

## EMOTIONAL INTELLIGENCE IN ORGANIZATIONS: ACTIVE OR LIABILITIES FROM THE ADMINISTRATORS' PERSPECTIVE?

Geisse Martins<sup>66</sup>

### SUMMARY

This paper aims to analyze and investigate how supply chain management can represent a competitive advantage for organizations. With the advent of the pandemic caused by COVID-19, there has been an exponential growth in global e-commerce, and this has required managers and companies to adopt new economic models capable of anchoring the planning, execution and control of effective actions in the management of fundamental assets for the oxygenation of purchasing, logistics, storage, production and delivery processes to consumer markets. New communication and telecommunications technologies, which place new tools, such as artificial intelligence, robotics and Big Data, at the service of this intricate gear of Supply Chain Management, at the same time also pose new challenges to managers and organizations that need to adapt to new market demands and requirements and, consequently, to new ways of strategically thinking about delivering value and competitive advantage to stakeholders.

**Keywords:**management; markets; logistics; management; economy

### ABSTRACT

This paper aims to analyze and investigate how supply chain management can represent a competitive advantage for organizations. With the advent of the pandemic caused by the covid-19, there has been an exponential growth in the world e-commerce, and this has required managers and companies to adopt new models of economy capable of anchoring the planning, execution and control of effectiveness actions the management of fundamental assets for the oxygenation of purchasing, logistics, storage, production and delivery processes to consumer markets. The new technologies of communication and telecommunications, which put new tools, such as artificial Intelligence, robotics and Big Data, at the service of this intricate gear of Supply Chain Management, at the same time also pose new challenges to the administrators and the organizations that need to adapt to the new demands and demands of the markets and consequently to the new ways of thinking strategically the delivery of value and the competitive advantage for the stakeholders.

**Keywords:**management; markets; logistics; management; economy

### 1 INTRODUCTION

Human intelligence is intrinsically intertwined with the times and movements of work. From the simple making of tools to the construction of sophisticated electronic equipment, human intelligence is present. More recently, within the concept of the fourth industrial revolution, in which advances in the field of science and

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supported by new information and communication technologies enhance intelligence in general within organizations, but above all emotional intelligence, which is imperatively necessary within these contexts of radical changes and daily adaptations that corporate markets (internal and external) impose on people within organizations. As Schwab (2016, p. 15) offers us:

Today, we face a wide range of fascinating challenges; among them, the most intense and important is understanding and shaping the new technological revolution, which implies nothing less than the transformation of all humanity. We are at the beginning of a revolution that will profoundly change the way we live, work and relate to each other. In its scale, scope and complexity, the fourth industrial revolution is something that I consider unlike anything that humanity has ever experienced.

Human intelligence and its derivations throughout human history have always been and continue to be the subject of studies. Specifically, emotional intelligence has gained prominence in the field of research within organizations over the last fifty years, as work environments have increasingly increased their level of complexity and the most basic concepts of general intelligence no longer support the limited universe of organizations. In this direction and sense, and within the context of emotional intelligence in organizations, a term that comes from Physics<sup>67</sup> and that in the context of human behavior is the ability of people to withstand pressure, adapt, and also have an inner capacity that combines not only technical skills and competencies, but also social and emotional skills that are now an integral part of the edifying structure of professionals in organizations.

Without obstacles, within organizations when decisions are made to invest in emotional intelligence, some uncertainties arise. Many executives, administrators, managers and owners, and even accounting professionals, are unable to reach a common denominator regarding this investment. Among the many questions, one disturbing one arises: Are investments in emotional intelligence in organizations understood as assets or as expenses? Just like research and development (R&D), why are investments in emotional intelligence still timid within organizations?

In an effort to discuss emotional intelligence within organizations and its impact, relevance as an investment that this article in light of the considerations, statements and proposals of authors and experts on the subject seeks to elucidate these disturbing questions.

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<sup>67</sup>Resilience: property that some bodies have of returning to their original shape after having been subjected to elastic deformation

## 2 METHODOLOGY

This work presents a qualitative approach and for the analysis the observation technique and theoretical bibliographic review were used. As argued by Minayo (2001, p.22)

Qualitative research answers very specific questions. In the social sciences, it is concerned with a level of reality that cannot be quantified. In other words, it works with the universe of meanings, motives, aspirations, beliefs, values and attitudes, which corresponds to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalization of variables. (MINAYO, 2001, p. 22).

In the same direction and sense, Musse in his comments on Durkheim's social fact (2011 p. 14) states:

The sociological study of education allows us to understand, in a general and summarized way, the ways in which the social being has been constituted throughout history. But it also makes it possible to examine the cultural determination of consciousness, that is, the procedures that lead individuals to internalize collective ideas, values, beliefs and feelings. It opens the way for the investigation of the modifications of collective representations (responsible for maintaining or reinforcing individual consciousness) due to the interference of other aspects of social life.

In effect, it brings to the table an observational study and a look directed towards the inside of organizations regarding people's emotions, which is already a social fact of current relevance in the field of contemporary administration.

## 3 DEVELOPMENT

Within contemporary companies, specifically with regard to people management, idealizing, developing, distributing goods, products and services in a rational, systematic way and with a deliberate focus on financial issues is no longer sufficient for survival in their respective markets. Leaders and followers within organizations need to act with skills and competencies that transcend technical abilities. According to Pezzi et al (2020),

Emotional Intelligence (EI) generates a better quality of life for people who begin to better control their feelings and this directly affects well-being in the work environment, as they begin to relate to others in a more pleasant way and tend to reduce unnecessary conflicts and focus on the company's objective (MARTINS, et. al, 2021).

In this direction and sense, technology giants such as Google and Microsoft have invested in the emotional intelligence of their direct and even indirect employees. These organizations generally know that the benefits of implementing

(emotional) benefits that can affect the personal and professional lives of employees represent added value not only to the brand, but also have a direct impact on the commercial relations of its products and services.

From an organizational perspective, the main benefits of emotional intelligence range from integrating teams with greater commitment to their activities and tasks, as they can deal with adversities arising from work and also from their personal lives. Employees who have been exposed to knowledge about resilience, the ability to work as a team, face difficulties in conflict situations and maintain emotional balance. Among the skills that organizations expect from their employees are:

- Self-awareness
- Positive Emotion Leadership
- Self-motivation
- Empathy
- Positive interpersonal relationships

Therefore, many companies develop their activities focusing on the interpretation and use of emotional intelligence as a productive factor. It is inevitable to think about resilience when faced with the topic "Self-motivation". Only professionals with broad control over their emotions, combined with a good relationship with the entire organization, from the presidency, management, to the operational areas, develop this capacity for self-motivation and focus on solving the problem.

It is important to emphasize that the founding concepts of emotional intelligence were proposed by Salovey and Mayer in the 1990s in their theoretical and seminal article that dealt with "the individual's ability to monitor the feelings and emotions of others and their own, to discriminate between them and to use this information to guide their own thinking and actions". In this decade, the work of John Caippo and Gary Berntson on the also seminal "Social Neuroscience" according to Goleman (2011) can also be highlighted.

A posteriori, understanding what emotions are and their importance within organizations was and still is a challenge for managers. In addition to simply understanding how emotions work in the workplace, managers are constantly concerned about their planning. Investments in ongoing training of employees regarding emotional intelligence. It is not enough to simply understand this social phenomenon of interpersonal relationships and emotions within organizations; it is also necessary to establish planning, organization and control of actions.

effective and affirmative within this scope. Therefore, this planning must include investment that enhances the capabilities of employees (direct and indirect) with regard to emotional intelligence, so that if in the past this topic was restricted to academic circles and featured more intensely with philosophical aspects, it is now a reality within companies and has to receive support from the financial sector and is managed by departments that deal with people management.

A good example of this new dynamic is Google and Tecfil, which have implemented a happiness director in their internal structures. At the technology giant, the position was called Chief Culture Officer. This position is fundamentally aimed at managing the well-being of employees as well as good results in professional environments.

Ana Paula de Oliveira, 47, who has been the HR manager at Tecfil for 15 years, says there are no secrets to structuring a corporate happiness plan. "The first step is to know and understand the employee profile, interests, goals, dreams, etc., and build a journey that makes sense," she said. Tecfil, a manufacturer of automotive filters, has 1,500 employees. In fact, managers were faced with the challenge of not only managing this transdisciplinary aspect, but also determining whether the investment in knowledge management in emotional intelligence is seen as an asset or an expense.

Without equivocating about current events, contemporary administration now has in its training structure not only economic sciences, but also people science, human behavior and with an emphasis on social sciences. This is because what is understood as emotional economy directly influences an organization's business.



Adapted from Goleman 1996

The doubts that managers have regarding the expected returns from investments in emotional intelligence in organizations is that this new perspective was not part of their training in the recent past. It is not uncommon for the classical management that has supported the knowledge of managers for decades to not consider happiness as a powerful asset within organizations. This somehow makes some managers skeptical, as they still base their planning on structures focused only on the objective and, as a kind of short-sightedness, prevents them from seeing that happiness within the work environment can be seen as an important strategic tool.

Just like any investment, there are variables that need to be understood and You study with the rigor that the administrator and manager needs to have in their dashboard.

Important points of this investment need attention from administrators:

- Understand what emotional effort is;
- Understand the theory of affective events;
- Understand how emotions and feelings impact activities

Organizational;

- Understand the importance of emotions for leadership;
- Understand the concept of emotional intelligence;
- Recognize the importance of emotional intelligence;
- Understand what it means to identify emotions and;
- Recognize the importance of identifying emotions in the workplace.

Studying and understanding all these aspects can be crucial for managers to support a claim that the strategic management of emotional intelligence (with an emphasis on happiness) in the workplace of organizations has the potential to bring positive impacts on productivity with consequent positive results for business.

According to Elcio Paulo Teixeira, CEO of Heach Recursos Humanos, several studies indicate a minimum gain of 12% in productivity (for companies that promote some regular happiness actions) and up to 40% (for companies that have well-structured happiness management actions).

According to the website Startee (Employee Experience and happiness as a productivity tool — StartSe):

Over the past five years, issues related to productivity, well-being, overwork and burnout have grown, according to Deloitte. In a digital transformation landscape, 84% of respondents say they need to rethink their workforce experience to improve productivity. However, as important as this is, only 9% of respondents believe that

are ready to solve this problem, making it a priority for organizations around the world.

In the same direction and sense, the website [reconnecthappinessatwork.com](http://reconnecthappinessatwork.com) explains the considerations of Madalena Carey, founder of the Happiness Business School.

**[...] happiness at work is how people feel.** We move away from the culture of giving to making employees feel and letting them be who they are. If we think about hedonic adaptation, it is clear that there is no point in thinking that we will make employees happy only by increasing their salaries, bonuses, and benefits. After all, when they achieve this, they will certainly continue in the incessant search for the myth of happiness that we are only happy when we obtain something.

Therefore, it can be stated with some certainty that emotional intelligence within organizations is increasingly closer to the strategic management of the organization supported by people management actions than just an isolated discipline in the field of social sciences.

In addition to traditional perceptions of management that have a lens focused only on practical and economic objectives that aim only at profits and financial results as the main focus of the social function of companies, now in contemporary times, emotional intelligence within organizations has established itself as an important asset and also signals to management that it needs to have on its radar the knowledge of the well-being of its employees.

Among the skills and competencies that will be a differentiator within organizations of the future is the emotional ability associated with the use of new ways of working and also technologies that are currently establishing themselves for the future within organizations. In this sense and direction, Schwab (2016, p. 65) guides us:

[...] successful organizations will increasingly move from hierarchical structures to more collaborative and networked models. Motivation will be increasingly intrinsic, driven by employees' and management's collaborative desire for mastery, independence, and meaning. This suggests that companies will increasingly become organized around distributed teams, remote workers, and dynamic collectives, with a continuous exchange of data and knowledge about ongoing things or tasks.

## **FINAL CONSIDERATIONS**

Organizations of the future and their managers who survive in increasingly changing environments and uncertain scenarios know that human intelligence is intrinsically linked to the times and movements of new work realities. And to survive now and in the future, they need to frequently improve their advantages and their capabilities to innovate. There is a tendency to believe that to withstand even more uncertain times and movements, it is necessary to break with old paradigms of classical management and also of management by objectives. Thinking based on the equation Men x machines x times/movements no longer supports a strategic positioning in the future. A variable that already existed and that

What used to go unnoticed within organizations is now the driving force behind disruption and, together with creativity, is making a difference in the eyes of administrators.

Emotion is at the core of the scientific perspective of contemporary managers and administrators. Emotional intelligence, which in the recent past was considered a liability, is now an important asset and is being considered a potential investment.

Teams are empowered by this investment and markets are being explored based on the emotional intelligence of the people who form the ranks of organizations that stand out in various sectors of the economy. The information technology sector usually always highlights a company in which the appreciation of emotional intelligence is an integral part of the process of valuing these organizations.

In fact, in contemporary management, emotion and emotional intelligence are a competitive advantage and also a fundamental part of the strategic planning of organizations. Human Resources departments plan, organize and control this investment and seek deterministic actions to enhance this powerful asset, driving a set of practices into the organizational culture that aim to foster not only environments that promote well-being experiences but also to ensure that happiness is a feeling to be sought and maintained among the people who make up the organizations.

Therefore, it can be concluded that if in the past issues related to emotions were directed to transdisciplinary areas within organizations and were viewed by administrators with a classical management background as a liability, this is no longer the case in contemporary times. Now, within organizations, emotions, emotional intelligence and happiness are a priority in the strategic planning of organizations, receiving not only attention, but also financial resources to establish themselves as an important alternative for organizations and the people who comprise them to face the challenges of the future that will come.

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# **HYBRID TEACHING AS AN ALTERNATIVE FOR SCHOOL INCLUSION? ANALYSIS OF THE BRAZILIAN SCENARIO IN INCLUSIVE SPECIAL EDUCATION IN TIMES OF PANDEMIC.**

Geisse Martins<sup>68</sup>

## **SUMMARY**

This paper aims to analyze and investigate whether hybrid teaching can be considered an alternative for Inclusive Education. To this end, a detailed analysis was made of a survey carried out at the height of the COVID-19 pandemic, in 2020, at a time when teaching and learning actions were being implemented for the target audience of Inclusive Special Education. In addition to the research carried out by a consortium that integrated some institutions, data from the MEC and Cetic.br school census were also analyzed regarding the use and application of digital information and communication technologies (TDICs) in the education of people with disabilities. The text was prepared using a qualitative approach methodology with an in-depth analysis of social facts, associated with observation techniques and consistent theoretical bibliographic review and in total harmony with the course of facts in a given time and space that is the object of this article. Since the topic at hand is current and in total harmony with contemporary concerns, it requires an in-depth investigation, which is what this article brings and presents.

## **1. INTRODUCTION**

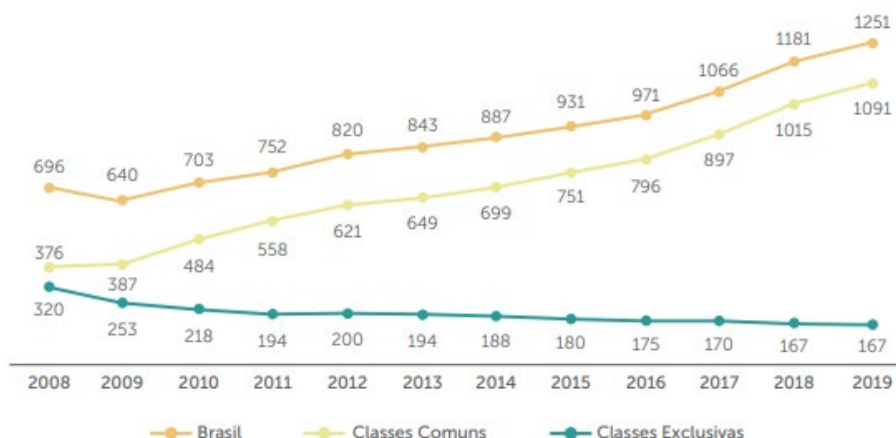
Technology is changing the world and taking everyone to a scenario that is still unknown. It is undeniable that the use and application of technology is part of the lives of many people (not all) around the world. The need and capacity to learn and also to relearn are imperative, especially in a scenario of rapid and mind-boggling changes like today. Faced with a reality in which everything changes all the time, it becomes increasingly complicated, and even difficult, to try to understand which capabilities (skills and competencies) will need to be used in a future of constant uncertainty. In this context, digital information and communication technologies present themselves as tools capable of facilitating the understanding of which skills will be necessary in the near future.

In the educational field, people with disabilities are increasingly occupying their rightful spaces. This is partly due to the skills acquired through the inclusion of ICTs. Proof of this is the growing number of enrollments in regular education by people with disabilities, as can be seen in Figure 1.

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Figure 1 - Total number of registrations of people with disabilities - Period from 2008 to 2019.



Source: Brazil (2015)

It is worth noting that people without disabilities may also have adaptation needs in the teaching-learning process, therefore their characteristics and singularities also need to be welcomed and respected, especially in chaotic and disconnected scenarios such as those experienced at the height of the pandemic caused by COVID-19.

Faced with this intricate path that bifurcates, on one side there is the use and application of digital information and communication technologies for all people, while on the other side, the use of traditional teaching methodologies. As a result, a disturbing question arises: **Can hybrid teaching be considered an alternative for inclusive education?**

In an attempt to answer this intriguing concern, this article will present and discuss the issue. To this end, it will bring to light the author's experiences and statements by other authors who address the topic. It will present an analysis of statistical data extracted from a survey by Cetic.br, from the 2020 school census carried out by the Ministry of Education (MEC), and from a survey conducted by a consortium of organizations that, through a public-private partnership, sought to understand the challenges of school education during the pandemic in 2019, such as the use of digital information and communication technologies in teaching people with disabilities.

### 3 METHODOLOGY

This article presents a qualitative approach and for this purpose the methodology of analysis of social facts, data and research was used, associated with observation techniques and theoretical bibliographic review. As Minayo argues,

Qualitative research answers very specific questions. In the social sciences, it is concerned with a level of reality that cannot be quantified. That is,

it works with the universe of meanings, motives, aspirations, beliefs, values and attitudes, which corresponds to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalization of variables. (MINAYO, 2001, p. 22).

In this sense, Durkheim states

The sociological study of education allows us to understand, in a general and summarized way, the ways in which the social being is constituted throughout history. But it also makes it possible to examine the cultural determination of consciousness, that is, the procedures that lead individuals to internalize collective ideas, values, beliefs and feelings. It opens the way for the investigation of the modifications of collective representations (responsible for maintaining or reinforcing individual consciousness) through the interference of other aspects of social life (DURKHEIM, 2011, p. 14).

#### **4 THE SCENARIO OF INCLUSIVE EDUCATION IN BRAZIL**

Inclusive Education in Brazil is a reality. It is not only included in the pantheon of laws in our country, but it is also present in people's lives and, especially, in the schools of this immense nation. The work of parents and guardians, together with other actors, in the construction and implementation of inclusive education, is the result of countless battles and achievements won with sweat, tears and dedication by a huge range of professionals involved in this beautiful art of teaching those who, as a rule, are victims of prejudice, abandonment, neglect and even the absence or lack of voice and place in society.

In this universe, it is worth highlighting the extremely important role of education professionals, due to their competent, selfless work, which even goes as far as altruism. These education professionals, who are immersed in their quasi-priesthood of teaching people with disabilities, deserve all the praise, admiration and respect, as they are true heroes who fight and win one battle at a time.

Special and Inclusive Education is very broad and requires an in-depth and detailed study of topics that are fundamental to the practice of any teacher. Welcoming and sharing are the watchwords. Inclusion is a dynamic and gradual process that reaffirms the principles of community, cooperation, solidarity, respect and appreciation of differences and improving living conditions for all people.

According to the IBGE Census (2010), there is a population of approximately 45.6 million people in Brazil with some type of disability (population that declares itself to have some type of disability). Also according to this institute, 6.7% of the population has difficulty seeing, hearing, walking, and are mentally or intellectually disabled.

Figure 1 - Inclusive Education in Brazil – Basic Education Enrollments



Source: prepared by the author, based on Brazil (2020b)

Data from the Brazilian Ministry of Education (MEC) [2020 school census] states that there are 1.3 million people with disabilities regularly enrolled in the education system throughout the country. According to the MEC, of the total enrollments in basic education classified in Public and Private networks, the public network receives and welcomes the largest contingent.

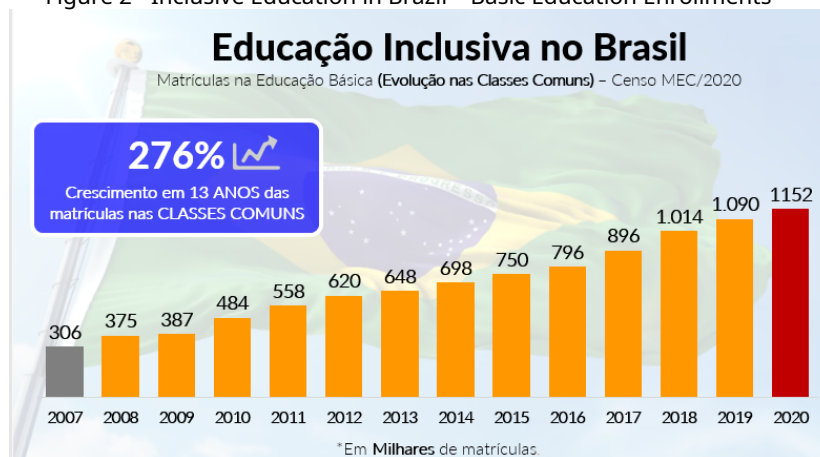
Figure 2 – Inclusive Education in Brazil – Basic Education Enrollments (class types)



Source: prepared by the author, based on Brazil (2020b)

Regarding enrollments by class type, according to data from the 2020 school census, a greater concentration of enrollments in regular classes can be observed. This result demonstrates an alignment of public policies with the goals established in the National Policy for Inclusive Special Education (PNEEI) and with the struggle for the rights of people with disabilities, who have been seeking social equity for more than half a century.

Figure 2 - Inclusive Education in Brazil – Basic Education Enrollments

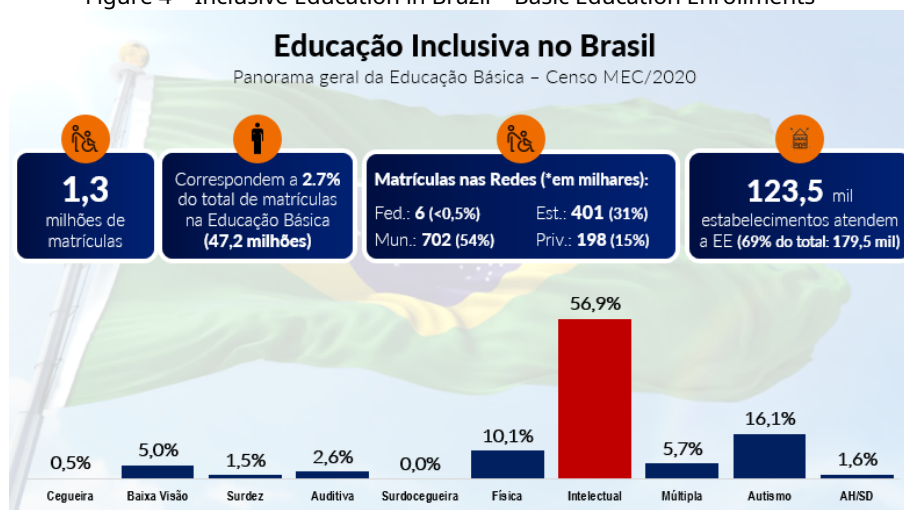


Source: prepared by the author, based on Brazil (2020b)

As seen in the previous graph, in 13 years there has been an exponential growth in enrollments in regular classes. This reality requires everyone involved in inclusive education to plan, organize and control not only public policies regarding reception, but also permanence and equitable possibilities to provide the same experiences and include these people within the teaching and learning processes.

In fact, it is important to emphasize that, with regard to access and use of new technologies by people with disabilities in Brazilian school environments, this is far from an expected reality. Brazilian education, especially public education, is lagging behind in the use of new technologies for people with disabilities.

Figure 4 – Inclusive Education in Brazil – Basic Education Enrollments



Source: prepared by the author, based on Brazil (2020b)

It is important to highlight that of this total of more than 1.3 million enrollments in inclusive education, 2.7% refers to basic education, that is, there are 47.2 million people and 123.5 thousand educational establishments that have Specialized Educational Assistance (AEE), which

corresponds to exactly 69% of a total of 179.5 thousand. Although these may seem like expressive numbers, a large part of these establishments still use traditional forms of teaching (analog and synchronous) without any medium or long-term planning to implement the use and application of computer resources in teaching and learning for people with disabilities.

#### **4 THE SCENARIO OF USE OF TECHNOLOGIES**

Brazil is a country of continental dimensions, with a diverse and diffuse population concentration, with enormous pockets of poverty, built on a historical and social basis based on discrimination, prejudices and segregation of minorities.

All of this that is argued regarding discrimination against minorities and violation of rights is well illustrated, recorded and substantiated in the works *The Big House and the Slave Quarters* (1933) by Gilberto Freyre, *Dictionary of Brazilian Folklore* (1952) by Câmara Cascudo and *The Brazilian People: the formation and meaning of Brazil* (1995), by Darcy Ribeiro.

Leaving the digression and returning to a more current reality, in 2020, a consortium of companies<sup>69</sup> conducted a survey called "School Inclusion in Times of Pandemic", whose focus was to try to understand and identify the challenges faced by professionals and students of basic education in the school setting during the COVID-19 pandemic. With a surveyed universe of over 1,500 people who work directly in inclusive special education. According to the survey report, more than 1,500 people participated by answering the questions. The interviewees were divided into four large groups, with the group with the highest prevalence working in inclusive special education or school inclusion. Figure 5 shows the profile of the respondents.

Figure 5 – Respondent Profile

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<sup>69</sup> Carlos Chagas Foundation (FCC), Federal University of ABC (UFABC), Federal University of Espírito Santo (UFES) and the University of São Paulo (USP).

1.594 docentes que atuam com alunas e alunos público-alvo da educação especial

**Sexo**

Feminino – 85%  
 Masculino – 14,6%  
 Outro – 0,4%

**Cor/raça**

Branca – 61,6%  
 Preta – 10,4%  
 Amarela – 1,4%  
 Parda – 26,4%  
 Indígena – 0,2%

**Pessoa com deficiência – 3,7%**

**Atuação**

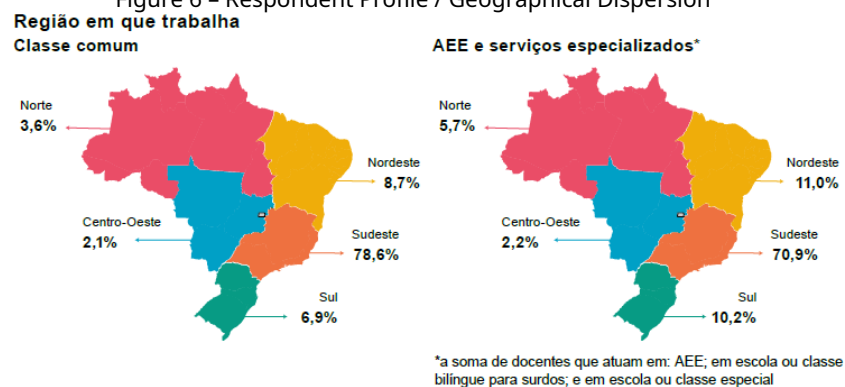


\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial

Source: Carlos Chagas Foundation (2020)

In the geographic dispersion of professionals working in regular classes and also in Specialized Educational Services (AEE), according to the results of the research, it is possible to observe (Figure 6) a massive concentration in the Southeast and a very low concentration in the North/Northeast. Evidencing that there is still strong social discrimination in Brazil when comparing the Southeast and Northeast regions.

Figure 6 – Respondent Profile / Geographical Dispersion

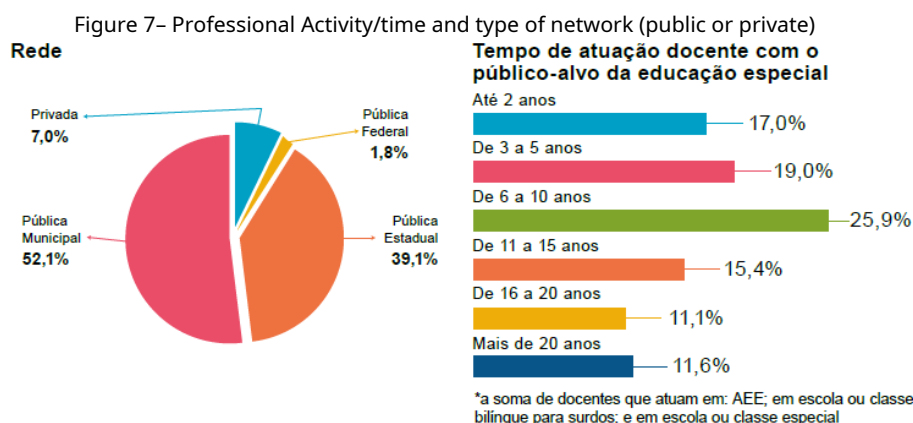


\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial

Source: Carlos Chagas Foundation (2020)

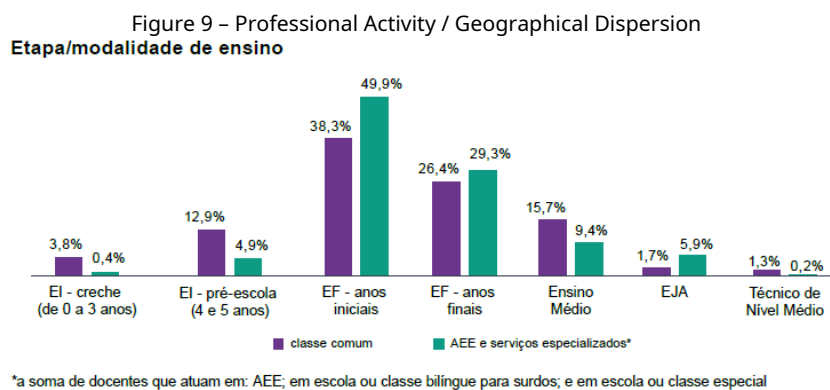
Regarding professional performance, the results found in the research are consistent with the stratified data from the MEC regarding the growth in the number of enrollments in regular classes and what is recommended by the National Policy for Inclusive Special Education (PNEEI).

Another piece of information raised in the research report is that more than 90% of respondents had links directly related to the public education network, with a large concentration of professionals working in specialized educational services, see the following graph.



Source: Carlos Chagas Foundation (2020)

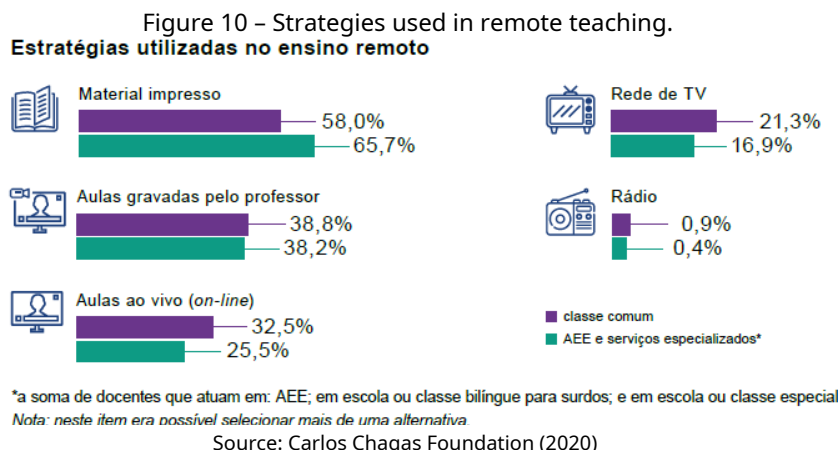
Regarding the stages and types of education in Brazil, the research revealed that there is a greater concentration of students (PwDs) in Early Childhood Education – Initial Years and that these concentrations do not remain constant in the Final Years, falling considerably in High School and almost non-existent in Technical Education. This reality of the numbers found is in line with a lack of adequate preparation for the job market which, in the global reality, increasingly demands skills and competencies for the use of new technologies.



Source: Carlos Chagas Foundation (2020)

As can be seen in Figure 10, regarding strategies for remote teaching, the report states that, in mid-July 2020, networks or schools did not have any type of organization for remote teaching. The vast majority of them were still carrying out some type of non-face-to-face activity (using printed material, for example) both in regular classes and in specialized educational services. In some cases, classes were being recorded, but in an experimental mode with technological resources provided by the teachers themselves.





This research finding, while exposing the reality of the lack of preparation of Brazilian schools in their ability to adapt to the challenges posed at the height of the pandemic, also highlights the fragility of teaching and specialized care for people with disabilities regarding the use and application of technologies in education.

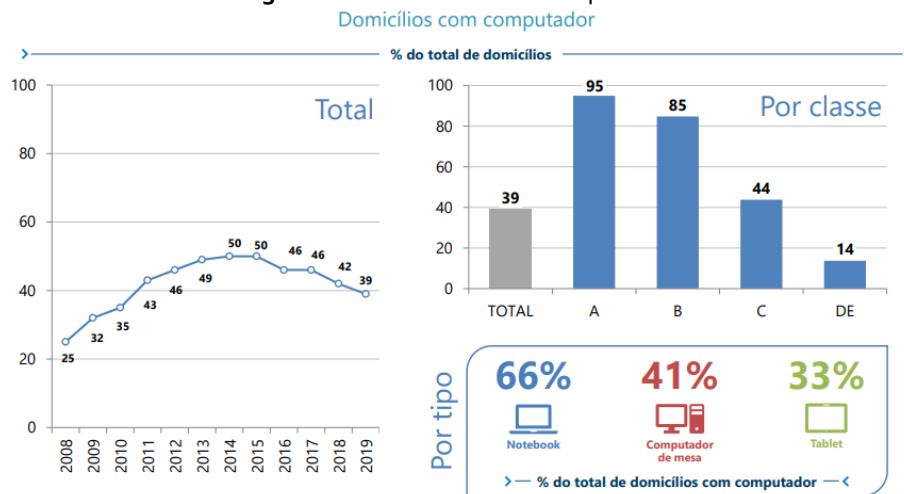
The lack of preparation does not only involve the structural training of professionals involved in inclusion. These figures show that there is a total lack of preparation on the part of public managers who do not make efforts or invest in equipping Special and Inclusive Education with new technologies. Although there is a high level of financial support for education in Brazil, this does not mean that these resources reach the people who actually and legally need them.

In the survey conducted by the consortium in 2020, it became clear that professionals involved in Special Education and inclusion did not have digital technological instruments planned and prepared to be used at the height of the pandemic. The strategies focused on actions using analog (printed) material and not on the use and application of digital information and communication technologies, as shown in the graph on strategies for remote teaching. It is imperative to note that, still in 2020, a survey by Data Folha found that only 29% of public schools in Brazil did not have access to the internet. Along the same lines, another important survey by CETIC.BR, in 2019, also found that there is a social discrepancy regarding internet access. It also showed that:

- 20 million households do not have Internet (28%);
- Households with internet exceed 50% in rural areas;
- Absence of ICT products and services reaches 50% in classes D and E;

- Reduction in the presence of computers in homes;
- Big difference by social class;
- Growth of broadband via cable or fiber optics;
- One in four Brazilians does not use the Internet;
- 47 million non-users (26%);
- 134 million Internet users (74%);
- Internet users do not exceed 50% in rural areas and in classes D and E;
- Cell phone is the most used device (99%);
- 58% access the internet only via cell phone;
- Rural areas (79%) and classes D and E (85%) concentrate exclusive use.

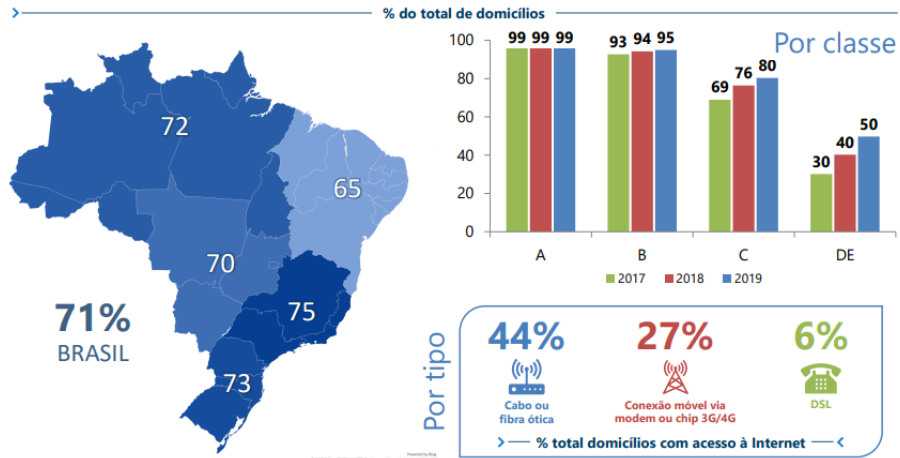
**Figure 11**–Households with computers



Source: Brazilian Internet Steering Committee (2020, p. 6)

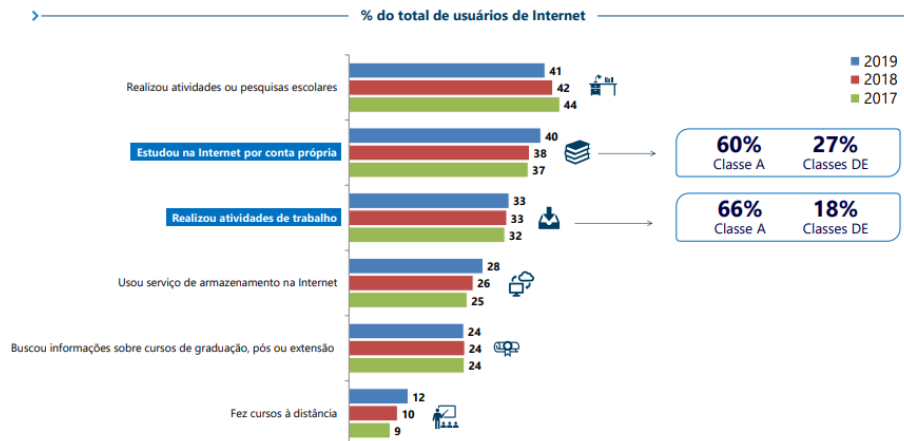
Another important finding of the CETIC.BR survey is that there is a considerable social gap regarding the use of the Internet for activities carried out in the duality of education and work. Classes D and E are very far from the reality of classes A. Evoking here the determinations of Bourdieu (1983) in his research and statements about power relations in the social field, here with emphasis on educational environments in which the intellect is disputed between the dominant and the dominated. In the specific case of Brazil, in the struggle between the dominant and the dominated, the dominated are always at a total disadvantage. Figures 12, 13, 14 and 15 show some results of this research.

Figure 12 – Households with internet access in Brazil  
Domicílios com acesso à Internet



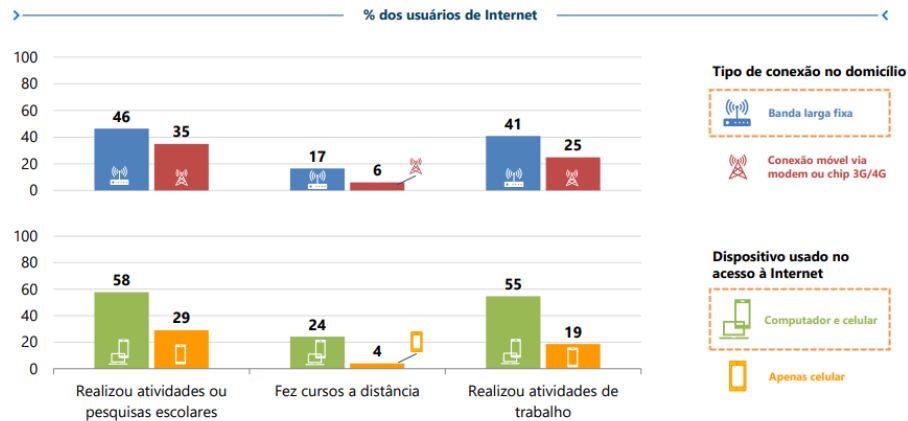
Source: Brazilian Internet Steering Committee (2020, p. 7)

Figure 13 – Internet users (by activities performed) – Education and work  
Usuários de Internet, por atividades realizadas na Internet - educação e trabalho



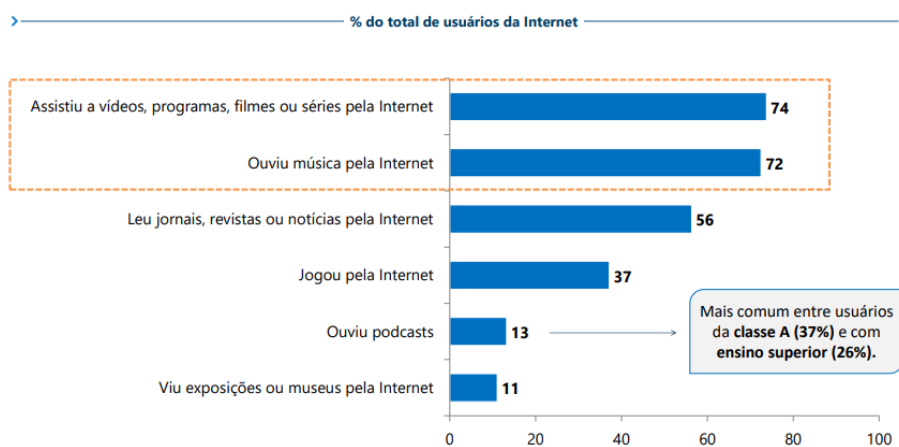
Source: Internet Steering Committee in Brazil (2020, p. 18).

Figure 14 – Internet users (by activities performed) – Education and work  
Usuários de Internet, por atividades realizadas na Internet - educação e trabalho



Source: Brazilian Internet Steering Committee (2020, p. 19)

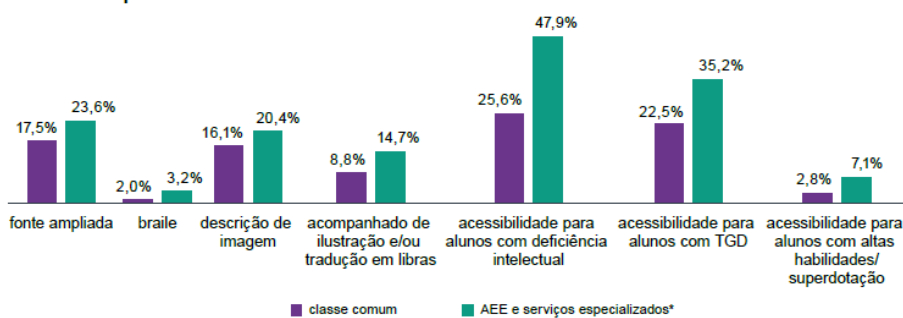
Figure 15 – Activities carried out on the Internet - Multimedia  
 Atividades realizadas na Internet – multimídia



Source: Brazilian Internet Steering Committee (2020, p. 25)

Therefore, in addition to the use and application of the internet in Brazilian homes, by exposing the data presented by the consortium regarding accessibility, the research brought to general knowledge that no resources were provided for accessibility to the target audience of remote classes during the most critical period of the pandemic. An inclusive education that does not include. A paradox is established. **Education, in its genesis, is inclusive and can never be exclusive in its processes.**

Figure 16 – Strategies used in remote teaching.  
 Material impresso



\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial  
 Nota: neste item era possível selecionar mais de uma alternativa.

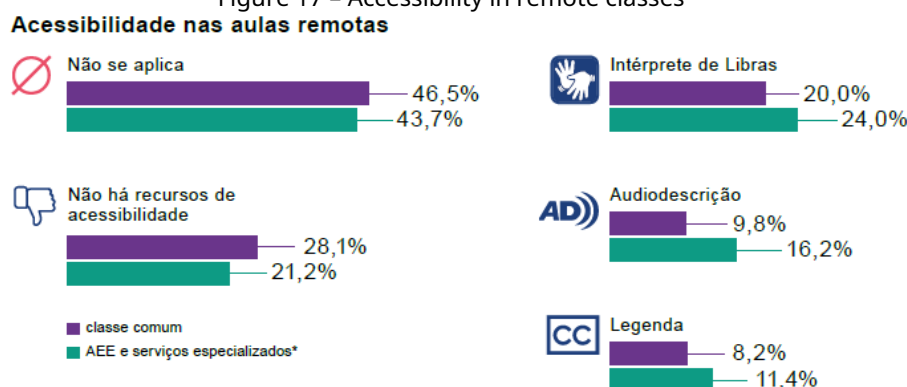
Source: Carlos Chagas Foundation (2020)

Even though there is a feeling of support on the part of teachers who work in AEE, in relation to the network/school, as a rule, this support derives from a history of solidarity and assistance that permeates Inclusive Special Education and that is part of the Brazilian culture of assuming and insisting on a feeling of complacency mixed with pity for people with disabilities. This cultural feeling should be replaced by

respect for people with disabilities and to assert the rights achieved over decades, achieved through Homeric struggles, it must be said.

It can be seen here that there is a distancing from the proposal to include all people regardless of their singularities and, still from Bourdieu's perspective (1983), the dominated remain at a disadvantage.

Figure 17 – Accessibility in remote classes



\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial  
 Nota: neste item era possível selecionar mais de uma alternativa.

Source: Carlos Chagas Foundation (2020)

Figure 18 – Network/School Support

Apoio da Rede/Escola	Classe Comum	AEE e serviços especializados*
Planejar as atividades	81,3%	81,3%
Desenvolver materiais acessíveis	62,0%	73,1%
Definir processos avaliativos	54,7%	61,1%
Orientar as famílias em relação às atividades propostas	70,9%	85,3%
Contatar os demais professores que atuam com o aluno	68,7%	81,5%
Contatar os demais profissionais que atendem o aluno	56,2%	62,2%

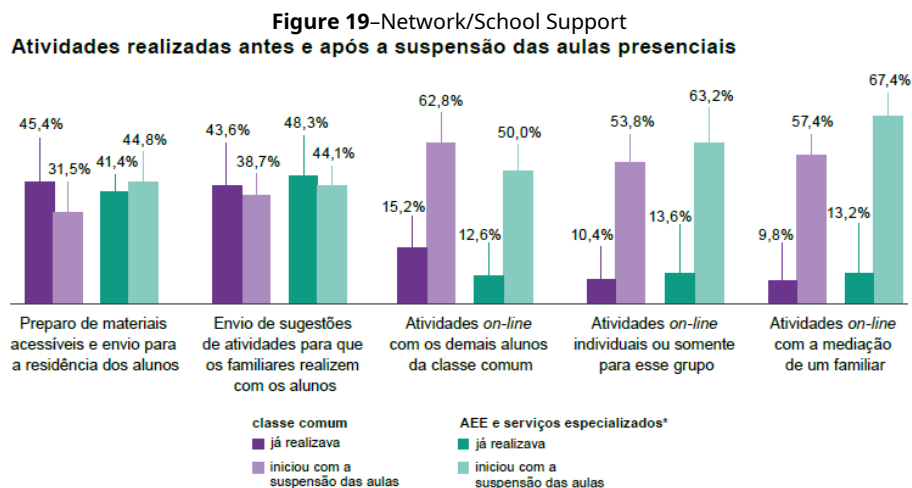
\* a soma de docentes que atuam em: AEE; em escola e classe bilingues para surdos; e em escola ou classe especial

Source: Carlos Chagas Foundation (2020)

What are the activities proposed? *online* and changes in the routine of people with disabilities, at the height of the pandemic the research report is emphatic in stating that the activities identified as *online* represented, up until that moment, one of the main changes in the routine of education professionals in the context of the pandemic, in regular classes, in Specialized Educational Assistance (AEE) and also in special classes. It is worth noting that the report made it clear that when teachers plan classes for remote teaching, they do so using copies of the teaching materials used by the school and send them to the families of people with disabilities. (This process includes suggestions for some activities that can be applied with the target students of inclusive education), when carrying out this process, teachers believe that they are meeting the requirements of a remote class, or in their understanding, a digital class. However, analog materials added to the analog dynamics of teaching and learning do not constitute hybrid teaching or the use of technological resources.

Still in this sense, the numbers demonstrated a timid movement in relation to the use and application of digital technologies, the dynamics in relation to activities *online* no

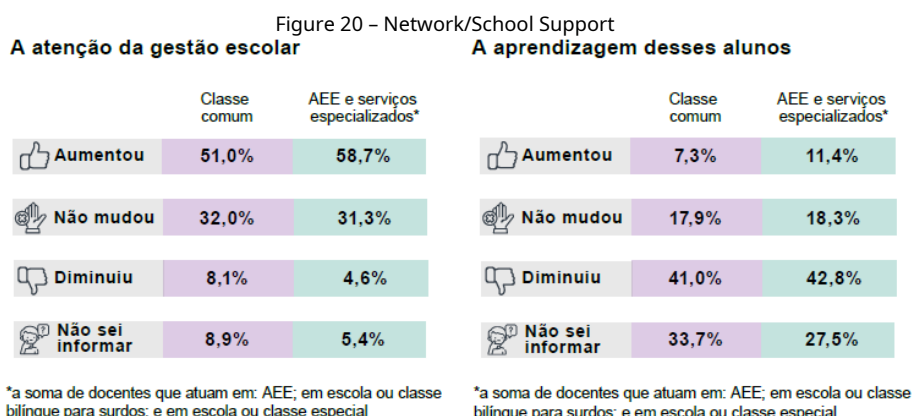
grew as much as expected. In part, it can be analyzed that some obstacles hindered this dynamic. Obstacles such as the use of computers and the lack of internet access on computers in Brazilian homes.



\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial  
 Nota: A soma dos percentuais não corresponde a 100%, pois foi desconsiderada a resposta "não se aplica".

Source: Carlos Chagas Foundation (2020)

When analyzing the binomial attention from school management and learning of students who are the target audience of inclusive education, according to the research figures, although there is a positive and growing feeling due to the attention from school management, this does not affect student learning and is disconnected in that there is not only a certainty that it has decreased, but also doubt on the part of those surveyed who were unable to provide information about student learning in school inclusion, see Figure 20.



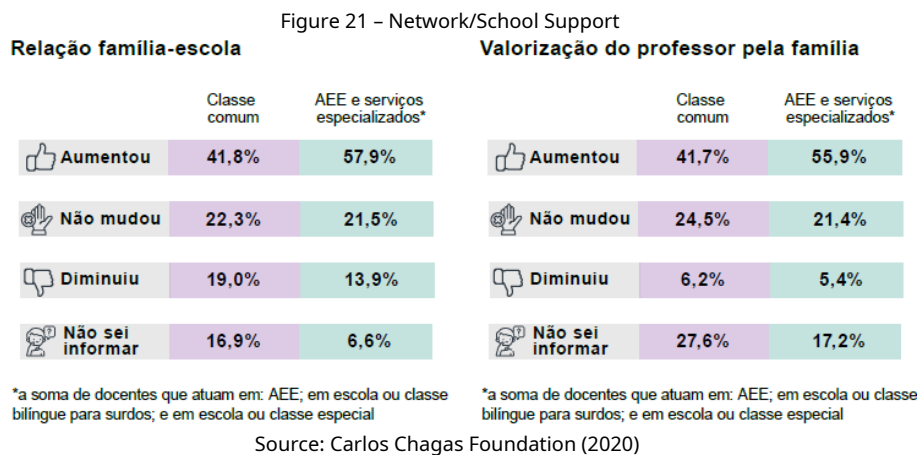
\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial

\*a soma de docentes que atuam em: AEE; em escola ou classe bilingue para surdos; e em escola ou classe especial

Source: Carlos Chagas Foundation (2020)

However, in the duality of the family-school relationship and the appreciation of the teacher by the family, in the FCC research, it was established that there is recognition on the part of society, not only regarding the importance of the family-school relationship, but also, on the part of

of the family, the appreciation of the work of the teacher who works with inclusion. This recognition is in line with the data presented by the MEC since the largest contingent of people with inclusion is welcomed in public education establishments throughout Brazil, as can be seen below.



It is worth noting that these numbers also reflect the excellent work of education professionals who dedicate themselves to the inclusion of people with disabilities. Despite working in precarious conditions, working long hours, and being unable to do almost anything, these professionals act like true Atlases from Greek mythology, carrying a heavy world of problems on their backs. They are resilient, but without neglecting their affection, dedication, studies, research, and feelings of altruism, making efforts to promote the de facto and de jure inclusion of people with disabilities.

Consequently, these difficulties that exist in the world of school inclusion under normal conditions, which were already challenging, with the advent of the pandemic and consequently with all the health issues, with emphasis on social distancing, have accentuated the problems.

In this regard, the research report shared the main barriers faced by the Special and Inclusive Education public, identifying that more than 70% of education professionals, with emphasis on teachers who deal directly with Specialized Educational Services, noticed changes in their routine, and these changes were the main barriers. The lack of mediation by teachers with students of Special and Inclusive Education had a considerable impact on the teaching and learning processes of people with disabilities.

With considerable obstacles, teachers (according to the survey figures) recognize that among the main obstacles the change in students' routine stands out



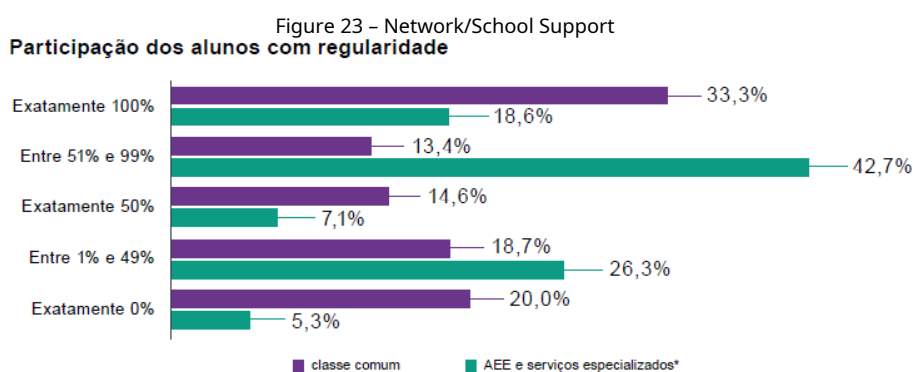
associated with classroom activities being completed only at home, and, subsequently, the difficulty in accessing the internet. In this regard, the FCC research is in line with what the CETIC.BR research, in 2019, had already detected. In addition to this, the greatest stratification of types of disability is intellectual disability, representing the highest prevalence (over 50%) according to the school census carried out by MEC/INEP (2020). This is, in fact, a major complicating factor, since for people with intellectual disabilities to use new technologies, full monitoring is necessary. However, the effective participation of students in Inclusive Special Education, even with the proposed challenges, proved to be regular and active.

Figure 22 – Network/School Support

Principais barreiras enfrentadas pelas alunas e alunos	Classe Comum	AEE e serviços especializados*
Alteração de rotina para o aluno (realizar atividades da escola em casa)	72,2%	70,9%
Falta de mediadores para realização das tarefas	56,6%	54,1%
Acesso à internet	53,2%	67,7%
Falta de equipamentos (celular, computador, notebook, tablet)	49,9%	65,7%
Falta de recursos de tecnologia assistiva	43,1%	41,7%
Ambiente inadequado para estudo	38,5%	45,3%
Material impresso fornecido não está acessível	13,8%	13,8%
Ausência de intérprete/tradução em Libras	7,8%	7,2%

\* a soma de docentes que atuam em: AEE; em escola e classe bilíngues para surdos; e em escola ou classe especial

Source: Carlos Chagas Foundation (2020)



\*a soma de docentes que atuam em: AEE; em escola ou classe bilíngue para surdos; e em escola ou classe especial

Nota: nas classes comuns, cada docente tem entre 1 e 4 alunas/alunos público-alvo da educação especial, por turma; no AEE e serviços especializados, a maioria indicou ter entre 4 e 30 alunas/alunos.

Source: Carlos Chagas Foundation (2020)

Among the digital information and communication technologies used in remote activities according to the data collected in the survey, the following stand out:

- *WhatsApp;*
- *Google (Classroom, Meet, Drive);*
- *Facebook,*
- *Zoom;*
- *Teams;*
- *Moodle;*
- *websites of education departments or schools;*
- *telephone contacts;*
- *e-mail.*

## **FINAL CONSIDERATIONS**

Educating people with disabilities in the current context requires much more than the analog methods widely used in the recent past. In an increasingly digital era, thinking of new alternatives for education and teaching and learning processes has become essential. Teaching practices adapt according to the needs and advances that the scenario has provided, both for educators and students. Given this pandemic context, it is necessary to pay attention to changes and what they can bring to the table. It is essential to discuss, plan, organize and monitor pedagogical actions and practices in view of the challenges posed to education and that the pandemic has imposed in general, not forgetting that for Inclusive Special Education these challenges are even more complex.

For people with disabilities, the act of communicating and learning at the same time is a great challenge, but also a big step towards autonomy. For professionals in Inclusive Special Education, providing this dyad, in addition to being a great pedagogical challenge, also represents providing PcDs with a considerable advance, since nowadays it is no longer possible to have a dissociation between communication and learning.

Some paradoxes arise when seeking answers for hybrid teaching with the target audience of Inclusive Special Education. Research analyses focus on the use of technology in general and specifically in the universe of Inclusive Special Education. At the height of the pandemic in 2020, research highlights a set of situations that clearly demonstrate that people with disabilities, in general, were harmed by remote classes or even by a faltering hybrid teaching. It is necessary to recognize that there was a great effort on the part of teachers and also of professionals involved in

Inclusive Education to mitigate the impacts of social distancing imposed by health regulations, however, these honorable efforts were not enough to alleviate the social discrepancies in the use and difficulty of access to new digital information and communication technologies in Brazil. Social classes D and E, which concentrate a huge contingent of people with disabilities, feel the process of sociodigital exclusion in their lives, and this entire intellectual game illustrates the propositions of power and the fields of social domination broadly determined by Bourdieu.

As if the obstacles encountered in Brazilian society in times of pandemic were not enough, when it comes to Inclusive Special Education, these obstacles have proven to be even greater, more acute and have revealed how much investment is needed in Inclusive Education to be able to serve people with disabilities who, in 2020, already exceeded one million and three hundred thousand people duly enrolled in the country's public and private networks.

Therefore, it can be concluded that school inclusion and socio-digital inclusion in Brazil, at the height of the pandemic in 2020, left much to be desired in terms of the de facto and de jure inclusion of all people with disabilities. The remote teaching adopted was precarious and insufficient to support and continue the proposed pedagogical practices. Hybrid teaching as an alternative needs to be thought of and articulated with real inclusive practices that can contemplate and encompass all people, without being exclusionary in its processes.

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