number of students who did not have access to the internet lies precisely in its unavailability in the spaces regularly attended by this group (Figure 4). The hierarchization and spatial segregation associated with the educational processes worsened in the pandemic and concurred to position many students in the offline context in the face of emergency remote learning.

Table 01. High School Enrollment and Internet Access: Brazil’s Public High School Network, 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of enrollments*</th>
<th>Without access</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Central-West</td>
<td>514,543</td>
<td>58,658</td>
</tr>
<tr>
<td>Northeast</td>
<td>1,900,195</td>
<td>437,045</td>
</tr>
<tr>
<td>North</td>
<td>731,501</td>
<td>231,154</td>
</tr>
<tr>
<td>Southeast</td>
<td>2,528,391</td>
<td>219,970</td>
</tr>
<tr>
<td>South</td>
<td>856,868</td>
<td>81,402</td>
</tr>
</tbody>
</table>

Source: elaborated by authors (2023), based on data from *INEP (2020) and IBGE (2021).
Students who were disconnected before the pandemic were very likely to be excluded from the collective processes of building education in an institutional perspective. The online, a remarkable feature of emergency remote education, has brought to the surface the bias of a commodified education, of reach, above all, to those who can afford technological equipment and/or the internet connection. For many, the material conditions for a closer dialogue and sharing of knowledge and wisdom, essential to educational practices, have disappeared, even if they were willing and hopeful to participate, because they were unable to make exchanges, due to the social distancing and the closing of the school units. This reality was more common among those who were in the Northeast and North, than among those who were in rural areas, and among those who could not afford to pay for internet services and electronic equipment.

The conditions of income, of access to the internet and to other digital technologies in education constitute, therefore, a primordial space for the discussion about the factors that crystallize Brazilian social disparities. In the context of public education, it can be observed that education is no longer a right, as it should mean a benefit available to all, but a privilege, as many students are faced with the discontinuity of school classes due to the inexistence of the necessary mechanisms to attend them. This has meant exclusion for many students, many from high school in stages close to integrating the workplace and/or graduating. The social crisis manifested in the inequality faced in Brazil hardened within the realm of public education during the pandemic.

**EMERGENCY REMOTE EDUCATION: where to find it in public education?**

The documents produced by public educational entities elucidate the conceptions of emergency remote education that materialized policies in the educational field. There are multiple reports, decrees, ordinances, laws, resolutions, projects, protocols, etc. that originated in the domain of the different Brazilian federative units to regulate teaching during the COVID-19 pandemic.

Just in the field of action of the National Education Council (Conselho Nacional de Educação – CNE), which has normative, deliberative, and advisory functions vis-à-vis the State Minister of Education and is the basis for policies designed in other federal instances, was outlined nine specific reports for the year 2020, some of them the fruit of re-examinations, consisting of more than 300 pages, to direct and formalize Brazilian education in the face of the epidemic situation. In the documents, there are recommendations regarding the reorganization of the school calendar and guidelines for the implementation of classroom and remote educational activities by the educational units.
The issues concerning social inequalities are exposed to attest that access to digital technologies in education does not exist for all (MINISTÉRIO DA EDUCAÇÃO, 2020e). Excerpts from documents, often providing generalized data on the circumstances of other countries and national contexts (MINISTÉRIO DA EDUCAÇÃO, 2020d), are drawn and show that Brazilian institutions responsible for education live with the absence of data to foster public policies.

In the scenario portrayed by the documents, the recommendations for using digital technologies in the teaching-learning process of the basic education often appeared with a condition, a “when possible”. Some demonstrations follow:

These activities may or may not be mediated by digital information and communication technologies, especially when the use of these technologies is not possible (MINISTÉRIO DA EDUCAÇÃO, p. 8, 2020b).

[…] undertaking, when possible, a process of pedagogical training for teachers to use the methodologies, with technological mediation or not, to be employed in remote activities (MINISTÉRIO DA EDUCAÇÃO, p. 18, 2020d).

In this sense, when possible, it is important that schools seek a virtual approximation of teachers with families, to strengthen ties and better guide parents or guardians in carrying out these activities with children (MINISTÉRIO DA EDUCAÇÃO, p. 28, 2020g).

Figure 04. Lack of internet usage: factors attributed by students in the year 2019 - in percentage

![Graph showing factors attributed by students in 2019](https://example.com/graph.png)

Source: elaborated by the authors (2023), based on data from IBGE (2019).

Thus, it was assumed that synchronous and asynchronous online activities were only likely to happen according to “technological availability” (MINISTÉRIO DA EDUCAÇÃO, 2020e, p. 13). As there were no conditions to use them due to the lack of access by teachers and/or students, the online and all digital technologies ceased to be the allies of Brazilian school education and increased even more the already deep chasm that separates the excluded from the included in the digital age. What and how to justify, for example, to the 1,028,229 Brazilian public high school students with no internet connection, that everything would remain the same as it has always been? Because, in
the documents analyzed, in the scope of the CNE, there was no mention of an effective public policy of broad access and use of digital tools in education.

This situation was also verified in other regulations issued by the Brazilian State in the year 2020, even when the ordinance called for the replacement of classroom classes by digital classes (BRASIL, 2020a; MINISTÉRIO DA EDUCAÇÃO, 2020a). In this context, everyone lost out, because of losing the opportunity to build a quality education through public investments and the failure to ensure fundamental rights to Brazilians, according to the United Nations (OEA, 2011), such as access to the internet.

The situation was so complicated that educational terms related to the digital world, commonly mentioned during the pandemic, disappeared, or were rarely mentioned in the resolutions. They referred to the non-face-to-face and, therefore, it seems that remote learning, emergency remote learning, distance learning, eLearning and others are impossible to exist in public education, a space marked by digital exclusion.

There have been alarming situations in Brazil, such as the case of Bahia. After the suspension of in-person classes for the entire year of 2020, elementary and high school education was paralyzed in the state schools. When they returned, they came in the format of a gradual continuum, in which two school years (2020 and 2021) occurred in only one calendar year, that of 2021. On the return to teaching, they ran into the same situation of educational inequalities. Schools were responsible to indicate effective actions to make learning opportunities equitable (BAHIA, 2021a), which assumes that digital technologies in Bahia’s education also had a secondary role as shown by the data on student exclusion from the internet throughout the education network and the limited school capacity to promote broad and equal integration to the digital world. It is possible that some schools have used digital technologies in a variety of ways to enable remote activities.

In the reference documents for the return to school, the use of digital media in teaching was proposed, with the development of synchronous online activities, asynchronous online activities, use of smartphone, chat, Google Classroom, WhatsApp, etc. (BAHIA, 2021b). All this without discussing what public policies and what investments would be made by the State administration to solve the social disparities that expel so many from the effective right to a quality school.

Thus, as always in the school context, the gap between the intentional declarations of public policies and their operationalization in the school space remains wide. In Bahia, 46.5% of the population was in poverty in 2021, with a monthly household income per capita of less than 475 reais (G1, 2022), a reality for many students in the state education units. With the legacy of families having to defray the cost of technological equipment and
the internet in emergency remote education, the gap between the idea of providing a quality education for all and the reality has widened. The existence of public schools cannot be confused with the right to education, since this “presupposes the active and responsible role of the State both in the formulation of public policies for its effectiveness and in the obligation to offer education with equal possibilities for all” (ARAÚJO, 2011, p. 287).

In a survey to collect data on classroom reorganization for the year 2021, the National Union of Municipal Education Officers (UNDIME) found that around 71% of municipal school systems across Brazil concluded the 2020 school year in the calendar year itself. Of these, 91.9% carried out only non-face-to-face pedagogical activities with widespread use of paper (95.3%), followed by guidance through WhatsApp (UNDIME, 2020). Among the biggest difficulties faced by municipal education departments is the lack of internet access for students and teachers (UNDIME, 2020) (Figure 5).

This meant that the alternative for many students was to receive printed activities, without an effective dialog between classmates and teachers, without the teacher’s mediating function. Conventional school practices remained dominant even under the new scenario of emergency remote teaching. Students became mere spectators, guided by instructions printed on sheets of paper, with models to be followed equally by all. What could be required? Copies, reproduction of content, memorization? Could experiences be shared? Through what means? Teaching became isolated from the point of view of social relations, and the hegemonic role of the teacher became that of fulfilling program requirements. It has led to the transposition of many pedagogical functions and responsibilities from educational professionals to students and family members.

Those responsible for students, many times, in home office jobs or developing face-to-face activities because they are essential activities, not to mention the unemployed, since the Brazilian unemployment rate hovered around 13.5% in 2020 (IBGE, 2021), have been intensely burdened by school tasks, developed at home. Possibly, many did not have the time or the intellectual skills to keep up with the emergency remote education and the printed activities presented to their children.

The inexistence or inadequacy of public policies to promote access to digital technologies has trapped teachers and students in what is most conservative: the reduction of school spaces to solitary desks, the silencing of speech, and the hindrance of ideas sharing (BEHRENS; OLIARI, 2007). There was no escape! The configured alternative, a reality for the digitally excluded, crystallizes, entrenches, and creates the fences to imprison teachers and students in a technicist teaching that reduces education to the supply of contents. Nothing more traditional (STEVANIM, 2020)!
The vices that displace formal education to the farthest reaches of active teaching-learning methodologies are maintained. The implications reach the pedagogical evaluation, which is included as a key element in the complexity of the education process (CHUEIRI, 2008; LUCHESI, 2013). The act of teaching and learning, as a means of directing trajectories and intrinsic to school spaces, involves the subjects as active participants. However, the development of education reduced and made possible only by the delivery of printed activities to students unable to access synchronous classes on digital platforms, strengthens the bonds with traditional perspectives of evaluation, attesting, many times, the right and the wrong, the true and the false. Here’s a doubt! In the context of unequal access to digital technologies in education, how can a comprehensive assessment be established, with possibilities to understand the evolution in all educational dimensions, be they linked to cognition or socioemotional specificities; to competencies, skills, and the objects of knowledge?

The evaluation is a means to qualify the teaching-learning process, according to intertwined purposes, not to confine it to simple examinations and dissipate all means of a dialogic work, consistent with the social and human demands of the school (UCHESI, 1991). As an example, Guskey (2023) establishes some paths for a continued assessment, with special focus on: i) participant reactions; ii) participant learning; iii) institutional support and change; iv) participant use of new knowledge and skills; v) student learning outcomes. However, the paths to seeking ongoing evidence, rather than proof, were difficult to assess amidst the conjuncture of emergency remote teaching and printed assignments.

Figure 05. Degree of difficulty to cope, by thematic area, according to municipal secretaries of education in Brazil during the COVID-19 pandemic, in 2020: 1 for lowest degree and 5 for highest degree of difficulty - in percentage

Source: elaborated by the authors (2023), based on data from UNDIME (2020).
The difficulty of access to the internet by teachers and students, and the inadequacy of the school units’ physical structures signaled by the UNDIME survey (Figure 5), express the challenges of digital connectivity. This indicates that a large part of the families, students and teachers could not engage with the digital resources and in the videoconference classes. There have been pedagogical efforts to break through such issues, but the struggle is unfair in face of the quality and quantity, or absence, of public policies. It clearly revealed that the right to education, supported by so many legal means, did not correspond to the diversity and social inequality that characterize Brazilian society, perceptibly evidenced in emergency remote education.

Certainly, the teachers observed several situations about remote emergency and non-face-to-face teaching, with possibilities to verify that the act of teaching should not be solitary, isolated, nor constituted by a junction of individualized interventions. Instead, it should refer to a dialogical and inclusive construction, based on a collective sharing of knowledge mediated by the teacher. We can observe, with all this, the meanings that were projected through public policies for a (supposedly remote) teaching during the first year of the pandemic in Brazil. A practice based on the interstices of selectivity, since it excluded people, students and teachers who faced difficulties to integrate themselves, consolidating the idea that education is not for everyone.

CONCLUDING REMARKS

The pandemic scenario in Brazil was marked by very serious problems, many of which were verified in health management, by the worrisome data regarding the numbers of infected people and related deaths. The situation characterized by social inequality was also deeply felt in formal education, when schools interrupted face-to-face classes, or even when public basic education networks closed all access doors to virtual classes for students and teachers.

Our research data emphasized the sheer magnitude of the numbers associated with the impossibility of using digital technologies in education, which invalidated the undertaking of projects aimed at emergency remote education and hindered the continuity of schooling during the COVID-19 pandemic. Many students received only printed activities, without the right to synchronous and asynchronous classes, for not having access to the internet and other technological resources, since their family income, a product of Brazilian historical inequality, did not make it possible for them. The situations verified were vastly worsened because of the absence, in the documents and norms analyzed, of public policies that made the internet and related technologies safely available to students and teachers.

We verified, in the circumstances of the pandemic, the exacerbated scenario of a social crisis, which has marked Brazilian education and led to a path
characterized by social injustice. This means that the data corroborates with the social inequality that rip apart regions, territories, the public and the private in Brazil, materialized in the contradictions of access to digital resources.

Reflecting upon such questions allowed us to see that: i) the disarticulation of actions between the teaching units generated a low level of student participation in the activities; ii) the State did not create broad public policies to offer digital technologies in the educational context, which led to the exclusion of many teachers and students and to the interruption or absence of emergency remote education; iii) State actions led to the discontinuity of emergency remote education because there were no public investments aimed at the participation of all in the process, and school subjects faced difficulties in learning and foreseeing social opportunities. Faced with the pandemic, therefore, the digital divide was the first impediment to the effectiveness of emergency remote learning and to the continuity of classes in many territories of Brazil in 2020.
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