

# Digital technologies, teaching practice, and the health crisis: reflections on the work *Educomunicação no contexto pandêmico*

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**Abstract:** The reviewed work, *Educomunicação no contexto pandêmico: desafios do ensino remoto*, analyzes the impacts of the COVID-19 pandemic on basic education in Brazil, based on a study conducted with 447 teachers. Organized by the MECOM group at ECA/USP, the book addresses the lack of technological infrastructure, deficiencies in teacher training, and the challenges of education during the health crisis. The study discusses topics such as the platform of education and the influence of big tech companies. It also examines the social acceleration, heightened by the omnipresence of digital devices, proposing regulations to ensure ethical practices.

**Keywords:** educommunication; social acceleration; remote education; platform; COVID-19.

**Resumo:** A obra aqui resenhada, *Educomunicação no contexto pandêmico: desafios do ensino remoto*, analisa os impactos da pandemia de covid-19 na educação básica no Brasil, com base em uma pesquisa realizada com 447 docentes. Organizado pelo grupo de pesquisa MECOM da ECA/USP, o livro aborda a falta de infraestrutura tecnológica, o déficit na formação docente e os desafios do ensino remoto emergencial e híbrido na crise sanitária. O estudo examina temas como a plataformização da educação e a influência exercida pelas big techs no cotidiano escolar. Também discute a aceleração social do tempo, intensificada pela onipresença dos dispositivos digitais, propondo regulamentações que garantam o uso ético das tecnologias.

**Palavras-chave:** educomunicação; aceleração social do tempo; ensino remoto; plataformização; covid-19.

Received: 29/12/2024

Approved: 18/02/2025

## 1. INITIAL APPROACH

The release of the book *Educomunicação no contexto pandêmico: desafios do ensino remoto*<sup>1</sup> by Editus, in December 2024, closes a year marked by extensive discussions on the effects of digital communication devices and social networks, particularly among young people. The volume is the result of the most recent work of the Educommunication Mediations Research Group (MECOM), based at the School of Communications and Arts of the University of São Paulo (ECA/USP) and coordinated by Professor Dr. Adilson Citelli. It brings together texts based on a survey conducted with elementary and secondary school teachers across Brazil between November 2021 and June 2022. The book contributes to the debate on the impacts of the health crisis caused by COVID-19 on formal education, with particular attention to technological mediation in school activities and the potential consequences of the unregulated and excessive use of digital devices and their languages.

Divided into eight chapters, the volume confirms and deepens reflections put forward by previous studies on the lack of infrastructure and adequate training for teachers during the period of “emergency remote teaching,” as well as during the gradual resumption of in-person activities, when the so-called “hybrid teaching” was adopted<sup>2</sup>. The book also engages with contemporary issues that, in recent years, have moved beyond the academic sphere to become part of everyday public discourse. Among these are: the pervasive role of algorithms in human interaction; the absence of regulation of big tech companies and the control they exercise over personal data, consumer habits, and access to information; the harm caused by the indiscriminate exposure of children and adolescents to screens, particularly smartphones; the precarization of labor relations and the physical and mental illnesses associated with the accelerated pace of social life; violence against education professionals; and the platformization of education, among others.

The research forms part of the broader project “*Comunicação e educação: mediações tecnossociais no ensino básico*,”<sup>3</sup> which also produced the digital report “*Ensino Remoto e Transições Associadas*,”<sup>4</sup> published in December 2023. In total, 447 teachers responded to an electronic questionnaire composed of 34 questions, guided by the following “lines of inquiry”:

identifying the profile of respondents and their media habits; examining school infrastructure, particularly regarding the availability and use of techno-communicative resources; assessing whether teachers possessed personal equipment suitable for remote classes and services; analyzing the strategies adopted by schools to adjust to the demands of teaching during the pandemic; inquiring into initial and continuing teacher education with respect to working with technological devices in pedagogical practices; understanding the transformations teachers underwent as they adapted to the temporal rhythms imposed by socio-technical systems<sup>5</sup>.

Most participants taught in elementary and secondary public schools at the state and municipal levels across 21 Brazilian states. The states with the

1 CITELLI, Adilson. (org.). *Educomunicação no contexto pandêmico: desafios do ensino remoto*. Ilhéus: Editus, 2024. v. 8.

2 The book includes a section entitled “*Termos e expressões em uso na pandemia* (Terms and Expressions in Use during the Pandemic),” dedicated exclusively to describing words and terms that became commonplace during that period in the educational context. Arranged alphabetically, the list includes, in addition to “emergency remote learning” and “hybrid learning,” definitions for expressions such as “synchronous class,” “asynchronous class,” “flexible teaching,” and “à la carte teaching,” among others.

3 The research was supported by the National Council for Scientific and Technological Development (CNPq).

4 CITELLI, Adilson. (coord.). **Ensino remoto emergencial e transições associadas**. São Paulo: ECA-USP, 2023. Available at: <https://www.eca.usp.br/acervo/producao-academica/003159913.pdf>. Accessed in: 23 Dec. 2024.

5 CITELLI, Adilson. Apresentação e delimitações. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 16-17.

highest number of responses were São Paulo (59.7%), Pernambuco (11.4%), Bahia (10.3%), and Santa Catarina (6%).

With the collaboration of 15 researchers<sup>6</sup>, the book is grounded in theoretical and methodological assumptions of an interdisciplinary nature. Developed through collective work, it draws primarily on references that have long informed MECOM's research, positioning itself at the intersection of Communication, Education, and Language. As Citelli highlights:

We evoke the communicative-cultural framework of Jesús Martín-Barbero; the emancipatory pedagogy of Paulo Freire; the interactive dialogism of Mikhail Bakhtin; the debate on the role of technologies in contemporary society, particularly in the works of Evgeny Morozov, Giselle Beiguelman, and Shoshana Zuboff; and the reflections on the social acceleration of time advanced by Hartmut Rosa, Carlo Rovelli, and Jonathan Crary. These references—among others—converge on shared elements aimed at ensuring both the conceptual and operational unity of our research and the internal coherence and points of convergence across the chapters of this book. Hence, the inevitable intersections and developments, whose theoretical sources are located, for example, in socio-technical systems, in the cultural configurations circulating in classrooms, in the language games that fuel both school and non-school discourses, and in the flows between them<sup>7</sup>.

Although structured around specific themes, the chapters maintain a fruitful dialogue with one another, sharing ideas and references, and in some cases drawing on the same data from different perspectives. The text is also organized in a way that guides readers to different parts of the compendium, particularly when a topic addressed only secondarily in one chapter is explored in greater depth in another.

As noted in the introductory paragraph of this review, the year 2024 was marked by various initiatives aimed at discussing and mitigating the influence and impact of technological communication devices on contemporary societies, particularly among children and adolescents. Without intending to exhaust the topic, one could mention the release of the book *The anxious generation*<sup>8</sup>, which received extensive coverage in the national press<sup>9</sup>. Another example includes measures implemented in Rio de Janeiro through a municipal decree<sup>10</sup>, in São Paulo through a state law, and a bill already approved by the Federal Senate<sup>11</sup> and under consideration in the Chamber of Deputies, which proposes the prohibition of mobile phone use in public and private basic education schools.

At the international level, two laws came into effect in mid-2024 in the state of New York, both aimed at restricting young people's access to digital platforms. One requires social media networks and app stores to obtain parental consent for minors under the age of 18 to access them. The other limits the collection of information by app providers from users who have not yet reached the age of majority<sup>12</sup>.

Australian authorities went even further by passing legislation banning social media use by individuals under the age of 16<sup>13</sup>. The country became the first in the world to adopt such restrictive measures against big tech companies,

6 The research originally involved 16 researchers, including Dr. Sandra Falcão. She collaborated extensively on various projects developed by MECOM over the past decade, actively participating in the development of the questionnaire, data collection, and early tabulation of data for the project "Comunicação e Educação: Mediações Tecnossociais no Ensino Básico." However, she passed away in September 2022, while the work was still ongoing.

7 CITELLI, *op. cit.*, p. 16.

8 HAITT, Jonathan. **A geração ansiosa**: como a infância hiperconectada está causando uma epidemia de transtornos mentais. São Paulo: Companhia das Letras, 2024.

9 We could cite, for example, episode #1236 of *O Assunto*, a G1 podcast presented by journalist Natuza Nery, which aired in June 2024, in which the book and the adoption of measures to ban cell phones among children and adolescents in schools were discussed. Available at: <https://g1.globo.com/podcast/o-assunto/noticia/2024/06/17/o-assunto-1236-celular-nas-escolas-banir-ou-adotar.ghtml>. Accessed in: 23 Dec. 2024. We can also mention that the social psychologist and author of the work, Jonathan Haidt, was interviewed on *Roda Viva* on December 9, 2024. Available at: <https://www.youtube.com/live/1u-pX4DqpVwY>. Acesso em 23 Dec. 2024.

which have one year to comply with the regulation before facing penalties for noncompliance.

These initiatives and their repercussions reflect the transformations that have unfolded in recent years due to excessive screen exposure, with serious implications across different aspects of life. Numerous studies have linked this phenomenon to disorders such as impaired cognition, increased difficulty concentrating, fragmented experiences, sleep deprivation, and diminished socialization.

As demonstrated by the work released by MECOM, the pandemic period was marked by the intensification of communication technology use, which became essential for interpersonal interaction during social isolation. Despite economic and social differences that shaped the degree of access to these technologies, their effects were widespread. Practices introduced and/or consolidated during that historical moment—such as the role and forms of use of instant messaging applications in daily life and the regular use of videoconferencing platforms for meetings and training—do not appear to have reverted to pre-pandemic patterns following the health crisis.

Emergency remote teaching exposed and exacerbated existing inequalities, with public education proving unable to meet the demands arising from school closures. The preexisting lack of adequate infrastructure was aggravated by the absence of planning, investment, and the necessary support for teachers, producing impacts that are likely irreversible for the education of millions of Brazilian students. At the same time, the harms caused by socio-technical devices were not limited to the economically disadvantaged sectors of society. Studies and measures adopted by authorities in different parts of the world indicate that the problems generated by these technologies have also reached pandemic proportions, producing effects on a global scale.

The text that follows is divided into four parts. The first, corresponding to chapters 2 and 3, addresses the technological infrastructure provided by schools to teachers, as well as the personal investments educators were required to make—such as purchasing equipment and contracting internet services—to continue teaching. The second part discusses chapters 4 and 5, which focus on the strategies of mobilization, communication, and guidance developed and implemented by education departments and schools, as well as the training programs offered to teaching staff. The third part, encompassing chapters 6 and 7, explores issues related to the social acceleration of time, considering the role of socio-technical devices in teachers' daily lives and the consequences of this experience. Finally, the fourth and last section presents chapter 8, which reflects on school violence and the platformization of education.

It is worth noting that the first chapter of the book—“*O perfil docente no ensino remoto emergencial: aspectos funcionais e pedagógicos* (The teaching profile in emergency remote education: functional and pedagogical aspects)” — offers an overview of the sample profile. In addition to data such as the states where these professionals worked, this section provides statistics related to variables

10 RIO DE JANEIRO. **Decreto Rio n.º 53.918, de 1 de fevereiro de 2024.**

Regulates the use of cell phones and other electronic devices by students in schools within the municipal public education system, and contains other provisions. Rio de Janeiro, 2024. Available at: <https://educacao.prefeitura.rio/wp-content/uploads/sites/42/2024/02/DECRETO-RIO-No-53918-DE-1o-DE-FEVEREIRO-DE-2024.pdf>. Accessed in: 23 Dec. 2024.

11 BRASIL. Senado Federal. **Projeto de Lei n.º 4.932, de 2024.**

Provides for the use, by students, of personal portable electronic devices in public and private basic education establishments. Brasília, DF: Senado Federal, 2024. Available at: <https://www25.senado.leg.br/web/atividade/materias/-/materia/166801#>. Accessed in: 23 Dec. 2024.

12 STOKEL-WALKER, Chris. As novas leis que tentam tornar redes sociais menos viciantes para crianças e adolescentes. **BBC News Brasil**, 6 Jul. 2024. Available at: <https://www.bbc.com/portuguese/articles/c2x-0g71452vo#>. Accessed in: 23 Dec. 2024.

13 RITCHIE, Hannah. Os argumentos a favor e contra veto de redes sociais para menores de 16 anos na Austrália. **BBC News Brasil**, 30 Nov. 2024. Available at: <https://www.bbc.com/portuguese/articles/cdrdr-j33xln0#>. Accessed in: 23 Dec. 2024.

such as years of teaching experience, age group, number of schools where they were employed, and the levels of education they taught.

## 2. INFRASTRUCTURE: LIMITATIONS, CHALLENGES, AND PRECARIETY

As mentioned briefly above, chapter 2 of the book recently published by MECOM, entitled “*Infraestrutura tecnológica escolar no ensino remoto emergencial: alcance e limitações para os(as) docentes* (School technological infrastructure in emergency remote teaching: scope and limitations for teachers),”<sup>14</sup> investigates which technological resources were provided by school management to teachers during emergency remote teaching, as well as those available within the schools themselves during hybrid teaching. Chapter 3, “*Impactos da pandemia na educação básica: infraestrutura tecnológica e letramento digital* (Impacts of the pandemic on basic education: technological infrastructure and digital literacy),”<sup>15</sup> focuses primarily on the equipment that these professionals had to acquire—such as internet packages, computers, and smartphones—in order to connect with students and conduct distance classes. It also engages in a discussion on digital literacy.

A feature present not only in these two chapters but recurring throughout the book is the revisiting of data from MECOM’s earlier investigation that preceded the research project “*Comunicação e Educação: Mediações Tecnossociais no Ensino Básico*”<sup>16</sup> entitled “*Inter-relações comunicação e educação no contexto do ensino básico.*”<sup>17</sup> Conducted between 2018 and 2019—approximately one year before the onset of the health crisis—this study culminated in the publication of *Comunicação e educação: dinâmicas midiáticas e cenários escolares*<sup>18</sup>. The research involved 509 teachers and 3,708 students and aimed to examine whether, and in what ways, school discourses engaged with media and with questions related to the temporality of teaching and learning practices.

The infrastructure of schools was among the aspects addressed by that earlier survey and, for this reason, it was referenced in chapters 2 and 3 of the recently published volume. One of the questions in the questionnaire administered to teachers sought to identify the number of computers available in the institutions where they taught at the time. The data revealed that one-third of schools (34%) did not have a computer lab, and only 18.5% had computers available in classrooms.

The COVID-19 pandemic, therefore, brought to light the long-standing limitations of technological infrastructure in Brazil’s public education system. When the first restrictions on mobility and social distancing measures were introduced in March 2020, the Ministry of Education demonstrated complete unpreparedness to develop a centralized plan that could provide assistance based on local needs. Most of the actions implemented to mitigate the effects of the crisis and to provide pathways for emergency remote teaching were left to states and municipalities, which, in general, were also largely ineffective.

14 BIERWAGEN, Gláucia Silva; SOLEDADE, Roberta Takahashi. *Infraestrutura tecnológica escolar no ensino remoto emergencial: alcance e limitações para os(as) docentes*. In: CITELLI, Adilson. (org.). *Educomunicação no contexto pandêmico: desafios do ensino remoto*. Ilhéus: Editus, 2024. p. 31-46.

15 NAGAMINI, Eliana; ALMEIDA, Maria do Carmo de.; LUZ-CARVALHO, Tatiana. *Impactos da pandemia na educação básica: infraestrutura tecnológica e letramento digital*. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 47-69.

16 Incidentally, both research projects share similar methodologies and strategies for collecting, organizing, and analyzing data.

17 CITELLI, Adilson. (org.). **Inter-relações comunicação e educação no contexto do ensino básico**. São Paulo: ECA-USP, 2020. Available at: <https://mecom.eca.usp.br/2021.html>. Accessed in: 23 Dec. 2024.

18 CITELLI, Adilson. (org.). **Comunicação e educação: dinâmicas midiáticas e cenários escolares**. Ilhéus: Editus, 2021. v. 7.

Government initiatives aimed at equipping schools with technology faced significant limitations. Even with authorization to execute emergency contracts, projects were only implemented in 2021, by which time the pandemic was already in its second year. Examples of such measures include the program “*Paulo Freire – Conectando Saberes*,”<sup>19</sup> established by the State Government of Paraíba through State Law No. 12,057 of September 2021, and the actions adopted by the São Paulo City Hall<sup>20</sup>. Both initiatives provided for the distribution of laptops to teachers. However, delivery of the devices, in addition to being delayed, was carried out slowly and without transparency regarding implementation deadlines<sup>21</sup>.

As the MECOM volume highlights, the situation had not undergone substantial changes at least until the conclusion of the data collection period—from the second half of 2021 to the first half of 2022. The study indicates that only 43.6% of teachers received a computer or laptop, while 41.8% had no access to any technological resources from their institutions to support remote teaching, and 60% rated the quality of school internet as below what was necessary.

In this context, 43.1% of teachers reported purchasing computers, 36.9% acquired smartphones, and 58.8% contracted internet packages, illustrating the transfer of responsibility for technological adaptation onto the educators themselves. Such personal investments underscore the lack of coordination and institutional support required to make emergency remote teaching feasible.

As argued by the authors of chapters 2 and 3, precarious infrastructure compromised both the stage of strictest restrictions, when classes were held exclusively online, and the period of hybrid teaching, when activities gradually resumed in person. Teachers and students alike faced difficulties adapting to the limitations imposed by the health crisis, at its different stages, due to the lack of access to adequate resources and even the most basic operating conditions.

### 3. SCHOOL MOBILIZATION AND TEACHER TRAINING

In the weeks following the imposition of social isolation, it became clear that in-person classes would not resume in the near future. Against this backdrop, chapter 4 of the book, “*Ensino emergencial: um panorama da atuação das escolas durante a pandemia* (Emergency teaching: an overview of school practices during the pandemic),”<sup>22</sup> aims to analyze how school management organized and mobilized teaching staff to ensure continuity of pedagogical activities.

According to the data collected by MECOM, teachers perceived that the initial responses were swift. For 76.4% of respondents, the first mobilization of educational managers occurred promptly, with guidance provided on the available alternatives for resuming classes at a distance. At that point, the options presented encompassed different approaches, ranging from the production and distribution of printed materials to the use of communication technologies, including messaging and videoconferencing applications via smartphones, computers, and tablets.

19 PARÁIBA. **Lei Estadual n.º 12.057, de 15 de setembro de 2021**. Establishes the “*Programa Paulo Freire – Conectando Saberes*,” to encourage digital inclusion for educators in the State Education System, and provides other measures. Paraíba, 2021. Available at: <https://auniao.pb.gov.br/servicos/arquivo-digital/doe/2021/setembro/diario-oficial-16-09-2021-1.pdf>. Accessed in: 25 Dec. 2024.

20 PREFEITURA de São Paulo atinge marca de 15 mil notebooks destinados aos professores da rede municipal. **Prefeitura de São Paulo**, 14 Jul. 2021. Available at: <https://capital.sp.gov.br/w/noticia/prefeitura-de-sao-paulo-atinge-marca-de-15-mil-notebooks-destinados-aos-professores-da-rede-municipal>. Accessed in: 24 Dec. 2024.

21 For example, we did not find any news article on the São Paulo City Hall website about the completion of the delivery of 48,000 notebooks to teachers. It would not be unreasonable to postulate the possibility that the delivery was interrupted or occurred over such a long period of time that, strategically, it would not be convenient for the municipal administration to publicize it.

22 CORAZZA, Helena; NARDES, Wellington. *Ensino emergencial: um panorama da atuação das escolas durante a pandemia*. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 71-83.

As days, weeks, and months went by, however, various problems became evident, aggravated by the lack of skill, planning, and assertive action on the part of the administration at different levels—federal, state, and municipal. Teachers not only had to rely on their own resources to purchase equipment—and even then, often without being able to establish effective interaction with students—but also ended up depending more than they should have on their individual efforts in the educational process, as highlighted in chapter 5, “*Formação docente para o ensino remoto emergencial: novas demandas, velhos desafios* (Teacher training for emergency remote teaching: new demands, old challenges).”<sup>23</sup>

Survey data indicate that 52.7% of teachers reported not having received any training offered by their schools for remote teaching, while 40% admitted that they managed to access some form of training either through their own initiative (26.6%) or with the support of colleagues (11.4%). Among those who did participate in courses and training sessions promoted by school administrators, only 11.4% considered the experience satisfactory.

It is therefore unsurprising that other findings in these chapters confirm the fragility of teacher–student relations during the years of social distancing. The absence of support from those responsible for planning and implementing educational projects, combined with the precarious conditions in which teaching and learning experiences occurred, undermined even teachers’ ability to evaluate the learning process. Approximately three-quarters of the sample (75.8%) reported difficulties in assessing whether students were actually learning. An additional indicator of this vulnerability—and, by extension, of the compromised nature of the educational process—is the proportion of respondents (67.6%) who mentioned the lack of student interaction in classes.

Another variable observed in the research, which aligns with the discussions in these two chapters, concerns the creation of mutual support networks. Despite social distancing, such networks could have contributed significantly to coping with the impacts of the health crisis, particularly in the context of education.

The results suggest a certain balance. On the one hand, around 40% of teachers stated that they participated in groups to exchange opinions, share problems, experiences, and lessons learned. On the other hand, a similar proportion (39%) reported facing the difficulties of the pandemic in isolation, with little interaction or collective support.

The discussions in this section reinforce the perception of disparity between the strategies adopted in private and public schools. While the former appeared to be more successful, investing in planning, infrastructure, and training, the latter faced a series of limitations that made it impossible to address—even partially—the needs of the entire school network.

23 TELES, Edilaine Carvalho; GOULART, Karen Pavanini; COSTA, Suéller. *Formação docente para o ensino remoto emergencial: novas demandas, velhos desafios*. In: CITELLI, Adilson. (org.). *Educomunicação no contexto pandêmico: desafios do ensino remoto*. Ilhéus: Editus, 2024. p. 85-102.

#### 4. PANDEMIC AND THE SOCIAL ACCELERATION OF TIME

Based on the findings discussed so far, it is already possible to anticipate some of the analyses addressed in chapters 6 and 7, respectively entitled “*Processos comunicacionais e pandemia: a variável do tempo* (Communicational processes and the pandemic: the variable of time)”<sup>24</sup> and “*Pandemia, jornada pedagógica e os desafios do tempo: novos dispositivos de aprendizagem, estresse docente e precarização do trabalho* (Pandemic, pedagogical journey, and the challenges of time: new learning devices, teacher stress, and the precarization of work).”<sup>25</sup> From the reading of the book’s first five sections, it seems reasonable to affirm that the working conditions of education professionals during the COVID-19 crisis were precarious. They were required to work more, often without access to adequate material and training resources, while suspecting that students were not experiencing an effective teaching–learning process. Additionally, it is worth noting that this entire context of precarization was exacerbated by digital communication technologies, which, in fact, were the only means available for carrying out teaching activities during the most severe stage of the health emergency, when schools remained closed.

The research findings corroborate and deepen the hypothesis previously outlined. MECOM researchers highlight that, according to 72.4% of the educators who responded to the survey, their workload during the pandemic was exhausting. Moreover, 85% stated that lesson preparation for emergency remote teaching required greater effort compared to in-person teaching.

When compelled to literally bring the classroom into their homes, educators saw their personal lives, leisure time, and moments of rest invaded by work responsibilities that became constant. This state of urgency was likely intensified by the use of WhatsApp as the primary means of communication—identified by 90.6% of respondents. Due to its immediacy, characterized by instant messaging and the pressure for rapid responses, the mediation of relationships through this tool may have contributed to the consolidation of an intense work pace among education professionals.

As emphasized by the authors of chapters 6 and 7, the overload of responsibilities borne by teachers during the health crisis—marked by excessive flexibility of working hours and the overlapping of tasks—brought to the fore issues related to their mental health. Teacher stress, exacerbated by the pressure for quick results and the adaptation to new demands of remote teaching, significantly affected their well-being. In this context, it is essential that discussions on teacher overload be incorporated into educational policies.

The MECOM researchers acknowledge that sociotechnical devices played an important role in sustaining educational processes during social isolation. However, they express concern about the possibility that these technologies might continue to be integrated into school practices and daily life without stricter regulation or deeper discussions and evaluations of their impacts.

24 CITELLI, Adilson. *Processos comunicacionais e pandemia: a variável do tempo*. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 103-126.

25 CALIXTO, Douglas; ANDRADE, Rogério Pelizzari. *Pandemia, jornada pedagógica e os desafios do tempo: novos dispositivos de aprendizagem, estresse docente e precarização do trabalho*. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 127-150.

Drawing on authors such as Zuboff and Morozov, the researchers underscore the power exercised by big tech companies, which operate on an economic model rooted in data extractivism. These corporations promote the massive and systematic collection of personal and behavioral information from users, using teachers' and students' data to feed algorithms of personalization, prediction, and segmentation.

Among the most evident implications of the control big techs exert over our lives are the violation of privacy, the reinforcement of inequality, and behavioral manipulation. Additionally, one must mention the lack of transparency regarding the access, processing, and use of the information they store. As Citelli points out,

Big techs, in addition to refining the traditional forms of profit-making and labor exploitation (as exemplified by platforms such as Uber, Cabify, Rappi, and iFood), have developed new strategies for gaining power and capital by capturing different aspects of human experience: colonizing data (Couldry & Mejias, 2019), building predictive models, interfering with lifestyles and behaviors—to mention only a few dimensions of this new project of capital accumulation being carried out by the templars of surveillance embodied in big techs<sup>26</sup>.

In the introduction of this review, the harms caused by excessive screen use were mentioned, such as the overlapping, fragmentation, and suppression of experience, in addition to impairments to memory and cognition. State, national, and international initiatives aimed at reducing the presence of these devices in people's lives—particularly those of children and adolescents—were also highlighted.

The MECOM research project, which resulted in the book *Educomunicação no contexto pandêmico: desafios do ensino remoto*, is situated within this debate, reinforcing the need to understand the limits of technology use in education. The authors and data presented in these two chapters demonstrate how smartphones, social media, and messaging applications affected teachers' daily lives.

## 5. CITIZENSHIP AND PLATFORMIZATION

The authors of the eighth chapter, entitled “*Contexto pós-pandêmico: políticas públicas abaladas, cidadania comprometida* (Post-pandemic context: shaken public policies, compromised citizenship),”<sup>27</sup> present an analysis structured around two interrelated objectives. The first is to discuss the repercussions of the violent incidents that accumulated after the resumption of in-person schooling, which led schools—traditionally regarded as safe spaces—to frequently appear in police reports. The second is to address the impact of the process of platformization of society, intensified since the pandemic, which has imposed new challenges on education, particularly regarding teachers' mediation of the teaching-learning process in the face of the growing ubiquity of digital technologies.

26 CITELLI, 2024, p. 121-122.

27 GOMES, Ana Luiza Zaniboni; SILVA, Michel Carvalho. Contexto pós-pandêmico: políticas públicas abaladas, cidadania comprometida. In: CITELLI, Adilson. (org.). **Educomunicação no contexto pandêmico: desafios do ensino remoto**. Ilhéus: Editus, 2024. p. 151-163.

The MECOM researchers ground their initial analysis in more than two dozen violent attacks that took place in Brazilian schools between 2022 and 2023. They emphasize that the repercussions of these episodes have fueled initiatives aligned with the far right, representing a step backward from the perspective of education. Among them are three bills presented in the National Congress: Bill No. 1,642/2023, which proposes granting public school<sup>28</sup> teachers the right to carry firearms; Bill No. 2,775/2022, which mandates “the compulsory presence of a security professional in schools”<sup>29</sup>; and Bill No. 1,338/2022, which seeks to introduce homeschooling<sup>30</sup>. The latter is based on the argument that, in a context of escalating violence and insecurity, physical presence is no longer indispensable to the processes of learning, citizenship, and socialization.

According to experts consulted during the investigation, digital networks, when combined with broader social disruptions—including the psychological disorders stemming from the health crisis—have played a decisive role in the increase of crimes committed in schools in recent years. The expanded use of these platforms—fueled by prolonged screen exposure, their heightened propensity to foster violent virtual environments, and the ease of access to extremist cultures—amplified by algorithms—stands out as a consequence of the absence of a regulatory system for big tech companies.

Platformization has also accentuated educational inequalities. While virtual learning environments and other digital technologies present pedagogical possibilities, they simultaneously reinforce social stratification, creating categories of students with unequal levels of access to resources, determined exclusively by market-driven criteria. As Morozov warns, “our relationships, our family lives, our vacations, and even our sleep are being converted into profitable assets by data-centric capitalism.”<sup>31</sup>

The book *Educomunicação no contexto pandêmico: desafios do ensino remoto* highlights the problems of infrastructure and the lack of support and training for educators during the pandemic period. It also exposes the harms produced by the platformization of human relations, with particular attention to the acceleration of social time, driven by the pervasive presence of communication devices across various spheres of life, including education.

The study underscores the urgent need to regulate the use and functioning of these technologies, with the aim of promoting inclusion and communicational citizenship. It stresses the importance of ensuring that political-pedagogical projects prioritize equity of access, so that digital tools are employed ethically and with respect for individuality. Furthermore, it calls for the expansion of debates on the limits of technology use and on the contribution of media education to the formation of autonomous individuals.

28 BRASIL. Câmara dos Deputados. **Projeto de Lei n.º 1.642, de 2023**. Law No. 10,826 of December 22, 2003, is amended to provide for the carrying of weapons by educators and school security guards. Brasília, DF: Câmara dos Deputados, 2023. Available at: <https://www.camara.leg.br/proposicoesWeb/fichadetramitacao/?idProposicao=2355063>. Accessed in: 26 Dec. 2024.

29 BRASIL. Senado Federal. **Projeto de Lei n.º 2.775, de 2022**. Amends Law No. 9,394 of December 20, 1996, which establishes the guidelines and bases for national education, to provide for the mandatory presence of a security professional in schools. Brasília, DF: Senado Federal, 2022. Available at: <https://www25.senado.leg.br/web/atividade/materias/-/materia/155106>. Accessed in: 26 Dec. 2024.

30 BRASIL. Senado Federal. **Projeto de Lei n.º 1.338, de 2022**. Amends Laws No. 9,394 of December 20, 1996 (Law of Guidelines and Bases of National Education), and No. 8,069 of July 13, 1990 (Statute of Children and Adolescents), to provide for the possibility of providing basic education at home. Brasília, DF: Senado Federal, 2022. Available at: <https://www25.senado.leg.br/web/atividade/materias/-/materia/153194>. Accessed in: 29 Dec. 2024.

31 GOMES; SILVA, *op. cit.*, p. 156.

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