

A educação no Brasil e na Itália durante o contexto pandêmico: breve panorama

Education in Brazil and Italy amid the pandemic: a brief overview

La educación en Brasil e Italia en el contexto de la pandemia: breve
panorama

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RESUMO

Esse trabalho é resultado de estágio pós-doutoral realizado no ano de 2020 e teve como objetivo identificar as problemáticas do campo educacional revelados durante o momento de emergência sanitária no Brasil e na Itália. Nesse sentido buscou acompanhar a reação de cada país na superação de obstáculos para ofertar educação à população de estudantes em isolamento sanitário. Trata-se de uma pesquisa de abordagem qualitativa, embasada em referenciais teóricos, documentos e dados de plataformas oficiais. Temos como resultados algumas medidas emergenciais adotadas ao longo dos meses após a deflagração da pandemia, que envolvem acesso às tecnologias e infraestruturas nas escolas, valorização e formação contínua dos professores. As políticas públicas mostraram-se frágeis e descontínuas, apesar de que na Itália as propostas ganham impulso, uma vez que a União Europeia colaborou na delimitação de algumas agendas. A partir dos dados é necessário refletir sobre a necessidade de propostas e ações mais enfáticas que tragam alternativas para o fortalecimento dos professores e das escolas dentro de uma perspectiva de cultura digital e de políticas de Estado.

Palavras-chave: Educação; Cultura digital; Políticas públicas.

ABSTRACT

This paper is the result of a postdoctoral research stay carried out in 2020 and aimed to identify the challenges in the educational field revealed during the health emergency in Brazil and Italy. In this sense, it sought to follow the response of each country in overcoming obstacles to providing education to the student population during pandemic-related isolation. This is a qualitative research study, grounded in theoretical frameworks, documents, and data from official platforms. The results include some emergency measures adopted in the months following the outbreak of the pandemic, involving access to technologies and infrastructure in schools, as well as teacher recognition and continuing education. Public policies proved to be fragile and discontinuous, although in Italy proposals gained momentum as the European Union contributed to the framing of certain agendas. Based on these findings, it is necessary to reflect on the need for more assertive proposals and actions that offer alternatives for the strengthening of teachers and schools within a perspective of digital culture and state-level policies.

Keywords: Education; Digital culture; Public policies.

RESUMEN

Este trabajo es resultado de una pasantía postdoctoral realizada en 2020, y tuvo como objetivo identificar los problemas en el campo educativo revelados durante la emergencia sanitaria en Brasil e Italia. En ese sentido, se buscó monitorear la reacción de cada país en la superación de los obstáculos para ofrecer educación a la población estudiantil en aislamiento sanitario. Se trata de un enfoque de investigación cualitativo, basado en referentes teóricos, documentos y datos de plataformas oficiales. Tenemos como resultado algunas medidas de emergencia adoptadas durante los meses posteriores al estallido de la pandemia, que involucran el acceso a tecnologías e infraestructuras en las escuelas, la valorización y la formación continua de los docentes. Las políticas públicas han demostrado ser frágiles y discontinuas, aunque en Italia las propuestas están ganando impulso, ya que la Unión Europea ha colaborado en la definición de algunas agendas. A partir de los datos, es necesario reflexionar sobre la necesidad de propuestas y acciones más enfáticas que aporten alternativas para fortalecer a los docentes y a las escuelas en una perspectiva de cultura digital y de políticas de Estado.

Palabras clave: Educación; Cultura digital; Políticas públicas.

Introduction

The pandemic context of SARS-CoV-2 affected the vast majority of the world's population. Measures to contain the spread of the virus were adopted by numerous

nations, and the field of education was among those most severely impacted, as all practices, from primary to higher education, which are carried out predominantly in person, had to be suspended. According to the report Education during COVID-19 and beyond (UNESCO, 2020a), 1.6 billion students in more than 190 countries around the globe were affected, representing 94% of the student population and reaching up to 99% in the least developed countries. This is considered the largest disruption to educational systems in history, unprecedented in scope, which gave rise to serious concerns regarding student dropout, school closures, learning deficits, and threats to the gains achieved in the democratization of education.

The need for physical distancing prompted emergency measures for the provision of online classes, which had a profound impact on the lives of students, teachers, education professionals, and families, who were generally caught off guard with regard to the availability of adequate environments, devices, and internet connectivity for didactic practices. The latter deserves particular attention, given that a radical reorganization of didactic and methodological designs was required, and in this respect, systems were unprepared, as can be observed through studies and analyses carried out by researchers in the field (Pireddu, 2020; Pretto, Bonilla and Sena, 2020; Saccoccio, 2020). Boni (2020) alerts us that the pandemic moment was so traumatic that it demands a paradigm shift involving a rethinking of reality, of our daily lives, and of what we are as human beings. In this sense, reflecting on the concept of education, as well as its implications for human formation and for the construction of a more just and solidarity-based society, is both urgent and necessary.

Throughout the text, we draw on some public policies from the field of education and technology in order to understand the importance of strengthened democratic societies, ones capable of overcoming the discontinuity of government projects and investing in state policies that adequately serve their populations. To support our analysis of the public policies presented, we draw on the work of Mainardes (2018), who calls attention to the context of results, political strategies, and their effects. Given that the circumstances in which we examine these policies are exceptional, revealing in stark terms the aggravation of social and educational problems, whether through the

absence or inefficiency of such policies, we agree with “the idea that policies have effects, rather than simply outcomes [...] In this context, policies should be analyzed in terms of their impact and their interactions with existing inequalities” (Mainardes, 2018, p. 4).

In light of this situation, our writing represents an attempt at a dialogue that brings together the shared challenges and efforts to address and develop public policies during the pandemic in Brazil and Italy. Although these are countries with distinct characteristics, both had to respond to the emergency situation by seeking educational solutions beyond in-person practices. Many points of this dialogue indicate the need to invest in teacher education and professional recognition; to develop and implement robust and coordinated public policies in terms of material infrastructure in schools, including those related to digital technologies such as devices and broadband; and to seek to redefine the very concept of education and technology as structuring languages of educational processes, within which debates concerning online education, data privacy, digital rights, and digital sovereignty are at stake, among others (Pimentel, 2018; Parra et al., 2018).

This connection is also established through theoretical frameworks that bring together researchers from both countries engaged in an inter-institutional investigation in the field of education, through the project *Conexão Escola-Mundo: Espaços Inovadores Para a Formação Cidadã* [School-World Connection: Innovative Spaces for Civic Formation]¹ which has been working on themes such as technology, communication, human rights, and teacher education. Among the concerns that give rise to this international collaboration is the fact that digital technologies, devices, and networks have not brought about the expected transformation in terms of efficiency in the fields of education, culture, and human rights. Quite the contrary: what can be observed is a context of increasing disinformation, violence, and violations of data privacy (Recuero and Gruzd, 2019; Bovalino and Minnella, 2020; Parra et al., 2018; Silveira, 2019).

¹ CHSSA 2016 – CNPq Call 22/2016 – Research and Innovation in Human, Social, and Applied Social Sciences.

We seek to understand the phenomenon through a qualitative approach, drawing on Denzin and Lincoln (2006), as this framework allows for an understanding of the object embedded in the complexity of each context under study. We employ documentary analysis, seeking to follow the search for alternatives in the field of education during the pandemic moment in both countries, from emergency measures, documents, administrative orders, and draft law, among others. The search for theoretical frameworks was fundamental, including for understanding prior public policies that, in some way, reverberated during the pandemic moment, whether positively or through their inadequacy.

This article is situated – it was written during a postdoctoral research stay² carried out in 2020 in Italy. It aims to bring to light elements revealed during the health emergency, so that we may reflect on the need for public policies capable of providing alternatives for the strengthening of teachers and schools within a digital culture perspective. We intend to offer a perspective that highlights the urgency of redefining the concept of education in the face of contemporary challenges, something that demands commitment to democratic and ethical thinking.

Overviews of the education systems in Italy and Brazil

We do not intend to make any form of comparison between the situations of educational public policies in Brazil and Italy, nor between their systems, which are organized in specific ways, but rather to bring together those elements that draw them closer or set them apart in terms of challenges and responses to situations that have long been observed and that, during the pandemic moment, came to be starkly highlighted. Various elements present or absent in each country contribute to the construction of peculiar ecosystems that either facilitate or render extremely complex the process of planning and implementing public policies in the field of education.

In this regard, we must note some particularities. Among them are the economic differences within the population, given that Brazil exhibits social inequalities

² This research was supported by the CAPES/Print Program – Call No. 001/2019 – PROPG – UFBA.

and levels of poverty that affect a large portion of the population; and the size of the student population and the number of education professionals, which makes it necessary, at this point, to analyze public policies and the constitution of educational networks and systems in each country. We cannot disregard territorial dimensions, which are clearly disproportionate between the two countries, a factor that becomes a challenging element for education in Brazil, creating many difficulties in the articulation and implementation of public policies, since the country has five regions with very distinct cultural, demographic, and economic characteristics within a geographic space of enormous proportions. We must also add the international political crisis, driven by neo-conservative and far-right movements that have worked to undermine democratic achievements. In Brazil, this situation was aggravated from 2015 onward with the onset of a political crisis and the consequent dismantling of all sectors, particularly those related to social policies.

Thus, we present some data that offer us an overview of education in each country. We begin with Italy, which in 2020, the period in which this study was constructed, presented data from 2018 on the platform of the *Ministero dell'Istruzione*, indicating a total of 8,636 public educational institutions serving 8,326,413 students in the age range corresponding to basic education in Brazil. The illiteracy rate is almost zero, with 99.8% of the population being literate, while the functional illiteracy rate stands at 28%. However, this is one of the highest rates among countries of the Organisation for Economic Co-operation and Development (OECD), where Italy appears among the first countries with the highest incidence of adults with difficulties in comprehending basic information (functionally illiterate).

According to the Istituto Nazionale di Statistica (ISTAT), in 2019, 27.6% of Italians between the ages of 30 and 34 held a diploma (33.8% women and 21.6% men), while the European average exceeds 41%. The last figure in the ISTAT report that is far from encouraging concerns the number of children who drop out of school before completing secondary education: 14.5% (the European average dropout rate is 10.6%). Dropout is not uniform across Italy: in the south it stands at 17.3% and in the islands at 22.3%. A gender gap is also present, with boys exhibiting a higher dropout

rate than girls; however, the highest percentage is found among foreign children, with a 37% dropout rate (ISTAT).

As for the teachers who constitute the public basic education workforce in Italy, there are 886,175 according to data from the Ministry of Education, the majority of whom are tenured professionals, that is, they have passed a civil service examination, with only 163,675 being contracted. On the other hand, this is an aging population of teachers, the oldest in Europe, with 608,036 between the ages of 45 and 54 or older. This reality is present not only in Italy but across the entire European Union (EU), where only one-third of teachers are under the age of 40, according to data from the EACEA (2015). As a result, there is a movement to reform public policies across member countries, as demonstrated by the document (EACEA, 2015) and more recently by the Resolution of the EU Council (2021/C 66/01), of February 26, 2021, which demonstrate interest in building regulatory frameworks and actions to ensure that qualified professionals are available to fill the vacancies arising from retirements. Some of the main concerns relate to employment contracts that better structure careers, which currently vary from country to country within the EU, giving rise to differences in terms of promotion prospects, salary incentives, working hours, and retirement conditions. The entire mobilization in this field of professional struggle thus aims to improve the training and selection of these professionals, invest in lifelong learning, and make careers more attractive.

One of the main structural problems concerning the teaching profession in Italy relates to the means of hiring, which directly impacts teacher professionalization. The reason is that examinations to select teachers in certain regions or for certain school subjects have been exhausted, making it impossible to fill vacancies in some areas of Italy. In the absence of the possibility of assigning these permanent positions to those who have already passed the civil service examination, while a new competition is awaited, the positions are systematically occupied by annual substitutes, teachers who hold posts every year until August 31st in schools where there is a shortage of tenured staff. Temporary contracts are, however, entered into systematically only after the school year has begun, with relative inconvenience for schools, which are compelled to fill gaps only at the start of the academic year. Three situations can be observed:

annual substitutes (“*organico di diritto*”) refer to vacant teaching positions resulting from a lack of interest on the part of tenured personnel in taking up posts in precarious or unfavorable locations, such as seismic zones or areas that do not suit their preferences, and these expire at the end of the school year; temporary substitutes (“*organico di fatto*”) hold contracts until the end of teaching activities, i.e., June 30th, covering vacancies that become available for various reasons such as an unexpected increase in classes or the student population; and there is a third type of temporary substitution, which occurs for any other need and whose contract ends as soon as the work requirement ceases.

In September 2020, the Italian Ministry of Education announced that there were approximately 130,000 contracts to be signed with substitutes, that is, for temporary positions, of which 110,000 had already been filled (with 20,000 remaining to be assigned). This situation reveals, in part, the precariousness of the working conditions to which many teachers in Italy are subjected, particularly the instability, lack of a career plan, and lack of continuing education. This last aspect affects both teachers who will move from school to school, or even find themselves without work, as well as the planning activities of the school itself, which sees its projects interrupted or must continuously provide training for its teaching staff.

Looking at Brazil in the same period, the number of public basic education schools reached approximately 138,420, with 50,783,650 students enrolled in 2020, according to data from the National Institute for Educational Studies and Research Anísio Teixeira (*Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira – INEP*, 2021), who were served by 1,803,961 teachers (Carvalho, 2018). From the National Household Sample Survey (*Pesquisa Nacional por Amostra de Domicílios – PNAD*), we find that the country had, during this period, 11 million illiterate persons, with aggravating factors marked by racial inequalities: while 9.5% of white individuals could not read or write, among Black and mixed-race individuals this percentage was approximately three times higher (27.1%), once again highlighting the overlapping nature of inequalities. Functionally illiterate individuals reached 38 million people among youth and adults between the ages of 15 and 64, according to the Functional Literacy Indicator (*Indicador de Alfabetismo Funcional – INAF*, 2018).

With regard to teacher career plans, we also observe instability in Brazil. The majority of basic education teachers are tenured civil servants and, although they have guaranteed labor protections, these have been subjected to many attacks that require constant political vigilance and struggle to maintain. However, there is still a category in a worse situation: teachers on temporary and outsourced contracts, who carry out their work under precarious conditions, given that they do not have permanent employment status and are deprived of the same guarantees afforded to tenured staff. That is, they assume the same responsibilities but are not offered a structured career plan that ensures progression, salary improvements, retirement benefits, and professional stability. Temporary contracts serve as an alternative to address emergency needs, in cases of maternity leave, medical leave, or other circumstances, for example. However, this model tends to be prolonged indefinitely, delaying the holding of public examinations or the appointment of permanent teachers, which further increases the precariousness of teaching work.

Another element that follows the international trend is the aging of the professional category. Although Brazilian teachers are still relatively younger, with an average age of 40 across all stages of basic education, research indicates that within 15 years approximately 40% will be eligible to apply for retirement (Carvalho, 2018).

In light of the data presented, which involve complex questions of a territorial, cultural, linguistic, and demographic nature, Brazil and Italy present contexts and challenges in terms of public policies in the field of education that sometimes converge and sometimes diverge, as we shall examine below.

Public policies on access and digital culture: the human right to communication

There are many discussions and publications concerning contemporary culture, in which the characteristics of the digital overflow in every direction, transforming aspects of social, economic, political, cultural, and educational life (Latour, 2012; Lemos, 2008a, 2008b; Santaella, 2013). From the media and techniques previously produced and refined through an analog perspective, we have come to coexist with

the potentialities of the digital, which are characterized by offering possibilities for the reconfiguration of all prior communication media. We can observe that once produced or inserted into digital media, communication becomes global, which makes the network an important instrument of power, as Castells noted at the outset of what he defines as a network society.

The Internet contains an extraordinary potential for the expression of citizens' rights and the communication of human values. It certainly cannot replace social change or political reform. However, by relatively leveling the field of symbolic manipulation and expanding the sources of communication, it does contribute to democratization. The Internet brings people together in a public agora to express their concerns and share their hopes. That is why the control of this public agora by the people may be the most fundamental political issue raised by its development (Castells, 2003, p. 168).

Thus, the right to communication in contemporary society has become an important element of democracy, citizenship, and human rights. The right to information has been recognized as a fundamental human right since 1948, expressed in Article 19 of the Universal Declaration of Human Rights:

Article 19 – Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive, and impart information and ideas through any media and regardless of frontiers.

Following this scope, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been working since the 1970s to expand the concept of the right to information and free expression, which remain important, but not sufficient. The result of this effort, dedicated to the construction of a concept that would move beyond an instrumental perspective, culminated in the declaration of the right to communication as a fundamental right. This holds great significance for Vannuchi, who understands “the right to information also as the freedom that every person has to produce information and to be heard, and not only to consume information produced by others” (2018, p. 170). This is a precept we defend within a hacker perspective of constructing culture, knowledge, and understanding. In this respect, we agree with

Bonilla and Pretto when they state that “a hacker actively participates in their social group, being a true activist. They produce content, placing it almost instantaneously on the network so that it can be tested and improved by everyone” (2015, p. 33). For us, the concept of hacker permeates all areas of knowledge and life, in which people are passionate about what they do and share what they produce (Pireddu, 2014). In the context of constant attacks on democracy and education as a common good, the presence of engaged, active, and activist teachers and citizens has never been more necessary.

To give positive content to this right, however, a long path is needed, and one of them is the democratization of access to the means of communication. During the pandemic moment, inequalities manifested themselves in a profound and violent manner by presenting extreme conditions for access to knowledge, online classes, connectivity, and devices. If we are speaking of democratizing communication, in which the protagonists can be not only consumers but also producers of content, in a context where the means of communication have been reconfigured by the digital, we need to address the right to internet access. In Brazil, the most prominent public policies created in an attempt to democratize internet access took the form of Connected Brazil: the National Broadband Program (*Programa Nacional de Banda Larga – PNBL*) and the Broadband in Schools Program (*Programa Banda Larga nas Escolas – PBLE*).

The PNBL aimed to pursue social inclusion through digital inclusion, understanding this as a matter of citizenship, a right through which all other rights can be attained. Along these lines, two programs were designed to serve schools: to meet the needs of urban schools, the PBLE was created, and for rural schools, the Electronic Government – Citizen Service Program (*Programa Governo Eletrônico – Serviço de Atendimento ao Cidadão – GESAC*).

The PBLE should have achieved 100% school coverage by 2010, under an agreement set to expire in 2025. By 2020, the target had not been met, nor was there any prospect of what would be done after that date. The GESAC, in turn, aimed to bring terrestrial or satellite broadband connectivity to the most remote communities, those with difficult access, or those in situations of social vulnerability, including

schools and study centers of the Open University of Brazil (*Universidade Aberta do Brasil – UAB*). Data from the Ministry of Communications (2020) indicated that there had been no investment in the implementation of this policy, leaving the situation stagnant for nearly a decade.

Data from Cetic.br (2019) indicated that there were approximately 134 million internet users in Brazil, corresponding to 74% of the population, meaning that one in every four people lacked access. Broadband reached 71% of Brazilian households; however, only 61% received fixed broadband. Among the reasons cited for the absence of internet in residences were: residents have no need for it (47%); lack of interest from residents (53%); the internet is too expensive (59%); do not know how to use the internet (49%); lack of internet availability in the area of the household (25%), among others. In a context of connectivity, where access to services and even to certain rights depends on connectivity, these justifications reflect a context of widening social injustices and, therefore, the urgent need to address them through public policies focused on access and education.

The mobile phone was and continues to be the most widely used device for internet access, reaching 99% relative to other means, and 58% of the population accesses the internet exclusively through their mobile phone. This indicator becomes particularly concerning given that mobile operators offer data packages with zero rating, which may mean, beyond limitations on data allowances, a breach of net neutrality. When we look at data referring to youth and children, we find that 89% accessed the internet and that 95% of them did so through their mobile phone, an indicator that is also far from encouraging, given that a large proportion of children from lower-income classes (D and E) had to access and complete school tasks from a device that offers limited operational conditions, and often had to share the same device with other members of the family. The home was the location with the highest access rate for children (92%), while the school represented only 32%. Here too, we must be attentive to the role that schools have been playing in the construction of digital culture, where access to devices and, above all, to the network has been limited.

In Italy, the I.Stat platform provided data from 2019 regarding household internet access. We found that 76.1% of households had internet access in their homes, and

in those households with minors this index reached 96.3%, which is highly significant. We will now present data relating to this stratum, households with minors, since this is the group that needed to access education through the network and digital devices. When examining data on broadband access, we find that 72.8% had a fixed broadband connection and 40.3% depended on mobile broadband, an expressive figure that reveals differences in access, particularly for those households with minors who needed to access education remotely during the pandemic period.

When we look at the reasons for not having internet access, the data indicate, directly or indirectly, that not everyone has access to or is equipped to take advantage of the potentialities of the digital. The response for 20.3% of households is that they do not have a connection in their homes because they access it elsewhere; the internet is not useful or interesting for 10.9%; those who justify their lack of connection by saying that the cost of devices to access the network is too high represent 34.9%; the high cost of the service is indicated by 37.8%; another notable argument is that no one in the household knows how to use the internet (14.6%); and finally, regarding connection availability, 2.7% said they do not have connectivity available in their area. Here we can observe that Italy also faces problems related to differences in access and conditions of use with respect to devices and the network, which contribute to other inequalities, even if proportionally much smaller than the contingent data presented by Brazil. Nevertheless, these issues do not go unnoticed and cause concern among researchers in the field, as evidenced by Marco Pedroni (2020), who presents in his study the various facets of the epidemiological crisis in this domain. The aforementioned author cites Francesca Melandri, who states that:

Social class [...] will make a difference. Being confined within a house with a beautiful garden or in overcrowded public housing will not be the same thing. Nor will being able to continue working from home or seeing one's own work disappear. The boat on which we will sail to defeat the epidemic is not and will not be the same for everyone: nor has it ever been (Melandri, 2020 apud Pedroni, 2020, p. 32 – authors' translation).

In Italy, efforts have been made for many years to intervene in the dissemination of broadband internet access, and the pandemic gave a greater impetus to a series of interventions that had over time proved insufficiently incisive. The majority of schools

incur, on average, an expenditure of up to 3,000 euros per year on connectivity (to which must be added the costs of managing, maintaining, and updating an internal Wi-Fi network or cabling that reaches all classrooms and meets all the school's needs). Since the onset of the pandemic emergency, the Italian government introduced a series of measures aimed at filling the gaps in network access, including the Decrees *Piano Scuola and Piano Famiglia* and those that allocated a portion of the resources from the National Digital Schools Plan to guarantee connectivity for digital education access for students from lower-income families, through the so-called *Piano Voucher*. This plan, promoted by the Ministry of Economic Development, through the Decree of August 7, 2020, approved by the Ultra-Broadband Commission (*Commissione di Banda Ultra Larga – CoBUL*) and coordinated by the Ministry of Technological Innovation and Digitalization, provided for offering lower-income families a maximum contribution of 500 euros, in the form of a discount on the sale price of fixed broadband internet connection fees (for a period of up to twelve months, including activation and device costs for connectivity such as a tablet or personal computer). For the Italian Ministry of Education, this was considered a measure with a positive impact on access to integrated digital education, reaching families with students who could receive the combined benefit of an appropriate device and connectivity for at least one year. The measure, according to the Ministry of Education, was projected to reach more than 400,000 families.

In the Recovery and Resilience Plan presented by the Italian government at the end of April 2021, in response to the initiative proposed by the European Commission and approved by the European Council, known as Next Generation EU (NGEU), medium- and long-term strategic objectives emerged for ultrafast networks (ultra-broadband and 5G). In particular, resources were allocated to: bring 1 Gbps connectivity (the “Italy at 1 Giga” plan) to approximately 8.5 million homes, businesses, and organizations in the gray and black areas of Next Generation Access (introduced by the European Commission in 2013, the distinction between “white areas,” “gray areas,” and “black areas” aims to differentiate, based on projected investments, the areas in which telecommunications operators were set to intervene by the end of

2022); and to complete the “Connected School” plan, to guarantee a 1 Gbps fiber connection in the remaining 9,000 school institutions (approximately 20% of the total).

In Brazil, the presence of public policies on connectivity and device access remains inefficient and reveals profound inequalities. For this reason, the pandemic situation placed all 26 states of the Federation and the Federal District (DF) on alert, as they suspended in-person classes. The situation was overwhelming, catching everyone by surprise in a country already facing serious social problems and undergoing an acute political crisis. The level of unpreparedness was made evident in a survey conducted by UNESCO (2020b) presenting the situation of the educational networks in the states at the time the pandemic was declared. The majority of them did not know what to do: 11 states of the Federation had no alternative whatsoever to offer online education; 4 of them reported that they were in the process of implementing one; and 11 of them, plus the DF, presented a solution for remote classes, among which were alternatives involving private platforms. As a result, there was no national coordination. Each state and educational network organized itself as best it could, since they were not prepared for online education and lacked the pedagogical conditions, infrastructure, connectivity, and devices required. In the states where remote classes in basic education were initiated, these were still insufficient, failing to cover the entire network, given that the most vulnerable population did not have internet access or that access was insufficient or inadequate. This demonstrates the disarticulation of systems in Brazil, exposing an unsustainable situation in terms of guaranteeing the right to education in accordance with constitutional and democratic principles.

Amid this context of profound social inequalities, in which broadband access and devices do not reach a large part of the population, the emergency solution found came through the presentation of a Bill (PL 3,477/2020) that provided for internet access and devices for teachers and students in public basic education schools. The bill was vetoed by the President of the Republic in 2020 and only overridden in June 2021. It was a proposal that provided for the transfer of R\$ 3.5 billion from the Telecommunications Services Universalization Fund (*Fundo de Universalização dos Serviços de Telecomunicações* – FUST), to be distributed to states, municipalities, and

the Federal District, in order to serve teachers and students from families registered in the Federal Government's Unified Registry for Social Programs (*Cadastro Único para Programas Sociais do Governo Federal – CadÚnico*), including those belonging to quilombola³ and indigenous schools. The acquisition of services and products was to follow the price criteria applied in public administration purchasing processes, with half of the resources allocated to the purchase of equipment and half to the purchase of internet services.

Another problem in the Brazilian landscape is the discontinuity of its public policies, generally resulting from changes in government (Pretto and Coelho, 2015; Pretto, Bonilla and Sena, 2020). From 2015 onward, an additional aggravating factor emerged: the profound political crisis that began to beset the country. This directly reverberated during the pandemic moment, as it caused losses across all sectors, an inability to maintain and implement already existing public policies, disarticulation between ministries, dismantling of existing programs and policies, and a weakening of social policies, among other consequences. In light of this broader panorama, with its political and strategic dimensions, we need to think about education in the context of adversities further aggravated by the pandemic situation. In this regard, public policies concerning teacher education are also fundamental and need to be examined in terms of their prospects and limitations.

Teacher education: digital culture in schools

Amid the many obstacles faced by the public policies previously mentioned, we would like to highlight one of the Brazilian programs that, despite its shortcomings, was among the most enduring: the National Program for Educational Technology (*Programa Nacional de Tecnologia Educacional – Proinfo*). This policy, developed since 1997, was aimed at the integration of technologies into schools and teacher education. Initially called the National Program for Information Technology in Education, in 2007 it received its current name and was divided into two strands:

³ Translator's note: *Quilombola* refers to members of quilombos — communities historically founded by Africans who escaped enslavement in Brazil.

ProInfo Urbano and ProInfo Rural. It was originally designed to bring computer laboratories into schools, offering desktop computers. Training was carried out by Educational Technology Hubs (*Núcleos de Tecnologia Educacional – NTE*), which were under the responsibility of state and municipal networks, and which, receiving didactic materials and guidelines from ProInfo, trained the teachers working in schools.

Despite being a successful policy in longitudinal terms, as it spanned several governments, we must emphasize that it always had a very instrumental character (Bonilla and Oliveira, 2011) with regard to teacher education, given that as technology changed, the formative proposal would refocus on the use of technology itself, on its specific operability. According to Bonilla and Oliveira (2011, p. 40–41), this excluded the perspective of digital culture from the formative processes of both students and teachers “a use directed almost exclusively toward the handling of school subjects and content, disregarding all processes of immersion and familiarization [...] in digital environments and culture.” And this is a fundamental point to which we must devote attention: the need to overcome processes and environments that conceive of the digital as mere instrumentality. We advocate for the creation of educational ecosystems in which the exchange of knowledge, the construction of understanding, and the development of science are reticulately intertwined with technologies, where these are not merely a means or a product, but an inspiration for the processes of learning, producing, creating, and sharing.

In the direction of the integration of digital technologies into the Brazilian educational context, all the other projects and programs that followed ProInfo were temporary and disarticulated, which prevented their dynamics from being incorporated into the daily life of schools, into the didactic practices of teachers, or into the curriculum more broadly. A case in point is the One Laptop per Student Program (*Programa Um Computador por Aluno – UCA*), which was in effect from 2007 to 2013 and aimed to bring connectivity, teacher education, and mobile devices to public schools. Its discontinuity was followed, in a disconnected manner, by the Tablets in Schools project, which also had a short lifespan. Other projects promising a revolution in education followed, such as digital whiteboards in schools and laptops for teachers, all of them disarticulated, including from the programs mentioned above that aimed to

bring broadband to schools, which we must once again note was always insufficient for the educational demands of each unit. We believe that all these factors, if well coordinated, could have contributed to the development of a digital culture present not only in teachers' didactic practices but within schools and involving their communities. However, from 2016 onward, the already existing public policies underwent a process of destruction, with no prospects for other proposals to replace them. The consequences of this disastrous project, stemming from a far-right government that had come to power at that moment, became even more severe with the arrival of the pandemic, since in addition to the disarticulation of prior policies, it offered no alternative whatsoever for addressing the problems that had emerged in the field of education.

In Italy, the most recent public policy at the time was related to teacher education and the restructuring of educational systems in alignment with EU and international agendas: the National Digital School Plan (*Piano Nazionale Scuola Digitale* – PNSD). This was a public policy established by the Italian government through Law 107/2015, which proposed the reform of its educational system, seeking to build strategies and plans for the innovation of school systems in the digital age. The principles of this restructuring were aligned with international and EU guidelines for education, which referenced the development of digital practices for the promotion of citizenship and the elaboration of competencies for students, with teachers and school leaders directly involved as protagonists of the processes. This proposal is considered quite complex for a system that, not unlike others in various parts of the world, has not yet been able to establish a more unified and constructive narrative between digital technologies and education. According to Pireddu (2015):

Naturally, considering the media, new media, and their users from a perspective of openness and attention to opportunities is difficult in a country that is slow to recognize an active and not intrinsically negative role for them with regard to social, cultural, and technological changes (Pireddu, 2015. p. 45).

Against the backdrop of a system still highly conservative in its approach to the concepts of education and digital technologies for access to cultural goods (Pireddu,

2017), the High-Level Studies Commission of the European Union, more specifically the European Commission's Joint Research Centre (JRC), in conjunction with the Directorate-General for Education, Youth, Sport and Culture (DG EAC), developed a common reference framework to encourage the development of digital competency practices in civic education. From this emerged: the Development of a Digital Competence Framework for Citizens (DigComp); the Development of a Digital Competence Framework for Educational Organizations (DigCompOrg); the Development of a Digital Competence Framework for Consumers (DigCompConsumers); and finally, the Development of a Digital Competence Framework for Educators (DigCompEdu). This entire structure of formative proposals is grounded in the idea of lifelong learning, encompassing training for work, social inclusion, and personal development, anchored in the potential of digital technologies to innovate educational systems.

It is within the context of DigCompEdu that the figure of the “*animatore digitale*” (digital animator) emerged. According to Pireddu (2017), this plan was characterized by several problems: first, a conception of the digital as if it were something new, even though it had already been present for decades in the social and cultural practices of the majority of the population; second, the training initiated in 2016 targeted teachers selected by school leaders; however, these teachers would only receive their training after the digital animators had completed theirs, which caused problems, since school leaders were unaware of the objectives of the plan before selecting the profiles of those who would receive the training and subsequently define its practical and theoretical application within the school. This generated many problems at the time of implementation and execution of the plan, which was met with considerable criticism and misunderstanding. The training was organized at a regional level and employed radically diverse methodologies (Pireddu, 2017). The first training phase was marked by a failure to fully achieve the plan's objectives: “the results obtained were very diverse, both in terms of the satisfaction of the subjects involved and in terms of modifications to the didactic and organizational practices of the schools” (Pireddu, 2017, p. 163 – authors' translation).

The second phase of training was left to the schools in the various regions. However, the criteria for selecting teacher-trainers multiplied, generally related to their accumulated points rather than to a justification grounded in the plan's objectives. Differences in the didactic organization of training sessions and in the theoretical and practical configurations of the training pathways all contributed to the collapse of the proposal. Additionally, these problems were compounded by delays in training due to various factors, including on the part of the government in supplying the Schoolkits; the organization of an agenda impossible to maintain; and difficulties with the Ministry of Education's platform for submitting examples of good practices produced by educators. The absence of monitoring of training pathways and their outcomes led to a sense of abandonment on the part of schools and of the plan itself by the ministry, which discouraged and deterred the continuation of practices within school environments and the strengthening of teachers for the development of a digital culture within educational settings.

In December 2020, the Italian Ministry of Education (*Ministero dell'Istruzione*) launched a cycle of meetings entitled "*Ripensare l'educazione nel XXI secolo: incontri per riflettere, proporre, agire*" (Rethinking Education in the 21st Century: Meetings to Reflect, Propose, and Act). The meetings brought together specialists and researchers in the field to discuss education. The December sessions were titled "*Pedagogia, didattica, educazione: fotografia di un Paese*" (Pedagogy, Didactics, Education: A Portrait of a Country), addressing the current state of schools and their challenges; those of January addressed "*Cura educativa*" (Educational Care), engaging with inclusive education, welcoming, resilience, and sociability; and in February, "*L'Educazione: in cammino verso il Futuro*" (Education: On the Way Toward the Future) proposed a discussion of the education of the future. This is an agenda that fits the need to discuss education from the perspective of confronting the challenges exposed by the emergency moment, thereby opening possibilities for thinking through innovative proposals in the fields of methodology and didactics. From the outset of the pandemic, Italy demonstrated sensitivity toward a pedagogy of welcoming and listening to students and families through networks. The initial concern was with the psychological well-being of the student population, which had suddenly been removed

from in-person schooling as a means of preserving lives. However, Colazzo and Maragliano (2021) invite us to reflect more deeply on the identity of the school, to rethink it profoundly in terms of culture and didactics, from the perspective of reinventing the school and society:

We need imagination. We need to invest in the construction of an imaginary (artistic, scientific, technical, human) of which all media, all of them, are simultaneously a mirror of the time and a vehicle, with the possibility of action, passing through the scrutiny of public debate. We must invest in a 'different' idea of the school, daring to have a 'different' idea of society (Colazzo and Maragliano, 2021, p. 10 – authors' translation).

In observing the authors' words, we perceive the emergence of a field of dispute. If on the one hand public policies are more focused on didactics and methodologies, on the other, education intellectuals put pressure on the dynamics that involve education as a broader field of human formation, one that encompasses the principles of democracy and citizenship.

We can observe how the public policies planned and implemented in both countries remain fragile and unable to sustain themselves in ways that build a culture in daily educational life and in the practices of teachers. This aspect became very evident during the pandemic moment, when those teachers who already had some training or who had already been developing some type of practice involving the digital and online environments in their planning did not face as much difficulty in reorganizing their activities and integrating into emergency learning contexts. This was a very different experience from those who, in addition to having to cope with physical distancing and all the fears of the pandemic moment, found themselves alone in entirely unknown territory: that of educational practices involving the digital. Once again, we observe that vertically planned and implemented public policies are inefficient. An effort is needed to implement policies that increasingly bring schools and universities closer together, and which, with government support, can create more engaged strategies that contribute to the development of education, science, and culture.

Final considerations

During the pandemic period, we observed that in both contexts analyzed, education was called upon as a fundamental priority; however, the infrastructure and human resources for the continuity of activities in an online mode were not sufficiently prepared to meet the demands required during the emergency moment. On the one hand, severe social and economic inequalities were made apparent, as well as the absence of efficient long-term public policies, which during the pandemic translated into limited access to adequate broadband and devices, or even insufficient connectivity for the completion of school tasks. Another point highlighted by this study is that educational systems also revealed their fragilities: despite having developed, over the years, public policies on teacher education involving the digital, they have still not managed to articulate consistent policies capable of transforming educational culture and projecting it toward a contemporary demand that involves a rethinking of its conceptions and practices. The dimension of connectivity enriches the reflection on both contexts, which under a shared state of emergency lead us to consider the need to advance rapidly and substantially in conceptual, methodological, and didactic terms. Education needs, now more than ever, to be in tune with the contemporary moment. From this stems our appeal for the connection of the school with the world, with its challenges, crises, dynamics, and movements, not in order to reproduce models, but precisely to be able to confront them, establish ruptures, and open up fields of engagement against any sign that might weaken our democracy and citizenship.

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