American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)
ISSN (Print) 2313-4410, ISSN (Online) 2313-4402

http://asrjetsjournal.org/

The Implementation of Emergency Remote Education in Brazilian Educational Systems

Paulo Henrique Estanislau Rodrigues[a], Ana Carolina Carius[b*]

[a]*Estácio de Sá University, Av. Francisco Sales, 23, Belo Horizonte and 30150-220, Brazil*
[b]*Petrópolis Catholic University, Rua Benjamin Constant, 213, Petrópolis and 25660-290, Brazil*
[a]*Email: paulo.estanislau@educacao.mg.gov.br*
[b]*Email: ana.carius@ucp.br*

Abstract

This article presents the results of an exploratory research, delineated in a documentary way. The research aimed to investigate how local educational systems were adapting to offer, via distance learning, the continuity of the school year by occasion of the schools' closure by the COVID-19 pandemic. A critical documentary research is presented, according the legislation implemented by the Ministry of Education and the State Governments of Brazil, with data from Brazilian Institute of Geography and Statistics (2018) and the School Census (2019). We conclude that remote education, as it was implemented, aims to fulfill only the annual workload by local schools, ignoring the pedagogical issues pertinent to the theme and benefiting students with greater financial resources.

Keywords: Schools' Closure; Distance Education; COVID-19 Pandemic.

1. Introduction

In recent months, the world community has had to suspend face-to-face activities to confront a pathogen that has threatened life around the world: coronavirus. In a century, it is the first time that the world population has a problem like this and social relations have entered in a process of transformation, associated to COVID-19 Pandemic [1]. With a predominantly face-to-face characteristic, Basic Education is one of the most affected sectors: about 1.5 billion students worldwide are without school activities due to the sanitary measures imposed by local governments, since schools are environments of large agglomeration of students.

---

* Corresponding author.

In order not to have an interruption of the school year of Basic Education in Brazil, distance learning, which is fenced in this school stage, was proposed as an emergency solution, based on the Law of Guidelines and Bases of Education [2], which makes it possible in emergency situations to use the modality as a complementation of learning. Distance education, for Moore and Keasley [3], means planned learning that typically takes place in a different place from the teaching site, requiring special course creation and instructional techniques, communication through various technologies, and special organizational and administrative arrangements [3]. The technologies adopted vary according to the regional characteristics of the federative units, but have, in general: elaboration of applications or use of state TV network for transmission of video classes and specific didactic material made available in a physical and /or virtual way, where the definition by the form of availability is parameterized considering the local reality. Although technology is capable of transmitting knowledge, it does not reach all students in the same way. In distance learning, there are factors that are independent of the will and measures that the student can take to transform the new content learned into knowledge, and there must be compatibility between the learning structure and the student, and vice versa, so that there is an environment with chances of success [4]. Basic Education in Brazil during the Covid-19 Pandemic was defined as the research theme of this work, which aims to ask whether the measures that are being implemented to maintain school activities include what is provided for in Article 205 of the Brazilian Constitution, which recognizes education as a right of all [5]. Although each student has a different social reality, in the school environment everyone has the opportunity to contact the content taught equally: in a classroom with tables, with the presence of a teacher to answer the doubts, with balanced food and living with the other members of the school community. Transferring to the home environment imposes the reality of that home within the teaching-learning context, and it is independent of the will of the student, who needs to present technical and pedagogical skills for an autonomous study [4]. The established problem, therefore, is to look at the impact of educational policies implemented to continue the school calendar in the school achievement of students. The justification of the work is to answer the questioning about the effectiveness of the application of non-face-to-face teaching in basic education, not only with regard to quantitative issues, but also to qualitative issues. It is not intended here to analyze the modality as a definitive solution in education, since such evaluation is not supported by current legislation. Considering as teaching hours the autonomous or tutored activities performed at home by the students is only a mere numerical issue in the situation in which the country is. The concern that is imposed is whether there are conditions for the content worked in this environment to have sufficient quality, to the point of dispensing with a future face-to-face replacement. To investigate the consequences of applying technological solutions and distance learning to fulfill school requirements, three parameters will be considered as fundamental: if teachers are able to perform the task, since teaching distance is very different from teaching in person [6]; the influence of economic and social factors on the day-to-day school and the role of the student in this process: their domestic study environment, their access to the Internet, their familiarity with technologies and other private domain factors. Thus, the wording slated for Ordinance No. 343 of March 17, 2020 of the Ministry of Education, Provisional Measure No. 934 of April 1, 2020 and state regulations that regulate emergency distance learning in Basic Education, will be analyzed verifying whether the factors mentioned were considered for the formulation of the proposed public policy. Contemplating them not only means ensuring a fair solution for this emergency period, but also avoiding that a low income implies an increase in school dropout.

2. Research Methodology

The research methodology considers the themes related to the use of technological tools in the teaching-learning process, in times of social distancing. This is an exploratory research, defined as being the one that provides greater mastery and investigation of the theme, in a clear and explicit way and has adjustable planning, which allows the study of the theme from various perspectives [7]. A research is a process in which the researcher has a theoretical practice of continuous exploration that defines a partial, constant and approximation of reality [8]. Therefore, when exploring the impacts of the use of distance learning in Basic Education, it should be evidenced not only the causes and motivations for this decision, but also, whether the transition from the face-to-face classes to the distance learning is not being treated superficially. With an exploratory aspect, the main technique used in this work is reading, 'because it is through it that one can identify the information and data contained in the selected material, as well as verify the relationships between them in order to analyze their consistency' [9]. When applying it, it seeks to present a scientific work that meets the requirements evidenced by Treinta and his colleagues [10]: a rigorous, valid and verifiable search. The conclusions result from the findings obtained by the researchers anchored in the investigation. The documentary analysis carried out in this work, structured in the next topic from the wording slated for Ordinance No. 343 of March 17, 2020 of the Ministry of Education [11], provisional Measure No. 934 of April 1, 2020 [12] and state regulations, aims to contemplate the subject from an analytical view, since 'thought and action since "nothing can be intellectually a problem if it has not been, first, a problem of practical life"'[9]. Thus, to build the article with these characteristics, we sought to aggregate relevant information about practical measures adopted from the regulations under analysis.

3. Data Analysis

3.1. Premises

To respond to the research problem, it is necessary, initially, to understand that, according to the Law of Guidelines and Bases of Education (LGB), education is the duty of the family and the State and that teaching will be taught, among other principles, on an equal basis for access and permanence in school [2]. By referring not only to access, but also to permanence, the legislation expands the characterization of the right to education and seeks to require that initiatives be taken, both within the school environment and of a social nature in the external environment, which provide a favorable conjuncture to students from popular classes for the continuation of their studies [13]. The LGB, in Article 3, also guarantees quality as a principle of the teaching offered. Unesco/Orealc [14] states that the quality of education is attributed different meanings, depending on the type of person and society that the country requires to form its citizens. One of the most frequent approaches is to associate quality efficiently and effectively, considering education as a product and a service that has to satisfy its users. [14]. Soon it is verified that the device is capable of interpretation, which are based on historical, territorial and class conditions, not being a property actually identified, but conceived by a value assessment [15]. In this context, a relevant aspect, which cannot be overlooked, is the fact that education, although offered equally, does not have a homogeneous performance. Dubet [16] argues that the most socially advantaged students, who have greater resources for success, are also privileged by a set of subtle mechanisms, specific to the functioning of the school, which benefits the most benefited [16]. Thus, he questions the role of the school in a social structure that develops exclusion processes, since the school offer is different. The

vacancy, in fact, exists for everyone. However, it is possible to see the existence of 'concentration of disadvantaged and worse performing students in certain establishments and, within them, in certain classes [...]' [16]. This contextualization allows us to identify what the literature finds: it is challenging to evaluate pedagogical measures as inclusive and quality. Nevertheless, when a given methodology is proposed, it is necessary to understand the impact it will have on daily activities. When it is important to include educational methods by technological means in Basic Education, even in an emergency way, it is necessary to consider as a priority that the transition to its inclusion occurs without prejudice to the actors of this process, since in the learning process, 'it is expected that students assimilated the same basic culture, through individualized paths in terms of rhythms, trajectories and procedures' [17].

3.2 Authorization for Changes in Basic Education

Because it has the duty to coordinate the 'national education policy, articulating the different levels and systems and exercising normative, redistributive and superfluous functions in relation to other educational bodies' [2], it is up to the Union to propose measures aimed at the predominance of the general interest [18]. Therefore, by encouraging the continuation of the offer of classes while legislative decree no. 6/2020 is in force, which recognizes 'the occurrence of the state of public calamity, with effect until December 31, 2020' [19], the Federal Government has issued rules aimed at replacing the accounting of in-person teaching hours with activities performed at the student's home, so that there is no interruption of the school year. The first of these came to light on March 17, 2020, with the publication of Ordinance No. 343 of the National Council of Education [11]. It proposes, in the caput of its Article 1, to authorize, exceptionally, the replacement of the disciplines in person, in progress, by classes that use means and information and communication technologies, within the limits established by the legislation in force, by a higher education institution integral to the federal education system, which deals with Article 2 of Decree No. 9,235, of December 15, 2011 [11]. A priori, it authorizes only in higher education the substitution of face-to-face disciplines by virtual ones, since this modality is directly subordinated to the Union. The Ordinance except the medical course of the measure, according to Article 3, which also deslates 'the professional practices of internships and laboratory of other courses' [11]. The decree also does not establish national parameters for the application of this measure Article 2: It will be the responsibility of the institutions to define the disciplines that may be replaced, the provision of tools to students that allow the monitoring of the contents offered as well as the performance of evaluations during the period of the authorization that the caput deals [11]. In a way, considering that there are different realities in each university, making it difficult to create criteria to regulate the use nationally, this article becomes necessary. Carius [20] signals the majority insertion in the university scope of remote activities, globally, of the Zoom tool from a literature review. This fact demonstrates, in some way, the attempt to implement university education in blended learning, permanently. However, by approving the replacement of classroom classes with virtual classes in higher education, a unit of Brazilian governors was created in favor of using the same tools in Basic Education. It is worth mentioning that Basic Education is the responsibility of states and municipalities. That is why the Union has not legislated about it. States from all regions of the country defined by exploiting a non-face-to-face teaching system based on the prediction of its implementation in the LGB, described in Article 32, Paragraph 4: 'elementary school will be face-to-face, distance learning being used as a complement to learning or in emergency situations' [2]. However, by institutionalizing pedagogical practices that do not have a

determined regulation, more questions are created than answers. As Flach [21] explains, 'both the Federal Constitution of 1988 and the Law on Guidelines and Bases of National Education – Law 9394/96 provide for the mandatory and gratuity of the public school for elementary school'. A priori, it is understood that the State finances education and the means for it to be effective. In practice, this is proven by paying the cost of the school structure: labor, meals, textbooks and other necessary resources. However, in non-face-to-face teaching, the equipment for access must be funded by the student's family group, which may or may not be able to afford them. In addition, the issue of the student's familiarity with technological tools, one of the requirements for a good use in non-face-to-face teaching, ends up benefiting students with greater purchasing power. Students with lower incomes are disadvantaged because they are not able to afford access networks or an access unit, such as computers or mobile devices. This fact can be verified in the experience described by Carius [22] in a rural school in Petropolis, State of Rio de Janeiro. Simple network availability is not a guarantee of learning, as Silva and his colleagues [23]: 'mobile devices by themselves do not constitute useful educational tools, making research on their pedagogical use essential'. Mobile devices are the most used tools to access the Internet in Brazil, according to Brazilian Institute of Geography and Statistics (BIGS) [24]. There are also other difficulties, where the lack of connection in the community in which the student resides stands out. The Ordinance, in turn, ignores this situation, not providing in its wording another type of solution for localities that are unable to effect the transition from face-to-face to virtual education for reasons of availability of access. The second measure published by the Federal Government was Provisional Measure No. 934 of April 1, 2020 [12]. It emerges with the objective of defining what it considers as "exceptional norms" for the fulfillment of the school year in Basic and Higher Education, due to the situation of health emergency in which the country is [12]. Its writing does not present solutions, directing this responsibility to local educational systems, which are responsible for their management. Article 1: The basic education establishment shall be exempted, on an exceptional basis, from the obligation to observe the minimum of days of effective school work, in accordance with item I of the caput and in § 1 of Article 24 and in item II of the caput of Article 31 of Law No. 9394 of December 20, 1996, provided that the minimum annual workload established in those provisions established in those provisions of the provisions of , in compliance with the rules to be edited by the respective educational systems. Single paragraph. The exemption that the caput is about will apply for the school year affected by the measures to cope with the public health emergency situation that treats Law No. 13979 of February 6, 2020. [12]. Thus, it guarantees the legality of the measures adopted in Basic Education by the Federative Units after the publication of Ordinance 343 [11], which did not yet have a specific regulation. It cites the 'educational systems', since this school stage is the competence of the States and Municipalities, according to the LGB. This is the only citation to Basic Education in the document, since Art. 2 is focused on Higher Education. A common feature in the wording sands of Ordinance No. 343 [11] and Provisional Measure No. 934 [12] is the superficiality with which it deals with the issue of education in this emergency period. There is no regulation in the legislation that includes distance learning in Basic Education and, by decentralizing actions, the Ministry of Education omits, allowing the Federative Units to refrain from proposing actions to ensure the continuity of the school year during the emergency period.

3.3 Consequences

Based on the regulation of the Ministry of Education, an investigation of the measures implemented by each

Federative Unit in its respective education system was carried out, presented below. This survey sought to determine the public data of each state school system, since the national regulation decentralizes the measures. The data obtained from the research will be confronted, soon after, in an analysis that considers the local characteristics of access to the internet connection, such as the availability of the network in school and at the students' homes, as well as the profile of users who use the network. These data were obtained from the Brazilian Institute of Geography and Statistics [24] and the School Census [25].

3.3.1 Northern Region

The Northern Region has seven Federative Units: Acre, Amazonas, Amapá, Pará, Rondônia, Roraima and Tocantins. Of these, only three have not implemented, so far, exceptional measures of continuity of the school year. The other ones regulated the use of technological tools as a lethal activity. These measures are listed in Table 1, which also presents the publication where they are quoted.

Table 1: Measures implemented by the states of the Northern Region

STATE	REGULATION	PLANNED MEASURES
Acre (AC)	Resolution 142 of the Secretary of State for Education and Sports of Acre.	Flexibility of the school year, enabling the completion of the 2020 school year in the calendar year 2021; Compensation of school days with school activities; Implementation of non-face-to-face classes in virtual learning environments for students from the 5th grade of elementary school.
Amazonas (AM)	Ordinance GS no. 311 of March 20, 2020 of the Secretary of State for Education and Sport of Amazonas; Resolution No. 30 of the State Council of Education of Amazonas.	Establishes a local system of non-face-to-face classes, from the multiplatform program called 'Classroom at home'; Deals with the preparation of content planning, so that it is not in disagreement with the forecast; Ensures the fulfillment of 200 school days, even if it is necessary to replace part of them with non-face-to-face activities; Establishes that, if the school presents justifications that make it impossible to support the program implemented at the state level, it will be up to it to prepare and submit a replacement proposal.
Amapá (AP)	Has not yet implemented	
Pará (PA)	Resolution 102 of the State Council of Education of Pará.	Establishes the implementation of the regime of non-face-to-face classes in the State of Pará; Mentions that the material used during the period must have execution and sharing facilities.
Rondônia (RO)	Has not yet implemented	
Roraima (RR)	Decree No. 24,911/2020, which amends and adds provisions to Decree No. 24,887/2020.	Establishes that educational institutions may make use of technological means to offer classes.
Tocantins (TO)	Has not yet implemented	

Source: The authors, 2020.

According to Table 1, the measures implemented in the States of the Northern Region, except Rondônia, Amapá

and Tocantins, have in common the implementation of classes in non-face-to-face environments. They do not, however, have uniform characteristics: Amazonas nominally cites, in legislation, that it must use the state TV network to broadcast classes, which can not be found in the legislation of the other states. It is noticed that some states, such as Amazonas and Pará itself, deepen the subject by regulating the theme, establishing parameters regarding the curriculum, the responsibilities of state agencies in the process and the participation of social networks in the transmission of activities. Others, such as Roraima, create only a legal device, where specific parameters can arise from other documents. One of the characteristics of the Northern Region is the strong presence of indigenous and quilombolas communities. According to the 2017 National Survey of Household Samples of Information and Communication Technologies, about 40% of the total population is located in this region and they have their own characteristics regarding the use of technology [24]. Because they are far from urban centers, internet access is difficult and costly [26]. It is emphasized the lack of mention of these communities in the legislation analyzed, not contemplating the specificities of this population, since its members are present in considerable quantity in the local educational systems.

The Brazilian Institute of Geography and Statistics [24] presents important information about the profile of users of technological tools in the region:

- Although about 85% of the region's residents have a cell phone, only 69% accessed the internet;
- In the rural area, about 27% make use of internet;
- Only 55% used the internet to access email.

There is a contrast between the local and national situation, being the lower place than the national, a reality that presents itself not only in the personal sphere, but also in the school. The 2019 School Census [25] places the Northern Region, almost in its entirety, with rates below 30% of schools with internet access.

3.3.2 Northeast Region

Nine federative units in Brazil are located in the Northeast Region. They are: Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe. Of these, three have not yet started projects for distance learning: Alagoas, Ceará and Paraíba. In Table 2 below, the measures taken by each of the federative units in the region follow.

When analyzing Table 2, it is verified that the characteristics of the remote system, when implemented, vary according to local reality: there are norms that have virtual platforms where classes will be made available to students and others, started the process leaving with simpler resources, seeking to effectively reach a larger number of students. The Northeast region concentrates the majority of people in poverty in the country, according to [24], housing more than 40% of the country's total population in this condition. This situation impacts the school situation in the region. According to the BIGS [24], the Northeast has the highest national rate of people without education: 37.2%. In the region, only 36% of teachers in the Final Years of Elementary School have specific training to teach, below the national average of 53%, according to the 2019 School Census

[25].

Table 2: Measures implemented by the states of the Northeast Region

STATE	REGULATION	PLANNED MEASURES
Alagoas (AL)	Has not yet implemented.	
Bahia (BA)	Resolution No. 27/2020, no. 34/2020 and no. 37/2020 of the State Board of Education of Bahia;	Deals with the preparation of the content, dissemination, monitoring and control of the activities performed in the student's residence; Regulates blended teaching when there is the return of face-to-face activities; Enables alternative standard for ordering classes and/or classes; Highlights the textbook as a useful tool for achieving remote classes.
Ceará (CE)	Has not yet implemented.	
Maranhão (MA)	Resolution No. 94/2020 of the State Board of Education of Maranhão; Ordinance No. 506/2020 of the State Department of Education of Maranhão.	Establishes that the classes will be recorded by education professionals and transmitted by TV Assembleia and Radio Timbira in order to supplement and complement the theoretical material available (handouts and textbooks); Allows schools to use other popular technology tools such as Youtube, Instagram and Whatsapp; Proposes the use of the flipped classroom; Establishes that the evaluations will occur only to the return of face-to-face classes; Specifies that remote education is not distance learning.
Paraíba (PA)	Has not yet implemented.	
Pernambuco (PE)	Resolution 03/2020 of the State Board of Education of Pernambuco.	Provides for the replacement of classroom classes by remote education, with real-time or non-transmission; Provides that remote education monitoring will be mandatory by students.
Piauí (PI)	Resolution State Board of Education of Piauí nº061/2020; Normative 719096255 of the State Department of Education of Piauí.	Establishes the replacement of face-to-face classes with remote activities; Determines the creation of a Pedagogical Action Plan by educational institutions, based on guidelines pointed out in the regulation; Discriminates the activities of each function present in the school environment.
Rio Grande do Norte (RN)	Normative Instruction No. 01/2020 of the State Board of Education of Rio Grande do Norte.	It allows the use of remote education to meet the school hours planned for the 2020 school year and determines that evaluations will only be carried out after the return of face-to-face classes.
Sergipe (SE)	Ordinance No. 2235/2020 of the State Department of Education, Sport and Culture of Sergipe.	Establishes and regulates the use of non-face-to-face classes to meet the school hours planned for the 2020 school year; Allows teaching to reach the student by phone, if the student has difficulty accessing virtual systems; It opportunities for the school unit to adhere or not to the remote education system; Determines that qualitative aspects should be relevant to quantitative aspects in monitoring the performance of students, as well as the conditions existing in the student's school situation during the development of such activities.

Source: Authors, 2020.

In legislation regulating the use of remote education, it can be noted the absence of specific proposals for

population groups with difficulty of access – with the exception of Sergipe, which provides for the use of telephone flames. In general, only 64% of the population had access to the Internet in 2017, being the smallest region with access in the national territory [24]. In the rural region of the Northeast, where about 30% of the region's population resides, only 30% have access to the Internet, according to BIGS [24]. Discussing alternative solutions as printed material, as stated in some local regulations of remote education, although ensuring access for students with difficulty access, open a reality of inequality not even suppressed in the school environment. The established public policies, although they were created in the face of an unexpected picture, should at least consider alternatives that reach a greater number of students attenuating the inequality between them.

3.3.3 Southeast Region

Considered the richest region in the country, according to BIGS [24], the Southeast Region is composed of four Federative Units: Espírito Santo, Minas Gerais, São Paulo and Rio de Janeiro. Of these, only Espírito Santo has not yet released proposals for remote education. The proposals presented by the other states are shown in Table 3.

Table 3: Measures implemented by the states of the Southeast Region

STATE	REGULATION	PLANNED MEASURES
Espírito Santo (ES)	They have not yet started planning remote activities.	
Minas Gerais (MG)	Resolution 4310/2020 of the Minas Gerais State Department of Education	Implemented the TSP - Tutored Studies Program with an application with free access for students and teachers, handouts and video classes transmitted by state TV network.
Rio de Janeiro (RJ)	Resolution 5843/2020 of the State Education Secretariat of Rio de Janeiro	Implements remote education to replace classroom teaching; Establishes Google Classroom as a virtual teaching platform; Establishes parameters for assessments during the non-classroom teaching period.
São Paulo (SP)	Resolution of the State Department of Education nº 30 of 04/03/2020 and nº 44 of 04/20/2020; Decree nº 64982/2020.	Institutes the 'Learn at home' program during the suspension of classes; Ensures the delivery of material to students, as long as they have the resources to do so; Provides for the display of asynchronous video classes.

Source: Authors, 2020.

The norms adopted so far present more information about the processes, unlike some states in the Northeast Region analyzed previously. In the states of Minas Gerais, São Paulo and Rio de Janeiro, there is a forecast to use or already use the TV network for transmission of video classes, which is justified when looking at BIGS data, where about 85% of households have the equipment [24]. The Southeast Region also has a higher internet access index when compared to the regions analyzed so far: 81.1% [24]. The states of the region guarantee, in the consulted legislation, the supply of printed material to students who cannot access the internet, a measure that unequally includes students in the process, as already said. Little was said about students who need specialized assistance, whether adapted material would be provided. There are application proposals where mobile data is paid for by the State, both in Minas Gerais and São Paulo, however, it does not mention the issue

of students who do not have access to the internet due to the absence of a telephone signal in the region where they live. Also according to BIGS [24], about 90% of people residing in the region have a mobile phone with internet access, which can help in the dissemination of virtual activities [24]. In the legislations, there is no mention of evaluation methods in this period, which presupposes that only the return of the face-to-face regime will occur, not yet provided for in any of the four Federative Units. The Southeast Region, also when compared to the other regions, is the one with the highest index of teachers who teach discipline in the same area of higher education, with rates between 90 and 100% in all Federative Units, according to the School Census 2019 [25]. These indices, coupled with the socioeconomic issues of the region with regard to access to technologies, should generally have a negative school impact that is quantitatively less than with regard to access, compared with the regions analyzed so far.

3.3.4 Midwest Region

In the Central West region, four Federative Units are located: Federal District, Goiás, Mato Grosso and Mato Grosso do Sul. Of these, only two have started the remote teaching process so far: Goiás and Mato Grosso do Sul. The measures implemented are available in the Table 4.

Table 4: Measures implemented by the states of the Midwest Region

STATE	REGULATION	PLANNED MEASURES
Distrito Federal (DF)	They have not yet started planning remote activities.	
Goiás (GO)	Goiás State Education Council Resolution No. 02/2020; Technical note nº 02/2020 from the Goiás State Education Council.	Institutes remote education during the period of suspension of classes; Provides for the use of social media (Facebook, Instagram, etc.) for the interaction between teachers and students; Specifies the measures to be taken in specific situations, such as if the student does not achieve satisfactory performance, does not have access to the digital platforms provided by the state, among other situations
Mato Grosso (MT)	They have not yet started planning remote activities.	
Mato Grosso do Sul (MS)	Resolution No. 3745/2020 of the State Department of Education of Mato Grosso do Sul; Decree nº 15391/2020.	Establishes remote education to replace classroom teaching during the period of suspension of classes; Creates the PEI - Individualized Educational Plan for special students; Details the sending and receiving of APC - Complementary Pedagogical Activities.

Source: Authors, 2020.

The norms that regulate emergency education in the two states that have implemented the solution so far have common characteristics: the use of social networks to disseminate activities and specific organizational details, assigning activities to all those present in the school environment. The Midwest Region is a region with a strong rural tendency, being the Brazilian region that stands out the most in agribusiness. According to BIGS [24], the region is responsible for almost 50% of the production of cereals and legumes from all over the country. The region is also home to most of the Pantanal, considered the largest continuous wetland in the world with

140,000 km². The analyzed laws do not present specific solutions for students residing in rural and wetland areas. According to BIGS [24], about 60% of the residents of the rural region of the Midwest Region have a telephone with internet access, which justifies the measure implemented in Mato Grosso do Sul, where material is sent and collected written for all students. This proposal presents more equity than those previously mentioned in other regions, where they are used only as a resource for students who do not have access to virtual platforms. Despite the solutions presented aim to reach all students, there are still challenges, such as attracting teachers with training to teach. In the Midwest Region, only 50% of teachers in the final grades of elementary and high school are graduated, an index below the national average, according to the 2019 School Census [25]. In order for the implemented policies to have the expected effect, it is necessary to have trained teachers, so that the quality of the education offered does not succumb to the scenario imposed by COVID-19.

3.3.5 South Region

The South region is composed of only three Federative Units: Paraná, Rio Grande do Sul and Santa Catarina. It is the only region where all state networks have already expressed their intention to adopt remote education during the suspension of face-to-face classes. The measures implemented by each state are shown in Table 5.

Table 5: Measures implemented by the states of the South Region

STATE	REGULATION	PLANNED MEASURES
Paraná (PR)	Resolution 1016/2020 of the State Department of Education and Sport of Paraná.	Establishes the non-attendance regime for fulfilling the annual workload; Determines that this workload will be given by activities available in the free app "Aula Paraná" and on open TV; Specifies methods of evaluation by the application itself and the Google Classroom platform; Regulates the activities to be performed by each member of the school environment.
Rio Grande do Sul (RS)	Decree nº 55292/2020; Guidelines for remote classes of the Hybrid Teaching Model 2020 - Booklet distributed by the State Department of Education.	Implements the blended learning system in the state education network; Transmits pedagogical guidance to schools. It deals with the characterization of a class, about its planning in the hybrid system implemented by the State, frequency, specificities of each school stage (elementary, high school and YAE) and solves the main doubts that may occur.
Santa Catarina (SC)	Resolution No. 009/2020 of the State Education Council of Santa Catarina.	Authorizes remote education as a substitute for classroom teaching; Establishes that remote activities must be in accordance with the Political Pedagogical Plan of each school; It has the activities to be performed by school managers to maintain the continuity of the school calendar.

Source: Authors, 2020.

By analyzing the data in Table 5, it is possible to identify two characteristics that are not present in the legislation analyzed in any other region of the country: the implementation of “blended learning” in Rio Grande do Sul and the evaluation by virtual platform in Paraná. Blended Learning is (...) any formal educational program in which a student learns, at least in part, through online teaching, with some element of student control over time, place, path and /or pace [27]. Unlike emergency remote education, where the proposal is to supply

face-to-face classes, in blended learning the focus is on the student. For Horn & Staker [27], blended learning has flexible characteristics, where it meets at the same time a general education for all students and the specific needs of each student. However, the measures proposed so far by the local government do not cover the flexibility that the concept induces, nor does it centralize the student in the process. Its application relates to the possibility of maintaining non-face-to-face teaching concomitant with face-to-face classes, disregarding one of the premises for the implementation of such teaching modality, which is the familiarity of students and teachers with the technologies available, to be able to create and manipulate content within the virtual environment [28]. According to BIGS [24], in the South Region, about 75% of people used the internet that year. The same indicators are present in the number of people who have internet at home, whether by fixed or mobile broadband. These data reflect the challenge of implementing a blended learning system with a relevant number of students without access to the internet. The measures implemented in Paraná and Santa Catarina are close to the solutions adopted in the rest of the country. Making an evaluation system available on the online platform as in Paraná is a differential, transforming the emergency solution into a definitive one, in case the reestablishment of face-to-face classes is not possible in the medium term. In this way, the evaluation process will take place over the period and will be communicated to students in advance, potentially enhancing participation in remote activities. It is important to mention that the South and Southeast Regions have a high rate of school age internet users, when compared to other regions of the country, according to BIGS [24]. This contributes positively to the development of remote education, albeit an emergency one, since, as already mentioned, one of the principles for success in this teaching modality is familiarity with the tool that will be used. The South Region also has a high rate of teachers with qualifications in the area in which they work, the second highest in the country, according to the 2019 School Census [25]. It is possible to explore this reality to obtain a good result in emergency remote education.

4. Discussion

Considering the survey, by Brazilian state, presented previously, it is possible to verify that the vast majority of Brazilian state educational systems opted for the use of technology-mediated remote education. Given the difficulties of access to the internet by all students enrolled in the state educational systems under analysis, it is possible to infer that many students do not have the right to education guaranteed in the current modality of emergency and remote education. With the advancement of the COVID-19 pandemic and the lack of prospects for returning to face-to-face classes, the vulnerability of students who are not participating in the teaching-learning process in the current modality is evident. In this sense, it is necessary to bring to the debate measures that, in fact, provide access and carry out the teaching-learning process remotely and the right to education in Basic Education materializes.

5. Conclusion

The regulations analyzed in this work were implemented until June 2020, just over 60 days after the suspension of classes in most state educational systems. This situation indicates that there is a movement, even if minimal, to include technological tools within the teaching-learning process in most local education systems. Regarding modality, some of the analyzed legislation clearly emphasize that “remote education is not distance education”.

It should be considered that the characteristics of distance learning subsidize emergency remote education, since the state is responsible for limiting the student, providing structure and personnel, guaranteeing access to education during the emergency period. It is concluded that the concern of the local education systems is with the conclusion of the academic year itself, that is, with the workload. The norms created for the remote emergency regime are largely based on the political impact of the issue, of offering the continuity of the school year, ignoring, in a way, the pedagogical question, where the individual nuances of the students are analyzed. We note the absence of dialogue between States and institutions in this process, since schools only had the role of carrying out the impositions, and not of building alternatives. To delegate this role to schools is to contribute so that the achievement does not reach the expected result, making emergency remote education inefficient. The aim of this work was to highlight the regionally implemented actions as well as the context in which they are inserted. Responding to the general objective, the situation highlights the need for articulated planning for atypical situations, which guarantees not only the continuity of classes, but also the quality and inclusion of all students in this offer. According to the norms analyzed, remote education, although implemented in unquestionable urgency due to the sanitary emergency, culminated in the loss of supply to the least favored, allowing both a record number of school dropouts to occur in the current year and a high rate of automatic approval, without proof of the skills acquired for each teaching stage. Although the difficulty of implementing some type of education quickly in local systems has been proven, an even greater challenge is already looming on the horizon: ensuring that everyone returns when face-to-face classes are authorized and how to level these students to continue in the next school stage. To check.

6. Recommendations

As the present study was carried out through a literature review, all questions of research ethics were obeyed.

References

[1]. L. Martinez & C. Possídio. “O trabalho nos tempos do Coronavírus”. São Paulo: Saraiva, 2020.

[2]. Brasil. Lei nº 9.394. LDB – Leis de Diretrizes e Bases**.** Brasília – DF, 1996.

[3]. M. Moore & G. Kearsley. “Distance education: a systems view”. Belmont: Wadsworth Publishing Company, 1996.

[4]. A. M. Abadi & J.H. Rehfeldt. “Autonomia para aprendizagem: uma relação entre o fracasso e o sucesso dos alunos da Educação a Distância”. Práxis Educativa, 11(2), pp.310-331, May/August, 2016.

[5]. Brasil. Constituição da República Federativa do Brasil. Brasília – DF, 1988.

[6]. C. M. Haas & J. N. S. Lopes. “Desafios da Docência em Educação a Distância: o que dizem os professores.” Informática na Educação: teoria e prática, 17(2), pp. 113-130, July/December, 2014.

[7]. C. C. Prodanov & E. C. de Freitas. “Metodologia do Trabalho Científico: métodos e técnicas da pesquisa e do trabalho acadêmico.” Novo Hamburgo: Feevale, 2009.

[8]. M. C. S. Minayo. Pesquisa social: teoria, método e criatividade. Petrópolis: Vozes, 1994.

[9]. T. C. S. de Lima & R. C. T. Mioto. “Procedimentos metodológicos na construção do conhecimento científico: uma pesquisa bibliográfica”. Rev. Katálysis ,10, pp. 37-45, 2007.

[10]. F. T. Treinta; J. R. Farias Filho; A. P. Sant’anna,; L. M. Rabelo. “Metodologia de pesquisa

bibliográfica com a utilização de método multicritério de apoio à decisão". Prod. [online], 24(3), pp.508-520, 2014.

[11]. Brasil. Ministério da Educação. Gabinete do Ministro. Portaria nº 343, de 17 de março de 2020. Brasília - DF, 2020.

[12]. Brasil. Medida provisória n. 934, de 01 de abril de 2020. Brasília, DF, 2020.

[13]. E. W. Pereira & Z. A. Teixeira. **"**Reexaminando a educação básica na LDB: ganhos e perdas após dezessete anos." in: LDB 1996 Contemporânea: contradições, tensões e compromissos. Brasil: Cortez, 2015, pp. 171-197.

[14]. Unesco, Orealc. Educação de Qualidade Para Todos: um assunto de direitos humanos**.** Brasília, 2007.

[15]. V. G. Silva. "Por um sentido público da qualidade da educação". Tese (Doutorado) – Faculdade de Educação, Universidade de São Paulo, São Paulo, 2008.

[16]. F. Dubet. "A escola e a exclusão"**.** Cadernos de Pesquisa, 119, pp. 29-46, July, 2003.

[17]. E. S. Barreto & E. Mitrulis. "Trajetória e desafios dos ciclos escolares no país". Revista de Estudos Avançados. 15(42), pp.103-140, May/August, 2001.

[18]. M. C. Moraes. "Educação a distância e a ressignificação dos paradigmas educacionais: fundamentos teóricos e epistemológicos." Revista da FAEEBA/Universidade Estadual da Bahia, 1(1), pp. 1-246, January/June, 2005.

[19]. Brasil. Decreto Legislativo n. 6, de 20 de março de 2020. Brasília – DF, 2020.

[20]. A. C. Carius. "Network Education and Blended Learning: Cyber University concept and Higher Education post COVID-19 Pandemic". Research, Society and Development**,** 9(10), pp. e8209109340-e8209109340, 2020.

[21]. S. de F. Flach. "A educação e obrigatoriedade escolar no Brasil: entre a previsão legal e a realidade". Revista HISTEDBR On-line, 11(43), pp. 285-303, 2012.

[22]. A. C. Carius. "Teaching Practices in Mathematics During COVID-19 Pandemic: Challenges for Technological Inclusion in a Rural Brazilian School". American Scientific Research Journal for Engineering, Technology, and Sciences**,** 72(1), pp. 35-43, 2020.

[23]. J. Silva; W. Rochadel; J. Simão Schardosim; A. Fidalgo. "Uso de dispositivos móveis para acesso a Experimentos Remotos na Educação Básica". VAEP-RITA, VAEP-RITA, 2013, 1(2) pp. 129–134, 2013.

[24]. Instituto Brasileiro de Pesquisa e Estatística. "PNAD Contínua. Pesquisa Nacional por Amostra de Domicílios Contínua. Acesso à Internet e à televisão e posse de telefone móvel celular para uso pessoal 2017". Brasília, 2018.

[25]. INEP- Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. "Censo Escolar 2019"**.** Brasília, 2020.

[26]. M. C. Dyson & S. B. Campello. "Evaluating virtual learning environments: what are we measuring?" Electronic Journal of e-Learning, 1(1), pp. 11-20, 2003.

[27]. M. B. Horn & H. Staker. "Blended: usando a inovação disruptiva para aprimorar a educação." Porto Alegre: Penso, 2015.

[28]. E. A. Castro; V. Coelho; R. Soares; L. K. S. de Sousa; J. O. M. Pequeno; J. R. Moreira. "Ensino híbrido: desafio na contemporaneidade?" Projeção e Docência, 6(2), pp. 47-58, July/December, 2015.