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The background of the cover is a dark blue field filled with abstract, flowing lines in shades of orange, yellow, and light blue. These lines swirl and curve across the page, creating a sense of movement and complexity. Scattered throughout the background are numerous small, bright yellow dots, resembling stars or data points. In the center of the cover, there is a large, stylized illustration of a human brain. The brain is rendered in a light blue color and is outlined with thick, vibrant yellow lines that follow its contours and internal structures, making it the central focus of the design.

INTERNATIONAL JOURNAL OF EDUCATION AND RESEARCH

• ISSN 2764-9733 | DOI 10.5281/zenodo.15131644

Volume 1 - Number 1 - Year 2025

iJEResearch
**international journal of
education and research**

iJEResearch
Journal of Scientific Articles

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Frequency

Semester

Language

The Journal publishes articles in English only

Editor

Journal edited by the iiEP - Instituto Internacional de Educação e Pesquisa

Thirst: Av. Pastor Martin Luther King Júnior, 126 (Torre 2000 Sala 104) - Del Castilho

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STANDARDS FOR PUBLICATION IN THE IJER JOURNAL



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.15131085

TEACHER TRAINING FOR INCLUSIVE EDUCATION IN ELEMENTARY EDUCATION

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ABSTRACT

The aim of this study was to analyze teacher training for inclusive education in elementary school, investigating pedagogical practices, challenges faced, and the instruments that operationalize inclusion in the school environment. To this end, an observational approach was adopted through systematic classroom observations and document analysis, including internal guidelines and records that guide school practice. The results indicated that teacher training plays a decisive role in consolidating high-quality inclusive education, as there are gaps in both initial and continuing training, making it difficult to implement effective strategies to meet the needs of students with disabilities (PcDs). Insufficient adapted teaching resources, limited school infrastructure, and the absence of multidisciplinary teams offering technical support were also identified. In addition,

teacher workload overload and a lack of opportunities for sharing experiences negatively affected pedagogical practices. Despite these challenges, there are examples of teachers who, on their own initiative, develop adaptations and seek additional training. However, broader actions—such as strengthened public policies, regular training, and the presence of specialized professionals—are necessary to ensure the effectiveness of genuinely inclusive education at the elementary level.

Keywords: Inclusive education. Teacher training. Pedagogical practices. Public policies.

INTRODUCTION

Inclusive education has been widely debated as a fundamental right to ensure equity in access to education for all students, regardless of their physical, sensory, intellectual or emotional conditions. In particular, the inclusion of people with disabilities (PwDs) in the Brazilian education system has required a restructuring of pedagogical practices, public policies and teacher training. This approach requires a school environment that recognizes diversity as an enriching element and promotes strategies that ensure the full development of students (Santos; Paula; Fascina, 2020).

Among the determining factors for the success of inclusive education, teacher training stands out. Trained teachers who are aware of their role as learning mediators are essential to meet the specific demands of students with disabilities. However, there are still significant challenges in preparing teachers to implement inclusive pedagogical practices that meet the individual needs of these students, while also favoring coexistence with their peers (Felicetti; De Lourdes Batista, 2020; Rocha et al., 2022).

Brazilian legislation, such as the Brazilian Inclusion Law (Law No. 13,146/2015), reinforces the need for education that eliminates barriers and promotes conditions of equality. Despite this legal framework, practice often does not correspond to what is expected, mainly due to limitations in initial and continuing teacher training. Therefore, understanding how these professionals are being prepared for inclusion is necessary to identify gaps and propose improvements (Pimentel; Ribeiro, 2021).

The effectiveness of inclusive pedagogical practices is directly linked to the support offered to teachers, who often face difficulties in the classroom. These difficulties can range from a lack of material and human resources to the absence of clear guidelines for implementing effective inclusive education. Analyzing these aspects can provide an overview for improving the teaching and learning process (Poker; Martins; Giroto, 2021).

Therefore, it is important to explore the documents and policies that operationalize inclusive education in the context of elementary education. These instruments are essential to guide pedagogical practices and ensure that all students, especially those with disabilities, have the right to a quality and accessible education. In this sense, establishing an ongoing dialogue between theory and teaching practice contributes to the advancement of teacher training policies and the strengthening of inclusion in the school environment (Rocha et al., 2022).

The general objective of this study is to analyze the training of teachers for the inclusive education of students with disabilities in elementary education, focusing on their pedagogical practices, challenges faced and the instruments that operationalize inclusion in the school environment.

METHODOLOGY

The methodology adopted in this study consisted of an observational approach, carried out in the elementary school environment. The study was developed with a focus on analyzing

pedagogical practices and teacher training in the context of inclusive education for students with disabilities. During the process, systematic observations were carried out in the classrooms, with the aim of understanding the strategies used by teachers, as well as the challenges faced in the school routine. In addition, the data were complemented by documentary analysis, including the school's internal records and guidelines that operationalize inclusive education. This approach allowed a detailed survey of pedagogical practices and an assessment of the structural and methodological conditions that influence the teaching and learning process of students with disabilities.

RESULTS AND DISCUSSION

Teacher training plays a central role in the quality of education offered, especially in contexts that demand inclusive pedagogical practices. In elementary education, the presence of students with disabilities (PcDs) challenges educators to adapt their methodologies, promoting strategies that address the specific needs of these students. In this sense, the analysis of the training of teachers at the Padre Conrado Municipal School, in Guapó – GO, becomes essential to understand how pedagogical preparation contributes to the implementation of inclusive education.

The teacher training process for inclusion, as described by Senna, Santos and Lemos (2020), involves both initial and continuing education. Initial training, offered by higher education institutions, is responsible for providing the theoretical and practical basis necessary for the exercise of the profession. However, this training often does not sufficiently address the challenges of inclusive education, resulting in professionals who enter teaching without adequate preparation to meet the demands of students with disabilities.

Soares and Soares (2021) point out that continuing education, which should serve as a complement and constant update for teachers, faces resource and structure limitations. At the Padre Conrado Municipal School, this reality is

no different, and teachers report difficulties in accessing courses, lectures, and specific training for working with students with disabilities. This highlights the need for more robust public policies that promote continuing education opportunities aligned with the demands of inclusive education.

A relevant aspect is the teachers' perception of their own training. Many educators recognize that the preparation they received during their undergraduate studies was insufficient to deal with the situations encountered in school practice. In their words, there is a lack of greater emphasis on subjects that address inclusion, as well as on supervised internships that involve real experiences in classrooms with students with disabilities.

In everyday practice, teachers often use trial-and-error strategies, trying to adapt materials and activities in an intuitive way. Although these efforts are valuable, they also reflect the lack of systematic preparation for inclusion. At Escola Municipal Padre Conrado, it is observed that many teachers develop their own methodologies, but face significant barriers, such as a lack of technical support and adequate resources.

The lack of specialized pedagogical support is another factor that negatively impacts teaching practice. Although Brazilian legislation provides for the presence of support professionals to assist in the inclusion of students with disabilities, the practical implementation of this support is still limited. In the school analyzed, the lack of assistants and interpreters, as well as adapted materials, represents a constant obstacle for educators.

Another point to be highlighted is the need for coordination between the school and those responsible for the students. Teacher training should not be limited to the internal environment of the school, but should also consider the family and social context in which the students are inserted. At the Padre Conrado Municipal School, teachers recognize the importance of dialoguing with families to align strategies and expectations regarding the

educational process.

Structural challenges also interfere with teaching training and practice. School infrastructure is not always adequate to meet the demands of inclusive education. In the school in question, limitations were observed in the physical space, such as the lack of access ramps and adaptations in bathrooms, which hinders the mobility and autonomy of students with disabilities. These conditions end up overloading teachers, who have to compensate for these deficiencies through improvised solutions.

Regarding the documents that guide pedagogical practice, it was identified that the school uses guidelines based on federal and state legislation, but lacks specific instruments to meet the particularities of inclusion. This gap reinforces the importance of teacher training that not only understands the legislation, but also develops practical skills to apply these principles on a daily basis.

The continuing education programs offered by the municipality have proven insufficient to meet the complexity of inclusive education. Despite some specific initiatives, such as workshops and lectures, teachers report that these training opportunities are not recurrent and often do not cover the specificities of working with PwDs.

On the other hand, it was found that some teachers seek training alternatives on their own, using online courses and materials available on the internet. This initiative reflects the dedication of educators, but it also highlights the lack of more effective institutional support. This individual search, although commendable, can result in fragmented training that is not aligned with the real needs of the classroom.

One of the ways to improve teacher training is through partnerships with higher education institutions and specialized organizations. Through these partnerships, it would be possible to offer regular and contextualized training, covering everything from theoretical aspects to inclusive pedagogical practices. In addition, the exchange of experiences among

teachers could also be encouraged, creating spaces for discussion and mutual learning.

Therefore, teacher training, although representing advances in the educational context, still presents significant gaps that need to be filled in order to meet the demands of quality inclusive education. The analysis carried out highlights the need for structured actions that articulate initial and ongoing training and pedagogical support, contributing to the construction of a more inclusive and equitable school environment.

Pedagogical practices used in the teaching and learning process for students with disabilities

Inclusive pedagogical practices aim to ensure that all students, including those with disabilities, actively participate in the teaching and learning process. In elementary education, these practices take on an even more important role, as it is at this stage that the foundations of knowledge and socialization are consolidated. To meet the needs of students with disabilities, teachers must develop adaptive strategies that respect the particularities of each student.

One of the most common practices is personalized teaching, which seeks to adapt content, activities, and assessments according to students' abilities and limitations (Souza et al., 2020). In an inclusive classroom, pedagogical differentiation allows each student to progress at their own pace, ensuring the assimilation of the proposed content (Abdalla; Almeida, 2020). This requires the teacher to constantly analyze the individual characteristics of each student.

The use of adapted materials is another essential strategy in inclusive education. For students with visual impairments, for example, materials in Braille or with audio resources are essential. For students with hearing impairments, the use of sign language interpreters and visual resources, such as subtitled videos, can facilitate learning. In the context of the Padre Conrado Municipal School, it was found that the adaptation of materials is done to a limited extent, usually at the initiative

of the teacher himself.

Technology has proven to be an important ally in inclusive pedagogical practices. Digital tools, such as educational applications and communication software, help overcome barriers to accessing knowledge (Bulcão; Silva and Alves, 2022). In the school analyzed, teachers reported difficulties in implementing these tools due to the lack of technological infrastructure and specific training in the use of these resources.

Another frequently used pedagogical resource is collaborative group work, which promotes interaction between students with and without disabilities. This approach encourages the exchange of experiences, empathy and the creation of a more welcoming environment. However, for this practice to be effective, the teacher must be able to mediate conflicts and encourage the participation of all group members.

The organization of the learning environment is also a fundamental practice in the inclusive process (Nogueira; Antunes and Menezes, 2022). Adapted classrooms, with large and accessible spaces, help students with disabilities develop their autonomy. However, the Padre Conrado Municipal School faces challenges in this regard, such as the lack of appropriate furniture and the lack of physical adaptations for students with reduced mobility.

Active teaching methods, such as games, role-plays and hands-on activities, have proven effective in inclusive education. These approaches allow students to engage directly with the content, making learning more meaningful. In the case of students with disabilities, these practices can be adapted to meet their specific needs, using tactile, visual or auditory resources.

Formative assessment is another relevant pedagogical practice in the context of inclusion. This type of assessment, which prioritizes continuous monitoring of student development, allows teachers to identify difficulties and propose specific interventions (Felicetti ; Batista, 2020). In the school studied, teachers

highlighted the importance of this approach, but reported the difficulty of balancing the demands of standardized assessments with the flexibility needed for students with disabilities.

The pedagogical plans at the school analyzed show efforts to include students with disabilities in the educational process, but also reveal gaps. Many teachers face difficulties in developing adapted activities due to the lack of guidance and technical support. This reflects the need for greater coordination between the school team and support professionals.

Partnerships with families are another element in the success of inclusive teaching practices. Santos, Paula and Fascina (2020) highlight that when there is an open dialogue between school and family, teachers are able to better understand students' needs and align strategies for their development. However, at Escola Municipal Padre Conrado, teachers reported challenges in engaging some families, whether due to cultural issues or the lack of time of those responsible.

The development of extracurricular projects has proven effective in promoting inclusion. Activities such as workshops, cultural fairs and inclusive sports provide opportunities for students with disabilities to explore their potential and integrate into the school community. These initiatives, although positive, are still infrequent in the school analyzed, due to the limited resources and professionals available.

Continuous teacher training plays an important role in implementing inclusive pedagogical practices. However, the lack of regular training specifically focused on inclusion is an obstacle faced by school teachers. This lack is reflected in the difficulty of planning and implementing adapted pedagogical strategies in a systematic manner.

Collaboration between teachers is a practice that can enrich the inclusive teaching process. Through the exchange of experiences and teamwork, educators can develop creative solutions to the challenges they encounter. Despite this, in the school analyzed, moments of

interaction between teachers are limited, due to the overload of tasks and the lack of spaces for exchanging ideas.

Support from specialists, such as psychopedagogues, occupational therapists, and speech therapists, is essential to complement inclusive pedagogical practices (Senna; Santos and Lemos, 2020). These professionals can provide specific guidance to teachers and monitor the development of students with disabilities. In the school studied, the absence of a multidisciplinary team makes it difficult to implement more specific and effective interventions.

Another relevant aspect is the need to raise awareness in the school community about inclusion issues. Promoting campaigns, lectures and training for everyone involved in the educational environment can contribute to building an inclusive culture. Despite some specific actions, this work is not yet developed systematically at the Padre Conrado Municipal School.

The challenges faced by teachers reflect a broader scenario of disconnection between public policies and school reality (Soares; Soares, 2021). Although there are national guidelines that guide inclusion, their effective implementation depends on resources, training and technical support, factors that are still insufficient in the context of the school analyzed.

Inclusive pedagogical practices must be understood as a process in constant construction, which requires coordinated efforts between teachers, families, administrators and the community. Despite the limitations observed, the teachers at Escola Municipal Padre Conrado demonstrate commitment to providing a more inclusive environment for their students.

It was noted that for inclusive pedagogical practices to be fully effective, it is essential to invest in teacher training, school infrastructure, pedagogical resources and technical support. Only with integrated actions will it be possible to guarantee quality education for all students,

respecting their differences and promoting their full development.

Difficulties faced by teachers in the classroom with people with disabilities

Inclusion is not just about opening the classroom doors; it is about transforming the educational space into an environment where everyone can learn and grow, regardless of their particularities (Balcão; Silva; Alves, 2022). However, when looking at the daily lives of elementary school teachers, especially those who work with students with disabilities (PwDs), the ideal of inclusion often comes up against the reality of a series of challenges. This study, through an observational approach, sought to shed light on these difficulties, revealing how teachers face structural, pedagogical, and emotional barriers in their daily practice.

Among the first points observed, the gap in initial teacher training stands out. Although educators arrive in the classroom with a solid theoretical basis, the specific preparation to deal with the demands of inclusive education often proves insufficient. During the observations, it became clear that many teachers need to learn "by doing", adapting intuitively to the needs of students with disabilities.

Continuing education, which could fill these gaps, also faces significant challenges. Training focused on inclusion is rare and, when it does occur, it is usually generic in nature, without addressing the specificities of inclusive education. This absence was widely perceived during the analyses, directly impacting teachers' confidence in applying adapted pedagogical strategies.

Teaching resources, or the lack thereof, constitute another barrier to the inclusive teaching process. During the observations, it was identified that materials such as Braille books, tactile resources and assistive technologies are scarce or non-existent. In some cases, teachers themselves create adaptations with the available materials, demonstrating creativity, but facing clear limitations that

compromise the effectiveness of the educational process.

The physical conditions of the school also represent a challenge (Nogueira; Antunes; De Menezes, 2022). The infrastructure observed lacked fundamental adaptations, such as access ramps, adapted bathrooms, and spaces suitable for students with reduced mobility. These limitations not only impact students with disabilities, but also overburden teachers, who often have to improvise solutions to ensure inclusion.

Teachers' work overload was a recurring theme in the observations. In addition to meeting the specific needs of students with disabilities, teachers deal with large classes, bureaucratic demands, and tight deadlines. This excessive workload limits the time available for planning and implementing inclusive pedagogical practices, generating a cycle of emotional and professional exhaustion.

The lack of multidisciplinary teams in schools was another critical point identified. Support from psychopedagogues, sign language interpreters, occupational therapists and other specialized professionals is essential to complement the work of teachers, but this support is rarely available (Abdalla; Almeida, 2020). This leaves teachers alone to face challenges that require specific technical knowledge.

The relationship between the school and the families of students with disabilities has proven to be both challenging and promising. During the observations, it was found that, although some teachers are able to establish productive partnerships with those responsible, in other cases there is a lack of engagement from families, which makes it difficult to monitor and support students' learning.

Another critical point observed was the pressure exerted by standardized assessments. These assessments often do not take into account the particularities of PwD students, requiring teachers to make an additional effort to adapt them, without there being clear guidelines or resources to do so. This scenario

generates a feeling of inadequacy and frustration among teachers.

Teachers face significant emotional challenges. During the study, it was evident that the lack of institutional support and high workloads result in feelings of exhaustion, anxiety and, in some cases, demotivation. These factors directly affect the quality of teaching and the well-being of educators.

Subtle but still present prejudice within the school community was also identified. Teachers reported that, on some occasions, they faced resistance from colleagues or other students regarding the inclusion of PwDs. This reinforces the need to raise awareness and educate the entire school community about the importance of inclusion.

The difficulties are not limited to the classroom environment. Document analysis revealed that the school's guidelines for inclusion are not very specific, relying only on general guidelines provided by law. This lack of direction leaves teachers without a clear framework to guide their practices.

Despite all these barriers, many teachers demonstrated an admirable commitment to inclusion. Even in the face of difficulties, it was possible to observe continuous efforts to adapt materials, seek new strategies and, above all, welcome students with disabilities. These reports demonstrate the resilience of educators, but also reinforce the need for institutional support to enhance their initiatives.

The exchange of experiences among teachers could be a powerful tool to overcome some challenges. However, it was observed that the school routine, marked by tight schedules and overload of tasks, limits the opportunities for collaboration among teachers. This restricts the possibility of building more effective pedagogical practices through collective learning.

The challenges observed are not insurmountable, but they require coordinated actions that involve investment in teacher training, improvements in infrastructure, provision of teaching resources and

strengthening of specialized support. The transformation of the inclusive educational reality depends on a systemic approach that values teachers and provides the necessary conditions for them to fully perform their role.

Addressing teachers' challenges is essential to ensuring the success of inclusive education. This study highlighted not only the barriers faced, but also the potential for change, provided that public policies and institutional actions are implemented consistently and aligned with the demands of pedagogical practice.

Therefore, understanding and overcoming the difficulties in inclusive education is a fundamental step towards building a more equitable school environment, where all students, regardless of their characteristics, can achieve full educational development.

Documents that operationalize inclusive education

Inclusive education in Brazil is supported by a set of legal and regulatory documents that guide and support pedagogical practices aimed at students with disabilities. These instruments are essential to ensure the effectiveness of inclusion in the school environment, providing clear guidelines for the actions of teachers, administrators and other education professionals.

According to Santos, Paula and Fascina (2020), the development of policies and documents that promote inclusion constitutes a permanent and fundamental articulation for the consolidation of a truly equitable educational proposal. However, the applicability of these documents depends directly on how they are operationalized in the school routine (Felicetti; Batista, 2020).

The 1988 Federal Constitution is the starting point for understanding educational rights in Brazil. In its article 205, education is defined as a right of all and a duty of the State and the family, and should be promoted with a view to equal conditions for access to and permanence

in school. In the context of inclusion, the Constitution establishes the basis for students with disabilities to be served equitably. According to Abdalla and Almeida (2020), this constitutional support reflects a broader trend in Latin America to recognize inclusive education as a fundamental right.

Another important milestone is the Law of Guidelines and Bases for National Education (LDB), Law No. 9,394/1996, which establishes the general principles for the functioning of the Brazilian education system. The LDB provides, in its article 58, for the provision of specialized educational services to students with disabilities, preferably in the regular education system. This service should complement or supplement regular education, ensuring the inclusion of these students in the school environment. According to Senna, Santos and Lemos (2020), the LDB serves as a basis for the implementation of several policies that aim to build an inclusive and participatory education.

The National Policy on Special Education from the Perspective of Inclusive Education, published in 2008, is one of the most comprehensive documents on the subject. It reinforces the need to eliminate barriers to learning and participation of students with disabilities, proposing the reorganization of the educational system to meet the specific needs of each student.

According to Soares and Soares (2021), initial teacher training still has gaps in dealing with these specificities, a fact that highlights the importance of this policy in directing actions aimed at preparing educators. The policy also emphasizes teacher training and the provision of pedagogical resources as central elements for inclusion (Rocha et al., 2022).

Another relevant regulatory instrument is the National Education Plan (PNE), established by Law No. 13,005/2014, which establishes goals and strategies for Brazilian education in the period from 2014 to 2024. The PNE pays special attention to inclusion, with specific goals aimed at expanding access of students with disabilities to regular schools and

continuing education for teachers to provide specialized services. According to Pimentel and Ribeiro (2021), the effectiveness of these goals depends on constant investment in training programs and coordination between the different levels of government.

The Brazilian Inclusion Law (LBI), or Statute of Persons with Disabilities, Law No. 13,146/2015, is another central document for the operationalization of inclusive education. The LBI reaffirms the right to education for all persons with disabilities, ensuring that schools offer adequate accessibility conditions, make available pedagogical and technological resources, and promote the training of teachers to work in this context (Poker; Martins; Giroto, 2021). Thus, the legislation lays solid foundations for the education system to be structured in a way that welcomes diversity.

Within the scope of the school analyzed in this study, internal documents, such as the Political-Pedagogical Project (PPP), play an essential role in implementing legal guidelines. The PPP is the instrument that organizes and guides the school's pedagogical actions and should include specific strategies for inclusive education. However, according to Bulcão, Silva and Alves (2022), inclusive guidelines often fail to be implemented due to a lack of clarity in planning and investment in ongoing training, which are important elements to ensure consistent implementation.

The operationalization of documents also depends on the articulation between public policies and the resources made available to schools. During the documentary analysis of this study, it was observed that the lack of investment in infrastructure, adapted materials, and teacher training compromises the application of the principles established in the normative documents. This gap directly reflects on the school routine, making it difficult to achieve inclusive goals. As Santos, Paula, and Fascina (2020) point out, the lack of resources and professional preparation constitute barriers that prevent an effective inclusion policy.

Another relevant aspect is the lack of clarity

and uniformity in the interpretation of documents by managers and teachers. Many educators reported feeling insecure about their responsibilities and legal limitations in serving students with disabilities. This difficulty in understanding and applying the documents reinforces the importance of awareness-raising actions and ongoing training (Felicetti; Batista, 2020). Without the necessary foundation, inclusive practices end up becoming fragmented and inconsistent.

Education Boards, both at the state and municipal levels, also play a significant role in regulating and monitoring inclusive practices. They are responsible for creating additional standards and ensuring that schools comply with legal provisions. However, limited interaction between the Education Board and school teams weakens the monitoring of inclusive practices (Rocha et al., 2022), demonstrating that the effectiveness of legal documents depends largely on their appropriation and systematic application in the educational environment.

The evaluation and monitoring of inclusive pedagogical practices are also influenced by regulatory documents. Instruments such as the School Census and education quality indicators are used to measure progress in implementing inclusion. However, the analysis of this study indicates that, in the school analyzed, inclusion indicators are not yet fully incorporated into strategic planning.

Another challenge identified is the compatibility of legal standards with the specificities of each school context. Although the documents provide general guidelines, their application needs to be adapted to the reality of each school. In the case of the school analyzed, the lack of detailed practical guidelines limits the effectiveness of inclusion in everyday life.

The National Curricular Guidelines for Basic Education also contribute to the implementation of inclusion. They establish parameters for the organization of school curricula, highlighting the importance of adapting content and teaching methods to the needs of students with

disabilities. However, the lack of specific materials and training for teachers makes it difficult to apply these guidelines in practice.

The implementation of documents that guide inclusive education requires not only the existence of legal standards, but also integration between public policies, school administrators, teachers and families. This coordination is essential to transform legal principles into concrete practices that guarantee the right to education for all students.

The analysis of the normative documents and their implementation in the school analyzed highlights both the advances and the gaps in the inclusion process. Overcoming these challenges requires coordinated efforts to strengthen teacher training, improve school infrastructure and promote continuous dialogue between the different actors involved in the educational process.

CONCLUSION

The analysis conducted in this study revealed that, despite legislative advances and guidelines that support inclusive education in Brazil, teacher training still faces significant challenges in aligning with the practical demands of everyday school life. Teachers, who play a central role in this process, often face gaps in their initial and ongoing training, which compromises the implementation of effective and inclusive pedagogical strategies.

Structural conditions and the lack of specific pedagogical resources make it difficult to develop practices that meet the needs of students with disabilities. Teachers' workload, lack of specialized support, and lack of coordination between the different stakeholders in the educational process – including families and school administrators – reinforce the barriers to inclusion. This reality highlights the urgent need for investments directed not only at infrastructure, but also at strengthening teaching skills.

Based on the observations and documentary analyses carried out, it was possible to identify

that, although there are isolated efforts at adaptation and innovation on the part of teachers, these are insufficient without the necessary institutional support. More robust public policies, regular and targeted training, and the presence of multidisciplinary teams in schools are essential measures to overcome the challenges faced and ensure effective inclusion.

Therefore, the study concludes that inclusive education, to be consolidated as a fully accessible right, requires an integrated approach that values and empowers teachers, promotes cooperation between the different agents involved and ensures the necessary resources for its operationalization.

Only in this way will it be possible to transform the school into a truly equitable environment, where each student, regardless of their conditions, can reach their full potential.

REFERENCES

- ABDALLA, Maria de Fátima Barbosa; ALMEIDA, Patrícia Cristina Albieri. Teacher Training in Brazil and Latin America from the Perspective of Inclusive Education. **Journal of Training in Movement**, v. 2, n. 4, p. 575-596, 2020. Available at: <https://cdn1.unasp.br/mestrado/educacao/2021/04/28102148/POLITICAS-DE-FORMACAO-DE-PROFESSORES-NA-AMERICA-LATINA.pdf>. Accessed on January 2, 2025.
- BULCÃO, Aline; SILVA, Fabrícia Gomes; ALVES, Katya Elyzabeth Charapa. Continuing education: concepts and practices for inclusive education in Elementary School I. **Teaching in Perspectives**, v. 3, n. 1, p. 1-11, 2022. Available at: <https://revistas.uece.br/index.php/ensinoemperspectivas/article/view/8870>. Accessed on December 17, 2024.
- FELICETTI, Suelen Aparecida; DE LOURDES BATISTA, Irinéa. Teacher training for inclusive education of students with disabilities based on literature. **Teacher Training–Brazilian Journal of Research on**

Teacher Training , v. 12, n. 24, p. 165-180, 2020. Available at: <https://revformacaodocente.com.br/index.php/rbpf/article/view/312> . Accessed on December 17, 2024.

NOGUEIRA, Clélia Maria Ignatius; ANTUNES, Franciele Cristina Agostineto; DE MENEZES, Marcus Bessa. Theories of Mathematics Didactics and Inclusive Education in teacher training: a possible articulation. **Com a Palavra, o Professor**, v. 7, n. 17, p. 99-119, 2022. Available at: http://revista.geem.mat.br/index.php/_CPP/article/view/785 . Accessed on December 14, 2024.

PIMENTEL, Susana Couto; RIBEIRO, Solange Lucas. Teacher training policy for inclusive education: reflections based on the national education plan. **Educational Scenes** , v. 4, p. e11763-e11763, 2021. Available at: <https://www.revistas.uneb.br/index.php/cenaseducacionais/article/view/11763> . Accessed on December 17, 2024.

POKER, Rosimar Bortolini; MARTINS, Sandra Eli Sartoreto ; GIROTO, Claudia Regina Mosca (Ed.). **Inclusive education: focusing on teacher training** . Oficina Universitária Publishing House, 2021. Available at: [https://books.google.com.br/books?hl=pt-BR&lr=&id=0Qo3EAAQBAJ&oi=fnd&pg=PA7&dq=POKER,+Rosimar+Bortolini%3B+MARTINS,+Sandra+Eli+Sartoreto%3B+GIROTO,+Claudia+Regina+Mosca+\(Ed.\).+Inclusive+education:+in+focus+on+the+training+of+teachers.+Publishing+Oficina+Universit%C3%A1ria,+2021.&ots=NvgPgwVkb8&sig=eHpdHkPsR3XU95WLR7-HTZUdx](https://books.google.com.br/books?hl=pt-BR&lr=&id=0Qo3EAAQBAJ&oi=fnd&pg=PA7&dq=POKER,+Rosimar+Bortolini%3B+MARTINS,+Sandra+Eli+Sartoreto%3B+GIROTO,+Claudia+Regina+Mosca+(Ed.).+Inclusive+education:+in+focus+on+the+training+of+teachers.+Publishing+Oficina+Universit%C3%A1ria,+2021.&ots=NvgPgwVkb8&sig=eHpdHkPsR3XU95WLR7-HTZUdx) . Accessed on December 13, 2024.

ROCHA, Leonor Paniago et al. Teacher training for the school inclusion of students

with disabilities. **Conjecturas** , v. 22, n. 3, p. 195-212, 2022. Available at: <https://scholar.archive.org/work/kteigbt4wrbsvicuiu6qan2mo4/access/wayback/https://conjecturas.org/index.php/edicoes/article/download/700/547> . Accessed on Dec. 15, 2024.

SANTOS, Marcos Antonio ; PAULA, Ercília Maria Angeli Teixeira; FASCINA, Diego Luiz Miiller . Dialogues on inclusive education, public policies and teacher training: an existing, permanent and fundamental articulation. **Educação Online** , v. 15, n. 34, p. 177-188, 2020. Available at: <http://educacaoonline.edu.puc-rio.br/index.php/eduonline/article/view/701> . Accessed on December 13, 2024.

SENNA, Manoella; SANTOS, Mônica Pereira; LEMOS, Lidianne Moraes Buechen . The participation of society and the case of the National Policy for Special Education from the Perspective of Inclusive Education: reflecting on teacher training. **RevistAleph** , n. 34, 2020. Available at: https://www.researchgate.net/profile/Monica-Santos-7/publication/343400027_A_PARTICIPACAO_DA_SOCIEDADE_E_O_CASO_DA_POLITICA_NACIONAL_DE_EDUCACAO_ESPECIAL_NA_PERSPECTIVA_DA_EDUCACAO_INCLUSIVA_REFLETINDO SOBRE_A_FORMACAO_DE_PROFESSORES_PARTICIPATION_OF_THE_CIVIL_SOCIETY_AND_TH/links/6091c0aa92851c490fb6f70c/A-PARTICIPACAO-DA-SOCIETY-AND-THE-CASE-OF-NATIONAL-POLICY-OF-SPECIAL-EDUCATION-IN-THE-PERSPECTIVE-OF-INCLUSIVE-EDUCATION-REFLECTING-ABOUT-THE-TRAINING-OF-TEACHERS-PARTICIPATION-OF-THE-CIVIL-SOCIETY-AND-TH.pdf . Accessed on 12 Dec. 2024

SOARES, Vitória; SOARES, Natalia. Initial teacher training x inclusive education:

challenges and possibilities. **Research in Science Teaching** , v. 26, n. 2, 2021. Available at: <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=15189384&AN=152270336&h=YOVOCiNFPcF9rTmF8XzblZpff3SfB1%2FuCvs%2F2TetuJ3FoKxIXluzKn6QLSARMwVaC34Q3t9jwwQ8X6eVY6YM1Q%3D%3D&crl=c> . Accessed on December 15, 2024.

SOUZA, Alex Fernandes; MENDES, Lucinéia Da Silva Sousa; GOMES, Marcilene Cristina. Flipped classroom: a bibliometric analysis based on articles published in Scopus. In: **11th CONGRESS OF SCIENTIFIC AND TECHNOLOGICAL INITIATION OF IFSP** . 2020. Available at: https://www.researchgate.net/publication/356377484_SALA_DE_AULA_INVERTIDA_UMA_ANALISE_BIBLIOMETRICA_COM_BASE_NOS_ARTIGOS_PUBLICADOS_NO_SCOPUS . Accessed on December 12, 2024.



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.15131125

MUNICIPAL EDUCATION COUNCIL (CME): CHALLENGES AND REFLECTIONS ON POPULAR PARTICIPATION IN THE CITY OF MAUÁ-SP

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ABSTRACT

This article is based on a qualitative study, supported by bibliographic and documentary research on the Municipal Education Council (CME) of the municipality of Mauá-SP and its contribution to the public authorities in decision-making in the educational sphere. The objective is to discuss aspects of the constitution and functioning of the Municipal Education Council (CME) of the municipality of Mauá-SP, a city that is part of the ABC region of São Paulo, metropolitan region of São Paulo-SP, and its role in municipal decisions about public education, as an important collegiate body, representing the democratization of educational management. The emphasis of the study is on the challenges faced by the CME of Mauá-SP in breaking the formal structure of collegiate bodies and expanding popular participation in decision-making together with the public authorities. Results: the city, like other Brazilian municipalities, faces the challenge of expanding the participation of popular segments in the elaboration of public educational policies and planning of goals that allow qualifying municipal educational systems. Democratic management, even though decreed in official documents, is still not effectively experienced in the municipality of Mauá-SP, as it is observed that civil participation happens in a timid way and needs to be continually encouraged by the Public Authorities.

Keywords: Municipal Education Council; Education; Democratic Management.

INTRODUCTION

This article analyzes the performance of the Municipal Education Council (CME) of Mauá-SP and its contribution to the democratic management of local education. The CME, established by Law No. 2,784/1997, performs normative, consultative, deliberative and supervisory functions, representing civil society in the formulation of educational policies. However, effective popular participation is still a challenge, demanding greater community involvement in decision-making (MAUÁ, 2024).

The 1988 Federal Constitution consolidated education as a social right, reinforcing the need for participatory management (BRASIL, CF, 1998). Despite the advances, it is observed that democratic management does not always translate into effective practice, as citizen participation still occurs in a limited manner. Saviani (2013) argues that social citizenship, which includes the right to education, is essential for human and social development.

The history of the democratization of education in Brazil shows the importance of social movements in the achievement of rights. Cury (2008) highlights that basic education as a subjective public right must guarantee universal access and quality of education. However, the centralization of power and the lack of critical mobilization of society still hinder the realization of this right.

The Mauá CME faces the challenge of expanding the participation of different social segments in the formulation of educational policies. The lack of knowledge about the council's function and the low participation of the population reflect the need for more effective strategies to involve civil society (FARIAS; VIEIRA, 2022). Consolidating a strong council requires a joint effort between managers, educators, and citizens.

The democratization of education requires effective social participation in collegiate bodies. For this to become a reality, it is essential that there be greater transparency in the actions of the CME, as well as incentives for

different social groups to actively engage in decision-making, strengthening the collective commitment to educational quality.

Thus, this study seeks to discuss the challenges and possibilities for improving participatory educational management in Mauá-SP, highlighting the importance of education as an instrument of citizenship and social transformation. Reflection on the role of the CME can contribute to strengthening the democratic management of municipal education, ensuring greater engagement of society in the planning and implementation of more inclusive and effective educational policies.

The municipal council of education of Mauá - SP: Structure, functions and challenges

The construction of scientific knowledge about the Municipal Education Council (CME) of the city of Mauá-SP requires a methodological approach that includes both the review of existing literature and the documentary analysis of regulations and official records. In order to understand the challenges and possibilities of popular participation in this area, a qualitative study was chosen, which allows an in-depth investigation of the dynamics that permeate participatory educational management in the municipality.

This chapter presents the paths taken in the research, justifying the theoretical and methodological choices adopted. To this end, aspects related to data collection techniques, the documentary sources analyzed and the criteria used in the selection and interpretation of the information obtained will be addressed. The qualitative approach is justified by the desire to understand the perceptions, experiences and impacts of democratic management in municipal education, from a critical and reflective perspective.

Data about the city were collected from municipal publications on the website of the city hall and the IBGE. The municipality of Mauá-SP is part of the ABCDMRR Region

(Santo André, São Bernardo do Campo, São Caetano do Sul, Diadema, Ribeirão Pires and Rio Grande da Serra, borders Ferraz de Vasconcellos to the northeast, São Paulo to the north, Santo André to the west, Ribeirão Pires to the east and south, with an area of 61,937km², population of 418,261 (2022), population density 6,753.01 inhab./km² (2022) and schooling according to IBGE data from 2010 is 97.4% (IBGE, 2024).

The municipality has a wide social, cultural and natural diversity, with 13 km² of spring areas, within the 61 km² of territorial extension, it is about 70 km from the Port of Santos, holds the 11th position among the largest cities in the State, however it is the 10th poorest in budget per capita. The Human Development Index (HDI) is 0.781, ranking second to last among the cities that make up the ABCDMRR (MAUÁ, 2024).

The municipality grew in a disorderly manner between the 1960s and 1980s, without adequate planning on the part of the public authorities, so the low-income population began to occupy peripheral areas, in areas of risk and environmental protection, on hillsides and on the banks of streams and rivers, according to data available on the city hall website, more than 78 subdivisions were installed (MAUÁ, 2024).

The city has 36 municipal schools and 61 state schools, a College of Technology (FATEC), a private college and a distance learning campus, 21 health units, 3 emergency care units, 3 private hospitals and only 1 public hospital. The city has 5 Social Assistance Reference Centers (CRAS), 1 Specialized Social Assistance Reference Center (CREAS) and 5 Socio-Educational Action Centers, aimed at families at social risk. A total of 12 thousand families benefit from the Bolsa Família Program. Mauá is recognized for two important centers of economic development: the Capuava Petrochemical Complex and the Sertãozinho Industrial Complex, with large companies and a prominent position in the industrial scenario (MAUÁ, 2024).

After selecting and organizing the data collected, content analysis was performed with the aim of describing the city and the organization of the CME. Then, the articles found on the web were organized to compose the discussion on the challenges and possibilities of social participation in decision-making regarding the educational organization of the municipality of Mauá. The study was organized into a summary, introduction, material and methods, and presentation and discussion of the results, finally bringing the conclusion about the research.

Analysis of the impacts and prospects of popular participation in CME, Mauá - SP

Initially, it is necessary to understand the definition and characterization of the councils through their regulations, describing how the rules are approved and how the electoral process for the inauguration of the electoral councilor takes place. The CME is relevant because it establishes an order in municipal education, defines rights and duties, and enables the participation of civil society in decision-making in actions involving the educational sphere of each municipality. It is linked to the Municipal Department of Education (SME), acting to advise the Municipal Executive in both the formulation and implementation and evaluation of public policies in the educational sphere.

The CME's role consists of developing complementary standards to the national and state Education guidelines, issuing opinions regarding the current interpretation and proposing solutions and approaches to the issues that underpin the educational system of each municipality (SÃO PAULO, 2024). In this way, councilors need to qualify themselves in the face of the various variables that arise from their work.

Every four years the municipal government is changed, in the years of acting as a councilor, it was possible to observe that the issue of quality in education was strongly present in the

speeches, thus bringing the council's actions closer to the neoliberal conception of State, Power and Politics, as Nez (2022) points out in his study in the educational field, the problems consist of associating “education and quality” and the different visions of each conception, which in practice generate different projects from one government to another that generate conflicts and setbacks and cites Nagel (2001):

The State is the vital energy that sustains the system, originating from the social relationship itself that supports it and offers the justification for its existence. By expressing the organization of society, its social practices capture and expose the transformations that occur in work. In addition, it enables the legitimacy of economic relations, commanding a harmonization between the diverse interests of different classes (NAGEL, 2001 apud NEZ, 2022).

Popular participation in decision-making still occurs in a subtle way in municipal public policies. The selection process is a peer-to-peer vote, and after the appointment, work begins with the CME. Council members carry out ongoing studies and research to implement changes in the municipality of Mauá that are in line with the legislation and that meet the diversity of the city's population. Each term in office restarts projects that should emphasize the “redistribution of social benefits” (NEZ, 2018), as the socioeconomic inequality of the city's population is moving towards more inclusive and egalitarian education.

The Council performs normative, consultative and propositional functions, as well as being responsible for developing and monitoring the goals contained in the Municipal Education Plan - PME. It is necessary to emphasize here the relevance of the creation of the CME for the democratic participation of civil society in the educational direction of each municipality and to enable everyone to have access to this democratic tool for social participation in the development of public policies.

The CME differs from other Popular Councils, it is institutional, which are collegiate bodies that do not require regulation by public

authorities and act directly with the community, organizing itself autonomously, the CME has its own legislation and a set of specificities linked to its own sphere of action and attributions.

Regarding their organization, the Councils can be consultative, deliberative or participatory: the consultative, as the name itself highlights, has an opinion-giving nature, and is therefore heard by the government, however, they may or may not act in accordance with the proposals; the deliberative acts in partnership with the government and demands broad and organized participation of members of civil society and public authorities, as it acts directly in the formulation and implementation of public authority actions and the Participatory Council has the function of monitoring public actions and spending and acts by suggesting actions and public policies, exercising and fostering social control in a broad and participatory way (SÃO PAULO, 2025).

The municipality of Mauá-SP, a city that is part of the ABC region of São Paulo, metropolitan region of São Paulo-SP, has the CME regulated in municipal legislation through Law No. 2,784, of November 24, 1997, signed by Mayor Oswaldo Dias, which creates the Municipal Education Council, thus beginning the challenge of fostering social participation in decisions about education in the city.

Since then, the city of Mauá has been mobilizing civil society to participate and expand knowledge about new forms of participatory educational management, based on Law No. 5,683, which approves the Municipal Education Plan, institutionalizing participation in decision-making and restructuring the Municipal Council for Monitoring and Social Control of the Fund for the Maintenance and Development of Basic Education for Education Professionals (FUNDEB) (MAUÁ, Law No. 5,719/2011), in accordance with Federal Law 14,113 of 2020.

Still on the aforementioned legislation, the role of the CME is set out in the Organic Law of the municipality of Mauá, in articles 180, 184, 185, 187, 188, 189 and 243 of the State

Constitution. It is a consultative, normative, deliberative and supervisory body (Art. 2) whose objectives are:

- I - Present diagnoses and define priorities to, together with the Executive Branch, prepare the Municipal Education Plan, which should include elementary and secondary education, regular and supplementary, early childhood education, education for work and special education at different levels;
- II - To reconcile federal, state and municipal, public, autonomous and private actions in the area of education and teaching;
- III - Compatibilize educational actions with other areas;
- IV - Monitor and supervise the municipality's budget execution;
- V - Make a diagnosis and propose a general policy to combat illiteracy;
- VI - Promote debate with society in order to allow the school to continually renew itself;
- VII - The CME will have as its basic objective to expand the political space for discussion on education and citizenship, contributing to improving the quality of educational services. (MAUÁ, Law No. 2,784/1997).

CME members need to know the objectives of their work in order to participate effectively and critically, considering that educational institutions are living and dynamic organisms and as such must be characterized by a network of relationships between all the elements that interfere in it directly or indirectly. Thus, counselors are expected to actively participate in meetings and assemblies, paying attention to the rules, guidelines, organizational structure, actions and procedures that ensure the rationalization of the use of human, material, financial and intellectual resources (LIBÂNEO et al., 2012).

It is important to highlight that the municipality of Mauá guarantees parity in the choice of representatives between government and society, thus enabling opinions from different perspectives and, effectively, exercising citizenship and respecting the democratization of access. According to art. 4, the organization of the CME, which must be made up of 16 (sixteen) members, elected by direct and universal vote, follows the guidelines

mentioned below:

- I - 4 (four) representatives of public authorities, 2 (two) from the Municipal executive and 2 (two) appointed by the Legislative;
- II - 4 (four) teachers from the municipality's education system, with professionals from the municipal, state and private networks being present;
- III - 2 (two) representatives of students from the municipality, 2 (two) parents of students, also from the municipality;
- IV - 4 (four) representatives of civil society entities, duly registered (MAUÁ, Law No. 2,784/1997).

The law also provides that each representative will have a substitute and that a Councilor who is absent four times in a row will lose his or her mandate, which lasts for two years, with reelection permitted only once. This is an unpaid position, but one of great public interest. Every two years, an Electoral Commission is established to be responsible for the election, by means of an ordinance, which can be found on the city hall website.

The CME meetings are held monthly, open to social participation, although they still occur timidly by the population. It has been possible to follow in recent decades the strengthening of the democratization of access to decisions related to education in the municipality, thus favoring the processes of exercising citizenship.

The close examination of the material researched in municipal records and in the literature review allowed us to verify that the population is unaware of the role of the CME and participation has been one of the challenges of management in fulfilling democratic management, which still comes up against the centralization of power, revealing the need to break down the barriers that prevent people from actively participating, as well as create mechanisms so that different social agents can participate in decisions regarding the educational policy of their city (FARIAS and VIEIRA, 2022).

It is worth noting that Brazil is a country with some of the greatest social inequalities on the planet, where until a few decades ago public

education was precarious. Since 1932, with the publication of the “Manifesto of the Pioneers of New Education”, secular, compulsory and free schools have been advocated, highlighting the urgency of restructuring the Brazilian education system. It was after the Federal Constitution of 1988 that popular participation was expanded, a historic moment of great achievements in guaranteeing rights, including education, an essential among fundamental human rights.

The moments that preceded the promulgation of the Federal Constitution of 1988 were marked by a broad political and social mobilization, it was a historic period after direct elections of the rulers in 1982, in which the broad campaign of “Direct Elections Now” managed to mobilize civil society, unions, political parties and was called by Ulysses Guimarães as “Citizen Constitution”, in which more than one hundred popular amendments containing 15 million signatures were presented (RODRIGUES, 2018).

This popular participation coincides with the end of the civil-military dictatorship, a time when the country was seeking a new form of intervention in decision-making regarding educational policies. Institutionalized channels organized into councils, committees, among others, were then created. However, as Cury (2006) highlights, a municipal education councilor has to play the role of “defender of citizenship” and this requires studies on the exercise of their function together, which implies knowing the legal and legal aspects that underpin participation and decision-making (CURY, 2006 apud (FARIAS and VIEIRA, 2022).

Cury (2008) and Saviani (2013) highlight the importance of the struggles and movements before the 1988 constitution, in which the divergence between the old and the new showed that a new democratic public sphere was needed both to combat dictatorial government power and to claim the various faces of democracy. In this context, new political subjects emerged in defense of different projects for the future, as they argued that Brazil could have a democratic organization and that democracy could coexist

with social justice, thus breaking with the political scenario in which the dictatorship was responsible for stealing the possibility of doing politics under different expressions and sharing privileges with society.

After redemocratization, education took a leap in quality, however, even though the right to education is guaranteed in laws, decrees and regulations in Brazil, there are discrepant inequalities and civil society is unaware of its rights and the forms of demand regarding the guarantee of access, permanence and quality preached in laws and statutes (RODRIGUES, 2018).

The relationship between law and education always needs to be revisited, as it is necessary to understand the historical and social relationships faced by societies. Thus, there is no linearity, but rather advances and setbacks, depending on the moment experienced. Thus, the right to education is not a finished process, as it is considered a dialectical and contradictory movement, which is in constant transformation (FLACH, 2009).

Understanding the different nuances of the historical and social moments of each period allows us to reflect in greater depth on the relevance of protecting social rights, thus allowing all subjects access to the minimum level of well-being possible according to the current standard of civilization (MARSHALL, 1967 apud SAVIANI, 2013).

Society considers schools to be the main way to universalize knowledge, as they are the ideal place to exercise citizenship, helping individuals to understand their rights and duties. As an educator, manager and municipal councilor, I have been able to see the efforts made in defense of different social movements, and today there is a significant set of norms and policies focused on the protection and promotion of human rights. However, we also live with “systematic violations, impunity, multiple forms of violence, social inequality, corruption, discrimination and weaknesses in the enforcement of rights” (CANDAU, 2012).

According to Cury (2008), the expression

“basic education” in the text of the Law of Guidelines and Bases of National Education (BRAZIL, LDBEN, 1996) is a new concept and a right, and it is also a form of organization of national education, which presents itself as a set of new realities brought about by the search for a public space. As a conceptual, generic and abstract principle, basic education helps to organize what is real on new bases and administers them through political action that aims to be democratic and fair.

In the study by Nez (2018), he defends education as a humanizing space, and highlights that “quality in education” needs to be in the sense of giving human beings the conditions to emancipate themselves and participate, as a democratic right. In the contemporary context, school is even more necessary, because in the face of technological transformations we are experiencing the moment called the “knowledge society”, or as Saviani (2013) highlights: “information society”, since knowledge implies the ability to understand the connections between phenomena and capture the meaning of everything that is present in the world, which goes against the circulation of information in fragmented forms, which do not allow access to knowledge capable of leading individuals to understand the situation in which they live.

In the contemporary scenario, education has been undergoing profound transformations, both in the federative spheres and in the pedagogical organization of school institutions. It is understood as a pillar of citizenship and its innovative character is due to the fact that it enables everyone the right to participate in decisions about educational policies, a right that was denied for centuries to Brazilians, however, despite the democratization of access, it is still a challenge.

The school still functions as a space intended for restricted schooling activities and cultural reproduction of the ruling class, as Santos (2019) warns, social exclusion reveals the multiple ways of depriving citizens of basic rights and is characterized by a complex and multifaceted process. As Flach (2009) states,

with mandatory education, historically only offered to the Brazilian elite, it is always a cause for concern for the ruling classes that do not defend a more democratic and fair management model.

Access to education is a crucial right, but it is not enough. It is necessary to take care of the content, methods, assessment, among others, since democratization requires democratic public policies in the economy, work, health and housing, and social security. Otherwise, equality of opportunities will come up against inequality of starting conditions, widely used by the new middle classes to continue to have both social and educational advantages, and municipal councilors need to be vigilant.

FINAL CONSIDERATIONS

The article on the study of the Municipal Education Council of Mauá-SP revealed the importance of the body in building a more democratic and participatory educational management. Throughout the research, it was found that, despite its relevance, there are still significant challenges to increasing the involvement of civil society in decisions about municipal education. The analysis allowed us to understand that the lack of knowledge of the population about the functioning and role of the CME directly impacts the effectiveness of its work, making it essential to implement strategies to strengthen social participation.

The organizational structure and responsibilities of the CME demonstrate its potential to positively influence the formulation of educational policies, ensuring that education management meets the real needs of the community. However, the study identified that the periodic renewal of council members and the alternation of municipal governments can generate instability in educational guidelines, making it difficult to continue long-term planned actions. In this sense, it is essential that mechanisms be established to ensure the continuity of public educational policies, regardless of political changes.

Furthermore, the research showed that

popular participation in decision-making still occurs discreetly, without much effective participation, reinforcing the need for greater dissemination and encouragement of citizen participation in the CME. Democratizing access to information about the council, as well as promoting spaces for debate and training, can help the population better understand its importance and actively engage in educational discussions in the municipality. Strengthening the CME's actions therefore depends on the joint engagement of managers, educators and civil society.

In view of the reflections presented, it is concluded that the Municipal Education Council of Mauá-SP plays an essential role in the democratic management of education, but faces challenges that need to be overcome in order for its performance to be even more effective. The expansion of social participation, the continuity of educational policies and the strengthening of the council as a deliberative body are central aspects for municipal education to advance towards a more inclusive and efficient model. Thus, it is expected that this study will contribute to future discussions and initiatives aimed at improving educational management in the municipality.

REFERENCES

BRAZIL. Mauá Basic Education Development Index (Ideb). 2023. Available at: <https://qedu.org.br/municipio/3529401-maua/aprendizado> . Accessed: Jan. 2025.

BRAZIL. Brazilian Institute of Geography and Statistics (IBGE). Cities and States. Mauá-SP. Available at: <https://www.ibge.gov.br/cidades-e-estados/sp/maua.html> . Accessed: Jan. 2025.

CANDAU, Vera MF Right to education, diversity and education in human rights. *Education and Society* , v. 33, n. 120, Sept. 2012. Available at: <https://www.scielo.br/j/es/a/phjDZW7SVBF3FnfNL4mJywL/> . Accessed: Jan. 2025.

CONCEIÇÃO, Viviane L.; ZAMORA, Maria Helena RN Social inequality at school. *Psychology Studies* , Campinas-SP, v. 32, n. 4, Oct./Dec. 2015. Available at: <https://www.scielo.br/j/estpsi/a/kPwXrLYC5ThZdZmnBfTVLrv/> . Accessed: Jan. 2025.

CURY, Carlos RJ Basic education as a right. *Cadernos de Pesquisa* , v. 38, n. 134, p. 293-303, May/Aug. 2008. Available at: <https://www.scielo.br/j/cp/a/QBBB9RrmKBx7MngxzBfWgcF/?format=pdf&lang=pt> . Accessed: Jan. 2025.

FARIAS, Elioenai SS; VIEIRA, Emília P. The role of education counselors in strengthening democratic management. *Exitus Journal* , Santarém, v. 10, Mar./Dec. 2022. Available at: http://educa.fcc.org.br/scielo.php?script=sci_arttext&pid=S223794602020000100287 . Accessed: Jan. 2025.

FLACH, Simone de F. The right to education and its relationship with the expansion of compulsory schooling in Brazil. Essay: evaluation and public policies in education , v. 17, n. 64, Sept. 2009. Available at: <https://www.scielo.br/j/ensaio/a/8GHfHbcbMfSt6HbSs8H6vNN/> . Accessed: Jan. 2025.

LIBÂNEO, JC; OLIVEIRA, JF de; TOSCHE, MS School Education: policies, structure and organization. 10th ed. São Paulo: Cortez, 2012. (Teaching in Training Collection: Pedagogical Knowledge; Coordination Selma Garrido Pimenta).

LIMA, Lucínio C. Education as a right in an unequal world. *Education and Society* , n. 45, 2024. Available at: <https://www.scielo.br/j/es/a/Mjc7yDCWbt4JBmyKSSx7vBh/> . Accessed: Jan. 2025.

MAUÁ. Municipal Education Council is sworn in in Mauá. Published on: June 30, 2021. Available at: <https://www.maua.sp.gov.br/Not.aspx?noticiaID=5306> . Accessed on: January 2025.

MAUÁ. Law No. 2,784, of November 24, 1997. Creates the Municipal Council of Education. PDF. Available at: <https://sistemas.maua.sp.gov.br/legislaconsulta/detalhes.php?nlei=2784&tipolei=0> . Accessed: Jan. 2025.

MAUÁ. Law No. 5,719, of August 18, 2011. Provides for the restructuring of the Municipal Council for Monitoring and Social Control of the Fund for the Maintenance and Development of Basic Education for Education Professionals (FUNDEB). Available at: <https://leismunicipais.com.br/a/sp/m/maua/lei-ordinaria/2021/572/5719/lei-ordinaria-n-5719-2021-dispoe-sobreareestruturacaodoconselhomunicipaldeacompanhamento-e-controle-social-do-fundo-de-manutencao-e-desenvolvimento-da-educacao-basica-e-de-valorizacao-dos-profissionais-da-educacao-conselho-do-fundeb-em-conformidade-com-o-art-212-a-da-constituicao-federal-regulamentado-na-forma-da-lei-federal-n-14113-de-25-de-dezembro-de-2020> . Accessed on: Jan. 2025.

MAUÁ. Law No. 5,683, of April 26, 2004. Approves the Municipal Education Plan of the Municipality of Mauá. Available at: <https://sistemas.maua.sp.gov.br/legislaconsulta/atosofic/Leis/3683.pdf> . Accessed: Jan. 2025.

MAUÁ. Municipality Profile. Available at: <https://www.maua.sp.gov.br/informacoes/perfilatual.aspx> . Accessed: Jan. 2025.

NEZ, Egeslaine de. Municipal Council of Education (CME): unveiling the concept of socially referenced quality. *Humanities and Innovation* , v. 5, n. 1, 2018.

RODRIGUES, Ana A. Right to education: a historical and political construction in Brazil. *Jusbrasil* , 2018. Available at: <https://www.jusbrasil.com.br/artigos/direito-a-educacao-uma-construcao-historica-e-politica-no-brasil/593072202> . Accessed: Jan. 2025.

SANTOS, Émina. Education as a social right and school as a space for the protection of rights: an analysis in light of Brazilian educational legislation. *Education and Research* , v. 45, 2019.

SÃO PAULO. Municipal Council of Education – CME. Updated on: December 3, 2024. Available at: <https://educacao.sme.prefeitura.sp.gov.br/conselhomunicipaldeeducacao/> . Accessed on: January 2025.

SAVIANI, Dermeval. Vicissitudes and perspectives of the right to education in Brazil: a historical approach and current situation. *Education and Society* , v. 34, n. 134, Sept. 2013. Available at: <https://www.scielo.br/j/es/a/BcRszVFxGBKxVgGd4LWz4Mg> . Accessed: Jan. 2025.

TÁRREGA, Maria Cristina VB; ALVES, Felipe F. de A.; APPROBATO, Ana Patrícia Ribeiro. Education as a collective right in the construction of citizenship and human dignity: the reality of an unconstitutional state of affairs. *Ensino em Re-vista* , Uberlândia-MG, v. 38, Jun. 2021. Available at: http://educa.fcc.org.br/scielo.php?script=sci_arttext&pid=S198317302021000100405 . Accessed: Jan. 2025.



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.15131160

CIVIL LIABILITY OF THE DATA CONTROLLER FOR THE LEAKAGE OF EMPLOYEE DATA

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ABSTRACT

This article deals with the civil liability of data controllers due to the leakage of employee data. This study had as its research question: what is the type of civil liability of the data controller due to the leakage of employee data and its consequences? Given this problem, the following general objective emerged: to identify the type of civil liability applied to controllers due to the leakage of employee data and its application consequences. The specific objectives are: to study the General Data Protection Law, in its general aspects; to understand the flow of data in the labor contractual phases; and to analyze the types of civil liability and their application consequences. The methodology used had, as regards its objective, an exploratory approach and the bibliographic research technique, as a way of supporting its theories and hypotheses. As the main result of the research, it is observed that the best path to be followed is the application of objective liability, since it gives rise to greater protection of the rights of employees. This thought is supported by the identification of the consequences of application, since subjective liability results in the protection of the controller and the weakening of the holder.

Keywords: Civil liability. Controller. Data leak. Sensitive data. Worker.

INTRODUCTION

The world is currently in the Fourth Industrial Revolution, as a result of the social disruptions caused by the use of digital technology, computers, networks and software. Therefore, one of the factors that differentiates the Fourth Industrial Revolution from others is the widespread use of technology, with easy access for anyone and everyone. In addition, other scholars also claim that the Fifth Industrial Revolution has already begun, as a result of the use of Artificial Intelligence by the global population.

Due to the Fourth Revolution and the use of new technologies, phenomena known as Big Data and Datafication have emerged, not only in relation to virtual data, but also in relation to physical data. The term Big Data refers to the massive collection and storage of personal information obtained, while Datafication refers to the collection of information from everything that exists, whether in a virtual or physical environment.

Thus, day after day, the quantity and volume of data handled and accessed has been growing throughout society, such as in employment relationships, in which employers have data such as: employment record, date of birth, affiliations, bank accounts, religious beliefs, medical exams, among others.

Thus, there was intense concern regarding personal data, leading to the creation of the General Data Protection Law (LGPD) in Brazil in 2018, inspired by European dictates on the protection of personal data. The purpose of this legislation, as set out in its art. 1, is to protect the fundamental rights of freedom and privacy, as well as to guarantee the free development of the natural person's personality.

The LGPD brought in its scope aspects related to the civil liability of data processing agents, one of which is the controller, as a result of leaks of personal and sensitive data, such as employee data, which demonstrates once again the protectionist nature present in the legislation.

Thus, the question arose: what is the type of civil liability of the data controller due to the leaking of employee data and its consequences? In view of this problem, the following general objective emerged: to identify the type of civil liability applied to controllers due to the leaking of employee data and its application consequences. The specific objectives are: to study the General Data Protection Law, in its general aspects; to understand the flow of data in the labor contractual phases; and to analyze the types of civil liability and their application consequences.

This article is justified by the thematic relevance and the high rate of fragility and leakage of workers' data, as exemplified by the study by Kaspersky (Você RH, 2022), an international cybersecurity and digital privacy company, which determined that 47% of organizations were unable to protect their employees' data in 2021. As a result, it is necessary to carry out studies, aiming at a doctrinal improvement on the matter, as well as an application of equity in judicial decisions.

Therefore, the article is subdivided into three topics, the first addressing the general aspects of the General Data Protection Law; the second, dealing with the flow of data in the labor contractual phases; the third analyzing the types of civil liability and their consequences of application due to the leaking of employee data; finally, the final considerations follow.

DEVELOPMENT

Actions such as taking photos, sending emails, and calling friends generate data and information that needs to be stored. From this perspective, individuals now have very little control over the exposure of their private lives. As a result of the weakening of data control and the "increase in incidents related to data leaks" (Pinheiro, 2023, p. XIV), debates began on data protection and the prevention of new leaks in the European Union, leading to the enactment of the General Data Protection Regulation in 2016.

Brazil, following the European trend, enacted Law 13,709/2018 in 2018, which was promulgated by the President of the Republic, Michel Temer. Understanding the formation, at this point, it is necessary to study the objectives present in the Brazilian General Data Protection Law.

General aspects of the General Data Protection Law

The General Data Protection Law aims, as set out in its art. 1: “to protect the fundamental rights of freedom and privacy and the free development of the natural person's personality”. According to Cots and Oliveira (2021, p. 15), “the verb to protect says a lot about how the legislator saw the data subject, that is, in an unequal position in relation to those responsible for processing such data, making their vulnerability clear”. Applying the consumerist view of protection.

According to Pinheiro (2023), the focus on protecting the fundamental rights of privacy, freedom and the free development of the natural person proves its protective nature. In other words, the LGPD aims to guarantee the principle of transparency and security of the data collected, safeguarding the fundamental rights inherent to privacy, freedom of the citizen, development and free formation of the personality of each individual. Therefore, the LGPD's desire to protect the data subject from possible harm is clear, following the foundations inherent to the Law itself.

Regarding data types, Law 13.709/2018 includes different types, such as: personal, sensitive and anonymized. Personal data is defined in art. 5, I, as all “information related to an identified or identifiable natural person”. Therefore, the concept of personal data is broad, encompassing any information capable of identifying a person.

Article 5, item II of the LGPD states that sensitive data are personal data “about racial or ethnic origin, religious beliefs, political opinions, membership of a trade union or organization of a religious, philosophical or

political nature, data relating to health or sexual life, genetic or biomedical data, when linked to a natural person”. Therefore, this type of data forms an exhaustive list.

When it comes to data processing, the LGPD addresses in its first article, including the processing activity in both digital and physical media, by a natural or legal person under private or public law, aiming at the protection of the fundamental rights of freedom, privacy and the free development of the personality of the human person. According to art. 5°, X of the General Data Protection Law:

Art. 5°, X: processing: any operation carried out with personal data, such as those relating to collection, production, reception, classification, use, access, reproduction, transmission, distribution, processing, archiving, storage, elimination, evaluation or control of information, modification, communication, transfer, dissemination or extraction.

Based on the reading of the paragraph, it can be observed that the processing encompasses the data from its collection to its elimination. In accordance with Maldonado and Blum (2022), the finding of the scope of the processing is of great relevance, since the processing agent must keep all records of the operations carried out.

Furthermore, “the hypotheses are not cumulative, that is, a single activity on the list is already included in the concept of processing, no matter how simple it may be” (Cots; Oliveira, 2021, p.72). At this point, we delve into the subjects involved in the processing of personal data, in line with the Brazilian LGPD.

Furthermore, the LGPD encompasses four distinct subjects related to Brazilian data protection, namely: holder, controller, operator and manager. However, for the purposes of this article, comments will only be made on two subjects, namely: holder and controller.

Article 5, V, states that the data subject is any “natural person to whom the data that are the object of processing belong”. Therefore, it can be said that it is any natural person, physical person, identified or identifiable to whom the data refers.

In section VI of art. 5 of the LGPD, the controller is qualified as: “a natural or legal person, under public or private law, responsible for decisions regarding the processing of personal data”. According to Maldonado and Blum (2022), the controller has the greatest legal weight provided for in the LGPD, since he is responsible for making decisions related to the processing of personal data.

Finally, it is worth noting that among the four subjects present in the legislation, only two of them are on the exhaustive list of processing agents, namely the controller and the operator, on whom civil liability applies.

Data flow in the labor contract phases

After understanding the role of the subjects, it is clear that within the Labor Law relations, employees appear in the role of data subjects, while employers are in the position of controller.

Knowing the existence of weaknesses that many labor relations already have, there is a need to understand the impact and repercussions of the LGPD on employment contracts, since they encompass three phases: pre-contractual, contractual and post-contractual.

First of all, it is important to highlight that, in the pre-contractual phase, there is still no relationship between employee and employer, but rather only job offers or a selection process and an intention of the candidates to fill the vacancies. The Consolidation of Labor Laws (CLT) does not specifically provide for the pre-contractual phase, therefore, each employer may choose to regulate the hiring method, as long as it respects and protects the basic principles of data protection.

At this stage, the personal data requested should only be those necessary for the selection process, with subsequent review for recruitment purposes, ensuring the consent of the holder and finally, deleting the data, after the candidate is dismissed from the vacancy. However, if you choose to keep the candidate's data in a

database, he/she must be informed of the action, including the time it will be available (Pinheiro; Bomfim, 2020).

According to Araújo and Calcini (2020), in the pre-contractual phase, the collection of data that may in the future generate some discriminatory character among employees is expressly prohibited, for example: pregnancy tests.

It is known that during the pre-contractual phase, employers have access to resumes, functional and educational histories, address, marital status, among other data, which will consequently result in greater review and care on the part of human resources, not only in relation to the selection process, but also to the storage of all the data that they have obtained knowledge of.

Of course, the company cannot control the information contained in the resumes that are sent by candidates or those interested in a possible future vacancy. However, when the company receives these resumes for immediate use or for future selection processes, it is important that it pays attention to the use, transfer, storage and elimination of the personal and sensitive data contained therein (Molina, 2021).

Therefore, even in the pre-contractual phase, employers must be careful and take the necessary precautions, in order not to disregard any provision of the LGPD and incur civil liability for their act.

In the second phase, called contractual, there is a link between the employee and the employer, as well as a greater collection of documentation and personal data in order to regulate the hiring. Thus, it is understood that it is authorized, therefore, that consent does not need to be an autonomous contractual instrument, but rather a clause of the employment contract or an annex to it (Araújo; Calcini, 2020).

From this moment on, employers must carry out constant risk analysis and the need to adapt to the LGPD, carrying out training with departments, reviewing contractual clauses and

policies.

Another factor that deserves to be highlighted is related to the processing of sensitive personal data, such as: health, race, biometrics, among others. Since, although there are legal grounds for collecting certain sensitive data, these data require greater protection from the controller-employer.

An example is health-related data, since it is necessary to analyze or review the contract signed with the medical service provider in order to guarantee the protection of sensitive data, as well as to protect against possible liability for security incidents.

Another common practice among employers is the collection of biometric data, whether for entry into security departments or for timekeeping. However, the collection of biometric data is also included in the list of sensitive data, and therefore, each employer must take all appropriate processing measures regarding the data provided by employees.

The third phase (post-contractual) corresponds to the employee's termination of the existing relationship, and may reach this phase for various reasons, such as: death, dismissal for just cause, dismissal for just cause, closure of the establishment, among others.

According to Alcântara (2021), at the end of the employment contract, there is data that is relevant and sensitive to the holder, and may have varied content, such as: reason for termination of the employment contract, severance pay, if the employee died, it will contain information about death and related information, data for future reference to the new employer.

At this stage, there is a need to comply with the principle of transparency, informing the employee that the use of the data will be terminated by legal determination or at the request of the employee-owner. It is worth noting that, with regard to the request of the employee-owner, it is relativized in labor relations, given that there are legal provisions that require the storage of employee documents and data.

During storage, employers must follow the respective guidelines for data processing, including carrying out anonymization techniques, as well as carrying out the correct and mandatory disposal after the legal storage period (Araújo ; Calcini, 2020), mainly due to the serious consequences resulting from non-compliance with the provisions of the LGPD.

Species and consequences application of objective or subjective liability relating to the leaking of employee data

This theme generates many doctrinal divergences, however, following the line of the doctrinaires Diniz, Stolze and Pamplona Filho, three assumptions can be listed, such as: human conduct, damage or loss and causal link.

Human conduct is the master expression of human will, and may arise from an action or omission, and this is a necessary premise for the formation of civil liability (Stolze; Pamplona Filho, 2024). In the positive case, the agent voluntarily practices that conduct and in the negative case, the person who caused the damage voluntarily failed to observe his duty to act.

With regard to damage, it can be defined as the reduction of a legal asset, of any nature, causing injury, whether in the patrimonial or moral sphere (Cavaliere Filho, 2023).

The last general assumption of liability according to the tripartite theory is the causal link between the damage and the action. In the words of Diniz (2024, p. 48): “the link between the loss and the action is called a “causal link”, so that the harmful event must originate from the action, directly or as its foreseeable consequence”. It can be seen, therefore, that in order to generate civil liability, it is not enough for the action and the damage to occur, but they must be connected to each other in order to obtain compensation.

When it comes to types of civil liability, the second major part of the doctrine, it is subdivided into two: subjective and objective.

Subjective liability based on fault and objective liability arising from the law.

liability is that which arises from the negligent or intentional act of the agent and requires proof from the victim for the obligation to compensate to fall. The conduct occurs through negligence, recklessness, incompetence or intent according to the majority understanding of the doctrine (Diniz, 2024).

Returning to the assumptions discussed in the previous topic, in subjective liability all elements must be proven: conduct, damage and causal link. From this perspective, Stolze and Pamplona Filho (2024) comment that since it is a fact constituting the law, the burden of proving the defendant's guilt in the broad sense falls on the plaintiff.

It is worth noting that the notion of guilt still raises great questions today, given that if the victim does not prove the agent's guilt, compensation will not occur, according to this type of liability. Therefore, it was necessary to change the meaning of guilt, thus giving rise to the objective theory/type of civil liability.

Civil liability, in turn, also known as risk theory, arose due to society's need to expand the meaning of guilt. This theory is based on the exercise of an activity, therefore, whoever exercises it must answer for the damages they cause (Diniz, 2024).

In this regard, Stolze and Pamplona Filho (2024, p. 18) state:

However, there are cases in which it is not even necessary to establish fault. In these cases, we are faced with what is conventionally called "objective civil liability". According to this type of liability, the intent or fault in the conduct of the agent causing the damage is legally irrelevant, given that only the existence of a causal link between the damage and the conduct of the responsible agent is necessary for the duty to compensate to arise.

That said, fault or intent still exists, but it will not be necessary to prove it to generate compensation, given the legislation or the risk of the activity itself. Therefore, it can be stated that objective civil liability arises from two sources: the law and the theory of risk.

The consequences of applying objective and subjective liability for the controller are provided for in Section III of Chapter VI of the LGPD, "making clear the possibility of repairing patrimonial, moral, individual or collective damages, whenever these result from a violation of personal data protection legislation" (Maldonado; Blum, 2022, p. RL-1.13).

It turns out that, in the area of civil liability presented in the LGPD, there are great doctrinal debates about the type to be followed, given that it is not precisely clear as to the application of objective or subjective liability. Unlike the Consumer Defense Code, which is explicit in adopting objective liability, the LGPD did not follow the same path of explicitness; however, when carrying out a systematic interpretation, one comes to the conclusion of the application of subjective liability (Maldonado; Blum, 2022).

It is worth noting that one of the fundamental aspects of the defense of this doctrinal aspect concerns the large set of duties established for the controller in the processing of data and, if not respected, they are subject to civil liability. Therefore, it can be observed as a consequence of the application of the subjective responsibility of the controller, that it is necessary to prove the culpable attitude, whether due to the violation of the LGPD or due to failure to take adequate security measures for data processing (Maldonado; Blum, 2022).

It turns out that the application of this type of civil liability in labor relations may lead to an even greater weakening, given that the employee is already in a vulnerable position (Camino, 2004). Therefore, placing yet another burden on the employee so that he or she may seek legal protection is very onerous.

However, the application of subjective liability to the controller provides protection for the controller, since there would be no point in creating duties to be followed in the LGPD, if at a time of accountability, the analysis of compliance with duties was not taken into consideration (Guedes and Meireles, 2023),

since according to the subjective theory, it is not possible to hold someone responsible for the damage suffered, if there is no culpable or willful conduct (Stolze; Pamplona Filho, 2024).

The doctrinal line that supports objective liability in the LGPD argues that although the article does not precisely indicate the liability of the controller and the operator, it does not demonstrate that there is any doubt that it deals with objective liability (Colombo; Facchini, 2018). Due to the objective of the LGPD and its protectionist nature, in comparison with the harmful potential of data processing, the use of the objective line proves to be the safest means for the holders-employees.

Another point that deserves to be highlighted concerns the widespread use of objective civil liability in the labor field, such as work accidents, abuse of the employer's management power and acts of employees or agents (Bertotti, 2014). Therefore, since there is already widespread use of this type, classifying the controller as liable in cases of employee leaks would be the most logical and assertive path to follow.

As a consequence of applying the controller's objective liability, it would be easier for the employee-holders to hold the company accountable, since the element of fault would not need to be proven, providing greater protection (Maldonado; Blum, 2022). However, for the controller, the application of objective liability could weaken labor relations, since it would lead to a greater number of lawsuits due to the leaking of employee data, increasing the costs of defenses and proof of compliance with all legal duties.

In addition to complying with the LGPD, employer-controllers must also follow the dictates of labor laws, the Constitution and regulatory standards. Thus, the subjective application of liability provides a greater framework for protection and supervisory oversight.

CONCLUSION

This article asked the following question: what is the type of civil liability of the data controller due to the leaking of employee data and its consequences? Therefore, this scientific article presents as a result of the aforementioned problem that the LGPD provided for the possibility of applying civil liability to data processing agents, thus encompassing the figure of the controller. However, this legislation did not clearly state its legal position regarding the type to be applied, allowing doctrinaires and jurists to interpret and apply the rule.

In the labor sphere, the employee finds himself in a vulnerable position vis-à-vis the employer (controller), due to the very configuration of the employment contract. In addition, the employee has access to various personal and sensitive data in his/her employment contract, such as medical exams, biometrics, health history, address, affiliations, religious opinion, etc.

Therefore, being unable to refuse to provide the data, if he wishes to continue in an employment relationship, the employee-holder once again places himself in a vulnerable position, seeking from the employer-controller the reliability of the processing of his personal and sensitive data.

However, when, due to a leak of data belonging to the employee-holders, they seek legal protection, they are surrounded by legal instability regarding the type of civil liability applied to their case. This is one of the reasons for defending objective liability, in order to not make it even more onerous for the employee-holder to assert his/her right before the Court, since, if it is proven that the leak occurred and that damage resulted from it, it would not be necessary to prove the fault of the employer-controller.

Another point defended by the minority group concerns the systematic analysis of the LGPD, in which one can see the legislator's concern in protecting the holders of personal data throughout its structure, bringing concepts of treatment, subjects involved, etc., a vision

similar to that of the Consumer Defense Code.

On the other hand, following the majority view, the LGPD follows the general Brazilian rule of application of subjective liability, giving the employee-holder the burden of proving the existence of the three elements of civil liability: conduct, damage and causal link. According to the current view, it would not make sense for the LGPD to stipulate guidelines for the processing of data by the controller, if in the factual case, it was not taken into account whether or not the guidelines were followed.

In the face of subjective liability, the highly protective nature of the employee-owners is weakened and reversed, in the case of civil liability, since the controlling employer becomes more protected, in terms of the need to prove his/her guilt, in a broad sense.

Thus, when dealing with employment relationships, the best path to follow is the application of objective liability, since it provides greater protection and makes it easier for employees to obtain rights, since they are already in an unequal position with their employers. This thought is supported by the identification of the consequences of application, since, as previously mentioned, subjective liability results in the protection of the controller and the weakening of the data subject. In contrast, objective liability reverses the poles, allowing greater protection for the data subject and weakening, but also an incentive to ensure the correct processing of data by the controller.

This time, the thematic relevance for students and legal professionals, and for employees and employers, is noted, given that it is of utmost importance to understand and adapt to the recent and growing legal branch, which permeates and brings great repercussions in the labor and civil spheres.

Finally, it is recommended that the application of civil liability in cases of employee data leaks be reviewed in the labor-civil sphere, in order to unify the application of objective liability, which is already applied in several other labor disputes, such as workplace

accidents and abuse of managerial power. Using the dualistic system, in which, even if there is no express provision in the text of the law, objective liability is applied, such as the civil liability provided for in art. 936 of the Civil Code, since the fact itself is so beneficial that it goes beyond the barriers of theories of risk, activity and even the analysis of fault.

REFERENCES

ALCÂNTARA, Clayton Deodoro Gonçalves de. **Impact of the General Data Protection Law on employment relations**. 30f. Pontifical Catholic University of Goiás, Goiânia, 2021. Available at: <https://repositorio.pucgoias.edu.br/jspui/bitstream/123456789/1472/1/TC2-B12%20-%20CLAYTON%20DEODORO%20G.%20DE%20ALCANTARA%20-%20FINAL%20-%202021-1%281%29.pdf>. Accessed on: 25 March 2024.

ARAÚJO, Cristiane Carvalho Andrade; CALCINI, Ricardo. **The impact of LGPD on labor relations**. Consultor Jurídico Magazine, September 17, 2020. Available at: <https://www.conjur.com.br/2020-set-17/lgpd-impactos-trabalhistas>. Accessed on: March 22, 2024.

BERTOTTI, Monique. Objective civil liability in the labor field. **R. Fórum Trabalhista**, nº 11, p. 109-124, Mar./Apr., 2014.

CAMINO, Carmen. **Individual Labor Law**. Porto Alegre: Síntese, 2004.

CAVALIERI FILHO, Sergio. **Civil Liability Program**. 16th ed.

BRAZIL. Law No. 13,709, August 14, 2018 (**General Data Protection Law**). Available at: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/lei/113709.htm. Accessed on: March

20, 2024.

COLOMBO, Cristiano; FACCHINI NETO, Eugênio. “Electronic body” as a victim in terms of personal data processing: civil liability for damages in light of the Brazilian data protection law and aesthetic damage in the digital world. **XXVII National Congress of CONPEDI**. Porto Alegre. Available at: <http://conpedi.danilolr.info/publicacoes/34q12098/15d3698u/Mw0I37P00cGrmxtJ.pdf>. Accessed on: March 5, 2024.

COTS, Márcio; OLIVEIRA, Ricardo. **General Law on the Protection of Personal Data with commentary**. 4th ed. São Paulo: Revista dos Tribunais, 2021.

DINIZ, MH **Course on Brazilian civil law: civil liability**. 38th ed. São Paulo: Saraiva Jur, 2024.

GIL, Antonio Carlos. **Social research methods and techniques**. 7th ed. São Paulo: Atlas, 2024.

GUEDES, Gisela Sampaio da Cruz; MEIRELES, Rose Melo Vencelau. Termination of Data Processing. **General Law on the Protection of Personal Data and its repercussions on Brazilian Law**. 3rd ed. São Paulo: Thomson Reuters Brazil, 2023.

MALDONADO, Viviane Nóbrega; BLUM, Renato Ópice. **LGPD: General Law on the Protection of Personal Data with commentary**. 4th ed. São Paulo: Thomson Reuters Brazil, 2022.

MOLINA, Cristina. **Application of LGPD in recruitment and selection: pre-contractual phase**. Available at: <http://www.negocioemmovimento.com.br/artigos/aplicacao-da-lgpd-no-recrutamento-e-selecao->

fase-pre-contratual/ . Accessed on April 27, 2023.

PINHEIRO, Iuri; BOMFIM, Vólia. **The General Data Protection Law and its impacts on labor relations**. Instituto Trabalho em debate, Minas Gerais, 2020.

PINHEIRO, Patrícia Peck. **Protection of personal data: comments on Law No. 13,709/2018 (LGPD)**. 4th ed. São Paulo: Saraiva, 2023.

SEVERINO, Antonio Joaquim. **Methodology of Scientific Work**. 24th ed. São Paulo: Cortez, 2017.

STOLZE, Pablo; PAMPLONA FILHO, Rodolfo. **New course in Civil Law 3 – civil liability**. 22nd ed. São Paulo: Saraiva Jur, 2024.

VOCÊ RH. **Employee data leaks are common in Brazil**. 2022. Available at: <https://vocerh.abril.com.br/politicasepraticas/vazamento-de-dados-de-funcionarios-e-comum-no-brasil>. Accessed on March 21, 2024.



iJEResearch

International Journal of Education and Research
Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal
ISSN 2764-9733 | ijerresearch.org
DOI: 10.5281/zenodo.15131401

HEALTH SURVEILLANCE IN BRAZIL: VULNERABILITIES AND HEALTH STRATEGIES TO DEAL WITH FUTURE PANDEMICS

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ABSTRACT

This article presents a systematic review of the literature on health surveillance in Brazil in recent years, focusing on vulnerabilities and strategies for dealing with future pandemics. The methodology used is a systematic review, using databases such as LILACS, Scielo and Google Scholar. The results indicate that, although there have been significant advances in epidemiological surveillance, there are still important gaps that need to be addressed, respecting the different social groups. The discussion addresses the main vulnerabilities identified and proposes strategies to strengthen the surveillance system in Brazil based on an inclusive intersectoral model. It is concluded that the main vulnerabilities are associated with the need to adapt public policies to the social characteristics of the groups. The main strategies are supported by increasing social participation and access to health.

Keywords: Public health surveillance, COVID-19, Brazil, Strategy, Vulnerability.

INTRODUCTION

Health surveillance is an indispensable tool for the field of knowledge and public health practices, and is defined as a set of actions that aim to monitor and control factors that may impact collective health. (ARREAZA; MORAES; 2010)

The National Health Surveillance Policy (PNVS) aims to monitor and promote the health of the population, through the identification, analysis and control of risks and public health problems covering several areas, such as epidemiological, environmental, sanitary and worker health surveillance. (BRAZIL, 2019)

The implementation of health surveillance is carried out with collaboration between federal, state and municipal spheres, in addition to counting on the participation of the community and the work of health professionals for effective and integrated monitoring. (BRAZIL; 2019)

Guimarães et al (2017) states that public policies present major challenges related to the difficulty in assessing and monitoring the impact of the occurrence of diseases due to the different social vulnerabilities and geography of Brazil.

Arreaza and Moraes (2010) emphasize that health surveillance must be understood as a continuous process of collecting, analyzing and interpreting health-related data with the clear objective of guiding decision-making and health implementations.

According to Rouquayrol (2018), health surveillance encompasses the collection, analysis and interpretation of data related to diseases and conditions, allowing the identification of trends and the formulation of effective public policies.

The health surveillance process can suffer different impacts due to unexpected situations such as the COVID-19 pandemic. The COVID-19 pandemic, caused by the SARS-CoV-2 coronavirus, has highlighted the importance of health surveillance as an essential tool for controlling infectious diseases (LANA et al ;

2020).

It is important to reference the specific contribution of the epidemiological surveillance system, which involves the collection, analysis and interpretation of data on the health of the population, which was fundamental to monitoring the spread of the virus and guiding public health policies such as vaccination in the population. (BRASIL, 2023).

The implementation of surveillance measures, such as case reporting and outbreak investigation, allowed for a more agile and effective response to the health crisis (WHO, 2021).

Prado et al (2021) consider that primary health care (PHC) is the main access point for people, configuring a critical basis for direct surveillance and management, emphasizing the importance of PHC as a strategy to guarantee technical, operational, logistical support and provision of resources favoring the implementation and development of control strategies.

Health surveillance has proven to be a fundamental pillar in the fight against COVID-19, highlighting the need for continued investment in this area to address

future challenges and development of coping strategies. (FREITAS; VILELA, 2021)

In the context of pandemics, the effectiveness of surveillance systems can determine a country's ability to contain the spread of diseases and minimize their impacts. In Brazil, health surveillance faces significant challenges due to factors such as territorial extension, regional inequalities, and resource limitations. (FREITAS; VILELA, 2021)

Tomkiel and Manz (2023) describe in their study the composition of four main categories of challenges faced by health surveillance during the COVID-19 pandemic period: inspection of establishments, monitoring of health measures and compliance with protocols, communication and awareness of the population, and work overload and limited

resources.

To face future public health crises, continuous and sustainable investment in the health system, training of professionals and development of effective strategies to face future public health crises will be necessary. (TOMKEL; MANZ, 2023; PEREIRA, 2024)

Through the studies, the question emerges: what are the main vulnerabilities identified by the health surveillance system in Brazil during the COVID-19 period and what are the possible strategies for dealing with them?

We believe that the main vulnerabilities are associated with Brazil's geographic size, availability of technology and training of active health workers.

This study is justified as the COVID-19 pandemic highlighted the importance of robust and well-structured health surveillance systems for the development of effective public policies adapted to different social scenarios.

OBJECTIVE

Identify the vulnerabilities of the health surveillance system in Brazil during the COVID-19 pandemic and list the main strategies that should be developed to face future pandemics.

METHODOLOGY

Qualitative systematic literature review study. The databases used were Latin American and Caribbean Literature in Health Sciences (LILACS), Scientific Electronic Library Online (SciELO), and Google Scholar. The Health descriptors (DEC's) included public health surveillance, COVID-19, Brazil, vulnerability, health strategy.

Different studies published between 2018 and 2023, in Portuguese, that addressed health surveillance in Brazil and strategies to combat pandemics were included. Studies that did not present empirical data or that were not available in full text were excluded.

The selection of studies was carried out in

three stages: reading the titles, reading the abstracts and reading the complete articles. The data were extracted and presented in a table format with information about the author, year of publication, objective of the study, methodology, results and conclusions. Data analysis was performed qualitatively, identifying recurring themes and gaps in the literature.

RESULTS

After initial screening in the LILACS and SciELO databases, a total of 4 articles were captured using the adapted health descriptors; health surveillance, COVID-19 pandemic, vulnerabilities, health strategies, Brazil, from which they were excluded following the analysis and content criteria.

When the descriptors were entered into Google Scholar, 20 articles were captured, of which 4 (four) were analyzed and 119 were excluded from the sample, following the exclusion criteria that considered the irrelevance of the content, the duplication of publications and the lack of access to the full text. This rigorous approach ensured the selection of relevant and quality studies for analysis.

Table 1 – Vulnerabilities and coping strategies for future pandemics.

AUTHOR(S)	YEAR	TITLE	OBJECTIVE	METHODOLOGY	MAIN RESULTS
Meneses, Michele Neves et al.	2023	Popular health surveillance practices in Brazil: scoping review.	Identify the practices of Popular Health Surveillance in Brazil, described in the scientific literature	Scoping review	Main strategies: individual and collective initiatives to strengthen solidarity networks; community actions to confront the problem with partnerships between residents, social organizations, and the public and/or private sector, whether coordinated or independent; diagnosis of with the territory; popular monitoring and data production by the population; recognition of practices and dialogue with popular knowledge, listening process within the territory.

AUTHOR(S)	YEAR	TITLE	OBJECTIVE	METHODOLOGY	MAIN RESULTS
FIELDS, Alice Romano; ALFAMA, BARBOSA, Conrad Carvalh o Horta	2022	Determinants of health vulnerability of indigenous peoples in the context of the COVID-19 pandemic: an integrative literature review.	Identify and gather evidence on the determinants of IP vulnerability to COVID-19 infection	Peer review	THE discontinuity of Indigenous Health actions, ineffective participation strategies, financial interference and the historical lack of data on IP converge to a situation of greater vulnerability in the face of the COVID-19 pandemic, deepened by difficulties in accessing products and services that meet indigenous specificities.
Souza, Daiane de Oliveira	2022	Impact of Covid-19 on the black population's access to health services: Integrative review	Highlight and debate the consequences of the Covid-19 pandemic on the black population's access to care Primary Health, as the main gateway to system, and at other levels of care	Integrative literature review	(1) Covid-19 has brought to the forefront of discussions the issues related to the health of the black population and access to health services; (2) it was possible to observe the invisibility and underrepresentation of these issues in the academic environment.
MILK, Isadora Abdalla Machado	2022	Homeless population and the approach adopted by the SUS during the Covid-19 pandemic: integrative review.	To contextualize the experience of the homeless population and the health actions developed by the SUS during the COVID 19 pandemic, in light of the scientific publications available on the subject	Integrative review	The COVID-19 pandemic reached Brazil in a scenario of unemployment, impoverishment and other risk factors that are related to the transmissibility of the disease. This reality has shown that crises Economic factors are elements that can facilitate the transmission of infectious diseases, as well as hinder the implementation of control actions.

Source: prepared by the author.

DISCUSSION

The results of the systematic review of the last five years on health surveillance in Brazil demonstrated that the greatest vulnerabilities are not associated with the implementation of monitoring processes in different scenarios in Brazil, but rather with the invisibility of social groups.

The article *Popular health surveillance practices in Brazil: scoping review* carries out a detailed analysis of popular surveillance practices in the context of health in Brazil, highlighting their importance in strengthening social participation and improving public health policies. (MENESES, 2023)

The scoping review provides a broad view of the approaches adopted in different regions of the country, identifying the main strategies and methodologies employed, as well as the challenges faced by the social actors involved in

this process. The study also addresses the relationship between popular surveillance and the SUS (Unified Health System). Single Health System, highlighting the role of civil society in building more democratic and accessible health. (MENESES, 2023).

The article *Determinants of health vulnerability of indigenous peoples in the context of the COVID-19 pandemic: an integrative literature review* addresses the multiple dimensions of vulnerability faced by indigenous populations during the pandemic, focusing on the social, economic and cultural determinants that aggravate the health conditions of these communities. (CAMPOS; ALFAMA; BARBOSA, 2022).

The study highlights the importance of integrating traditional knowledge and collective health strategies adapted to the specific realities of these populations, proposing the need for a more attentive and sensitive look at the particularities of each indigenous people in facing health crises such as COVID-19, describing the importance of an intersectoral approach with public policies that recognize their autonomy and promote equity in access to health care. (CAMPOS; ALFAMA; BARBOSA, 2022; WEISS, 2023)

The article *Homeless population and the approach adopted by the SUS during the COVID-19 pandemic: an integrative review* carries out a critical analysis of the responses of the Unified Health System (SUS) in assisting the homeless population during the COVID-19 pandemic, with an emphasis on the limitations and challenges faced by this highly vulnerable group. The integrative review reveals that, despite the SUS initiatives, such as the creation of temporary shelters and the expansion of health actions, the response was not sufficient to guarantee the comprehensive protection of this population, which suffers from the lack of access to basic care, precarious living conditions, and social exclusion. (LEITE, 2022).

The study highlights that the pandemic has accentuated pre-existing inequalities, exposing

the difficulty of implementing effective public policies to serve this population in a situation of extreme vulnerability, and points out that the approach adopted by the SUS was marked by a lack of coordination between the spheres of health, social assistance and housing policies, which compromised the effectiveness of the actions. (LEITE, 2022).

The article *Repercussions of Covid-19 on the black population's access to health services: Integrative review* critically examines the racial inequalities that have been deepened by the COVID-19 pandemic, focusing on the black population's access to health services. (SOUZA, 2022).

The integrative review presents an analysis of the main barriers faced by this population, such as structural racism, discrimination in health institutions and greater social vulnerability, which result in limited access to adequate health care. (SOUZA, 2022).

The study highlights that, in addition to greater exposure to the virus due to precarious working and housing conditions, the black population also suffers from the lack of effective public policies that meet their specific needs during the pandemic. By relating data from the scientific literature, the article points out that the pandemic has highlighted pre-existing inequalities in the health system, where the black population is at a disadvantage in both the prevention and treatment of COVID-19. (SOUZA, 2022).

The analysis suggests the urgent need for public policies that promote equity in access to health, respecting ethnic-racial particularities and combating institutional racism. Thus, the study contributes to a broader understanding of the repercussions of the pandemic on the health of the black population and reinforces the importance of implementing inclusive and anti-racist strategies in the health system. (SOUZA, 2022).

Table 2 - List of coping strategies

Popular health surveillance practices in Brazil: scoping review.	• Social participation • Health Education • Epidemiological Monitoring and Surveillance • Reporting violence and social injustice
Determinants of health vulnerability of indigenous peoples in the context of the COVID-19 pandemic: an integrative literature review.	• Mobilization of leaders • Integration of knowledge • Strengthening primary care actions • Support for public policies and inter-institutional coordination
Impact of Covid-19 on the black population's access to health services: Integrative review	• Affirmative actions and anti-racist public policies • Health education and awareness • Strengthening the SUS and expanding access • Training healthcare professionals to deal with racial diversity • Articulation between health, social assistance and education
Homeless population and the approach adopted by SUS during the Covid-19 pandemic: integrative review.	• Reception and protection actions • Expansion of the supply of health services • Distribution of protective and hygiene materials • Interinstitutional coordination • Educational actions and awareness

Source: prepared by the author.

CONCLUSION

At the beginning of the study, our initial hypothesis was that the main vulnerabilities were associated with Brazil's geographic size, integration of health data, access to technological devices, and training of health professionals. In this sense, our hypothesis was not confirmed, but the studies directed our attention to minority social groups.

We were able to verify that the main vulnerabilities are associated with the difficulty in developing an inclusive intersectoral model that respects culture and ethnic-racial characteristics, favoring access to health.

The main strategies are supported by social participation, equity and respect for diversity that will favor the health process and adapt health surveillance monitoring while respecting cultural diversity.

This study does not close the subject, it only intends to contribute to the development of new and more articles that can support the development of new public policies.

REFERENCES

ARREAZA, ALV; MORAES, JC DE .. Health surveillance: foundations, interfaces and trends. *Ciência & Saúde Coletiva*, v. 15, n. 4, p. 2215–2228, Jul. 2010. Available at: <https://www.scielo.br/j/csc/a/nC4LpHzs3bS7RVztSq8SZnc/> Accessed on: January 19, 2025.

BRAZIL Ministry of Health (MS). Health Surveillance Secretariat. Health Surveillance Management Manual Brasília; 2009. [accessed 2025 Jan 19]. Available at: http://bvsmms.saude.gov.br/bvs/publicacoes/manual_gestao_vigilancia_saude.pdf

» http://bvsmms.saude.gov.br/bvs/publicacoes/manual_gestao_vigilancia_saude.pdf

BRAZIL. Ministry of Health. Secretariat of Health Surveillance. Epidemiological Bulletin. Vol. 54; N. 10. Brasília: Ministry of Health, 2023. Available at:

<https://www.gov.br/saude/pt-br/centrais-de-content/publications/bulletins/epidemiological/editions/2023/epidemiological-bulletin-volume-54-no-10/view> Accessed on: January 19, 2025.

CAMPOS, Alice Romano Pontes de Faria; ALFAMA, Gabriela Ferreira; BARBOSA, Conrado Carvalho Horta. Determinants of health vulnerability of indigenous peoples in the context of the COVID-19 pandemic: an integrative literature review. *Brazilian Journal of Health Review*, Curitiba, v. 5, n. 2, p. 6642-6653, Mar./Apr. 2022. Available at: <https://repositorio.uniceub.br/jspui/handle/prefix/16035>

FREITAS, CM, BARCELLOS, C., and VILLELA, DAM, eds. Strategies for coping and surveillance. In: *Covid-19 in Brazil: epidemiological scenarios and health surveillance* [online]. Rio de Janeiro: Fiocruz Covid-19 Observatory; Editora Fiocruz, 2021, pp. 287-418. Information for action on Covid-19 series. ISBN: 978-65-5708-049-8. <https://doi.org/10.7476/9786557081211>.

GUIMARÃES, RM et al.. The challenges for the formulation, implementation and implementation of the National Health Surveillance Policy. *Ciência & Saúde Coletiva*, v. 22, n. 5, p. 1407–1416, May

iJEResearch - Vol. 1, Number 1 – 2025 - ISSN 2764-9733

2017. Available at: <https://www.scielo.br/j/csc/a/Nk7DzDXghCHQJHzSjVcHMPz/> Accessed on: January 19, 2025.

LANA, RM et al.. Emergence of the novel coronavirus (SARS-CoV-2) and the role of timely and effective national health surveillance. *Cadernos de Saúde Pública*, v. 36, n. 3, p.e00019620,2020. Available at: <https://www.scielo.br/j/csp/a/sHYgrSsxqKTZNK6rJVpRxQL/> Accessed on: January 19, 2025.

LEITE, Isadora Abdalla Machado. Homeless population and the approach adopted by SUS during the Covid-19 pandemic: integrative review. <https://repositorio.pucgoias.edu.br/jspui/handle/123456789/4038> Accessed on: January 20, 2025.

MANZ, Marina Bressan; TOMKIEL, Michele Veronica . Challenges faced in the routine of health surveillance during the COVID-19 pandemic. (2023). Article (Specialization in Health Management) – Federal University of Latin American Integration, Foz do Iguaçu, 2023. Available at: <https://dspace.unila.edu.br/items/05b3d8e9-8206-42ae-aecd-6ea2b8800541> Accessed on: January 19, 2025.

MENESES, Michele Neves et al. Popular health surveillance practices in Brazil: a scoping review. *Ciência & Saúde Coletiva* [online]. v. 28, n. 09 [Accessed 20 January 2025], pp. 2553-2564. Available at: <https://doi.org/10.1590/1413-81232023289.13542022> <https://doi.org/10.1590/1413-81232023289.13542022EN>. ISSN 1678-4561. <https://doi.org/10.1590/1413-81232023289.13542022>.

PEREIRA, MCL et al; PUBLIC HEALTH IN BRAZIL: STRUCTURAL CHALLENGES AND NEEDS FOR SUSTAINABLE INVESTMENTS TO IMPROVE THE

SYSTEM. **Cedigma Journal**, [S. l.] , v. 2, n. 3, p. 64–80, 2024. DOI: 10.5281/zenodo.13292623. Available at: <https://revistacedigma.cedigma.com.br/index.php/cedigma/article/view/21>. . Accessed on: January 19, 2025.

Administração (Porto Alegre), v. 29, n. 1, p. 126–142, Jan. 2023. Available at: <https://www.scielo.br/j/read/a/xJLCWSCzsgwj9MKcKKFgW5v/> Accessed on: January 19, 2025.

PRADO, NM DE BL et al.. Health surveillance actions integrated into Primary Health Care in the face of the COVID-19 pandemic: contributions to the debate. **Ciência & Saúde Coletiva**, v. 26, n. 7, p. 2843–2857, Jul. 2021. Available at: <https://www.scielo.br/j/csc/a/z5WSwQfqN6348KfWcnS34pL/> Accessed on: 19/01/2025.

ROUQUAYROL, MZ (2018). Public Health: Theory and Practice. 11th ed. Rio de Janeiro: MedBook.

SOUZA, Daiane de Oliveira. Repercussions of Covid-19 on the access of the black population to health services: Integrative review. 2022. Available at: <http://repositorio.ifrj.edu.br/xmlui/handle/20.500.12083/813> Accessed on: January 20, 2025.

WHO. World Health Organization. COVID-19 Strategy Update. Geneva, 2021. Available at: <https://www.who.int/publications/m/item/covid-19-strategy-update> Accessed on: January 19, 2025.

WHO. World Health Organization. Global Surveillance for COVID-19 Caused by Human Infection with COVID-19 Virus: Interim Guidance. Geneva: WHO, 2020. Available at: <https://www.who.int/docs/default-source/coronaviruse/2020-03-20-surveillance.pdf> Accessed on: January 19, 2025.

WEISS, MCV. INDIGENOUS RIGHTS AND PUBLIC HEALTH POLICIES IN BRAZIL: SOCIAL LIABILITY OR “NOBODY”? READ. Electronic Journal of



iJEResearch

International Journal of Education and Research
Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal
ISSN 2764-9733 | ijerresearch.org
DOI: 10.5281/zenodo.15131530

ENTREPRENEURSHIP: THE INFLUENCE OF ENTREPRENEURSHIP ON TODAY'S COMPANIES

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ABSTRACT

This study aims to discuss concepts and provide practical examples and trends that demonstrate the central role of entrepreneurship in the emergence of companies. Entrepreneurship is a vital force in the development of contemporary companies, promoting innovation and competitiveness in a rapidly changing world. Defined as the ability to identify opportunities and mobilize resources, entrepreneurship applies both to the creation of new businesses and to the transformation of existing companies. Small businesses, often led by innovative entrepreneurs, are essential to the local economy, generating jobs and fostering the circulation of income. The training of future entrepreneurs in schools is crucial, with interactive methodologies that encourage creativity and problem-solving. Institutions such as Link School of Business and programs such as Sebrae have contributed to this training. However, there are still challenges in implementing entrepreneurial education, such as the lack of resources and specific training for educators. Investing in this education is vital to prepare young people for a constantly evolving market, enabling them to create innovative solutions and positively impact society.

Keywords: Entrepreneurship; Entrepreneurial personalities; Entrepreneurship and Marketing

INTRODUCTION

Entrepreneurship has established itself as a driving force in the development of contemporary companies, by driving innovation, stimulating competitiveness and transforming ever-changing markets. In a global scenario marked by accelerated digitalization, frequent economic changes and complex social demands, the entrepreneurial spirit emerges as a strategic differentiator for organizations of all sizes and sectors. In general, entrepreneurship can be defined as the ability to identify opportunities, mobilize resources and take risks to transform ideas into viable projects or businesses. More than the simple act of starting a new venture, it involves creativity, innovation and the search for solutions that meet market needs or solve specific problems. This concept applies both to the creation of new businesses and to the implementation of transformative initiatives within already established companies, in what we call intrapreneurship (Flores et al., 2024).

Entrepreneurship plays an essential role in small local businesses. These ventures are often the backbone of a country, state or city's economy, generating jobs, boosting regional economies and fostering local consumption. In addition, small businesses led by creative and resilient entrepreneurs are responsible for serving specific market niches, promoting the circulation of income and, often, acting as catalysts for innovation in their communities. The collective impact of these initiatives is significant, contributing to economic growth, reducing inequalities and diversifying a nation's business fabric. In Brazil, several entrepreneurs have stood out for their contributions to the market and their inspiring stories. Some of the most notable examples are Jorge Paulo Lemann, co-founder of 3G Capital, responsible for the creation of global giants such as Ambev and Burger King; Luiza Helena Trajano, chairwoman of Magazine Luiza, recognized for her innovative and humane leadership; Abílio Diniz, who transformed Grupo Pão de Açúcar into one of the largest retailers in the country; and Anitta, a singer and businesswoman who

built a global brand in the entertainment and marketing sectors. These names illustrate how Brazilian entrepreneurship has the power to transcend borders, boost different sectors and serve as an example for new generations (Martins et al., 2024).

Promoting entrepreneurship also depends on public policies and a solid educational foundation. Stimulating policies, such as credit facilitation, tax incentives and the reduction of bureaucracy, are essential to create an environment favorable to entrepreneurship. Furthermore, teaching the subject in schools and universities is essential to train future entrepreneurs. Including subjects focused on entrepreneurship in curricula stimulates skills such as creativity, leadership, critical thinking and management, preparing young people to operate in competitive markets and innovate in various sectors. This investment in education contributes to the development of an entrepreneurial culture capable of generating long-term economic and social impact (Zemlyak et al., 2023).

This article aims to examine the influence of entrepreneurship on current companies, exploring how its practices, values, and approaches have redefined business models, driven more dynamic organizational cultures, and generated positive impacts inside and outside organizations. In addition, we seek to analyze how the entrepreneurial mindset can help companies overcome contemporary challenges, such as sustainability, digital transformation, and global crises (Awad & Martín-Rojas et al. (2024). We also observe that applied directly to human material in organizations, they can provide important information for continuous improvement and strategic decision-making. (Maldonado Paes, J.; Scavarda, L. F. ; Ceryno, P.; Machado, E., 2022).

The following chapters will discuss key concepts, practical examples and trends that demonstrate the central role of entrepreneurship in building more resilient, innovative companies aligned with the demands of the future.

DEVELOPMENT

Entrepreneurship Training in Schools

Schools play an essential role in developing future entrepreneurs, especially in a world where innovation and adaptability are more important than ever. It is in the classroom that many young people begin to develop fundamental skills such as creativity, problem-solving and leadership, competencies that form the basis of an entrepreneurial mindset (Jardim et al., 2023). Preparing these students to identify opportunities and put ideas into practice is a challenge that many educational institutions have embraced in recent years.

How can schools train entrepreneurs?

Traditionally, the educational system has always prioritized training professionals for already established careers. However, this is changing. Many schools are beginning to understand that training entrepreneurs is not just about teaching management or economics, but also encouraging curiosity, autonomy, and critical thinking (Saygin et al., 2024).

One practical way to do this is through more interactive methodologies, such as project-based learning. For example, students can be challenged to identify a problem in their community and propose solutions that could be turned into real businesses. In this way, they learn in a practical way how to face challenges, work in teams and make important decisions – skills that go far beyond the traditional school content (Okada & Gray, 2023).

Schools and colleges focused on entrepreneurship

In recent years, some institutions have taken entrepreneurship education to a more advanced level, creating programs and even colleges dedicated exclusively to this. A great example in Brazil is Link School of Business, in São Paulo. Founded in 2019, Link is a college that goes straight to the point: training entrepreneurs. Instead of focusing on tests and

theoretical classes, students are encouraged to create their own businesses while they are still studying. They receive mentorship from experienced entrepreneurs, learn from real examples and are placed in situations that simulate market challenges. It is a practical approach that is helping to change the way entrepreneurship is taught in the country (Fahrrurrozi, M., 2024).

Another example is Escola Concept, also in São Paulo, which applies an innovative methodology from basic education onwards. There, students work on integrated projects that encourage collaboration and creativity, preparing them to be protagonists of their own trajectories (Hallerstrand et al., 2023).

Abroad, institutions such as Draper University in Silicon Valley and Minerva University in the United States have gained prominence for their disruptive approaches. Both offer courses where the focus is not only on learning, but on applying what is learned, creating real solutions to real problems. (Harefa & Hulu, 2024).

Entrepreneurship from an early age

It is interesting to note that entrepreneurship does not have to start only in high school or college. In basic education, it is already possible to plant the seeds of this mindset. Simple activities, such as games that simulate negotiations or challenges that involve planning, help children think "outside the box" and develop a critical eye for solving problems. These small initiatives can be the starting point for these young people to be better prepared to create something in the future, whether within a company or in their own businesses (Biney, I., 2023).

Programs and initiatives that are making a difference

In addition to schools and colleges, programs such as Sebrae's National Entrepreneurial Education Program have been helping to spread the entrepreneurial spirit throughout Brazil.

With workshops and events aimed at students of different ages, the program has helped to spark interest in entrepreneurship and empower young people to turn their ideas into reality. These initiatives show that entrepreneurial education is not something distant or complicated, but something that can be integrated into the daily routine of schools, positively impacting the lives of thousands of students (Laspita et al., 2023).

Challenges and next steps

Despite the progress, there are still challenges in implementing entrepreneurial education. Many teachers do not have specific training to teach the subject, and many schools, especially in the public sector, face difficulties due to a lack of resources. Overcoming these obstacles requires more investment and a broader vision of the role of education in training citizens prepared for a constantly changing job market (Enstroem & Schmaltz., 2024).

The long-term impact and connection to the next stage

Educating for entrepreneurship goes far beyond teaching someone how to start a business. It involves training people who know how to identify problems and create innovative solutions, contributing to economic and social development. Whether by creating jobs or bringing new ideas to the market, young entrepreneurs have the power to transform the future. However, entrepreneurial training is not limited to the school environment. It continues and intensifies throughout life, with new influences coming from professional experiences, networking and continuous learning. In the next chapter, we will explore how this training takes place outside of schools – within companies, in specialized courses and through individual trajectories that shape successful entrepreneurs. (Rowe et al., 2023).

From the Emergence of the Entrepreneur to the Role of Job Creator

Entrepreneurship in Brazil has proven to be a vital driver for the economy, reflected in the significant increase in new companies and startups in recent years. Turning an idea into a successful business requires determination, planning, and courage to take risks (Hashimy et al., 2023). In this chapter, we will explore how an entrepreneur is born and how they can evolve to become a generator of jobs, contributing to economic and social growth.

What motivates someone to undertake?

Motivation to undertake a business can come in many forms, usually related to the desire to solve a problem or seize an opportunity. The main reasons include:

1. **Necessity:** Many people start to undertake when they cannot find alternatives in the job market. This type of entrepreneurship, known as "entrepreneurship by necessity", is common especially during economic crises.
2. **Opportunity:** Others see a gap in the market and see it as a chance to offer something innovative or unique.
3. **Passion:** Some people decide to turn a skill or hobby into a business, seeking to combine work and personal fulfillment.
4. **Inspiration:** Many people are inspired by success stories or experiences with other entrepreneurs and feel the urge to follow the same path.

Regardless of the reason, what sets successful entrepreneurs apart is the ability to take an idea from paper to action (Blomsma et al., 2024).

The first steps: from idea to planning

After identifying an opportunity, the entrepreneur begins planning his/her business.

This is a crucial step in determining the viability of the proposal. The steps include:

- **Market research:** Understanding consumer needs, competitors, and industry trends.
- **Business model:** Define how the product or service will be offered, priced and distributed. Tools such as the Business Model Canvas help visualize these strategies.
- **Financial planning:** Estimating costs, sources of revenue, and strategies for obtaining the capital needed to start the business.

Although planning is essential to reduce risks, the path of entrepreneurship is full of unforeseen events, requiring flexibility and resilience to face challenges (Mosteanu, N., 2024).

The growth of new companies and startups in Brazil

In recent years, Brazil has experienced a significant increase in the creation of new companies and startups, reflecting a more favorable environment for entrepreneurship.

- **New companies:** From January to August 2023, 2,716,269 new companies were opened in the country, totaling 21.8 million active companies. Of these, 93.7% are micro or small companies. The average time to open a company was 1 day and 5 hours (gov.br).
- **Startups:** Brazil currently has 12,040 startups, 45% of which are micro-enterprises, 24% are small, 20% are medium-sized and 11% are large. In the last 10 years, more than 7,000 startups have been opened in the country (cortex-intelligence.com).
- **Investments in startups:** In the last four years, Brazilian startups have captured more than 60% of the investments made in innovative companies in Latin America, totaling R\$108 billion (agenciasebrae.com).

br).

These numbers indicate a booming entrepreneurial ecosystem, with a growing number of companies and startups contributing to the country's innovation and economic development.

The importance of training in entrepreneurship

The growth of entrepreneurship in Brazil is also driven by the increasing availability of courses, schools and platforms that offer specialized training and support for entrepreneurs (Klein & Braido, 2024). These initiatives have proven to be essential for preparing new entrepreneurs, offering tools and knowledge that help transform ideas into sustainable businesses.

Some notable examples of companies and educational institutions focused on developing entrepreneurship are:

- **G4 Education:** Founded by Alfredo Soares, Tallis Gomes and Bruno Nardon, G4 offers courses focused on business management, sales and leadership. Its goal is to train entrepreneurs so that they can grow strategically and sustainably. G4 has stood out in the Brazilian scenario for the quality of its content and the impact it has had on entrepreneurs from various sectors.
- **Link School of Business:** Located in São Paulo, Link is a college dedicated to training leaders and entrepreneurs focused on the real market. With a curriculum that combines theory and practice, Link provides intensive and specialized training for those seeking to transform their ideas into big businesses.
- **StartSe:** The StartSe platform offers courses, events and content on innovation and entrepreneurship. It connects entrepreneurs with big names in the sector and promotes immersion in global trends, helping its students to better understand the market and position themselves strategically.

These initiatives have created a more favorable environment for those who want to start a business, offering the tools and knowledge necessary to make a difference in the market (Allal -Cherif et al., 2024).

The evolution of the entrepreneur

As the business grows, the entrepreneur takes on multiple roles: manager, leader, salesperson, and innovator. This initial phase can be challenging, especially for small entrepreneurs who have to deal with limited resources and work on several fronts. Over time, the entrepreneur begins to delegate tasks, hire people, and invest in their own training. Participating in courses, workshops, and networking events are common strategies to expand knowledge and exchange experiences with other professionals. In addition, the entrepreneur's mindset evolves. They stop thinking only in the short term and begin to see the business as part of a larger ecosystem, concerned with generating value not only for customers, but also for employees, partners, and the community in which they operate (Bitencourt et al., 2024).

From small business to impact on the job market

As the business becomes more established, the entrepreneur plays an increasingly important role in the economy. One of the greatest contributions he can make is job creation.

Small and medium-sized enterprises are responsible for a significant portion of jobs in Brazil and worldwide. Entrepreneurs who start with a small business, a startup or a family business often become employers who generate income and drive economic development in their regions (Kritikos, 2024).

The hiring process is an important milestone in the entrepreneurial journey, as it reflects the growth of the business and the entrepreneur's ability to share responsibilities. Furthermore, by creating jobs, the entrepreneur contributes to

improving the quality of life of many families and stimulating the circulation of income locally.

Connection to the next chapter: the challenges of doing business in Brazil

Although the entrepreneurial journey is full of achievements, it is also full of obstacles, and in Brazil, these challenges can be even more intense. Excessive bureaucracy, high tax burden, difficulty in accessing credit, and economic and political instability are just some of the factors that make the path difficult for entrepreneurs in the country { Seyoum (2024)}. In the next chapter, we will analyze how these barriers impact entrepreneurship and what can be done to overcome them, bringing a realistic view of the daily struggle of those who decide to undertake in Brazil.

The Difficulties of Entrepreneurship in Brazil

Starting a business in Brazil is not an easy task. Despite the growing number of new businesses and startups, entrepreneurs face a series of obstacles that make the path more difficult. High taxes, excessive bureaucracy, difficult access to credit, and economic and political instability are just some of the challenges that directly affect the success and survival of companies in the country {Rashid & Rashid (2024)}. In this chapter, we will take a closer look at these difficulties and their impact on the Brazilian entrepreneurial ecosystem.

High tax burden and fiscal complexity

The tax system in Brazil is one of the most complex in the world. According to a study by the Brazilian Institute of Planning and Taxation (IBPT), Brazil has one of the highest tax burdens in the world, with taxes consuming around 32% of the Gross Domestic Product (GDP). In addition, the complexity of tax obligations is a major challenge for entrepreneurs, especially small businesses. The World Bank's Doing Business Report ranks

Brazil 124th out of 190 countries in the "ease of doing business" category, with the high tax burden being one of the main reasons for this. Small businesses, which represent 98% of businesses in the country, end up facing difficulties in complying with tax obligations, which directly impacts their viability and growth. Tax bureaucracy also ends up generating high operating costs, diverting resources that could be invested in business growth (Fernandez-i-Marin et al., 2024).

Excessive bureaucracy

Bureaucracy in Brazil is also a major obstacle for those who want to start a business. According to the 2023 Global Competitiveness Report, Brazil ranks 124th in the "ease of doing business" ranking, mainly due to the lengthy business registration and licensing processes. To start a new business, entrepreneurs face a process that can take up to 3 months or more, depending on the city and the type of company. In a study by the International Chamber of Commerce (ICC), 72% of entrepreneurs stated that bureaucracy is one of the main factors discouraging entrepreneurship in the country. This is especially problematic for microenterprises, which account for more than 50% of employment in the Brazilian private sector, according to data from Sebrae (Neves et al., 2024).

Restricted access to credit and financing

Obtaining credit in Brazil is a difficult task for many entrepreneurs. According to Sebrae, only 25% of micro and small businesses have access to formal credit. Interest rates, among the highest in the world, are around 25% per year for small businesses, according to data from the Central Bank of Brazil. This scenario hinders the growth of companies and increases the risk of bankruptcy, especially for businesses that depend on working capital.

In 2023, small and medium-sized enterprises (SMEs) in Brazil faced a 12% drop in the

volume of credit available, compared to the previous year, which represents a huge difficulty for maintaining activities and investments. Entrepreneurs are often forced to resort to informal sources of credit, which impose even higher rates, which contributes to debt and bankruptcies.

Economic and political instability

Brazil's economic and political instability is a constant. Over the last decade, the country has experienced different periods of recession and high inflation, which has resulted in an environment of uncertainty for entrepreneurs. According to the Institute of Applied Economic Research (IPEA), inflation in Brazil in 2023 was 6.3%, a significant increase compared to previous years. This puts pressure on companies' profit margins and makes financial planning more difficult. In addition, the volatile political environment, with frequent changes in public policies and regulations, creates uncertainty for entrepreneurs, making long-term decisions difficult. A survey by the National Confederation of Industry (CNI) indicated that 68% of entrepreneurs consider political instability to be one of the biggest challenges for managing their companies (Berndt et al., 2024).

Lack of qualifications and shortage of skilled labor

The shortage of skilled labor is a recurring problem in Brazil. The Higher Education Census by the National Institute of Studies and Educational Research Anísio Teixeira (INEP) reveals that, in 2022, the unemployment rate among young Brazilians between the ages of 18 and 24 was 27.4%, with a large part of these young people out of the job market due to a lack of qualifications.

The lack of specific skills in areas such as technology, finance and digital marketing is an obstacle for entrepreneurs seeking to build competitive and innovative teams (Rizvanovic et al., 2023). In a survey by Sebrae, 62% of

small business owners stated that the lack of professional qualifications directly impacts the company's performance, especially in innovation and technology sectors.

Fierce competition and market saturation

Brazil is one of the countries with the highest entrepreneurship rate in the world, with more than 20 million entrepreneurs, according to data from Sebrae . However, this large number of companies generates fierce competition, which makes the business environment highly competitive. In saturated sectors, such as retail and food, profit margins become increasingly narrow, which requires entrepreneurs to constantly innovate to stand out in the market . A survey by Fundação Getúlio Vargas (FGV) revealed that, in 2023, 38% of small companies closed their doors in the first 5 years of operation. The highly competitive market is one of the main reasons for this, as companies are unable to maintain significant differentiation in the face of so many competitors (Hakim et al., 2023).

Entrepreneurial culture and fear of failure

In Brazil, there is still a certain stigma surrounding business failure. According to a survey by PwC Brazil , 57% of Brazilian entrepreneurs say that fear of failure is a limiting factor for starting new businesses (Ribeiro, D., 2023). This fear is especially strong in small towns, where the entrepreneurial vision is still developing. For many, failure means not only the end of the business, but also the social stigma of not having been able to succeed.

This scenario can demotivate potential entrepreneurs, limiting the capacity for innovation and the growth of new businesses in Brazil.

Business Closures in Brazil: A Reflection of Difficulties

Brazil has an alarming rate of business closures. In 2023, more than 2.1 million companies closed their doors in the country, according to data from Sebrae . This number represents an average of more than 5,700 companies closing their doors per day. In comparison, 3.3 million companies were opened in the same year, showing that, despite the growing number of new businesses, many are unable to survive in the long term.

According to data from the Brazilian Institute of Geography and Statistics (IBGE), approximately 38% of Brazilian companies do not survive the first 5 years, and only 15% of new companies reach 10 years of operation. This high business mortality rate is a reflection of the structural difficulties of the business environment in the country. (Ribeiro, D., 2023).

Entrepreneurs' Indebtedness After Bankruptcy

Debt is a common consequence for entrepreneurs whose companies have gone bankrupt. Data from Serasa Experian reveals that, in 2023, the number of indebted companies in Brazil grew by 12.7% compared to the previous year, reaching a total of 7.5 million businesses with active debts. In addition, the total value of these companies' debts exceeded R\$200 billion.

Many entrepreneurs end up accumulating personal debts, since the company's finances and those of individuals are often mixed up, which makes recovery even more difficult. This debt scenario can compromise the ability to start over, since access to credit is limited, negatively affecting the entrepreneur's professional and financial future (Sikka & Bhayana, 2024).

The Path to Overcoming Difficulties

Starting a business in Brazil is difficult, but not impossible. With alternatives for financing, adaptation to economic and political changes,

and the adoption of new technologies, it is possible to overcome these challenges. Despite the adverse scenario, many Brazilian entrepreneurs have stood out for their resilience, innovation, and ability to adapt.

In the next chapter, we will learn about the trajectories of some of the greatest Brazilian entrepreneurs, who not only overcame the difficulties of the business environment, but also became examples of success and transformation for Brazil and the world.

Success Stories: Brazil's Top Entrepreneurs

Brazil has a rich history of entrepreneurs who, with vision and courage, not only changed their own lives, but also helped transform the economy and society. These successful examples show that, with persistence, innovation and focus, it is possible to build great companies, even in a challenging environment. In this chapter, we will meet some of the main names in entrepreneurship in Brazil, divided between historical references, who helped shape the country's economic scenario, and current entrepreneurs, who continue to leave their mark on the economy.

Historical References: Entrepreneurs who Made History in Brazil

Baron of Mauá (Irineu Evangelista de Souza)

Irineu Evangelista de Souza, better known as Baron of Mauá, was one of the great pioneers of entrepreneurship in Brazil. Born in 1813, he became famous for his industrial, financial and infrastructure initiatives. Baron of Mauá was responsible for creating Brazil's first railway and the first telegraph line. He also founded a bank and participated in several businesses that helped modernize the country in the 19th century.

With his investments and vision for the future, Mauá helped propel Brazil into the industrial age. His work in building railways, for example, transformed the country's logistics, reducing costs and boosting trade. His

impact is still visible today, as many of his innovations are still part of Brazil's infrastructure system.

Silvio Santos

Silvio Santos is, without a doubt, one of the greatest icons of Brazilian entrepreneurship. Born in Rio de Janeiro in 1930, he began his career as a street vendor, then worked in several jobs and, through hard work and determination, created an empire that includes SBT (Sistema Brasileiro de Televisão). Silvio also has investments in shopping malls and other companies.

In 2020, SBT had an estimated revenue of over R\$3 billion. Silvio Santos, with his diverse portfolio, has become one of the most influential figures in Brazil, employing thousands of people and shaping the entertainment industry in the country. His example of entrepreneurship shows how it is possible to build a successful empire, even starting from scratch.

Jorge Paulo Lemann

Jorge Paulo Lemann is one of the biggest names in entrepreneurship in Brazil and the world. Born in Rio de Janeiro in 1939, Lemann began his career as a banker, but became known for his actions as an investor and businessman. He was one of the founders of 3G Capital, the investment fund that bought large companies such as Ambev, Burger King and Kraft Heinz.

Lemann's impact is immense: Ambev, for example, is one of the largest breweries in the world, with revenues exceeding R\$55 billion in 2020. 3G Capital was also responsible for creating one of the largest global food conglomerates. His innovative and efficient approach to business has transformed entire sectors, creating thousands of jobs and moving economies around the world.

Abílio Diniz

Abílio Diniz is another important name in the

business world in Brazil. He was responsible for the expansion of Grupo Pão de Açúcar, one of the largest retail chains in the country. He began his career in the supermarket sector and, with a lot of hard work, managed to expand the company, diversifying its operations and transforming Pão de Açúcar into one of the largest retail and distribution conglomerates in Brazil.

The Pão de Açúcar Group is responsible for more than 150,000 jobs in Brazil and, in 2020, recorded a net revenue of more than R\$70 billion. Abílio Diniz has become an icon of adaptation and innovation in the retail sector, contributing to market growth and wealth generation in several regions of the country.

Luiza Helena Trajano

Luiza Helena Trajano is a prominent name in Brazilian entrepreneurship. She is the chairwoman of the board of directors of Magazine Luiza, one of the largest retail chains in Brazil. Luiza began her career at the company founded by her uncles and, with her innovative vision, helped transform Magazine Luiza into a retail giant.

With over 1,100 stores in Brazil, Magazine Luiza had net revenue of R\$43 billion in 2020. In addition, the company has become a reference in the digital transition, investing heavily in e-commerce, which represented 40% of its total sales. Luiza Helena has become an example of how to lead with innovation, ethics and a focus on people's well-being, becoming one of the most admired entrepreneurs in Brazil.

Current Entrepreneurs: Names That Are Making a Difference

Flavio Augusto da Silva

Flávio Augusto is the founder of Wise Up, one of the largest English school chains in Brazil. He started his career with few resources, but with a lot of hard work, he managed to create a company that would become a reference in teaching English to adults. His business vision went beyond simple language

teaching, expanding into the franchise and investment sector.

With over 400 schools in operation, Wise Up achieved revenues of R\$1 billion in 2020. Flávio Augusto also invests in other initiatives, such as O Novo Mercado, an education platform aimed at entrepreneurs. His story is an example of how a good idea, combined with a focus on hard work, can transform a market niche.

Roberto Justus

Roberto Justus is a prominent businessman in Brazil, known for his work in advertising, television and investments. Founder of the Newcomm Group, one of the largest advertising agencies in the country, Justus also became famous for his participation in the program Shark Tank Brasil, where he acts as an investor.

With his entrepreneurial vision, Justus helped transform the advertising industry in Brazil and continues to be one of the country's biggest business influencers. His portfolio of companies and investments also includes major names in communications, with combined revenues exceeding R\$5 billion.

Alexandre Costa

Alexandre Costa is the founder of Cacau Show, one of the largest chocolate chains in Brazil. What started as a small chocolate business in 1988 has become an empire, with more than 2,000 stores spread across the country. Alexandre knew how to take advantage of the premium chocolate market niche and expand the brand strategically, making it a huge success.

In 2020, Cacau Show had revenues of over R\$4 billion. The company created thousands of direct and indirect jobs, creating a network of suppliers and collaborators in several regions of Brazil. Alexandre Costa is a clear example of how an entrepreneur can dominate a specific market and create a solid brand.

Anitta

Anitta is best known as a singer, but she is also a successful businesswoman. She has built an empire with her personal brand, and in addition to being one of the biggest artists in Brazil, she has invested in several sectors, such as fashion, technology and music. Anitta has built an international career and has been a pioneer in using digital platforms to expand her business.

Her success goes beyond music, with her personal product brands and investments in technology companies, such as Aceleradora Anitta. She is one of the Brazilian artists with the greatest potential for financial impact, being an example of how entrepreneurship can be multifaceted and based on a strong personal brand.

Guilherme Benchimol

Guilherme Benchimol is the founder of XP Investimentos, one of the largest investment platforms in Brazil. Founded in 2001, XP began as a brokerage firm and, under Benchimol's leadership, became one of the leading players in the financial market. He was one of the people responsible for democratizing access to investments and educating Brazilians about personal finance.

XP Investimentos has over R\$600 billion in assets under custody and is one of the largest financial services providers in Brazil. Benchimol is an example of how strategic vision can transform an entire sector, democratizing access to financial opportunities and creating a network of investors in Brazil.

These entrepreneurs have not only created great companies, but they have also helped move Brazil's economy forward. Their stories are not only inspirational for new businesses, but they have also had a real impact on the lives of thousands of people who find work and growth opportunities in their companies. The success of these entrepreneurs is reflected mainly in the creation of jobs and in how their companies often become pillars of entire

communities.

These companies are largely responsible for moving the job market in Brazil, creating a network of opportunities that benefit several areas of the economy. In the next chapter, we will see how these success stories continue to generate jobs, even in times of economic challenges, and how entrepreneurship continues to be essential for the future of the job market in Brazil.

The Impact of Entrepreneurs and Small/Medium-Sized Enterprises on Job Creation in Brazil

Small and medium-sized companies are extremely important to the Brazilian economy, especially when it comes to job creation. Over the last five years, these companies have been responsible for a large portion of formal jobs. Let's take a closer look at their impact on job creation, highlighting the most recent data and some observed trends.

These represent 99% of establishments in Brazil, totaling approximately 6.4 million units (sebrae.com.br). In addition, they are responsible for 52% of formal jobs in the country, highlighting their importance in the absorption of labor, being responsible for approximately 27% of the Brazilian Gross Domestic Product (GDP), a significant contribution to national economic growth.

Job Creation in Recent Years

In 2023, micro and small businesses generated more than 1.1 million formal jobs in Brazil, which represents 80% of the formal jobs created in the year (G1). This shows the continued importance of absorbing labor in the country.

In 2024, performance continued to be positive. Until July alone, they were responsible for more than 900,000 jobs, representing around 60% of formal jobs created up to that point (ASN Brazil). These numbers reflect the companies' ability to adapt and grow, even in the face of a challenging economic scenario.

Recent Trends

In recent years, the participation of SMEs in the creation of formal jobs has increased. For example, in May 2023, micro and small companies represented 70% of employment relationships in Brazil, an increase of 2 percentage points compared to 2022 (SEBRAE PR).

Furthermore, in 2023, Brazil saw the opening of 859 thousand micro and small businesses, which represented a growth of 6.62% compared to the previous year (G1). This increase in the number of businesses shows that the environment is more favorable for those who want to undertake and generate new jobs.

Despite the major impact of companies, they still face significant challenges, such as high tax burdens, excessive bureaucracy and difficulty in accessing credit. In order for these companies to continue growing and generating more jobs, it is essential to overcome these obstacles.

FINAL CONSIDERATIONS

Entrepreneurship is one of the fundamental pillars of today's economy, whether in the traditional format of creating new companies or in the indirect model that occurs within large corporations. The ability to identify opportunities, innovate and transform ideas into actions has proven to be crucial not only for generating new business, but also for the adaptation and growth of companies that are already established in the market.

When we think about direct entrepreneurship, it plays a vital role in the economy by creating companies, generating jobs, promoting innovation and meeting the demands of specific niches. In Brazil, for example, micro and small businesses are responsible for more than 50% of formal jobs and a significant portion of the country's GDP. Despite the challenges imposed by bureaucracy, high tax burden and difficulties in accessing credit, Brazil has experienced remarkable growth in the number of startups and new businesses. Examples such as Jorge Paulo

Lemann, Luiza Helena Trajano and Anitta show how Brazilian entrepreneurship can have a significant impact, not only within the country, but also globally.

However, entrepreneurship goes beyond the creation of new companies. Intrapreneurship, or entrepreneurship within large organizations, is equally essential for the success of companies in the current scenario. With a constantly changing market, accelerated digitalization and global economic challenges, companies need to cultivate an entrepreneurial mindset to remain competitive and innovative. An intrapreneur is someone who, even within a large organization, identifies opportunities for innovation and contributes to significant changes, whether through the development of new products or the improvement of processes. These professionals are agents of transformation within companies, with an impact as relevant as that of entrepreneurs who found new businesses.

Fostering intrapreneurship is essential to ensure that large companies do not lose their dynamism or become obsolete. When companies encourage an entrepreneurial mindset internally, they create an environment that fosters continuous innovation and collaboration, in addition to remaining relevant to market needs. Big names such as Google, Amazon and Tesla are examples of companies that encourage an entrepreneurial mindset, allowing their employees to feel empowered to make decisions and propose innovative ideas.

Furthermore, entrepreneurship is an important driver of the economy because it not only generates economic growth, but also improves people's quality of life and strengthens local communities. Whether they are creators of new businesses or innovators within large corporations, entrepreneurs play a key role in adapting economies to constant market changes and new social demands.

Entrepreneurship, in its various forms, must therefore be seen as an essential foundation of the economy. To ensure that this impact remains positive, it is necessary to create conditions that favor both new businesses and innovation

within large companies. This includes public policies that encourage the entrepreneurial spirit, education that prepares future generations for the challenges of the market, and a support ecosystem that provides the conditions for entrepreneurs of all sizes to thrive. The economic future depends on the ability of companies and individuals to constantly reinvent themselves and seize the opportunities that arise. Entrepreneurship, with its power to transform and innovate, will continue to be key to this evolution.

REFERENCES

ALLAL-CHÉRIEF, O.; CLIMENT, J. C.;

BERENGUER, K. J. U. Born to be sustainable: How to combine strategic disruption, open innovation, and process digitization to create a sustainable business. *Journal of Business Research*, v. 154, p. 113379, 2023. Disponível em: <https://doi.org/10.1016/j.jbusres.2022.113379>.

AWAD, J.; MARTÍN-ROJAS, R. Enhancing social responsibility and resilience through entrepreneurship and digital environment. *Corporate Social Responsibility and Environmental Management*, v. 31, n. 3, p. 1688-1704, 2024. Disponível em: <https://doi.org/10.1002/csr.2655>.

BERNDT, A. C.; GOMES, G.; BORINI, F.

M. Exploring the antecedents of frugal innovation and operational performance: the role of organizational learning capability and entrepreneurial orientation. *European Journal of Innovation Management*, v. 27, n. 5, p. 1704-1722, 2024. Disponível em: <https://doi.org/10.1108/EJIM-06-2022-0320>.

BINEY, I. K. Adult education and entrepreneurship: getting young adults involved. *Journal of Innovation and Entrepreneurship*, v. 12, n. 1, p. 13, 2023. Disponível em: <https://doi.org/10.1186/s13731-023-00277-0>.

BITENCOURT, C.; ZANANDREA, G.;
FROEHLICH, C.; AGOSTINI, M. R.;
HAAG, R. Rethinking the company's role: Creating shared value from corporate social innovation. *Corporate Social Responsibility and Environmental Management*, 2024. Disponível em: <https://doi.org/10.1002/csr.2723>.

BLOMSMA, F.; TENNANT, M.; OZAKI, R.

Making sense of circular economy: Understanding the progression from idea to action. *Business Strategy and the Environment*, v. 32, n. 3, p. 1059-1084, 2023. Disponível em: <https://doi.org/10.1002/bse.3107>.

ENSTROEM, R.; SCHMALTZ, R. Striking gold: navigating the education massification maze for work readiness. *Journal of Work-Applied Management*, 2024. Disponível em: <https://doi.org/10.1108/JWAM-10-2023-0100>.

FAHRURROZI, M. Entrepreneurship Teaching: Design and Activities of 21st Century Learning for Economic Class under Mini-Project (Participatory-Phenomenological Design). *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, v. 10, n. 2, 2024. Disponível em: <https://doi.org/10.33394/jk.v10i2.11063>.

FERNÁNDEZ-I-MARÍN, X.;

HINTERLEITNER, M.; KNILL, C.;

STEINEBACH, Y. Bureaucratic overburdening in advanced democracies. *Public Administration Review*, v. 84, n. 4, p. 696-709, 2024. Disponível em: <https://doi.org/10.1111/puar.13725>.

FLORES, M. C.; GRIMALDI, R.; POLI, S.;

VILLANI, E. Entrepreneurial universities and intrapreneurship: A process model on the emergence of an intrapreneurial university. *Technovation*, v. 129, p. 102906, 2024.

Disponível em: <https://doi.org/10.1016/j.technovation.2023.102906>.

HAKIM, A. R.; WIJAYA, A. S.; SYAFI'I, A.; ROHIMI, U. E. Analysis of factors affecting competitive advantage in business management. *Riwayat: Educational Journal of History and Humanities*, v. 6, n. 3, p. 1958-1964, 2023. Disponível em: <https://doi.org/10.24815/jr.v6i3.34154>.

HAREFA, D.; HULU, F. Mathematics learning strategies that support Pancasila moral education: Practical approaches for teachers. *Afore: Jurnal Pendidikan Matematika*, v. 3, n. 2, p. 51-60, 2024. Disponível em: <https://doi.org/10.57094/afore.v3i2.2299>.

HASHIMY, S. Q.; JAHROMI, A.; HAMZA, M.; NAAZ, I.; NYAMWERO, N. B.; HT, B. Nurturing leadership and capacity building for success: Empowering growth. *International Journal of Rehabilitation & Special Education*, v. 3, n. 2, 2023. Disponível em: <https://doi.org/10.48165/ijrse.2023.3.2.5>.

JARDIM, J.; PEREIRA, A.; BARTOLO, A.; PINHO, A.; CARDOSO, M.; CATANHO, P. Promoting an Entrepreneurial Culture: Development, Feasibility and Acceptability of a Primary School-Based Program Focused on Soft Skills. *Education Sciences*, v. 13, n. 11, p. 1074, 2023. Disponível em: <https://doi.org/10.3390/educsci13111074>.

KRITIKOS, A. S. Entrepreneurs and their impact on jobs and economic growth. *IZA World of Labor*, 2024. Disponível em: <https://doi.org/10.15185/izawol.8.v2>.

LASPITA, S.; SITARIDIS, I.; KITSIOS, F.; SARRI, K. Founder or employee? The effect of social factors and the role of entrepreneurship education. *Journal of Business Research*, v. 155, p. 113422, 2023.

iJEResearch - Vol. 1, Number 1 – 2025 - ISSN 2764-9733

Disponível em: <https://doi.org/10.1016/j.jbusres.2022.113422>.

MALDONADO PAES, J.; SCAVARDA, L. F.; CERYNO, P.; MACHADO, E. Human technology organizational dimensions for sustainable logistics: a context mechanism outcome model. *Brazilian Journal of Operations & Production Management*, v. 19, n. 2, 2022. Disponível em: <https://doi.org/10.14488/BJOPM.2022.002>.

MARTINS, F.; CEZARINO, L.; LIBONI, L.; HUNTER, T.; BATALHAO, A.; PASCHOALOTTO, M. A. C. Unlocking the potential of responsible management education through interdisciplinary approaches. *Sustainable Development*, v. 32, n. 3, p. 2001-2019, 2024. Disponível em: <https://doi.org/10.1002/sd.2757>.

MOȘTEANU, N. R. Adapting to the Unpredictable: Building Resilience for Business Continuity in an Ever-Changing Landscape. *European Journal of Theoretical and Applied Sciences*, v. 2, n. 1, p. 444-457, 2024. Disponível em: [https://doi.org/10.59324/ejtas.2024.2\(1\).37](https://doi.org/10.59324/ejtas.2024.2(1).37).

NEVES, M. L.; CRUZ, P. B. D.; LOCATELLI, O. Factors that influence the survival of micro and small enterprises in Brazil. *RAM. Revista de Administração Mackenzie*, v. 25, n. 1, eRAMC240073, 2024. Disponível em: <https://doi.org/10.1590/1678-6971/eRAMC240073.en>.

NOTARISTEFANO, G. M. Analysis of agribusiness productivity development in Brazil. 2023.

OKADA, A.; GRAY, P. A Climate Change and Sustainability Education Movement: Networks, Open Schooling, and the 'CARE-KNOW-DO' Framework. *Sustainability*, v. 15,

n. 3, p. 2356, 2023. Disponível em: <https://doi.org/10.3390/su15032356>.

RASHID, Z.; RASHID, S. Political Instability Causes & Affects. *Pakistan Journal of Humanities and Social Sciences*, v. 12, n. 1, p. 294-303, 2024. Disponível em: <https://doi.org/10.52131/pjhss.2024.v12i1.1935>.

RIBEIRO, D. T. D. O. Diversity and inclusion in Brazilian audit firms? Always changing to remain the same. 2023. Tese (Doutorado) – Universidade de São Paulo. Disponível em: <https://doi.org/10.11606/T.12.2023.tde-08112023-190424>.

RIZVANOVIĆ, B.; ZUTSHI, A.; GRILO, A.; NODEHI, T. Linking the potentials of extended digital marketing impact and start-up growth: Developing a macro-dynamic framework of start-up growth drivers supported by digital marketing. *Technological Forecasting and Social Change*, v. 186, p. 122128, 2023. Disponível em: <https://doi.org/10.1016/j.techfore.2022.122128>.

ROWE, L.; KNIGHT, L.; IRVINE, P.; GREENWOOD, J. Communities of practice for contemporary leadership development and knowledge exchange through work-based learning. *Journal of Education and Work*, v. 36, n. 6, p. 494-510, 2023. Disponível em: <https://doi.org/10.1080/13639080.2023.2255149>.

SEYOUM, B. Entrepreneurship, Domestic Investment, and Services. In: *State Fragility, Business, and Economic Performance: An Ethiopian Perspective*. Cham: Springer International Publishing, 2024. p. 225-274. Disponível em: https://doi.org/10.1007/978-3-031-44776-1_6.

SIKKA, V.; BHAYANA, P. Barriers to Comprehensive Financial Inclusion Across the Globe: From Sociocultural Norms to Systemic Challenges. In: *E-Financial Strategies for Advancing Sustainable Development: Fostering Financial Inclusion and Alleviating Poverty*. Cham: Springer Nature Switzerland, 2024. p. 89-126. Disponível em: https://doi.org/10.1007/978-3-031-67523-2_7.

ZEMLYAK, S.; GUSAROVA, O.; KHROMENKOVA, G. Entrepreneurial initiatives, education and culture: hubs for enterprise innovations and economic development. *Sustainability*, v. 15, n. 5, p. 4016, 2023. Disponível em: <https://doi.org/10.3390/su15054016>.

ZEMLYAK, S.; GUSAROVA, O.; KHROMENKOVA, G. Entrepreneurial initiatives, education and culture: hubs for enterprise innovations and economic development. *Sustainability*, v. 15, n. 5, p. 4016, 2023. Disponível em: <https://doi.org/10.3390/su15054016>.



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.15131581

SPECIALIZED EDUCATIONAL SERVICES (AEE) AND THE POSSIBILITIES OF PEDAGOGICAL PLANNING IN THE DEVELOPMENT OF SKILLS IN AUTONOMOUS AND SOCIAL LIVING ACTIVITIES (AVAS) THAT FAVOR LEARNING

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ABSTRACT

This article explores the importance of Specialized Educational Assistance (SEA) as a fundamental resource in promoting learning and the development of Skills for Independent and Social Living Activities (AVAS) in students target audience for Special Education. We discuss how personalized pedagogical planning within the context of SEA can benefit students by increasing their autonomy and participation in school life. Additionally, we examine the benefits of these skills in the learning process. Through literature review and case analysis, we demonstrate how SEA can play a crucial role in the inclusion and full development of students with disabilities, disorders and high abilitiftedness. The objective of this work is to explore the possible contributions, from this study, to future inclusive educational practices. In this way, the aim is to contribute to the advancement of inclusive education, by promoting a broader and more comprehensive view of the role of AEE and pedagogical planning in the development of skills for autonomous and social life. The importance of the dialogue between theory and practice is emphasized in this article. The aim is to demonstrate how the theory can be

applied in educational practice to promote the learning of students who require specialized educational assistance. It is believed that this dialogue can provide a better understanding of the challenges faced by these students and how to overcome them. The research question that this article aims to answer is: What is the necessary harmony between pedagogical planning that promotes learning and Specialized Educational Assistance (AEE)? This question will be addressed through the analysis of existing literature on the topic, as well as through direct observation of educational practices in the AEE environment at E. M. Maria Augusta Lopes - EMMAL, located in the municipality of Mangaratiba – Rio de Janeiro. It is hoped that, at the end of this work, it will be possible to offer a significant contribution to inclusive pedagogy, by providing a better understanding of the role of AEE and pedagogical planning in the development of skills necessary for autonomous and social life.

Keywords: Specialized Educational Service – AEE; Autonomous and Social Life Activities – AVAS; Special education ; Inclusive education; Planning.

INTRODUCTION

Special Education from the perspective of Inclusive Education is a subject that has gained more relevance each year in pedagogical and political debates, as it emerges from a principle that aims at the right of all students, regardless of their individual differences, to access an education with equity, breaking down barriers in the search for guaranteeing their participation and full development in a qualitative way.

Specialized Educational Assistance (SEE) emerges as an important ally for the construction of a pedagogical practice that favors the development of skills in the Activities of Autonomous and Social Living (AVAS) of students with disabilities, disorders and/or high abilities/ giftedness , offering assertive strategies for their reality, promoting inclusion and ensuring equal opportunities in the school environment, providing the necessary resources and support so that these students can reach their full educational potential. In this context, this work aims to explore possible contributions, based on this study, for future inclusive educational practices, highlighting the importance of the dialogue between theory and practice.

The main research question that guides this study is: What is the necessary harmony between pedagogical planning that favors learning and Specialized Educational

Assistance (SEA)? To answer this question, it is necessary to understand the concepts involved and current practices, as well as to seek theoretical references that can support the analyses. As Mantoan (2016) states, "inclusive education requires careful and flexible planning, capable of adapting to the individual needs of each student."

Furthermore, it is essential to consider the particularities of the AEE in the context of pedagogical planning, thus understanding that this planning is the fundamental tool for the inclusion and meaningful learning of all students, as confirmed by Batista & Gonçalves (2018), "the AEE must be articulated with the other activities of the regular school, aiming at the realization of school inclusion". Therefore, when thinking about pedagogical planning aimed at the development of skills in the Activities of Autonomous and Social Living (AVAS), it is necessary to consider the specificities of the AEE and how it can favor the student's academic development.

This study therefore aims to contribute to the discussion on pedagogical practices that assist in the development of learning together with skills in the AVAS of students with disabilities, disorders and/or high abilities/ giftedness . Always seeking dialogue between theory and practice so that the reflections proposed here can assist in the construction of an increasingly

inclusive education.

Based on the need to explore the possible contributions that this study may offer for future inclusive educational practices, it is essential to emphasize the importance of the dialogue between theory and practice. As already stated by Freire (1996), theory and practice are not dichotomous, but rather complementary. It is in the exercise of praxis that the educator becomes a pedagogue, articulating theory and practice in favor of meaningful teaching.

In this sense, the main question of this article becomes essential: What is the necessary harmony between pedagogical planning that favors learning and Specialized Educational Assistance (AEE)? The answer to this question may lie in understanding the need for pedagogical planning that considers the specificities of each student. As stated by Rodrigues (2006), a curriculum must be flexible and adaptable to the different needs of students.

In the case of AEE, this flexibility is even more relevant, since its objective is to guarantee the school inclusion of students with disabilities, disorders and high abilities/ giftedness (BRASIL, 2008). In this sense, it is essential that pedagogical planning is oriented towards the development of skills in the Autonomous and Social Life Activities (AVAS) of these students.

This article aims to contribute to reflections on how this alignment between pedagogical planning and AEE can be achieved in educational practice. In addition, we examine the strategies and methods used to achieve these objectives, presenting evidence that demonstrates the benefits of AEE in the academic and daily lives of students.

METHODOLOGY

To prepare this article, a comprehensive bibliographic review was carried out that included studies, analyses and research in documents related to Specialized Educational Assistance (AEE), the development of skills in Autonomous and Social Living Activities

(AVAS) and their impact on the learning of students with disabilities, disorders or high abilities/ giftedness . The research was conducted in academic databases, university libraries and relevant online resources. In addition, it also has compiled the analysis of the work carried out in the Multifunctional Resources Room - AEE of EM Maria Augusta Lopes - EMMAL, located in the city of Mangaratiba, state of Rio de Janeiro, to exemplify the effectiveness of AEE in the development of AVAS and how these skills contribute to the inclusion and learning of students who are the target audience of Special Education.

At EMMAL, Specialized Educational Assistance (AEE) works as a Special Education service. In this context, the objective is to identify, develop and organize pedagogical resources that enable the elimination of barriers to the independent and social coexistence of children with disabilities. The Multifunctional Resource Room then becomes a space flooded with pleasure, knowledge, expectations, experiences, entertainment and, above all, relationships. This school space, with countless possibilities, shows us the possibilities of contributing to the integration of work aimed at the regular classroom, and, with connectivity increasingly emerging in the daily lives of children, promote, through adaptive strategies and new technologies, appropriate resources that positively influence the disabled children served in this Teaching Unit, since such tools used intentionally directly help with the disability, enabling real social inclusion.

The evidence collected through this qualitative analysis was conducted using thematic analysis, a flexible tool that allows for rich and detailed identification of themes within the data (Braun & Clarke, 2006). This methodology allows for an in-depth exploration of the potential contributions of this study to future inclusive educational practices that are presented throughout this article, supporting the discussions and conclusions.

Meaningful learning

Meaningful learning is not a new concept in education. It is an idea known to scholars in the field and has remained current over the years. The so-called Meaningful Learning Theory (SLT) or Assimilation Theory was proposed by David Ausubel (1918-2008), based on the cognitive theory, and aims to explain the internal mechanisms of the structure of knowledge and learning. According to David Ausubel , the view of the Assimilation Theory for the foundations of inclusive education starts from situations in which it is necessary to anticipate decisions, establish relationships or infer new senses, meanings or references. In the construction of meanings, problems may arise that require a solution, hypothesis, curiosity that encourages inquiry, questioning, establishing relationships and associating school knowledge with practical social life.

Special Education from an Inclusive Education perspective operates in a field that recognizes and celebrates the unique diversity of each student, highlighting the importance of providing meaningful learning experiences. In an inclusive school environment, educators play a vital role in creating a space that fosters understanding, engagement, and holistic development of students.

Specialized educational services (AEE) as an inclusive resource

Specialized Educational Assistance - AEE is one of the services provided by Special Education, guided by three fundamental principles: respect for differences, equal opportunities and appreciation of diversity. Based on these principles, the aim is to recognize and value the particularities of each student, offering them appropriate and individualized support that aims to promote access, participation and progress for students with disabilities, global developmental disorders and high abilities/ giftedness . It is offered as a complement to regular education and adapted to the characteristics and needs of each student.

The AEE guidelines provide guidance for the organization and implementation of this inclusive resource. Among them, the following stand out: flexibility of schedule and space, interdisciplinarity and teamwork, individualization of care and the use of specific pedagogical resources.

Within this context, the AEE assumes a prominent role by directing its pedagogical planning towards the development of the skills of Autonomous and Social Living Activities - AVAS. These skills encompass aspects such as self-care, mobility, communication, self-management, social skills and the ability to make decisions, all of which are essential for autonomous living and full inclusion of the individual in society.

Advantages of specialized educational services

The AEE brings several advantages for educational inclusion. First, it allows students with disabilities to have access to individualized and specialized care that takes into account their needs and potential. In addition, it promotes interaction between students with and without disabilities, fostering mutual respect and valuing diversity.

Another advantage of AEE is the training of teachers and other education professionals to deal more appropriately with special educational needs. This occurs through training in inclusive pedagogical strategies and the use of appropriate diversified resources.

Definition of autonomous and social living activities - avas and their importance in student development

AVAS encompass a series of skills related to daily and social life, such as taking care of one's own personal hygiene, eating, dressing, moving around, organizing one's environment, communicating, and interpersonal relationships, among others. For students with disabilities or developmental disorders, or high abilities/ giftedness , the development of these

skills is essential for their autonomy and social inclusion. It is the role of the AEE, through pedagogical planning, to offer strategies and activities that favor the development of these skills.

Pedagogical planning in the development of avas

Pedagogical planning in AEE must be individualized, taking into account the specific characteristics and needs of each student. For the effective development of AVAS, it is essential to follow some steps:

a. Individualized Assessment: The first step is to carry out a detailed assessment of the student's current skills in relation to the AVAS. This allows us to identify the areas in which the student needs further development.

b. Setting Goals and Objectives: Based on the initial individualized assessment, specific goals and objectives are established for the student. These goals must be measurable and realistic.

c. Personalized Strategies and Activities: Pedagogical planning should include personalized strategies and activities to meet the student's needs. This may involve the use of adapted resources, assistive technologies, digital information and communication technologies (DICT) and teaching materials characteristic of each specificity.

d. Integration with the Regular Curriculum: AEE should not be isolated from the regular curriculum. On the contrary, the activities and strategies developed in AEE should be integrated into the school curriculum, ensuring that the student actively participates in regular classes and activities.

e. Constant Monitoring and Evaluation: Student progress must be closely monitored, and pedagogical planning must be adjusted as necessary. Constant evaluation is essential to ensure that the goals set are successfully achieved and/or reassessed.

Benefits of autonomous and social living activities (avas) for learning

As Mendes, Silva and Schambeck (2012) point out, pedagogical objects consist of materials used by teachers, which can be ready-made or adapted objects with the purpose of meeting a need and ensuring the development of an activity autonomously by the student. In addition, the accessibility that these strategies and materials provide to students with disabilities can also provide them with the expansion of their skills and potentialization of their learning. In this way, educational resources assist teachers and educators in the teaching and learning process as innovative proposals that allow greater access to students. For Tarouco et al (2003, p.02), educational objects can be defined as any resource, supplementary to the learning process, which can be reused to support learning. Working with the development of skills in AVAS as a learning resource not only benefits the daily lives of students with disabilities, disorders or high abilities/ giftedness, but also has a positive impact on the teaching-learning process. Here are some of the main benefits:

a. Autonomy: AVAS empower students to take care of themselves, make decisions and act independently. This increases their self-esteem and self-confidence, which is positively reflected in their approach to learning.

b. Active Participation: Students who have well-developed AVAS are more able to actively participate in classroom activities and engage in the learning process.

c. Self-advocacy: Communication and self-management skills are crucial for students to be able to express their needs and preferences in the school environment, promoting self-defense of their educational rights.

d. Collaboration skills: Students who have well-developed AVAS are better able to interact and collaborate with other students through verbal communication or alternative communication tools according to their

specificity. This implies written communication, negotiation, teamwork and conflict resolution skills, which will be necessary in school life and in society.

e. Organizational skills: Students who have well-developed AVAS are better able to plan and manage their time, focusing on learning. This includes the ability to set priorities and overcome barriers.

f. Reducing Barriers: By developing AVAS, AEE helps reduce the barriers that prevent students with disabilities, pervasive developmental disorders, and giftedness from fully participating in school. This creates a more inclusive environment for all students.

DISCUSSION AND ANALYSIS OF RESULTS

The discussion and analysis of research on Specialized Educational Assistance (SEE) and its implications for Pedagogical Planning for the development of skills in Autonomous and Social Living Activities (AVAS) reveal the relevance of this service in promoting autonomy and inclusion of students with disabilities. The methodology adopted, which included bibliographical studies, direct observations and documentary analysis, confirmed that a well-structured pedagogical planning adapted to individual needs is crucial for the success of educational interventions. The analysis of the collected data indicates that the application of differentiated pedagogical strategies, collaboration between educators and the active participation of families are crucial elements for the progress of students. Teachers reported that practical activities and SEE contribute significantly to the development of AVAS skills, corroborating the literature that emphasizes the importance of a functional and adaptive curriculum (Stainback & Stainback, 1999; Sasaki, 2010).

The results were surprising! Academic progress, social interaction and student autonomy, in line with the observations of researchers such as Batista (2017) and Silva

(2019), who highlight how social and emotional aspects are crucial in the educational process. In addition, the improvement in students' self-esteem and confidence in carrying out activities independently was an important qualitative finding, with parental involvement increasing significantly after the implementation of AEE (Oliveira & Santos, 2019).

But not everything is perfect! We have discovered persistent challenges, such as the need for training and continuing education for educators, as well as the lack of adequate resources that can limit the effectiveness of AEE. We need collaborative and multidisciplinary work, as suggested by Friend and Cook (2010), to ensure an integrated and effective approach.

In summary, the results confirm that AEE is essential for the development of AVAS skills, opening doors to social inclusion and equal opportunities. However, to optimize this practice, it is necessary to continue researching and implementing adaptive strategies that meet the specific needs of each student, creating a lasting and significant impact on their lives.

CONCLUSION

After an in-depth study on the theme "The Specialized Educational Service and the possibilities of Pedagogical Planning in the development of Skills in Activities of autonomous and social living (AVAS)", it can be concluded that Specialized Educational Assistance (AEE) plays a fundamental role in promoting the inclusion and autonomy of students who are the target audience of Special Education. Pedagogical planning, when well designed and implemented, enables these students to develop essential skills for good academic performance and consequently for autonomous and social life.

The results obtained during this work demonstrated that AEE and a pedagogical planning focused on AVAS skills are effective strategies to enhance the integral development of students with disabilities. With adequate support, these students are able to overcome

barriers, acquire new skills and increase their participation in social activities.

The findings of this study reinforce the importance of investing in continuing education programs for education professionals, promoting greater qualification to deal with the particularities of specialized education. Furthermore, they highlight the relevance of including these students in the regular school environment, since this social interaction favors the development of AVAS skills.

Based on the results obtained, it is possible to conclude that Specialized Educational Assistance (AEE) represents a fundamental pedagogical resource for the development of the skills necessary for the performance of Autonomous and Social Living Activities (AVAS) by students with disabilities. The study demonstrated that adapted pedagogical strategies, when applied in the context of AEE, can promote significant advances in these skills, increasing the autonomy and social inclusion of these individuals.

This conclusion is in line with the studies by Santos and Batista (2018), which highlight the role of AEE in promoting the autonomy and independence of students with disabilities. As in our study, these authors emphasize the importance of adequate pedagogical planning to ensure the effectiveness of AEE.

Additionally, the findings of this study corroborate the results of the research conducted by Oliveira and Ferreira (2019), which point to the positive impact of pedagogical planning on the AVAS of students served by the AEE. These authors also emphasize that pedagogical practices must be flexible and individualized, taking into account the particularities and needs of each student.

The relevance of these findings in the current context of inclusive education is also highlighted. As pointed out by Souza et al. (2020), it is essential to develop pedagogical strategies that favor the active participation of students with disabilities in daily activities and in life in society. In this sense, the present study contributes to expanding knowledge about the

possibilities of AEE for the development of AVAS.

REFERENCES

BATISTA, C.A.; Gonçalves, TM Specialized Educational Assistance from the perspective of inclusive education: a look at pedagogical practice. *Brazilian Journal of Special Education*, Marília, v. 24, n. 1, p. 113-128, 2018.

BRAZIL. Ministry of Education. Collection: Special Education from the Perspective of School Inclusion (Issue 6). Fortaleza, CE, 2010. **BRAZIL.** Guidance manual: program for the implementation of multifunctional resource rooms. Brasília: DF: Secretariat of Special Education, 2013 (Updated 2010 Edition).

BRAZIL. Ministry of Education. Secretariat of Special Education. (2007). National Policy on Special Education from the Perspective of Inclusive Education. Brasília: MEC/SEESP.

BRAZIL. Secretariat of Special Education. National Policy on Special Education from the Perspective of Inclusive Education. Brasília, DF: MEC/SEESP, 2008.

BRAZIL. SDHPR - National Secretariat for the Promotion of the Rights of Persons with Disabilities – SNPD, 2012. Available at: <<http://www.pessoacomdeficiencia.gov.br/app/>>. Accessed on: April 6, 2024.

BRAZIL. National Undersecretariat for the Promotion of the Rights of Persons with Disabilities. Technical Assistance Committee. Assistive Technology . – Brasília: CORDE, 2009. 138 p.

BERSCH, R. Introduction to Assistive Technology . Specialized Center for Child Development (CEDI). Porto Alegre: RS, 2008.

Available at: <<http://proeja.com/portal/images/semana-quimica/2011-10-19/tec-assistiva.pdf>>. Accessed on: June 26, 2024.

CAMARGO, MCGA, & Bosa, C. A. (2012). Specialized Educational Assistance for people with autism: educational practices in focus. *Psychology in Study*, 17(1), 17-27.

FERREIRA, MC (2018). Inclusive Education and Specialized Educational Services: Contributions to the Development of Autonomous Living Skills. *Special Education Journal*, 31(59), 421-436.

FREIRE, P. Pedagogy of Autonomy: knowledge necessary for educational practice. São Paulo: Paz e Terra, 1996.

GALVÃO, NM; Gonçalves, TG; Marques, ACP. Specialized Educational Assistance (AEE): reflections and proposals about the pedagogical practice of the specialized teacher in the context of school inclusion. *Ibero-American Journal of Inclusive Education – REDIIN*, Vol 10(1), p.167-182, 2017.

GARCIA, Rosalba Maria Cardoso et al. Public inclusion policies: an analysis in the field of Brazilian special education. 2004.

MANTOAN, MTE School inclusion: what is it? Why? How to do it? São Paulo: Moderna, 2016.

MANTOVANI, MF, & Carvalho, LL (2018). Specialized Educational Assistance and the Development of Autonomous Living Skills from the Perspective of Inclusive Education. *Brazilian Journal of Special Education*, 24(2), 243-256.

MAZZOTTA, MJS (2012). Special Education

in Brazil: History and Public Policies. Editora Cortez.

SANTOS, LLG, & Pimentel, J. G. (2019). Specialized Educational Assistance and Development of Autonomous Living Skills: A Case Study. *Brazilian Journal of Special Education*, 25(1), 123-138.

SANTOS, T., Freitas, P., & Pinto, M. (2018). Autonomous and social living skills in people with disabilities: a systematic review. *Brazilian Journal of Special Education*, 24(3), 369-384.

SASSAKI, RK (1999). Inclusion: Building a Society for All. Rio de Janeiro: WVA.

SIQUEIRA, LB (2017). Development of Autonomous Living Skills in Students with Visual Impairment through Specialized Educational Assistance. *Special Education Journal*, 30(58), 37-52.

SILVA, Edivânia Rodrigues. "Specialized educational services and the use of assistive technologies in teachers' pedagogical conception." (2011). Available at: <http://www.googleacademico/referenciaartigospesquisa/> Accessed on 09/17/23 at 1:00 p.m.

SILVA, A., & Mantoan, M. (2019). Continuing teacher training for specialized educational services. *Brazilian Journal of Special Education*, 25(1), 129-144.

ZANATTA, J. C., & Capellini, VL MF (2019). Specialized Educational Assistance for Students with Intellectual Disabilities: Development of Autonomous Living Skills. *Brazilian Journal of Special Education*, 25(1), 1-18.

ZORZI, J. L., & Santos, FP (2016).

Pedagogical Planning in Specialized
Educational Services: Inclusive Strategies and
Practices. Brazilian Journal of Special
Education, 22(3), 455-4



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.15287510

METACOGNITION AND THE CONTRIBUTION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHER TRAINING: CHALLENGES AND PERSPECTIVES IN THE COVID-19 PANDEMIC

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ABSTRACT

This article investigates the experiences and difficulties faced by teachers with the advent of the COVID-19 pandemic regarding the use of ICTs, as well as the performance of these professionals in a new education model that presented new metacognitive experiences. The formation of active individuals is directly linked to the search for knowledge and learning, and we investigated how the teaching/learning process was experienced, in contrast to the actual teacher training. The research site was the Emílio Nemer State High School, located in the municipality of Castelo, state of Espírito Santo, Brazil, through data collection, through a survey conducted among teachers and management team. The research observed the teacher's perspective, focused on the use of Metacognition in teaching/learning relationships.

Keywords: Teacher training. Metacognition. TDICs. Pandemic.

INTRODUCTION

The year 2020 began with the outbreak of COVID-19 and the World Health Organization (WHO) declared a public health emergency of international concern, adopting numerous measures that culminated in the creation of several global emergency public policies, with the aim of reducing the impact of this pandemic. The social distancing measures suggested by the WHO, adopted in most countries, caused the closure of schools and the suspension of in-person classes in public and private schools, when the first online learning experiences began to be implemented in education, and remote teaching was implemented.

In contemporary times, New Digital Information and Communication Technologies (TDICs) permeate all processes in society, including educational processes. Humanity is going through this technological revolution, which has had a greater impact than Gutenberg's creation of the printing press or the Industrial Revolution itself, which is why it needs to be understood and worked on.

It is undeniable that the use of technologies was boosted, in the school context, with the COVID 19 Pandemic, however, many factors and difficulties were faced and mediated by educational management, referring to the teacher, who was not prepared for the virtual environment, which is the object of this study.

Current education has faced a scenario in which it was necessary to involve technological practices in the classroom. Technological tools, in addition to assisting teachers in daily school activities, encourage students to seek new knowledge and socialize with resources, in a way that is favorable to the acquisition of knowledge.

The science that allows the development of new technologies is the same that is developed through the use of these new technologies, in a relationship of mutual nourishment, acting in society and being demanded by it (PEIXOTO; BRANDÃO; SANTOS, 2007).

Technological education can transform more

complex subjects into something more accessible and attractive. The absorption of new technologies in classes also contributes to increasing participation, creativity and proactivity. However, Information and Communication Technologies are not just a teaching tool; their scope goes far beyond the activities proposed by teachers.

Postmodernity is characterized by a paradigm shift, in which a set of processes configure the discontinuity of the modern condition. In other words, there is a predominance of the instantaneous, of the loss of borders, generating the idea that the world is getting smaller and smaller, through the advancement of technologies. We are faced with a virtual world, with images, sound and text in real time.

In this scenario, this research aims to understand how, at the beginning of the Pandemic, teachers developed virtual teaching, at the Emílio Nemer State School, through the use of Information and Communication Technologies (ICTs) and also, how the metacognition process occurred.

The Pandemic

With the impacts of the COVID-19 pandemic on school education, schools were abruptly closed and remote teaching was adopted and according to Nóvoa (2020)

[...] school closures and the suspension of in-person teaching activities led public and private schools to abruptly adopt a remote teaching model using digital technologies. Teachers had to adapt their teaching practices and teaching plans to a distance learning model from one moment to the next, in many cases without the essential digital knowledge and skills to promote quality learning.

The school community remained silent, as never before in history had such a situation occurred. The Ministry of Education proposed distance learning for basic education and many questions arose, the main ones being: how would classes be counted? How would everyone have access? And how would technological tools reach the communities?

Distance learning in the LDB - Law of Guidelines and Bases for Brazilian Education, Law No. 9,394 of 1996, in its Article 80, establishes that the "Public Power shall encourage the development and dissemination of distance learning programs, at all levels and modalities of education, and of continuing education". With regard more specifically to Elementary Education, we find in Article 32, § 4, which states that "Elementary education shall be in-person, with distance learning being used as a complement to learning or in emergency situations". Regarding High School, Article 36, § 11 states that "For the purpose of fulfilling the curricular requirements of high school, the education systems may recognize competencies and enter into agreements with distance learning institutions with notable recognition". As for Early Childhood Education, no reference was found in the current LDB regarding the possibility of distance learning. (BRAZIL, 1996)

Before the pandemic, planned distance learning experiences were already significant, however, the remote teaching adopted at the beginning of 2020 was very different. In-person teaching suddenly became virtual and the success of the action would depend on factors such as motivation for learning, access to the internet and technology, and teachers' competence for the teaching modality now in place.

And in the period experienced, Almeida and Alves (2020) state that the implementation of remote teaching further highlighted the socioeconomic and cultural disparities that exist in Brazil.

Adapting to the new reality was not easy, but students and teachers began studying virtually all over the world and this need awakened a feeling that everyone in the school community should develop digital skills and competencies.

Information and communication technologies - ICT

The research has its central axis defined by education and technology in the school environment, during the Covid-19 Pandemic, using interdisciplinarity and deepening studies on the importance of education involving the

use of technologies.

We are looking for to substantiate our search node theme technology and according to Moran (1995)

To the technologies of communication no change necessarily the relationship pedagogical. To the technologies both serve to reinforce one vision conservative, individualistic as one vision progressive. THE person authoritarian will use the computer to reinforce even more your control on you others. Put other side, one mind open, interactive, participatory, you will find wonderful tools in technology to expand interaction.

And still according to Moran (2018),

In schools with fewer resources, we can develop meaningful and relevant projects for students, connected to the community, using simple technologies such as cell phones, for example, and seeking support from more connected spaces in the city. Although having good infrastructure and resources brings many possibilities for integrating in-person and online learning, I know many teachers who are able to carry out stimulating activities in minimal technological environments.

Technological education can transform complicated subjects into something useful, simple and attractive. The use of new technologies in classes can also increase participation, creativity and proactivity. However, information and communication technology is not just a teaching tool; it goes beyond the activities proposed by teachers.

The use of educational technology as a symbol can be an efficient strategy for achieving metacognition, that is, this new perspective of knowledge and society is essential for teachers to be prepared to promote reflection, providing transformations in mentality and social practices. This implies the continuity of teacher training in the application and use of strategies, in Postmodernity, with the purpose of incorporating them into the academic environment effectively.

Teacher training

During the pandemic, the vast majority of teachers, with little or no prior training, had to

suddenly change their teaching practices by using completely new contexts. From the traditional in-person classroom, students suddenly began to have classes virtually. This was an extremely difficult process, with a lack of technological resources and professionals lacking technological training. In the initial phase, the reality of the disorganization of public education was evident, both for students and for teachers who did not have the tools available for study and satisfactory learning.

The fragility of the educational system was exposed to everyone. Teachers with experience in teaching were completely unprepared for classes in the virtual environment. Education professionals who should have mastered ICTs began a process of learning how to use technologies, while at the same time passing on the content to their students.

According to Nóvoa (2020), keeping up to date with new teaching methodologies and developing more efficient pedagogical practices are some of the main challenges of the teaching profession. Completing a teaching degree or a degree is just one of the steps in the long training process that cannot be interrupted as long as there are young people wanting to learn; teachers are trained at school.

Although we already have many continuing education courses to prepare education professionals, these still leave something to be desired, as they do not focus on situations such as the pandemic. We need to look at innovative practices and models, as stated by GENTILE (2001).

The invitation that has been extended to teachers for some time to reinvent themselves has become essential with the pandemic. More than ever, teachers need to be able to think, analyze and question their own practice in order to act and improve it, building autonomous performance, while also enabling students to build autonomy.

Training, as Gentile (2001) reports, is something that belongs to the subject itself and is part of a process of being (our lives and experiences, our past, etc.) and a process of

becoming (our projects, our idea of the future).

And Paulo Freire (2003) explains to us that education never happens through mere accumulation. It is an achievement made with many aids: from teachers, books, classes, computers. But it always depends on personal work. No one educates anyone else. Each person educates themselves.

Metacognition as a basis for reflection on practice pedagogical

By including metacognition as a basis for reflecting on pedagogical practice, it has become an extremely relevant topic today and is already becoming a reality in educational spaces, as it influences reflection on pedagogical practice. Metacognition refers to the ability to think about one's own thinking, understand how to learn and make conscious decisions about learning processes.

The word "metacognition" is a neologism, originated in the field of contemporary psychology. According to the Aurélio Dictionary (sd), etymologically the word metacognition comes from Meta + cognition, from the Latin *cognitio.onis*, action of knowing. It is a word composed of the Greek prefix "meta" which means "change", "projection", "transformation" and "end to which an action tends". It is the knowledge that an individual has about their own cognitive (mental) processes, being able to reflect or understand the state of their own mind (thinking, understanding and learning). The word "cognition" refers to the acquisition of knowledge; the ability to discern, to assimilate this knowledge; perception.

Maraglia (2018) reinforces that the word "metacognition" is a coined word that adds the prefix "meta" to the word "cognition". The prefix "meta" complements the concept of transcendence, a critical consideration of something. In fact, the structure of the word metacognition refers to the transcendence of cognition, a thinking about learning. According to Bransford (2007), metacognition can collaborate with investigative processes and

other tools in the student's work environment, in situations in the teaching/learning process. Metacognition contributes to student engagement in their learning, highlights important situations, and advances the understanding of what an individual learns and how he or she learns.

The form and/or model of how teachers conduct their classes and the way students learn are constantly improving, which makes analysis and teacher training essential so that they are, in fact, prepared to deal with transformations in the teaching/learning process (BUSNELLO; JOU; SPERB, 2012).

Metacognition has been worked on in some fields of research, such as: developmental psychology, with an emphasis on theory of mind; experimental and cognitive psychology, with a focus on metamemory; and educational psychology, which emphasizes self-regulation of learning, being the three main areas responsible for production in metacognition (MARAGLIA, 2018).

Cognitive psychologist John Flavell (1979) is often cited as one of the pioneers in the study of metacognition. The researcher defined metacognition as the knowledge that people have about their own cognitive processes and the effectiveness of these processes, that is, metacognition can be defined as the process of thinking about one's own thinking. Flavell argues that educators can promote metacognition by helping students develop a deeper understanding of how to learn and become self-regulated learners. In other words, it refers to the ability of human beings to monitor and self-regulate their cognitive processes.

Busnello, Jou and Sperb (2012) years later, state that metacognition is the ability to reflect on one's own actions and decisions, considering different strategies and possible results. In the teaching practice sector, metacognition refers to the teacher's ability to reflect on his/her personal practice, his/her teaching strategies and the impact they have on the students' learning process.

The best-known concept of metacognition is that of Flavell (1979), who establishes metacognition as cognition about cognition, describing a thought about knowledge. Flavell presented the first model that encompasses four aspects: metacognitive knowledge, metacognitive experience, goals and actions or strategies.

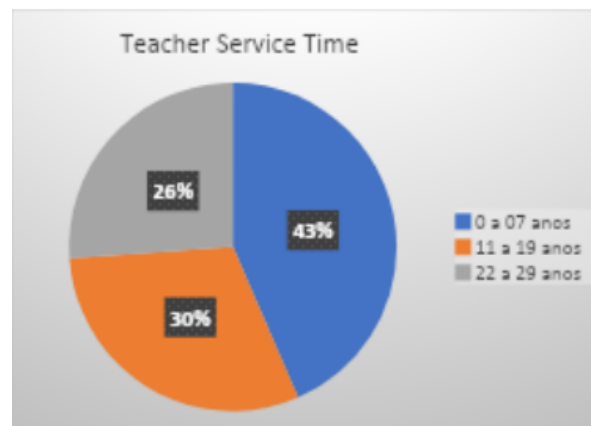
Interviewee profile

In our research, we interviewed 20 teachers, 01 pedagogue and 01 course coordinator according to:

Institution	School	Teachers	Pedagogues	Coordinator Shift
State Public High School	Emilio Nemer	20	01	01

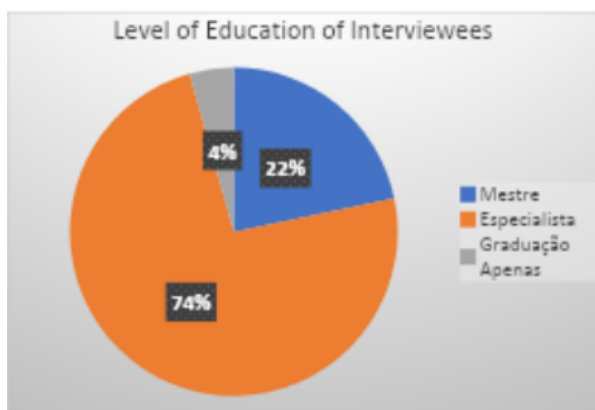
Table 1 – professionals interviewed

In graph 1 we have the average length of service of the teachers involved, with the concentration of less experienced teachers being dominant among those interviewed:

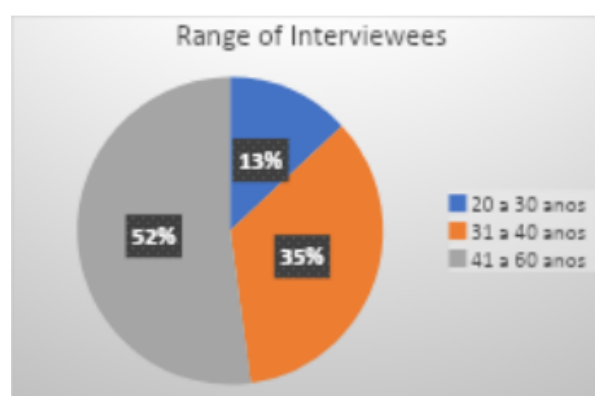


Graph 1

In graph 2, it becomes clear that the highest level of education is for specialists, with few having a master's degree and, despite all the facilities available for studying today, a minority still only have a degree in the public with the least amount of time in service:

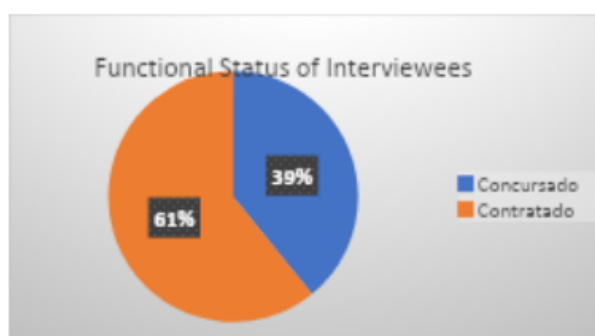


Graph 2



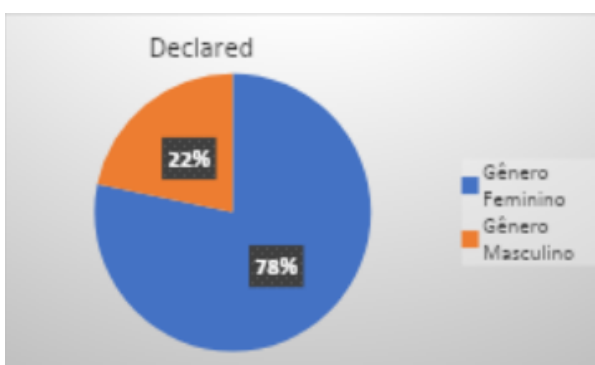
Graph 5

Regarding the current functional situation of the interviewees shown in graph 3, we found that those hired under a temporary designation system are dominant at the Emilio Nemer school, as shown in the graph:



Graph 3

In graph 4 we can clearly see that the female gender is dominant among the teachers working at the institution:



Graph 4

And in graph 5, we demonstrate the age range of teachers, with more than 50% being between 41 and 60 years old.

FINAL CONSIDERATIONS

This research is relevant because it makes it possible to understand the training of the teacher investigated, as well as the profile of these interviewees so that we can understand the teaching practice in the classroom, regarding the use of ICTs and the role of these professionals with the advent of the COVID-19 Pandemic in the metacognitive context.

The aforementioned study also allowed us to understand an evolution in the teaching/learning process, focused on Information and Communication Technologies (ICTs), as innovation tools, intertwined in scientific thinking, active methodologies; such technological tools have become the facilitating and transformative means in society.

When investigating the use of metacognition in the development of teaching planning, it was noted that technological equipment is used as a didactic facilitator, thus demonstrating efficiency in the teaching process. Metacognition is a source for changing strategy, but planning is a priority for success. Positive stimulus is a source of power and domination in interactions so that teaching/learning happens and is strengthened for the future.

Teachers worked on the use of technologies from the perspective of metacognition during the pandemic period, and the teachers' work procedures regarding the use of technology in the classroom from the perspective of metacognition, as they learned to learn, in a process of advances and setbacks. There was a

focus on the use of metacognition in the school context and interactions in teaching/learning relationships, in which teachers showed concern for mediation, learning and planning, considered a fundamental part of success in the teaching/learning, leading to the search for metacognition as an effective means, to develop efficient methods to favor learning, in the pandemic context, which were forced to adapt.

In the midst of a situation of extreme need, it was necessary to reinvent teaching/learning. Adapt to the new, the unexpected, use metacognition to learn how to learn.

REFERENCES

Almeida, BO & Alves, LRG (2020). **Digital literacy in times of COVID-19: an analysis of education in the current context.** Debates in Education, 12(28).

AURÉLIO. Dictionary. Metacognition. sd Available at: <<https://www.dicio.com.br/metacognicao/>>. Accessed on: July 30, 2023.

BACICH, L.; MORAN, J . **Active Methodologies for Innovative Education: A Theoretical-Practical Approach.** Porto Alegre: Penso, 2018.

BARDIN, Laurence. **Content Analysis.** Lisbon: Edition 70, 2011.

BRAZIL. Federal Senate. **Law of Guidelines and Bases of National Education: n° 9394/9.** Brasilia: 1996.

_____. **National Base Common - BNCC.** March, 2018.

BLOOM, BS et al. **Taxonomy of educational objectives.** New York: David McKay, 1956. 262 p. (v. 1)

BRANSFORD, J. D . et al. **How People Learn.** New York: Routledge, 2007.

BUSNELLO, F. de B.; JOU, GI de; SPERB, TM Development of metacognitive skills: training of elementary school teachers. **Basic Psychological Processes, Psychol. Reflex. Crit.** v. 25, n.2, 2012 . Available at: <<https://www.scielo.br/j/prc/a/h9wn3swpXPZ6QwzcV7FfS8D/?lang=pt#>>. Accessed on: July 16, 2023.

SPIRIT HOLY. **Law No. 10.382 : Flat State of Education of Spirit Holy- PEE/ES.** Victory: 2015.

GENTILE, Paola. Antonio Nóvoa: **teacher graduates from school.** New School Association , v. 1, 2001.

FLAVELL, JH **Metacognition and cognition monitoring: a new area of cognitive-developmental inquiry.** American Psychologist, Washington, DC, v. 34, p. 906-911, 1979.

GIL, Antonio Carlos. **As elaborate projects of search.** 3rd ed. They are Paul: Atlas, 1991.

LAKATOS; MARCONI. **Scientific methodology.** They are Paul: Atlas, 1991.

LAVILLE, Cristian; DIONES, Jean. **The Construction of Knowledge: Methodology Manual of Research in Science Humanities.** Harbor Alegre: Artmed, 1999.

MARAGLIA, PH E **Metacognitive teaching strategies: a systematic literature review.** Dissertation (Master's in Science and Health Education) - Postgraduate Program in Science and Health Education, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2018. Available

at: <http://objdig.ufrj.br/55/dissert/870072.pdf>.
Accessed on: July 22, 2023.

MORAN, José Manuel. **New technologies and pedagogical mediation**. Papirus Editora, 2000.

_____. **New Technologies and the Re-enchantment of World**. Technology Educational. Rio de Janeiro, vol. 23, n.126, September-October 1995, p. 24-26.

_____. **Active methodologies for deep learning**. In: MORAN, José; BACICH, Lilian (org.). **Active methodologies for innovative education: a theoretical-practical approach**. Porto Alegre: Penso, 2018.

_____. Innovative teaching and learning with technologies. **Computer science in education: theory & practice**, v. 3, n. 1, 2000.

_____. José Manuel. **New technologies and the re-enchantment of the world**. Educational Technology Magazine . Rio de Janeiro, vol. 23, n.126, September-October 1995, p. 24-26.

NÓVOA, António Sampaio. **Establishing the position as a teacher, affirming the teaching profession**. Research Notebooks, v. 47, n. 166, p. 1106-1133, Oct./Dec. 2017.

_____. The Covid-19 pandemic and the future of Education. **Com Censo Journal: Educational Studies of the Federal District**, v. 7, n. 3, p. 8-12, 2020.

_____. **Teacher training in times of pandemic**. Economic News Brasil, 2020.

FREIRE, P. **Pedagogy of the Oppressed**. São Paulo: Paz e Terra, 1996. FOUREZ, G. Crisis
iJEResearch - Vol. 1, Number 1 – 2025 - ISSN 2764-9733

in Science Teaching? Journal of Research in Science Teaching – V8 (2), pp. 109-123, 2003.

PEIXOTO, M. DE AP; BRANDÃO, MAG; SANTOS, G. Dos. **Metacognition and symbolic educational technology**. **Brazilian Journal of Medical Education**, v. 31, n. 1, p. 67–80, 2007. Available at: <<https://www.scielo.br/j/rbem/a/S37BSpD3dsYsnFrrGqpGHXL/?format=pdf&lang=pt>> . Accessed on July 22, 2023.

PORTELA, Fábio. **Theoretical framework: an unconventional guide to choosing yours**. Available in< <https://medium.com/teoria-juridica/marco-te%C3%B3rico-um-guia-unconventional-to-choose-your-48555169c476.htm>>.Access in 20.06. 2022.



iJEResearch

International Journal of Education and Research

Vol. 1, Number 1, March - 2025 | Peer-Reviewed Journal

ISSN 2764-9733 | ijerresearch.org

DOI: 10.5281/zenodo.17455647

BREAST CANCER MORTALITY IN ELDERLY WOMEN IN NORTHEAST BRAZIL: FROM 1996 TO 2020

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ABSTRACT

The objective of this article is to present breast cancer mortality in the Northeast region of Brazil, among elderly women aged 60 to 80 years or older, from 1996 to 2020. Data from the Mortality Information System (SIM) of the Department of Information Technology of the Unified Health System (DATASUS) and the International Classification of Diseases (ICD) were used, as well as data from the Brazilian Institute of Geography and Statistics (IBGE). Breast cancer is considered the most common type of cancer among women in all Brazilian regions. By 2030, the Northeast region of Brazil will have the highest cancer mortality rate, according to a study by Barbosa et al (2015).

Keywords: Mortality. Breast Cancer. Elderly Women.

INTRODUCTION

Breast cancer is the most common type of cancer among women and the leading cause of cancer death worldwide.

Breast cancer occurs when there is excessive and disordered cell proliferation, resulting from genetic modifications that stimulate increased estrogen levels. Thus, women are more predisposed than men due to their greater breast tissue. Because it is a pathology associated with high mortality rates, it is important to adopt measures for prevention and early detection.

Without considering non-melanoma skin tumors, female breast cancer occupies the first most frequent position in all Brazilian regions, with an estimated risk of 81.06 per 100,000 in the Southeast Region; 71.16 per 100,000 in the South Region; 45.24 per 100,000 in the Central-West Region; 44.29 per 100,000 in the Northeast Region; and 21.34 per 100,000 in the North Region.

Access to health services differs across several Brazilian states, and consequently, there is a wide variation in mortality rates due to disparities in the initial diagnosis, treatment, and follow-up.

From the 1990s onwards, changes began in the clinical presentation and management of breast cancer cases, with the implementation of mammography screening, the implementation of effective hormonal treatments, chemotherapy, and progress in surgery and radiotherapy.

In many countries, these innovations have contributed to reduced mortality and increased survival from breast cancer.

However, in developing countries like Brazil, where mammography screening is performed opportunistically, resulting in loss of patient history information, it is difficult to assess the quality of screening programs. Furthermore, factors such as the disorganization of the patient care network are also contributing to this. With cancer, triggering problems that determine the levels of mortality for this cancer, because the fatal cases are influenced by early

diagnosis and the availability of treatments and patient care.

Beginning in 2000, discussions began on actions that could integrate breast cancer control into the existing Viva Mulher Program, which focused on cervical cancer prevention. Then, in 2002, INCA and the Ministry of Health intensified the Viva Mulher Program's efforts, expanding cervical cancer screening coverage nationwide and including breast cancer-related initiatives. Gradually, the Program became known as the National Cervical and Breast Cancer Control Program.

Population aging is occurring rapidly in developing countries, especially in Brazil. Thus, this process of demographic change represents a major challenge for these countries, which urgently need to incorporate the issue of population aging into public policy formulation and devise solutions for social and health reorganization sufficient to meet the needs of this new population reality. (MIRANDA, GMD, 2016; VERAS, R. 2009)

Thus, studies on this pathology gain even more prominence in the national context, as Brazil is undergoing a rapid process of population aging, which has directly increased the incidence and mortality of chronic non-communicable diseases (PEREA et al., 2018), (CARVALHO; PAES, 2019).

It is estimated that by 2025, there will be approximately 1.2 billion people over the age of 60 worldwide. Alongside the demographic transition, the population's pattern of illness and death is also undergoing transformations. The epidemiological profile, which is the result of a complex series of interrelated changes in health and disease behavior that occur in populations over time, is a consequence of a set of social, economic, and, primarily, demographic transformations.

Information on breast cancer incidence and mortality can be useful for planning public policies and implementing evidence-based cancer control programs, but it is not available in most low- and middle-income countries. Therefore, it is necessary to analyze information

on the epidemiological behavior of deaths from this disease, enabling the establishment of prevention and health promotion strategies, with a reduction in public spending on treatment.

Conceptualization and Risk Factors

Breast cancer is a multifactorial disease, with age being the most important risk factor. However, other environmental and behavioral factors increase the risk of developing cancer, such as obesity, a sedentary lifestyle, alcohol consumption, and frequent exposure to ionizing radiation; reproductive and hormonal history (early menarche, nulliparity, first pregnancy after age 30, late menopause, use of hormonal contraceptives); and finally, genetic and hereditary factors (family history of ovarian and breast cancer, genetic alterations, especially in the BRCA1 and BRCA2 genes) (INCA, 2019).

Cancer is already a serious public health problem throughout Brazil. The widespread knowledge that advanced age is one of the main risk factors associated with this disease is relevant. Therefore, we must encourage and motivate women to prevent breast cancer through good nutrition, physical activity, judicious medication use, and adherence to screening.

Diagnosis

The main signs and symptoms of breast cancer are a lump in the breast and/or armpit, which may be painless or cause breast pain, and changes in the skin covering the breast, such as retractions with an appearance similar to orange peel, discharge of clear or bloody secretion, unilateral or bilateral.

For early detection of breast cancer, it is recommended:

- Annual screening, through clinical breast examination, for all women aged 40 and older. This procedure is still considered part of comprehensive women's health care and should be performed at all clinical appointments, regardless of age group;

- Mammography screening in women aged between 50 and 69 years, with a maximum interval of two years between exams;
- Clinical breast examination and annual mammography, from the age of 35, for women belonging to population groups with a high risk of developing breast cancer;
- Guaranteed access to diagnosis, treatment and follow-up for all women with changes in the tests performed.

The following population groups are defined as having a high risk of developing breast cancer: 1) Women with a family history of at least one first-degree relative (mother, sister or daughter) diagnosed with breast cancer, under 50 years of age; 2) Women with a family history of at least one first-degree relative (mother, sister or daughter) diagnosed with bilateral breast cancer or ovarian cancer, in any age group; 3) Women with a family history of male breast cancer; 4) Women with a histopathological diagnosis of proliferative breast lesion with atypia or lobular neoplasia in situ.

According to the Ministry of Health, the most effective forms of early detection are clinical breast examination (CBE) and mammography (MMG). Ultrasound can be performed as diagnostic support, and FNA and core biopsy can provide sufficient data for clinical staging of the tumor and treatment planning. However, many women at risk do not have access to these exams because the healthcare system in some parts of Brazil is slow and extremely bureaucratic.

When breast cancer is diagnosed early, characterized as "in situ," it has a high cure rate, resulting in a 97% five-year survival rate. The most widely used method for evaluating outcomes in oncology, and even epidemiology, is patient survival, in which mortality rates in historical series have high analytical significance, making it possible to discuss statistical techniques for survival analysis with observations obtained from health service records.

METHODOLOGY

An ecological, retrospective time-series study was carried out, based on secondary data collected from the Mortality Information System (SIM) of the Department of Information Technology of the Unified Health System (Datasus), with analysis of deaths resulting from malignant breast neoplasm that occurred in the northeastern region of Brazil in the period from 1996 to 2020. In addition to demographic data from the Brazilian Institute of Geography and Statistics (IBGE), based on information from the census (2000 and 2010), count (1996); and population estimates for the other years.

To analyze temporal mortality trends, the Joinpoint Regression Analysis program was used. It allows computing and analyzing rate trends in segments, providing models that summarize behavior over the period. The specifications used in the program were the model: $\log(y) = bx$, where Y is the mortality rate and X is the year of death. Constant variance was assumed, using a maximum of four joinpoints. The joinpoint determination method used was Grid Search (LGS), and the model selection method used was the permutation test.

Two-tailed tests with a 5% significance level were used for all calculations. Epidat software version 3.1 was used to calculate confidence intervals and adjust rates.

Knowledge about the incidence and mortality of neoplasms aims to support public policy structures that aim at early diagnosis and adequate treatment of these diseases, as well as their associated comorbidities. (DUTRA; PARREIRA; GUIMARÃES, 2018).

Changes in society's lifestyle over the years have accompanied an increase in cancer incidence and mortality. However, disparities between nations related to socioeconomic and cultural characteristics influence prevention, control, and quality of life policies for patients after diagnosis. While developed countries have reduced cancer incidence and mortality rates, poor and developing countries like Brazil account for 80% of the world's

noncommunicable diseases, and cancer will be the leading cause of morbidity and mortality in these regions in the coming decades. (BRAY et al, 2012).

In 2030, the northeastern region of Brazil will have the highest cancer mortality rate, according to a study by Barbosa et al (2015).

The Mortality Information System (SIM) was essential for this study, as it provides important information for describing the national mortality profile. The various variables that feed this system are collected from death certificates, including: year of death, place of residence of the deceased, sex, age group, race/ethnicity, education level, and cause of death. One of the most important pieces of information is the underlying cause of death, which is coded based on the International Statistical Classification of Diseases and Related Health Problems, or simply the International Classification of Diseases (ICD-10). The purpose of this system is to standardize and catalog diseases and health problems according to the International Nomenclature of Diseases established by the WHO (World Health Organization). Beginning in 1996, death certificates in Brazil began to be coded using the 10th Revision of the International Classification of Diseases (ICD-10). The SIM (Mortality Information System) gathers death records from municipal and state health departments and disseminates information to the community on general aspects or disaggregated by specific variables (DUARTE; BARRETO, 2015)

PRESENTATION AND ANALYSIS OF RESULTS

Table 1 shows the information quality indicators by age group (60-80 years or older) for the population of northeastern Brazil, analyzing deaths from ill-defined causes and malignant neoplasms without location specification (ICD C80). A significant reduction can be observed over the years, starting in 2003, across all age groups. However, from 1997 to 2003, the number of women over 80 years of age more than doubled that of women aged 60

years old regarding ill-defined causes. Deaths from ill-defined causes have also decreased in recent decades in all Brazilian regions, particularly in municipalities outside the capitals. This indicates an improvement in the quality of information recorded in the Mortality Information System (SIM). However, significant numbers of deaths from ill-defined causes remain in the North and Northeast regions.

The World Health Organization (WHO), which compiles the latest available data for each country on deaths from ill-defined causes (IDCs), reported a 10.14% rate for Brazil in 2015. Other South American countries, such as Argentina (16.66%), Ecuador (11.81%), Paraguay (14.41%), and Uruguay (15.96%), have higher rates than Brazil, while Peru (6%), Guyana (8.72%), Colombia (4.69%), and Chile (4.6%) have rates of less than 10% of deaths from ill-defined causes. In comparison, in 2003, European countries had death coverage close to 100%, while African countries had coverage of less than 10%. Africa had the highest number of countries with no or low-quality mortality data. In South America, data quality ranged from low to medium.

Regarding malignant neoplasms without specification of location, all women in the age groups studied (60 years; 60-69 years; 70-79 years; 80 years) presented similar percentages to each other and comparatively all results decreased between 1997 and 2003.

Table 2 shows the crude rate and mortality rate ratio for breast cancer in the Northeast region, according to age group in the periods 1997-2008 and 2009-2020. Mortality rates were calculated per 100,000 inhabitants/year.

The findings of the present study showed an increase in the mortality rate from breast cancer in elderly women, in all age groups (60-69 years; 70-79 years; 80 years or older). In 1997, women in the age group between 60 and 69 years had a crude rate of 20.49 with a progressive increase in the years 2008 and 2009, reaching 40.02 in 2020. Women in the age group between 70 and 79 years had a crude rate

of 25.48 with a progressive increase, reaching 52.53 in 2020. And women in the age group of 80 years and older had a crude rate of 35.08 with a progressive increase, reaching 97.15 in 2020. Analyzing the mortality rate ratio, it is observed that there was a reduction in the coefficient in the period 2009-2020 compared to the previous period of 1997-2008.

Table 03 shows the mortality rate and the mortality rate ratio for breast cancer in the Northeast region according to age group between 1997 and 2020. It shows the confidence interval (95% CI) in 2008, in the age groups 60-69; 70-79 and 80 or more with the respective values 1.62; 1.61 and 2.04. In 2020 in the same age groups mentioned above, the values correspond to 1.28; 1.32 and 1.41.

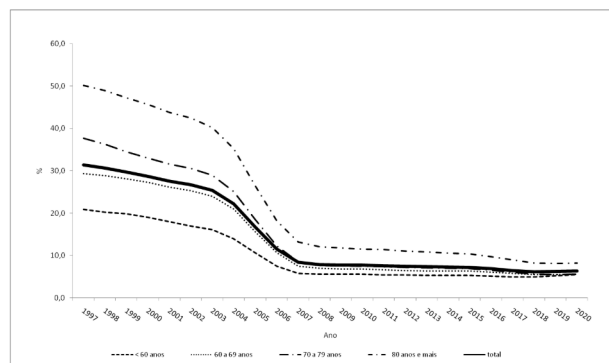
The data in Table 04 indicate the result of the analysis of trends in the time series of mortality coefficients carried out by the Joinpoint program considering the crude and adjusted mortality rates per 100,000 inhabitants/year for breast cancer in the Northeast region, in the age groups of 60-69; 70-79 and 80 or more; and in the period between 1997 and 2020. Which were expressed by the APC values (annual percentage variation) that showed in 1997-2000 in women aged 60-69 (APC -1.3), with a considerable increase in 2001-2006 (APC 7.9), evolving with a significant reduction in 2006-2010 (APC 0.4), increasing again in 2010-2016 (APC 4.9) and declining significantly in 2016-2020 (APC 0.2). In women aged 70-79, in the years corresponding to 1997-2003 (APC 2.3), 2003-2006 (APC 8.4), 2006-2013 (APC 3.8), 2013-2018 (APC -3.8) and 2018-2020 (APC -1.5). And finally, in women aged 80 and over in 1997-2001 (APC -2.1), 2001-2007 (APC 11.8), 2007-2011 (APC -1.6), 2011-2014 (APC 10.4) and 2014-2020 (APC 2.3). The average annual percentage change (AAPC) between 1981-2012 shows a significant increase in all age groups, being more prominent in women aged 80 and over.

Table 01: Indicators of information quality by age group in the northeast region between 1997 and 2020.

Sex/Age Range (Years)	Ill-defined causes (%)			Malignant neoplasms, site not specified – C80 (%)		
	1997	2008	2020	1997	2008	2020
< 60	20.9	5.6	5.5	3.3	3.2	1.8
60 - 69	29.3	7.0	5.6	3.9	3.5	2.2
70 - 79	37.7	7.7	5.6	3.3	3.4	2.1
≥ 80	50.2	12.1	8.3	3.9	3.4	1.9
Total	31.4	7.9	6.4	3.5	3.3	2.0

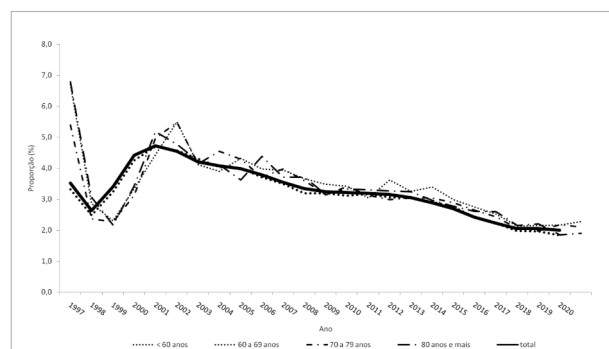
Source: Mortality information system – SIM/Ministry of Health.

Figure 01 – Proportion of ill-defined causes in the northeast region, according to age group between 1996 and 2020.



Source: Mortality information system – SIM/Ministry of Health.

Figure 02 – Proportion of neoplasms without location specification in the northeast region between 1996 and 2020



Source: Mortality information system – SIM/Ministry of Health.

Table 02: Crude rate and mortality rate ratio for breast cancer in the northeast region, according to age group in the periods 1997 - 2008 and 2009 - 2020.

Age range (years)	Mortality rate*				Mortality rate ratio (95% CI)	
	1997	2008	2009	2020	1997-2008	2009-2020
60 – 69	20.49	30.96	32,32	40.02	1.54 (1.28; 1.79) *	1.28 (1.14; 1.44) *
70 – 79	25.48	39.07	41.13	52,53	1.53 (1.26; 1.87) *	1.32 (1.16; 1.51) *
≥ 80	35.08	69.27	71.60	97.15	1.98 (1.56; 2.51) *	1.41 (1.23; 1.63) *
Total	24.18	39.46	41.23	53.12	1.63 (1.46; 1.83) *	1.33 (1.24; 1.44) *
	**p<0.001	p<0.001	p<0.001	p<0.001		

Source: Mortality information system – SIM/Ministry of Health.

Note: * Mortality rate per 100,000 inhabitants/year

** χ^2 for trends

Significant rate ratio (p<0.05)

Table 03: Crude rate and mortality rate ratio for breast cancer in the northeast region, according to age group between 1997 - 2020.

Age range (years)	Mortality rate*	Mortality rate ratio (95% CI)
1997		
60 – 69	20.49	-
70 – 79	25.48	-
≥ 80	35.08	-
	P<0.001	-
2008		
60 – 69	30.96	1.62 (1.37; 1.91) *
70 – 79	39.07	1.61 (1.33; 1.96) *
≥ 80	69.27	2.04 (1.62; 2.59) *
	P<0.001	
2009		
60 – 69	32,32	-
70 – 79	41.13	-
≥ 80	71.60	-
	P<0.001	-
2020		
60 – 69	40.02	1.28 (1.14; 1.44) *
70 – 79	52,53	1.32 (1.16; 1.51) *
≥ 80	97.15	1.41 (1.23; 1.63) *
	P<0.001	

Source: Mortality information system – SIM/Ministry of Health.

Note: * Mortality rate per 100,000 inhabitants/year

** χ^2 for trends

Significant rate ratio (p<0.05)

Table 04 - Joinpoint analysis of crude and adjusted mortality rates per 100,000 inhabitants/year for breast cancer in the northeast region according to age group between 1997 and 2020.

Age range (years)	Trend 01		Trend 02		Trend 03		Trend 04		Trend 05		AAPC [#]
	Period	APC [§]	Period	APC [§]	Period	APC [§]	Period	APC [§]	Period	APC [§]	1981-2012
60 - 69	1997-2000	-1.3	2000-2006	7.9	2006-2010	0.4	2010-2016	4.1	2016-2020	0.2	3.0 (1.9; 4.1)
70 - 79	1997-2003	2.3	2003-2006	8.4	2006-2013	2.3	2013-2018	-3.8	2018-2020	-1.5	3.1 (1.9; 4.3)
≥80	1997-2001	-2.1	2001-2007	11.8	2007-2011	-1.6	2011-2014	10.4	2014-2020	2.3	4.3 (1.4; 7.2)
Total	1997-2001	0.4	2001-2006	8.6	2006-2010	1.0	2010-2018	3.7	2018-2020	-2.1	3.2 (2.1; 4.3)

Source: Mortality information system – SIM/Ministry of Health.

Notice: § Average Annual Percent Change Change)

& Annual Percent Change Change)

F APC is significantly different from 0 (p<0.05)

AAPC is significantly different from 0 (p<0.05)

In most parts of the world, breast cancer is the most common malignant neoplasm among women. This is no different in Brazil.

Variations in breast cancer mortality rates can be attributed to early diagnosis through mammography screening and access to more effective treatments, including adjuvant chemotherapy or tamoxifen, as well as radiotherapy and supportive surgery, in addition to the increase in the frequency of new cases, a fact that occurs due to the variation in risks for the disease.

By studying the temporal trends in breast cancer deaths in northeastern Brazil, a strong upward trend was identified for the period analyzed (1996-2020). Furthermore, according to Barbosa et al., the northeastern region will continue to experience rising mortality rates in the future. Based on mortality projections through 2030, a considerable increase in the breast cancer mortality burden will be observed for all states in northeastern Brazil.

In recent decades, Brazil has experienced demographic and epidemiological changes, which have consequently impacted the profile of diseases and conditions, with increased life expectancy. In this context of epidemiological and demographic transition, a high prevalence of cardiovascular and chronic degenerative diseases, including cancer, has been observed in the Brazilian population. Variations in breast cancer mortality rates can be attributed to early diagnosis through mammography screening and

access to more effective treatments, including adjuvant chemotherapy or tamoxifen, as well as radiotherapy and supportive surgery. This is in addition to the increase in the frequency of new cases, which is due to varying disease risks. One of the most important aspects to be evaluated in Brazil is the distribution of health services across the country's regions. The precariousness of services is related to screening, diagnosis, the stage of the disease at diagnosis, available treatment methods, and, consequently, the impact on survival. The increased mortality from this type of cancer in poorer regions is likely due to delayed diagnosis and the implementation of appropriate treatment, resulting in mortality rates similar to or higher than those in developed countries. The concentration of health services in large urban centers and the lack of organization in the service network mean that, in many municipalities, women are forced to travel to areas with available services, placing a strain on public hospitals in other cities.

CONCLUSION

The upward trend in breast cancer mortality among older women in the Northeast region of Brazil, highlighted in this study, reflects not only the impact of population aging but also the persistent inequality in access to health services. The data analyzed indicate that, despite advances in information systems and the quality of death records, effective breast cancer control remains a challenge, especially among older age groups, where the mortality rate is markedly higher.

The highest mortality rates were recorded in women aged 80 and over, demonstrating the vulnerability of this population to barriers to access to screening, early diagnosis, and timely treatment. The lack of integration between primary and specialized care services, the scarcity of diagnostic resources in small municipalities, and the need to travel to urban centers contribute to the worsening prognosis for these women. Furthermore, it is important to highlight that secondary prevention measures,

such as mammography screening , do not always include older women and are often disregarded in public health strategies, despite the increase in life expectancy. Furthermore, the clinical management of these patients requires an individualized approach, considering their functional conditions, comorbidities, and personal preferences. This requires adequate training and awareness among healthcare professionals.

Therefore, it is urgent to strengthen public policies that ensure equitable access to healthcare services, including expanding mammography coverage , investing in training family health teams, strengthening referral and counter-referral networks , and adopting care protocols that consider the specificities of aging. Analysis of temporal trends in breast cancer mortality among elderly women should inform strategic decisions for organizing care pathways that aim not only to reduce mortality but also to promote the dignity, autonomy, and quality of life of older Brazilian women .

REFERENCES

AKINYEMIJU, T.F. et al. Trends in Breast Cancer Stage and Mortality in Michigan (1992–2009) by Race, Socioeconomic Status, and Area Healthcare Resources. *PLOS ONE*, 2013.

ANDERSON, R.L. Understanding breast cancer risk. *Radiol Technol.*, v. 81, n. 5, p. 457-476, 2010.

AZEVEDO, Gulnar, et al. Tendência da mortalidade por câncer nas capitais e interior do Brasil entre 1980 e 2006. *Revista de Saúde Pública*, v. 45, n.6, p.1009-1018, 2011.

BARBOSA, I. R., COSTA, I. D. C. C., PÉREZ, M. M. B., & de SOUZA, D. L. B. Mortalidade por câncer de mama nos estados do nordeste do Brasil: tendências atuais e projeções até 2030. *Revista Ciência Plural*, v.1,

n. 1, p. 04-14, 2015.

CARVALHO, J.B.; PAES, N. A. Correção das taxas de mortalidade por câncer para idosos nos estados do nordeste brasileiro. *Ciência e Saúde Coletiva*, v. 24, n. 10, p. 3857–3866, 2019.

DUTRA, V. G. P.; PARREIRA, V. A. G.; GUIMARÃES, R.M. Evolução da Mortalidade para câncer colorretal no Brasil e Regiões, Por Sexo, 1996-2015. *Arquivos de Gastroenterologia*, v.55, n.1, p.61-65, 2018.

Instituto Nacional de Câncer José Alencar Gomes da Silva. Diretrizes para a detecção precoce do câncer de mama no Brasil. Rio de Janeiro: INCA; 2015.

Instituto Nacional de Câncer José Alencar Gomes da Silva. Atlas on-line de mortalidade [Internet]. Rio de Janeiro: INCA; c1996-2014. Disponível em: <https://www.inca.gov.br/app/mortalidade>.

International Agency for Cancer Research [Internet]. GLOBOCAN 2008: section of cancer information. [cited 2010 Jun 28]. Available from: <<http://globocan.iarc.fr/factsheets/cancers/breast.asp>>2008

MATHERS, C.D. Counting the dead and what they died from: an assessment of the global status of cause of death data. *Bulletin of World Health Organization*, v. 83, n. 3, p.171–177, mar. de 2005.

MEDEIROS, W. R. Mortalidade em idosos longevos e "mais jovens" no Brasil. [Tese Doutorado em Saúde Coletiva] - Centro de Ciências da Saúde, Universidade Federal do Rio Grande do Norte, Natal, 2015

MINISTÉRIO DA SAÚDE. Secretaria de Vigilância à Saúde. Saúde Brasil 2005 - Uma análise da situação de saúde. Brasília; 2005.

MIRANDA, G.M.D., MENDES, A.C.G., SILVA, A.L.A. O envelhecimento populacional brasileiro: desafios e consequências sociais atuais e futuras. Revista Brasileira de Geriatria e Gerontologia, v.19, n. 3, p. 507-19, 2016.

PEREA, L.M. E. et al. Tendência de mortalidade por câncer de boca e faringe no Brasil no período de 2002-2013. Revista de Saúde Pública, v. 52, p. 10, 2018.

Precoce, D. E. T. E. C. Ç. Ã. O. Controle do Câncer de Mama-Documento de Consenso. Revista Brasileira de Cancerologia, v. 50, n. 2, p.77-90, 2004.

VERAS, R. Envelhecimento populacional contemporâneo: demandas, desafios e inovações. Revista Saúde Pública, v. 43, n. 3, p. 548-54, 2009.

World Health Organization. Indicators: Ill-defined causes in cause-of-death registration [Internet]. The Global Health Observatory. 2019. Disponível em: <https://www.who.int/data/gho/data/indicators>

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ISSN 2764-9733

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