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Seeing through the Fog: A Case Study of Teachers' Working Conditions during the Pandemic in the State of Paraná, Brazil¹

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Abstract: This paper seeks to investigate how, in the face of the COVID-19 pandemic, the work proposals directed by the government unfolded in the pedagogical practices of basic education teachers in Paraná/Brazil in emergency remote teaching. For that, the case study was used as a method, with a quantitative and qualitative analysis of the data. The qualitative analysis of the regulations took place through descending hierarchical classification (CHD), word cloud generator and similitude analysis, as well as through the descriptive analysis of the data from the application of a questionnaire to 78 basic education teachers. The results showed a gap between the main regulations issued by the federal and state public authorities that affect basic education in Paraná in the emergency period due to COVID-19 and the teaching practice of teachers, as well as the problems faced in the pedagogical/administrative support that these teachers received. Finally, the information presented in this study proved to be significant to understand the complexity of the educational problems that were intensified and others that emerged, due to remote teaching.

Keywords: emergency remote education; regulations; pedagogical support; technological support; working conditions of teachers

Viendo detrás de la niebla: Un estudio de caso sobre las condiciones laborales de los docentes durante la pandemia en el estado de Paraná, Brasil

Resumen: Este estudio busca investigar, cómo se desarrollaron las propuestas de trabajo dirigidas por el poder público, frente a la Pandemia del COVID 19 en las prácticas pedagógicas de los docentes de Educación Básica en Paraná/Brasil en la enseñanza remota emergencial. Para ello se utilizó como método el estudio de caso, realizando un análisis cuantitativo y cualitativo de dos datos. El análisis cualitativo de la normativa se realizó a través de la Clasificación Jerárquica Descendente (CJD), Nube de Palabras y Análisis de Similitud, así como el análisis descriptivo de los datos a partir de la aplicación de un cuestionario a 78 docentes de la Educación Básica. Los resultados revelaron una brecha entre las principales normativas emitidas por las autoridades públicas federales y estatales que afectan a la Educación Básica en Paraná en el período emergencial por COVID-19 y la práctica de los docentes, así como los problemas enfrentados en el apoyo pedagógico/administrativo que recibieron. Finalmente, las informaciones presentadas en este estudio resultaron significativas para comprender la complejidad de los problemas educativos que se agudizaron y otros que surgieron debido a la necesaria alternativa de la enseñanza remota.

Palabras clave: enseñanza remota de emergencia; normativo; apoyo pedagógico; soporte tecnológico; condiciones laborales de los docentes

Vendo por trás da névoa: Um estudo de caso sobre as condições de trabalho de professores durante a pandemia no estado do Paraná, Brasil

Resumo: O presente estudo busca investigar como se desdobram as propostas de trabalho direcionadas pelo poder público, frente à pandemia COVID-19, nas práticas pedagógicas de professores da Educação Básica do Paraná/Brasil no ensino remoto emergencial. Para tanto, utilizou-se como método o estudo de caso, realizando-se uma análise quantitativa e qualitativa dos dados. A análise qualitativa das normativas se deu por meio da Classificação Hierárquica Descendente (CHD), Nuvem de Palavras e Análise de Similitude, bem como pela análise descritiva dos dados a partir da aplicação de um questionário a 78 professores da Educação Básica. Os resultados evidenciaram um hiato entre as principais normativas emitidas pelo poder público federal e estadual que afetam a Educação Básica no Paraná no período emergencial devido à COVID-19 e à prática

docente dos professores, bem como os problemas enfrentados no suporte pedagógico/administrativo que esses receberam. Por fim, as informações apresentadas neste estudo se mostraram significativas para a compreensão da complexidade dos problemas educacionais que se intensificaram e outros que emergiram, em decorrência da alternativa necessária pelo ensino remoto.

Palavras-chave: ensino remoto emergencial; normativas; suporte pedagógico; suporte tecnológico; condições de trabalho dos professores

Seeing through the Fog: A Case Study of Teachers' Working Conditions during the Pandemic in the State of Paraná, Brazil

The COVID-19 pandemic impacted the world with the advance of the virus. Numerous measures to control the spread of the disease were taken, including social distancing of students in schools. This resulted in the closing of schools and affected 1.7 billion students of various school levels and age groups (UNESCO, 2020) in 160 countries (87% of all students in the world). As a result, remote learning became a necessary alternative to in-person schooling.

In Brazil, the Ministry of Education (MEC) constituted a committee to manage the educational impacts of the pandemic. MEC, through the Provisional Measure 934 (converted into Law No. 14.040/2020; Brasil, 2020b) regulated the replacement of in-person classes with remote classes, however, it maintained the minimum workload legally required in the country. In this way, another problem emerges in the Brazilian scenario: information inequality with regard to obtaining and accessing the electronic means necessary for remote teaching, in the use of digital tools, as pointed out in the Continuous National Household Sample Survey (PNAD Contínua; IBGE, 2018). With the sanction of Federal Law No. 13,979 of 2020 (Brasil, 2020a) providing emergency measures in Brazil, and the Declaration of the World Health Organization (WHO) stating the arrival of the pandemic, states and municipalities started to issue decrees with combat measures against COVID-19 throughout the national territory (Brasil, 2020a).

The crisis generated by the virus directly affected the school organization and, on April 28 of 2020, the National Council of Education (NCE) approved the guidelines to guide basic education schools² and higher education institutions to seek alternatives (such as remote teaching) to keep school activities for students, thus avoiding the in-person replacement of school days (Brasil, 2020b). The document prepared by the NCE was created with the collaboration of the MEC and presented guidelines, recommendations, and suggestions for all stages and teaching modalities. Therefore, as occurred in other states in Brazil, the government of Paraná, through Deliberation No. 01/2020, authorized the offer of remote activities (except for kindergarten) issuing provisional guidelines for the reorganization of the 2020 school calendar (Paraná, 2020c). These guidelines adhered to synchronous or asynchronous remote learning via mobile devices (i.e., laptop computers, smartphones) and under the mediation of different media (i.e., print, TV, radio).

The return of teaching activities through remote classes and digital information and communication technologies (DICTs) have been used globally (Williamson et al., 2020), using the

² Basic education in Brazil consists of kindergarten (0 to 3 years old, at nursery school; and 4 to 6 years old, at pre-school), elementary school (students from 6 to 14 years old), high school (students from 15 to 17 years old), and youth and adult education (YAE; students over 15 years old for elementary school and over 18 years old for high school).

expressions emergency remote education³ (ERE) and emergency remote teaching (ERT). It is in this scenario that distance basic education in Brazil was inserted, as a temporary curricular adaptation during the COVID-19 pandemic. However, considering the vastness of Brazilian socioeconomic inequalities, students, teachers, and schools face major challenges in the context of the pandemic. For instance, the ICT Household⁴ Survey showed that in 2018 more than 30% of Brazilian households (about 46.5 million) did not have access to the internet (Tarouco, 2018). Also, data from the Brazilian Institute of Geography and Statistics (IBGE, 2017)⁵ show that 43.4% of Brazilian households do not have a personal computer, and the most used equipment for accessing the network is the cell phone, present in 98.7% of the households.

It is important to emphasize that at the beginning of the emergency transition to distance education, it was not clear which working conditions basic education teachers would face during the school year. In Brazil, for example, there was no articulated educational policy between the Brazilian and state governments, which left schools and teachers with a potential lack of pedagogical support and training. In addition, little is known about how teachers have faced emergency remote teaching and learning in practice. This context defined the guiding question of this study: How did the work proposals directed by the government, in the face of the COVID-19 pandemic, unfold in the teaching practices of teachers from Paraná/Brazil?

Thus, the main objective of this paper is to map out the teaching conditions in Paraná - Brazil in the face of the COVID-19 pandemic. For this, research with a mixed approach was carried out, using the case study as a method; a qualitative analysis of the normative data was carried out through descending hierarchical classification (DHC), word cloud generator, and similarity analysis, as well as the descriptive analysis of the data from the application of a questionnaire to 78 teachers of basic education.

In this study, it was possible to identify, in the analysis of the regulations, the concern of the public authorities in structuring compliance with the health care protocols necessary to minimize the contagion of the virus and in articulating imposing measures that would ensure compliance with the school year and the school calendar via remote classes. In the analysis of the word clouds and the similarity analysis, the relevance of words such as teaching and learning, and teaching quality was not identified. Most teachers who responded to the questionnaire had to buy some equipment to carry out their work remotely and considered the pedagogical work performed inefficient. Most of those working in public schools did not receive pedagogical and technological support before and during the ERE. The evaluation of teachers regarding the organization of remote work at the school was between good and regular, which denotes the gaps between theory and practice of the legislation, when it comes to remote teaching in Paraná, in the view of the main protagonists of this process, the teachers.

This research is a case study limited to a Brazilian state and does not intend to be generalizable (given the limited data), but hopes to contribute to relevant discussions on the importance of education management in times of crisis, such as the current one, considering the implications of remote teaching in the teaching work in basic education. Based on the results, the

³Emergency remote teaching is the type of teaching or class that presupposes the geographic distance of teachers and students, adopted due to the restrictions imposed by COVID-19, which prevents the physical presence of students and teachers in educational institutions (Antônio Moreira & Schlemmer, 2020).

⁴TIC Domicílios (CGI.br) is a survey carried out annually with the objective of mapping the access to Information and Communication Technologies in urban and rural households in Brazil and its forms of use by individuals aged 10 years or over. Available at: <https://www.cetic.br/pt/pesquisa/domicilios/>

⁵The Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística - IBGE) is the main provider of geographic information and statistics in Brazil.

relevance of this study lies in the possibility of rethinking public policies and actions in order to improve education, helping teachers and educational institutions to overcome the challenges inherent to remote education.

Literature Review

The Constitution of the Federative Republic of Brazil (CF), Article 206, establishes that all educational systems, when preparing their proposals for public policies, should include the basic principles for teaching with equal conditions for access and permanence in school, free public education in official establishments, and guarantee of quality standards. This resulted in the articulations and regulations elaborated during the ERE by public authorities, whether federal, state, or municipal. Thus, since the declaration of the national state of emergency due to the COVID-19 pandemic, one of the first measures taken by the government of Paraná was the suspension of face-to-face classes throughout the educational, school, and university system. However, the apprehension resulting from the pandemic is inevitable, triggering an educational, socioeconomic, and health crisis, which has occurred in the world and the entire Brazilian territory.

Given this scenario, the working conditions of teachers were significantly changed, as, in addition to reorganizing school activities, both in basic education (BE) and higher education (HE), it was necessary to “consider proposals that do not increase inequality at the same time they use the opportunity brought by new Digital Information and Communication Technologies (DICT) to create ways to reduce learning inequalities” (Brasil, 2020b, p. 3, our translation).

Recent studies have investigated the teachers' conceptions about the use of information and communication technologies in the educational context because of the pandemic. In the Basic Education of the city of Jaguaruana-Ceará-Brazil, Oliveira et al. (2020) identified that in the adaptive process to remote education by teachers, there was a lack of familiarity with DICT and the search to use them. In the pedagogical practice in schools in the studied municipality, the main challenges were deficiencies in initial and continuing teacher education, the inaccessibility to technological means by students and teachers, and the absence of public policies for digital inclusion of students and teachers. The authors emphasized the lack of responsibility of the State in the democratization of access to DICT and the scrapping of education.

Also considering teaching in basic education in the Brazilian context during the pandemic, Cipriani et al. (2020) carried out a study centered on the suspension of face-to-face classes in the city of Juiz de Fora in the state of Minas Gerais. The authors gave a questionnaire to 209 teachers and identified that the concerns of the teachers in this sample were accentuated by the most evident inequalities in the pandemic, difficulties in curricular educational practices, and their expectations regarding their return to schools. However, many of these difficulties experienced in the teaching practice during the pandemic are not limited to Brazilian states.

A study carried out on this topic with basic education teachers from Brazil and Spain (Moura-Vieira et al., 2021), identified that the emergency insertion of digital technologies without adequate training and lack of working conditions caused great suffering to the teachers. Respondents reported initial difficulties with the virtual classroom, recorded classes, live classes, videos, and technologies such as Google Scholar, Meet, Zoom, WhatsApp, radio, and television. There was also the teachers' fear of contamination during face-to-face classes (Moura-Vieira et al., 2021).

Kaiper-Marquez et al. (2020) studied how the Goodling Institute for Research in Family Literacy at The Pennsylvania State University changed its way of working to face the challenges arising from ERE, which included moving from face-to-face family literacy classes to remote teaching using online platforms. They identified that despite the challenges (digital inequities and discomfort with technology, class management, presence and participation inconsistency) for

educators and students, there was collaboration, experiences, and lessons learned, using creativity. In addition, they highlighted the importance of family literacy programs as an educational means.

In China, the need for adequate teacher training has also been discussed as part of the education policy of “Suspending Classes Without Stopping Learning” (Huang et al., 2020). Similarly, in Malaysia, Nasri et al. (2020) point out the need to develop new methodological approaches in the context of teacher education. With new contributions, the study by Trust and Whalen (2020), with 325 elementary and high school educators during the COVID-19 pandemic, identified a lack of preparation, training, and support for educators to work with remote learning. The authors concluded that remote learning created an environment of additional barriers influenced by the use of technology in the context of ERE.

It is worth noting that, in Brazil, although access to education has expanded, there is still a lack of investment in educational structures (e.g., infrastructure, initial and continuing professional training). The non-incorporation of digital technologies in school practices is consistent with the lack of adequate public funding found throughout the country (Modelski et al., 2019). In turn, the discrepancies between public policies aimed at education and the realities in the school context have been exacerbated during the pandemic. Lima et. al (2020) proposed a reflection based on the content analysis of the resolutions issued by the government of Paraná that deal with the management of the pandemic and its folds in youth and adult education (also included in basic education) identifying discrepancies between the theory (the content of documents) and the practice experienced at school, especially regarding the difficulties encountered by students to continue studying during this period.

This articulation between public policy and efficient results (measures that materialize and reach the public for which they were created), despite the exceptional and provisional character, could consider management based on scientific data, the dialogue between the powers, between the administrative spheres, considering the levels of socioeconomic inequalities existing in the country, as “[...] there was a great disparity between states and municipalities in political decision-making related to public health, with a certain mismatch of actions, which aggravated the general social and educational situation [...]” (Gatti, 2020, p. 31, our translation).

Considering the difficulties that permeated this scenario, affecting primarily the main actors in this process – teachers and students –, the need to map the conditions of teaching arose, making a parallel between the guidelines of the current regulations and the educational reality of the state of Paraná. In this way, this paper seeks to contribute to the debate on the implemented emergency educational policies, as well as to understand the real educational needs of Basic Education and the existing gaps between the theory set out in the legislation and the practice developed in the schools of Paraná. Therefore, in the context of the ERE, the difficulties of teachers in the pedagogical and technological aspects, as well as the insecurity and fear of COVID 19 contamination, aroused the need to map the teacher’s working conditions, once these conditions can directly impact the quality of such work and, consequently, the quality of teaching and learning. Thus, this review shows the need to further examine the guidelines of current regulations and how these regulations affect the educational reality experienced by teachers and students.

Methodology

This research sought to map the conditions of the teaching work in the face of the COVID-19 pandemic in the State of Paraná. Data collection was carried out in the metropolitan region of Curitiba (capital of Paraná). This case study is based on mixed methods research (Johnson & Onwuegbuzie, 2007), performing a set of procedures for collecting and analyzing quantitative and

qualitative data, considering that, according to Creswell and Plano Clark (2011), the combination of these approaches allows a greater degree of understanding than if a single approach were adopted.

Based on the study by Pereira, Araújo e Machado (2021), in which predictors of success in the evaluation reports of higher education (HE) were identified, this investigation also gathered several documents into a single textual corpus of analysis using mixed methods, recommended for discovering associations of large texts. For this, Iramuteq⁶ software was used as a data processing tool, which favors conventional quantitative analysis applied to the textual content (Onwuegbuzie & Teddlie, 2003). Public policy guidelines followed throughout the state were analyzed using Iramuteq, which enabled data analysis through descending hierarchical classification (DHC), word cloud generator, and similarity analysis.

This study also used a questionnaire as a research instrument, and descriptive statistics were used to analyze these data. Generally, the following questions were asked: What is the socio-demographic profile of basic education teachers who migrated to ERE? What conditions do teachers have to work with remote classes? Did teachers receive pedagogical and technological support to work with remote education due to the COVID-19 pandemic?

Qualitative data analysis (QDA) sought to identify how the work proposals directed by the government in the face of the COVID-19 pandemic unfolded in the teaching practice of teachers in Paraná/Brazil.

Data Collection from Teachers

The present study used a questionnaire as a data collection technique, a non-probabilistic sample, descriptive statistics, and quantitative analysis. The online questionnaire (Google Forms) was created exclusively for this research, and was available from December 12, 2020, to January 12, 2021, containing 25 objective questions⁷.

Recruitment was carried out through invitations via various means such as direct personal contacts of researchers and WhatsApp thematic groups for teachers from public and private schools, mainly concentrated in the metropolitan region of Curitiba, capital of the State of Paraná-Brazil. The criterion for responding to the survey was limited to basic education teachers who participated in the transition from the regular classroom to remote teaching as part of the response to the COVID-19 epidemic. To validate the data collection instrument, a pilot study was carried out with 5 teachers randomly chosen from the groups of teachers on WhatsApp. After the application of the pilot study, four questions were reformulated as they had a double interpretation. After sending it, 78 teachers answered the questionnaire.

⁶ Iramuteq is a free software, developed in Python language, and uses functionalities provided by the statistical software R. (Reinert, 1990). In Brazil, it began to be used in 2013 in social representations research. Currently, it is widely used in other areas (such as in the health area) and contributes to the dissemination of the various possibilities for processing qualitative data, allowing different forms of statistical analysis of texts produced from interviews, documents, etc.

⁷ Following ethical procedures, the questionnaire began with an explanatory statement presenting the researchers, the research theme, the target public (research subject). It also had the free and informed consent document with the objective and justification of the research, possible discomforts, and risks arising from the study, ensuring the ethical responsibility of researchers to maintain the anonymity of the participants. To proceed, respondents had to read the content and click on the accept option. In the objective questions, the participants indicated one or more options, as well as being able to write and include other alternatives in the document.

After data collection via Google Forms Excel spreadsheet, the database was run through SPSS⁸, version 20.0, to perform descriptive analyzes (relative and absolute frequencies). For the question about the pedagogical and technological support for teachers, Pearson's chi-square statistical test was used to investigate the association of these two variables. The null hypothesis indicates that there is no association between the variables observed if the p -value is greater than the limit of 0.05. Next, we present the mode for gathering and selecting materials for the documentary research.

The Corpus of Analysis (Regulations)

First, a timeline of the main regulations issued by the federal and state public authorities was built. The criteria for selecting the regulations was to deal with measures and guidelines that affect basic education in Paraná during this emergency period due to COVID-19. Initially, 25 documents were located (two federal and 23 state). Carrying out a detailed pre-analysis of them, it was identified that some previous resolutions and instructions were only changes that were already included in other regulations. Thus, it was sought to certify the updating of such regulations up to the date of this analysis (considering that they constantly changed due to this unstable scenario), remaining 14 documents (Chart 1). These are primary sources, original and public data, made available by the government at their respective electronic addresses, signed by those responsible.

Chart 1

Main Legislations: Pandemic and Basic Education in Paraná

DATE	Documents	Content
06/02/2020 Federal Doc. **** *doc_1	Law No. 13.979/2020	Provides measures to face the public health emergency of international importance resulting from the coronavirus responsible for the 2019 outbreak.
16/03/2020 State Doc. **** *doc_2	Decree No. 4.230/2020	Provides measures to face the public health emergency of international importance resulting from COVID-19.
18/03/2020 State Doc. **** *doc_3	Resolution No. 891/2020 – GS/SEED	Establishes measures provided in Decrees No. 4,230, of March 16, 2020, and No. 4,258, of March 17, 2020, within the scope of the Secretary of State for Education and Sport.
20/03/2020 State Doc. **** *doc_4	Decree No. 4312/2020	Grants special licenses to public workers who compose the functional structure of the Secretary of State for Education (SEED), with rights acquired on the date the law enters into force.
21/03/2020 State Doc. **** *doc_5	Resolution No. 901/2020 – GS/SEED	Guides the distribution of school meals available at the educational institutions of the state system during the period of suspension of classes.
31/03/2020 State Doc. **** *doc_6	Deliberation No. 01/2020 of State Board of Education.	Institution of a special regime for the development of school activities within the State Education System of Paraná as a result of specific legislation on the pandemic caused by the new coronavirus – COVID-19 and provision of other measures.

⁸ SPSS (Statistical Package for the Social Science) is a statistical package with different modules, developed by IBM for the use of humanities and exact sciences professionals.

DATE	Documents	Content
03/04/2020 State Doc. **** *doc_7	Resolution No. 1014/2020 – GS/SEED	Provides for the emergency call of teachers from the Magisterium (QPM) and teachers hired under the Special Regime - CRES (PSS) to compose the working group for the production of audiovisual material for students of basic education in the state system of education.
03/04/2020 State Doc. **** *doc_8	Resolution No. 1016/2020	Establishes in a special regime school activities in the form of remote classes, as a result of the pandemic caused by COVID-19.
07/05/2020 State Doc. **** *doc_9	Resolution No. 1.522/2020 – GS/SEED	Establishes school activities, under a special regime, in the form of remoteclasses as a result of the pandemic caused by COVID-19.
18/08/2020 Federal Doc. **** *doc_10	Law No. 14.040	Establishes exceptional educational regulations to be adopted during the state of public calamity.
03/12/2020 State Doc. **** *doc_11	Resolution SESA No. 1433/2020	Establishes, in a very exceptional way, the regime and work routine of all public workers in the State of Paraná in the face of the public health emergency resulting from the COVID-19 pandemic.
29/01/2021 State Doc. **** *doc_12	Resolution No. 541/2021 – GS/SEED	Establishes, in a very exceptional way, the procedures for the removal of teachers who have medical vulnerabilities, according to SESA Resolution No. 1.433/2020.
03/02/2021 State Doc. **** *doc_13	Resolution No. 098/2021	Regulates State Decree 6,637, of January 20, 2021, and provides for prevention, monitoring, and control measures of COVID-19 in public and private educational institutions in the State of Paraná for the return of curricular and extracurricular activities.
11/03/2021 State Doc. **** * doc_14	Resolution No. 1.111/2021 – GS/SEED	Establishes the criteria for registering teachers' attendance in hybrid and/or remote education during the COVID-19 pandemic.

The 14 regulations (Chart 1) composed the textual corpus⁹ of analysis that presented a total of 22,451 occurrences of words or tokens. To perform the processing in the software, the texts are separated by command lines also called “lines with asterisks” or metadata (Camargo & Justo, 2016). Thus, in this monothematic textual corpus, each text was represented as **** *doc (document number), illustrated in Chart 1. The composed words of the entire textual corpus were connected by underscores (school_community, basic_education, covid_19, among others) to ensure its representation within the context and to perform its processing by the software. However, the lexical analysis and use of synonyms of these words with underscores are not possible, as they do not exist in the software dictionary (Pereira et al., 2021). To validate the processing in Iramuteq, the entire textual corpus was adapted, eliminating symbols, and spaces between paragraphs, among other requirements.

Similar to the study by Pereira et al. (2021), this research sought to standardize the textual corpus to qualify its elements using lexical and/or semantic categories and quantify them, by verifying the composition and frequency of occurrence of its textual elements. After preparing the

⁹The corpus was built by the researcher. It consists of a set of texts to be analyzed (Camargo & Justo, 2016).

textual corpus, data processing was carried out in the software, which statistically quantified them, presenting the dendrogram of classes in descending hierarchical classification (DCH), word cloud generator, and similarity analysis.

Qualitative Analysis Technique Applied to Regulations

Quantitative analysis is a specific type of data analysis (Lebart & Salem, 1994), in which we can analyze texts, documents, and interviews. It can be used to describe material produced by a producer (individual or collective) and for comparative, relational purposes, comparing documents according to specific conditions of their production. Qualitative data analysis (QDA) is facilitated with the aid of computational methods and tools in revealing the information treated in a textual corpus (Lebart & Salem, 1994.) For this organization of the textual corpus, the Iramuteq software was used, which facilitates the vocabulary distribution in an understandable and visually clear way with graphic representations based on the possibility of analysis (Loubère & Ratinaud, 2014), and includes lexical analysis and word count, as well as semantic analysis, identifying possible concepts contained in the content. Therefore, the use of the software collaborated with the work of the researchers, considering the large volume of data contained in the documents (22,541 words).

First, the descending hierarchical classification (DHC) was performed, using the procedure suggested by Reinert (1990) and statistically validated by Benzecri (2007). Text segments (TS)¹⁰ were classified according to their respective vocabularies, dividing the corpus texts into homogeneous thematic classes. The analysis shows the thematic structures of the text (Reinert, 1990).

Thus, the software divided our textual corpus, composing 6 stable thematic classes, characterizing its content by analyzing the occurrence of text segments (TS), frequency of occurrence of forms, and analysis of the χ^2 (chi-square) of each form. Later, considering the inductive method (Thomas, 2006) in the QDA, we named each class according to the interpretation of its vocabulary set, considering that the DHC allows revealing relationships and similarities existing in the categories that would not be detected in paired variable comparisons, from a factorial analysis of multiple correspondences. It is an exploratory and multivariate procedure applicable to contingency tables involving two or more categorical variables (Benzecri, 2007), as is the case in this study. These structures are represented in the DHC and word cloud of each class.

Afterward, the classes were explained individually according to the ramifications represented in the class dendrogram¹¹, word cloud, and text excerpts. During the analysis, when needed, the individual class similarity analysis (SA) diagram was presented. SA is used to describe social representations and studies the proximity and relationships between the elements of a set. The creation of maximal trees demonstrates the number of connections between two items (Vergès & Bouriche, 2001). Next, we will present the results and discussions of the QDA of the study legislations, as well as the analysis of the data collected from the questionnaires answered by the teachers.

¹⁰ The text segments (TS) are normally dimensioned by the software according to the corpus size and have approximately three lines. The text segments are the environments of the words (Camargo & Justo, 2016).

¹¹ The class dendrogram is a graphical view of cluster analysis results. It is generally used to verify the results of data classification using structures that make sense, taxonomies, capable of classifying the observed textual data into different classes (Pereira et al., 2021) and demonstrates the ramifications of the classes (links between them), as they are associated with each other.

Findings and Discussions

In this section, the results of the analyzes divided into two topics are presented: in the first, the QDA of the regulations is presented; in the second, the analysis of the research carried out with the teachers.

Qualitative Data Analysis (QDA) of Regulations Issued by the Federal Government of Brazil and the Government of the State of Paraná

The Iramuteq software allowed the dendrogram of classes in the descending hierarchical classification (DHC). The procedure separated and divided the contents into homogeneous classes. The program used successive interactions in the factor analysis of multiple correspondences, identifying the most important themes (Pereira et al., 2021). The 14 normative texts were grouped into 629 TS with 3,266 forms, totaling 22,451 occurrences of words, with 2,362 different lemmas. In the classification, 2,089 active forms of words and 95 supplementary ones were identified. For this analysis, the number of active forms with a frequency greater than or equal to 3 totaled 886. The average number of form occurrences in each TS was 35.69. Among the 629 TS analyzed, the utilization was 84.10%, classifying 529 TS in the 6 resulting classes and presented in the class dendrogram (Figure 1).

The textual corpus can be considered adequate for the DHC as it represents a set centered on the theme “teaching work in the COVID-19 pandemic” and, therefore, as a monothematic set, it prevents the analysis of these texts under other themes “to replicate its reproduction of the initial structuring of them” (Pereira et al., 2021, p. 9, our translation).

Statistical procedures applied to textual content gather information using the same type of lexicon, allowing the identification of different lexical worlds (Reinert, 1990). Thus, the class dendrogram (Figure 1) demonstrates the thematic classes that emerged from the textual corpus during the DHC, with the detailing of the classes including the terms that composed them individually, represented by the interactions that were performed in the TS classification. These interactions generated the sub-corpora that corresponds to the classes. The textual corpus originated six stable thematic classes, composed of text segment units that present a similar vocabulary.

The six classes are divided into 4 branches (A, B, C, D) of the total corpus under analysis. After the inductive analysis (Thomas, 2006) we named the classes according to their representations in relation to the guidelines directed by the government regarding the basic education and the teaching work. Subcorpus A is composed of class 1, called “Working conditions in the remote education”, formed by 92 TS, 17.39% of the 529 used, and class 2, “Pandemic and education”, composed of 114 TS, representing 21.55%. Subcorpus B contains the speeches corresponding to class 6, named “COVID-19 prevention measures” with 73 TS, representing 13.8% of the TS used. Subcorpus C is composed of class 5, “Emergency situation in Brazil”, with 97 TS, 18.34%. In subcorpus D, there are class 3, “Directions to education professionals”, which obtained 87 TS, 16.45% of the TS used, and class 4, “Guidelines to return to face-to-face classes”, which accounted for 66 TS, 12.48% (Figure 1).

Subcorpus A (Figure 2) comprises the division of classes 1 and 2, demonstrating that the two classes, because they come from the same grouping or division, have a similar vocabulary to each other. Both classes provide more specific guidelines on how classes should be taught in the pandemic. However, although they have very similar semantics, Class 1 represents the working conditions of teachers, directly related to the teaching practice, and Class 2 to the directions of basic education as a whole. Figure 2 shows, side by side, the word clouds of the two classes (subcorpus A), allowing this differentiation to be identified through the presentation of the main forms evoked.

Figure 1
Classes Dendrogram

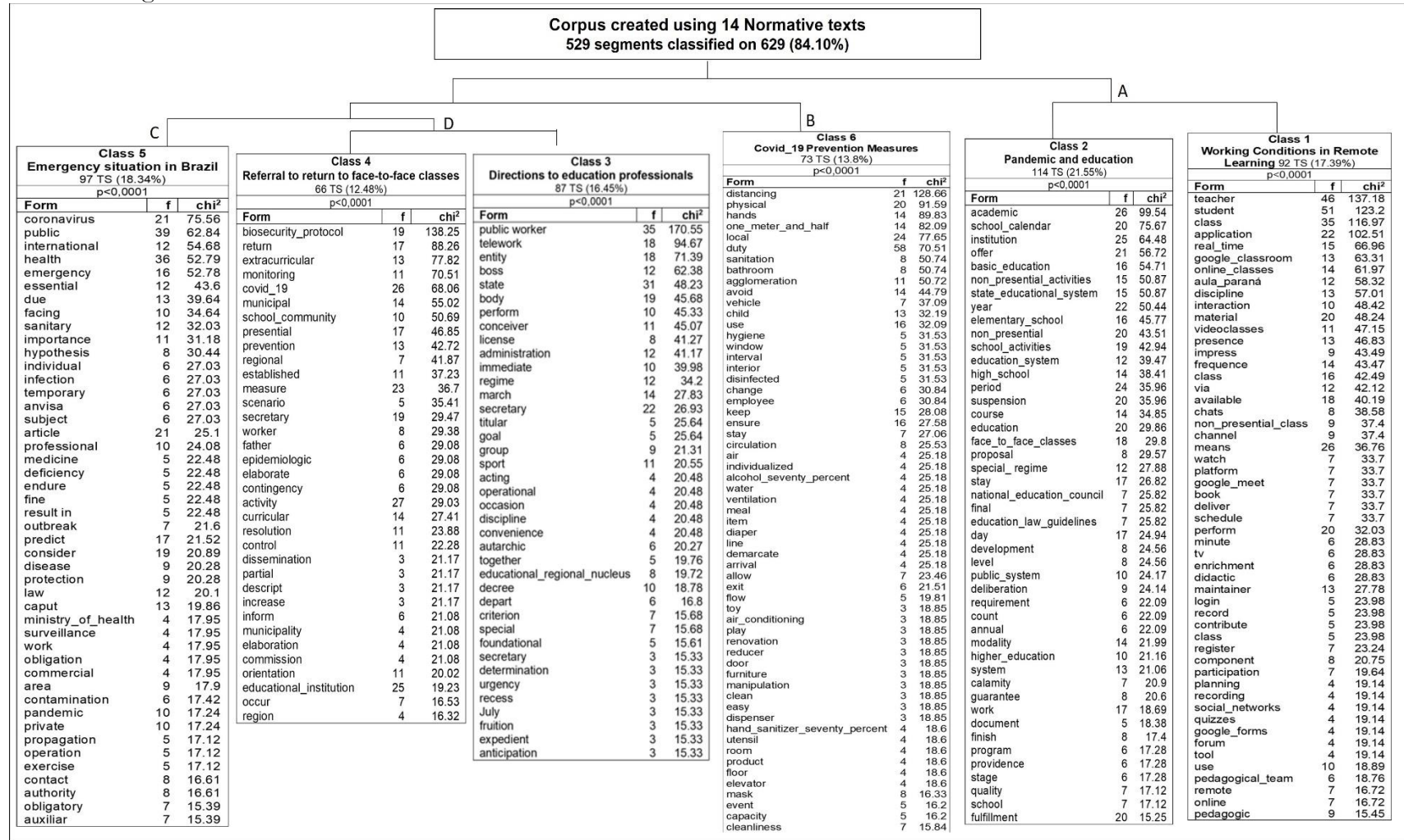
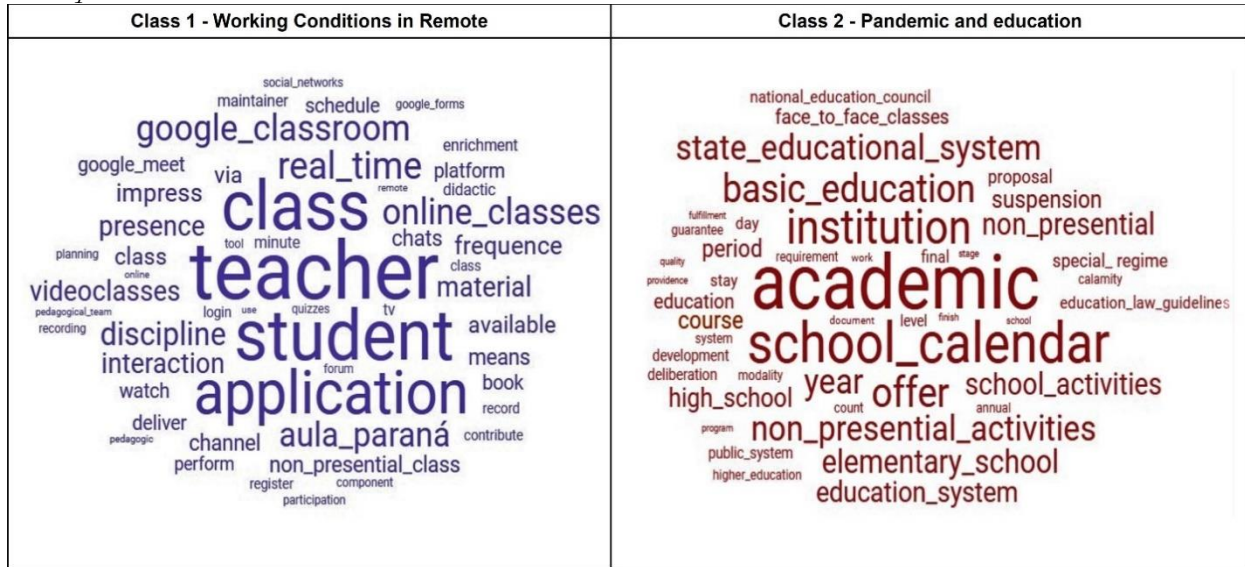


Figure 2*Subcorpus A word cloud*

In class 1, the most prominent words were “teacher” (with a greater association of the word with the class, representing χ^2 137.18), “class” given to “students” through “application”, “video classes”, and with other words related to that context. This class addresses more specifically the practical order regarding the teaching work in the pandemic and in online classes. This becomes more evident in the typical TS that obtained the highest score¹² among the others (814.96), presented in the following excerpt (*our emphasis*¹³):

The *non-presential* school activities are intended for *teacher-student interaction* through *printed guidelines, guided studies, quizzes, virtual platforms, email, social networks, chats, forums, electronic journals, video classes, online classes in real-time, and printed and similar materials.* (Paraná, 2020c, our translation)

In order to better understand the definition of non-presential school activities adopted in Brazil and Paraná, we find in SEED Resolution No. 1,016, the following excerpt classified in class 1 (score 517.19, *emphasis added*): they are *remote* school activities “the ones offered by the *sponsor* and/or by the *educational institution*, under the responsibility of the *class teacher* or the *curricular component, remotely* and without the presence of the *teacher* and the *student in the same physical space*” (Paraná, 2020b, our translation).

The methodologies that cover the technological resources used in remote school activities following the regulations (class 1, score 469.25, *emphasis added*) include “*software and hardware, adopted by the teacher or by the educational institution and used by students with private material or equipment, provided by the educational institution, or even public*” and must be (score 451.96) “*included in the teacher’s*

¹²As a parameter for our analysis, the Iramuteq software classified the typical text segments, which are the characteristic text segments of the class. The highest TS score of class 1 was 814.96 and the lowest score, 425.87.

¹³The italics in the words that appear in all excerpts were performed by the Iramuteq software and can be found in the classification of the dendrogram (Figure 1) and word cloud (Figure 2) of each class.

planning and *included* in the *educational institution's pedagogical proposal*" (Paraná, 2020a, 2020b, 2020c, our translation).

Remote teaching carried out in the emergency situation in Brazil had as a technological instrument for teaching-learning several platforms and software related in class 1 (Figure 1) and organized in the word cloud (Figure 2), such as the "application" "Aula Paraná" (free access and no consumption of data from mobile devices), "Google Classroom", "Google Forms", "Google Meet". The "classes" were also made available on open TV "channels". Teachers should "record" the "video classes", "organize" the "forums", "chats", and "quizzes".

In case the teacher does not have the technological equipment to carry out their activity, in class 1, guidance is shown in the following excerpt (score 475.12) of Resolution No. 1.522 (*our emphasis*): "[...] *make* the information technology laboratories *available* for those who *need equipment* to access *Google Classroom*, on a *time* scale, *respecting* the *guidelines* of the *directions* and health agencies [...]" (Paraná, 2020c, our translation).

As for pedagogical support, class 1 includes excerpts (score 555.90 and 475.15) of Resolution No. 1522, which directs the Pedagogical Team to (*our emphasis*): "inform *teachers* on the importance of *implementing remote classes* and planned actions" (PARANA, 2020c, our translation) and "contribute with teachers, if necessary, in pedagogical *enrichment*, in the *class planning* in *Google Classroom*, as well as in the *planning* and monitoring of *online classes* in *real-time*, preparation and *delivery* of *printed material*, when necessary"¹⁴ (Paraná, 2020c, our translation).

We can see in Figure 2 that the word "attendance" is also highlighted and directly linked to the "presence" of the "teacher" and the "student". According to the following excerpts (score 587.16 and 629.72, *emphasis added*) of Resolution 1,016, the institution's Direction is responsible for "*monitoring* the effective *participation* of the *pedagogical team* and *teachers*, *recording* the *occurrences* in the *attendance* in the *Monthly Absence Report*" (Paraná, 2020b, our translation), while "student's attendance will be registered by logging in the app 'Aula Paraná'" (Paraná, 2020b, our translation).

Among the attributions directed to the teacher (class 1, score 440.96 and 724.98) is (*emphasis added*): "*complementing* and making the *pedagogical enrichment* of the *classes* through online classes in real-time and *didactic resources* (*images*, texts, graphics, videos, among others), observing the legislation that deals with copyright"¹⁵ and "*log in* to the *Aula Paraná application*, respect the *daily* offer of *classes* for your *classes*, effectively *participate* in *chats*, stimulating *student interaction*, promoting the mediation of learning" (Paraná, 2020b, our translation).

Concerning the proven cases of students without access to the means available to attend remote classes, SEED Resolution No. 1,016 (class 1 score 425.87) provides that "the teaching team must print the materials provided by the sponsor, which must be delivered to students every fifteen days, at the time of delivery of the school lunch kit" (Paraná, 2020b, our translation).

In short, the legislation does not guarantee prior technological training for teachers and students, despite its relevance and need, since it deals with this issue in a very vague way, placing this attribution as a responsibility for the school without the necessary support for its realization. In addition, in the legislation, there is no guarantee of financial investment or technological resources for the development of this work, given the economic crisis accentuated by COVID 19, which

¹⁴ An important part to consider is that this wording aimed at pedagogical support was only included on September 24, 2020, by SEED Resolution No. 3,817, that is, in May 2020 (when Resolution No. 1,016 was issued) there was no such instruction.

¹⁵ Wording given by SEED Resolution No. 3817/2020 of September 24, 2020. The previous wording of Resolution 1,016 – 03/04/2020 was "to complement and make the pedagogical enrichment of application classes and Google classroom and Google forms through didactic resources (images, texts, graphics, among others, observing the legislation that deals with copyright)".

affects teachers already with a history of salary gaps and, mainly, students from the popular classes, mostly in economically disadvantaged conditions. In this sense, the gaps for a better quality of teaching and learning are even greater, given that students already lacking the dominant languages and cultural references at school are violated in their rights due to the lack of technological skills to deal with institutional tools, and mainly due to the lack of physical resources to access them.

In Class 2, “Pandemic and education”, we have as a highlight in the word cloud (Figure 2) the words “school”, “school calendar”, “basic education”, “state education system”, “offers”, “remote activities”. The typical TS of this class, which obtained the highest score¹⁶, was 526.36. In this classification, the highlights were general instructions on deadlines, bureaucratic procedures, and measures to be adopted regarding the reorganization of the basic education school calendar. In this sense, the importance of the autonomy of schools for the reorganization of their school calendar is highlighted.

Another very important point regarding the two classes presented is the impersonality of the resolutions when defining the guidelines for the development of the teaching work, disregarding the ontological condition of the human being - the teacher. In this sense, it is observed that the legislation refers to those involved in the educational context, mainly teachers and students, as mere consumers of services, being restricted to machines, numbers, and accesses. Privileging the mechanics of work, other important fundamental variables in the teaching-learning process are disregarded, such as the social, economic, and cultural conditions that permeate the different spaces.

Subcorpus B (Figure 1) contains class 6, “COVID-19 prevention measures”. From this class, the divisions of classes 5 (subcorpus C), 4, and 3 (subcorpus D) originate, as they have similar characteristics, such as the preservation of health, hygiene care, and sanitary protocols that can minimize the contamination of the disease and preserve the health of the school community (parents, teachers, students, principals). As subcorpus B is composed of a single class that originates the subdivisions of three more classes, for a better understanding of the TS, we performed a Similarity Analysis (SA) of class 6 as shown in Figure 3.

The noun “duty” constitutes the central nucleus of this graphic representation and its ramifications are linked to an obligation to comply with protective measures and care for not being contaminated by the COVID-19. The branches are grouped considering the proximity of the words. Thus, the words directly linked to the nucleus in the green section comprise general preventive measures such as the use of masks and avoiding agglomerations. In the other branches, we find specific measures such as cleaning and disinfection of surfaces (purple background), on the yellow background, hand hygiene with alcohol gel, and ventilation of classrooms on the blue background. Among the ramifications, in Figure 6 there are two ramifications directly linked to the minimum distance (light green and red background), in which we can understand the ability to ensure the physical distance of one and a half meters in physical contact (orange background). In this sense, it is important to bring to light the questions about the rights of education professionals so that the work is effectively safe. Is the State providing working conditions that meet this regulation? Have all teachers and staff received the personal safety equipment (PSE) so that the teaching work is safe? Do schools have a physical and human structure to serve students and other members of the community?

The typical TS of class 6, with the highest score of 607.59¹⁷, is consistent with the similarity analysis, as it deals with the following excerpt (*emphasis added*) on the prevention and control measures of Resolution No. 0098/2021 of the Health Department (SESA): “Places with the *possibility*

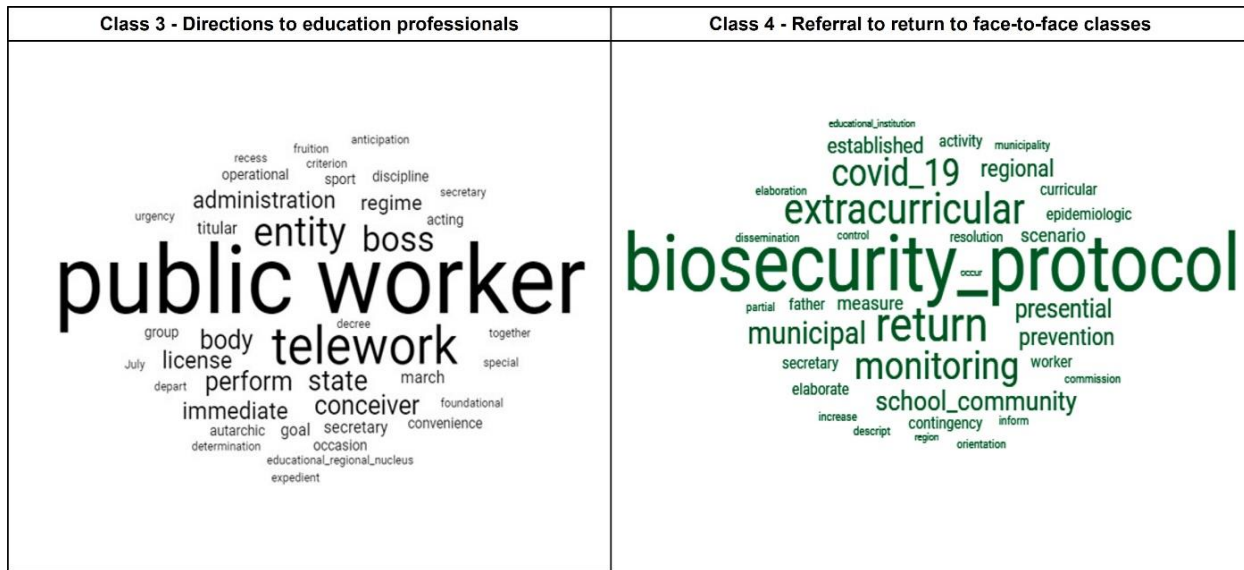
¹⁶The highest score in this class was 526.36 and the lowest, 248.96.

¹⁷The highest score in this class was 607.59 and the lowest, 248.96.

aimed at public servants concerning complying with prevention and control measures for COVID-19. The typical TS representing this class and with the highest score of 610.07¹⁸ is (*emphasis added*) “The Heads of *Institutions* and *Entities* may preferentially grant the *telework regime* to other *servants* in the *state of Paraná*, according to the *convenience* and interest of the *Public Administration*” (Paraná, 2020d, our translation).

Figure 4

Subcorpus C Word Cloud: Class 3 and 4



It is observed that in this class the words “worker” and “telework” refer to the condition of providing the student with a quality service of teaching and learning. It is inferred that the corpus that comprises this class clearly explains the duties of the worker, however, little mentions the rights of this worker in the face of the pandemic, bringing only criteria for licenses and for people with comorbidities and over 60 years old. The offer of equipment and basic technological training for the teacher’s work is left aside considering that, during an overwhelming pandemic with hundreds of thousands of fatal victims, the basic public education teacher is faced with a low-paid job, lack of equipment and internet access and, above all, no prior training to assist students in telework.

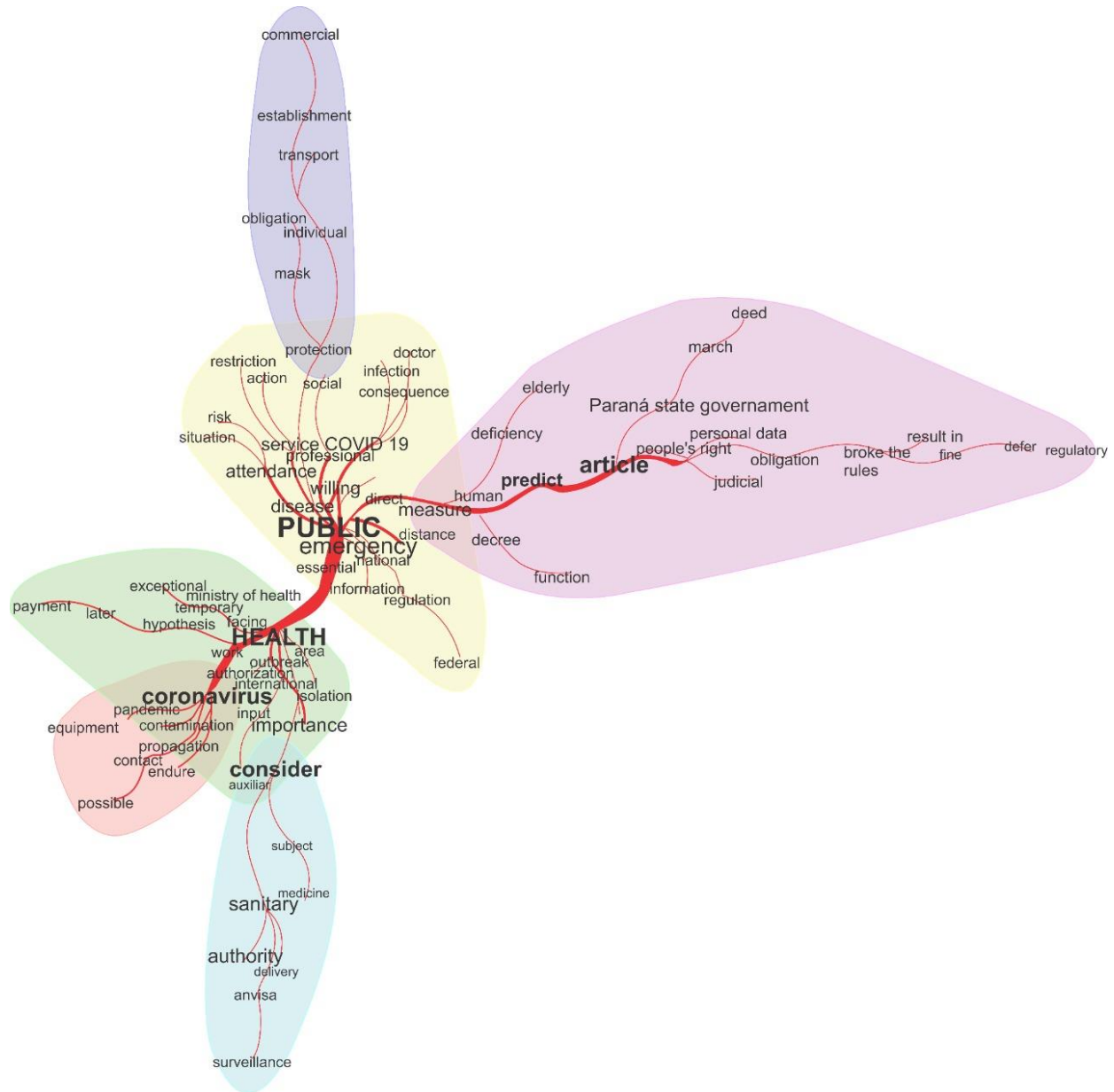
Thus, continuing the classification in subcorpus C, in class 4 we find the prevention measures to be adopted in educational institutions in Brazil and Paraná, as well as the “biosafety protocols” involving the “return” of face-to-face classes, the “monitoring” of the “COVID-19” pandemic situation in each region, aiming at the safety of the “school community”. The typical TS with the highest score (637.37) in this class demonstrates a synthesis of this classification, as this TS contains most of the words that are most repeated in the class.

In the same way as Class 4, Class 5 (subcorpus D), “Emergency situation in Brazil”, deals with the determinations published by the government to face the emergency due to the pandemic, differing in that they are general public health standards, not specifically in education. Figure 5 (below) presents the similarity analysis of this class.

¹⁸In class 3, the typical Text Segment had the highest score of 610.07 and the lowest of 164.02.

Figure 5

Class 5 Similarity Analysis - Emergency Situation in Brazil



The similarity analysis of class 5 (Figure 5) has “public” and “health” among the forms shown with the greatest χ^2 , constituting the nucleus of the ramifications. In addition, it is observed that to the public (yellow background) the regulations bring information about essential services, risk situations, rights, and measures of restrictions directly linked to this core (purple background) described and provided for in the regulations, decrees, and articles, and failure to comply with such regulations can lead to fines. In addition, linked to the “public” core, we find the protection measures (blue background), such as the obligatory use of the mask.

The second core concerns the organization of the health sector and information about the coronavirus. Thus, in line with the similarity analysis already carried out in this class, the typical text segment (below) with the highest score of 519.15¹⁹ addresses this information (*our emphasis*):

As a result of this situation, Federal Law No. 13,979 was published in Brazil on February 6, 2020, which *provides measures to face the public health emergency of international importance* resulting from the *Coronavirus*, and the *Ministry of Health* published the *National Contingency Plan for Human Infection by the New Coronavirus* and Decree No. 356, of March 11, 2020. (Paraná, 2020a, our translation)

The analysis of regulations can help to understand how the government in Paraná sought to regulate school activities during the pandemic. In the textual content of the analyzed regulations, it was found that the government in Paraná deals with the general working conditions of teachers, with restrictions in the face of public health needs and containment of the disease, as well as establishing norms and bureaucracies to be complied with. As for the working conditions of teachers, the content was limited to the possibility of remote work, duration of classes, attendance, and control, in addition to the attributions directed to the teachers, the pedagogical team, and the direction of the educational institution. There was also a lack of information regarding referrals aimed at the quality of teaching and student learning in the face of the new emergency proposal for remote teaching. Furthermore, the “duty” prevailed in one of the analyzes developed, making it clear that the “right” to quality public education, in the face of an unknown virus, was neglected.

It was not possible to identify different measures, respecting the peculiarities of each region (even being in the same state), except for the possibility for the teacher to use technological resources at school if they did not have accessible equipment at home, and the delivery of printed material to students along with the lunch delivery. However, with the imminence of the virus and the fear of contagion, those who routinely needed to attend school due to a lack of technological resources were deprived of the #stayhome, as was widely publicized on social networks. In addition, the modality of youth and adult education, given its particularities, was forgotten, as the documents mention it superficially, disregarding the need for pedagogical practices that meet the profile of the population, as advocated by national legislation (Brasil, 1996).

As for the pedagogical matter, the normative content refers to bureaucratic issues, not establishing a communication with the methodological difficulties of an ERE - it even seeks to hire teachers who are familiar with the technology, but does not guarantee an effective and continuous teacher training program for those who suddenly saw their work routine altered. In addition, the legislation does not contemplate prior training, both for teachers and students, for the use of institutional digital tools made available by the State.

The pedagogical, technological, and even psychological professional support, considering the difficulties, anxieties, and fears in the face of an unprecedented pandemic situation, did not have categorical attention in the analyzed material (the textual content is limited to imposed duties and attributions), a factor that impacts directly on the quality of teaching and student learning.

Results of Research Carried Out with Teachers of Basic Education in Paraná

After the analysis of the current regulations with the help of the Iramuteq software, a questionnaire was created and disseminated to understand how this process of change from classroom teaching to ERE impacted the practice of teachers and their working conditions,

¹⁹ The highest score in this class was 519.15 and the lowest was 150.34.

considering the pedagogical and technological support received by the educational institutions. In total, 78 teachers answered the questionnaire.

According to data from the 2020 Census, in Brazil, there were 2.2 million teachers and 161,183,000 principals working in 179,500 Basic Education schools. The position of principal is 80.6% women, and 88.2% hold a higher education degree (INEP, 2021). Similarly, our sample is mostly composed of women who declared themselves white, married, and graduated with specialization in some areas. Of the responding teachers, 51% work in public schools, 40% in private schools, and 9% in both institutions.

The age group is mostly between 36 and 55 years old (64.1%). Furthermore, as the pandemic is a public health issue, 25.6% of these professionals declared themselves to belong to the risk group for COVID-19.

The social networks and applications most used by teachers as resources for classes are WhatsApp (85.9%), YouTube (70.5%), Facebook (29.5%), Instagram (26.9%), Telegram (3.8%), and TikTok (3.8%). In addition, 30.8% reported that they had already stopped using some social network or application due to difficulty in using it. It is inferred that, in Brazil, the incorporation of digital technologies in school institutions still faces numerous barriers such as lack of infrastructure and deficient teacher training.

In the studies by Moura-Vieira et al. (2021), the teachers interviewed reported their initial difficulties to deal with computers, virtual classrooms, recorded classes, live classes, videos, and various technologies that were used and tested, such as Google Scholar, Meet, Zoom, WhatsApp, radio, television, among others. In fact, many of these technological resources are provided in the laws analyzed here, as alternatives during the ERE in Paraná.

According to data from the 2020 School Census of Basic Education, in Brazil, broadband internet is present in 100% of elementary schools in the federal system; 74.7% of the state system, and 52% of the municipal system. The desktop computer is found in 91.3% of federal elementary schools; 76.7% of the state ones; and 38.3% of the municipal ones. This shows that public schools are evolving in the infrastructure of incorporating digital technologies (INEP, 2021).

With this in mind, we sought to identify whether the teachers had technological equipment for the ERE (since their work would be managed from their homes or would fit the exception in the law, with the need to travel to the school during the pandemic) and if there was a concern on the part of the institutions to support the acquisition of such equipment. In the questionnaire, 55.1% of the teachers reported having adequate equipment, and 44.9% did not have such equipment. However, 73.1% of teachers had to buy some kind of equipment to prepare the lessons – most bought a smartphone and a computer (laptop or desktop). This percentage is significant and shows that teachers suddenly had to adapt to continue teaching from their private space, from their homes, many without the ideal infrastructure and without the State's subsidy (Moura-Vieira et al., 2021).

Furthermore, we also compared teachers from public and private schools and found no significant difference. While 47% of public school teachers needed to buy some equipment, an equivalent percentage happened in private schools (42%). Regarding internet connection, 95% of respondents have high-speed internet while 5% teach via a 3g connection. This comparison between private and public schools was carried out in order to find some differences in the working conditions of teachers, as the private school is paid for, it generally has better infrastructure and demands from parents in relation to the quality of education.

In this scenario, the concern with pedagogical and technological support becomes relevant, especially in the search for differentiated strategies to meet the demand of students and teachers. In this perspective, teachers answered if they received pedagogical and technological support to work with remote education due to the Covid-19 pandemic, and 41% of respondents received both

support, while 21.8% did not receive any support. Most teachers (33.3%) who received pedagogical support did not receive technological support for remote classes. When performing Pearson's Chi-square statistical test, we rejected the null hypothesis with $p < 0.05$, showing a significant association in the relationship between having pedagogical and technological support during the pandemic. Overall, 57.7% of respondents felt that the pedagogical support provided during the pandemic was not efficient.

About this, Bonatto et al. (2013) emphasize that, if the teacher does not have a pedagogical preparation to use technology, the computer as a tool is ineffective. To verify whether teachers from public and private schools received technological and pedagogical support, we analyzed this information in a segmented way, comparing the responses of teachers from both institutions. Thus, it was found that most teachers who faced a lack of support worked in public schools, as 65% of them did not have technological support and 70% did not receive any pedagogical support during the pandemic. This shows that, in a way, these teachers were not supported by the government. It is not possible to identify in this study if this is a reflection of the lack of public policies or if it is the inefficiency of the existing ones.

From this perspective, Oliveira, Gomes, and Barcellos (2020, p. 563, our translation) point out that "[...] it is not the availability of equipment and access to the internet that would make a difference, but rather, how technology is inserted in the school context". At the conclusion of the study, the authors indicated the need to create policies that even in a post-pandemic moment can be used and included (Oliveira et al., 2020). In addition, ERE requires more than technical conditions from teachers and pedagogical teams (such as access to the internet or equipment), but a series of strenuous administrative activities due to the nature of the distance, evident in the proposals for remote education.

The school, as a complex organization, has different ways of responding to events, even though it is often limited by a bureaucratic apparatus in which, generally, "the administrative takes precedence over the pedagogical" (Tragtenberg, 2018, p. 189, our translation). This bureaucratic apparatus either regulates and directs or limits and excludes local diversities. The teachers evaluated the organization of remote work in the school organization as excellent (14.1%), good (37.2%), regular (37.2%), and very bad (11.5%).

Furthermore, it was also asked to get to know the difficulties and challenges experienced daily in the teaching practice in the ERE. Thus, the teachers cited several difficulties. The five most-cited categories were difficulty in interacting with students (51.9%), slow internet (39%), the smartphone does not have enough memory (32.5%), no abilities with technology (20.8%), and having only one computer for the whole family (20.8%). On the same issue, teachers also complement pointing out using "other" option to describe new difficulties. From this, the following were cited: "domestic demands do not allow for quality work", "students' emotional exhaustion", "students who did not have internet access", "students who gave up because they did not adapt to distance learning", and "technological support was started too late".

That said, the difficulties reported by the teachers in this study reflect the lack of effective public policies, inefficient technological and pedagogical support, and socioeconomic inequalities in the country. The lack of support during the ERE is justified by its exceptional character, but the incorporation of digital technologies in teaching and learning is not a new issue.

It is noteworthy to say that the ERE challenged socially vulnerable groups as schools struggled to fit into the new model (Kallo et al., 2020). In addition to the difficulties of facing the new challenges of the ERE, the COVID-19 pandemic brought a scenario of uncertainties because, with the closing of schools, many teachers, especially in the private system, suffered from the risk of

losing their jobs, as well as teachers temporarily hired by the state system of Paraná who feared the termination of their contracts.

In this direction, it is noteworthy that productivity at work during social distancing was studied by Sanchez-Taltavull et al. (2020). The authors identified an estimated reduction of 50% in normal production, especially when there is an inadequate environment for remote work or when there are high rates of infection by COVID-19. This reflects in the anguish of possible contamination with the return of classes. Regarding personal losses due to COVID-19, 67.9% of respondents reported having lost a student, co-worker, or family member due to COVID-19. In addition, the number of teachers who fear returning to face-to-face classes is compared to teachers who considered themselves members or not of the risk group. In general, 84.6% are afraid to return to face-to-face classes.

The content of the analyzed regulations provides important guidelines to avoid contagion in the school community, but there is a gap between continuing the school year and the effectiveness of remote education, especially regarding the difference between students “[...] with good conditions, with internet access, with the necessary supports (computer, tablet or cell phones) [...]” (Gatti, 2020, p. 32, our translation) compared to those who, “[...]not having these facilities, or having restrictions (for example, no internet or computer or other support, possession of prepaid cell phones with little access to networks; only one cell phone in the family) [...]” (Gatti, 2020, p. 32, our translation), live an unequal reality, without equity in learning. It is noted that the pandemic further accentuated this inequality and exposed a veiled reality in the situation of social and economic vulnerability in the Brazilian scenario.

Thus, this investigation from the teacher’s perspective also demonstrated these difficulties, as the challenges faced by the students also impact the teacher’s work, especially when they start to face difficulties arising from the change from the school environment to the environment of their own home, where other demands exist within this space, having a dual function.

However, face-to-face classes, even in a provisional character and depending on the region’s epidemiological bulletin (Paraná, 2021a), are gradually returning in a hybrid form (following protocols established by law). In this scenario of returning to classroom activities, Gatti considers it essential to “[...] create an atmosphere of serenity among educators in relation to physical adjustments, infrastructure, curriculum and reception [...]” (Gatti, 2020, p. 35, our translation) of students of basic education.

In short, the COVID 19 pandemic, with its overpowering and lethal tentacles, brought to light the abysses between Brazilian legislation that proclaims Education as a public and subjective right for everyone, without distinction, and the reality of the school floor. Maliciously, it showed the population the scenario of inequalities present in the country, including the access to digital technologies.

The laws governing the ERE favor, between the lines, the student who is not only prepared to master digital technological tools, but also who has equipment and internet for access conditions, a reality for a small portion of the Brazilian population. Concerning teachers, the legislation also brings in its content a proposal for the teaching work that determines the use of equipment/internet network, as well as the need for technological and digital skills to work in this profession, a dynamic that, in times of pandemic, leads the teacher to purchase equipment/services with their own resources, given the importance of continuing the work for their survival.

On the other hand, the pandemic also revealed a reality little valued by society: the importance of the teaching work. In these times, based on the findings in this study, learning difficulties were identified, being accentuated by the lack of human relationships that are woven on the school floor. This reality is harshly experienced in Brazilian homes, with families facing demands

that, until then, were not noticed in their “normal” daily lives: the accentuated difficulties of teaching and learning in the face of distance work.

There is a real appreciation of the teaching work inside and outside this scenario of uncertainties, as well as the relevance of the process of humanization and listening of teachers and students even in the virtual space. The quality of teaching must be thought of from a perspective of social quality, which articulates the theory advocated in the legislation with the practice of “the classroom floor”. In this way, it is possible to move towards an education of social quality that, from a Freirian perspective, provides everyone, teachers and students, with a proposal to “be more” (Freire, 2019), which, undoubtedly, must be linked to an educational proposal that considers the difficulties and peculiarities of the main actors in this process.

Final Considerations

The study allowed the observation of socioeconomic inequalities between teachers and students, between teachers and teachers, and also between students and students. These inequalities were even greater during remote education, revealing a gap between the regulations issued by the federal and state government that affect basic education in Paraná during the emergency period due to COVID-19 and the practice of teachers, as well as the support that they received to carry out their work. In the study, it was identified that there was a concern of the public authorities in structuring compliance with the health care protocols necessary to minimize the spread of the virus and also in articulating measures to ensure compliance with the school year. However, these regulations did not guarantee equal conditions for teachers and students regarding the ERE, revealing a dichotomy between theory and practice. Instead, the inconsistency in the access to education by law was observed, particularly when we came across students from private schools returning to classroom or hybrid classes before students from public schools.

Thus, the study results point to the importance of further thinking about public policies and actions aimed at ensuring educational quality, directing more effective strategic actions, considering the socioeconomic inequalities of both teachers and students, in an articulated and integrated vision between the federal, state, and municipal scopes.

Although the present study considered the ERE resulting from the COVID-19 pandemic, the research goes beyond this scenario and opens possibilities for new studies, as it makes it possible to rethink the teaching work conditions and the need for continuing education for teachers articulated with the demands that arise.

Thus, it is concluded that there is an urgent need to rethink actions that consider the social context of teachers and students and help teachers, as well as educational institutions, to overcome the challenges inherent to remote education, to guarantee the right to access to education for all.

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