

O crescimento do ensino superior em ambientes virtuais com o advento da Pandemia de Covid-19: quais os mecanismos de controle de oferta e de qualidade?

*Edson César Napoleão JÚNIOR¹
Maria Jose BALDESSAR²*

Resumo

Com o crescimento da oferta de cursos na modalidade remota no Brasil, especialmente após a deflagração da pandemia de Covid-19, houve a necessidade de se intensificar os debates acerca da qualidade dos cursos sob a perspectiva dos discentes, considerando-se que estes, num contexto de oferta de serviços, seriam os clientes do processo. O presente trabalho teve como objetivo promover uma discussão acerca dos modelos disponíveis para avaliação da percepção de qualidade dos serviços educacionais a partir da perspectiva do Ensino Superior a distância. Dentre os modelos mais utilizados, o Servqual tem sido uma ferramenta bastante eficaz nos processos de gestão administrativa e educacional, considerando os níveis de percepção de qualidade dos discentes.

Palavras-chave: Ensino Superior a distância. Modelos de Avaliação de Qualidade. Pandemia de Covid-19.

¹Master's student in the Graduate Program in Knowledge Management Engineering - Federal University of Santa Catarina (UFSC) Florianópolis - Brazil.

ORCID: <https://orcid.org/0009-0003-3923-674X>.

E-mail: jrnapoleao@gmail.com

² PhD in Communication Sciences from the University of São Paulo - Brazil.

ORCID: <https://orcid.org/0000-0001-8971-4576>.

E-mail: mbaldessar@gmail.com

The growth of higher education in virtual environments due to the Covid-19 Pandemic: what are the mechanisms for supply and quality control?

Edson César Napoleão JÚNIOR
Maria Jose BALDESSAR

Abstract

With the growth in the offer of distance learning courses in Brazil, especially after the outbreak of the Covid-19 pandemic, there was a need to intensify the debates about the quality of courses from the students' perspective, considering that they, in a context of service offering, would be the customers of the process. The present work aimed to promote a discussion about the models available to evaluate the perception of quality of educational services from the perspective of Distance Higher Education. Among the most used models, Servqual has been a highly effective tool in the administrative and educational management processes, considering the students' levels of perception of quality.

Keywords: Higher Education at a Distance. Quality Assessment Models. Covid-19 pandemic.

El crecimiento de la educación superior en sistemas virtuales de enseñanza con la llegada de la pandemia de Covid-19: ¿cuáles son los mecanismos de oferta y control de calidad?

Edson César Napoleão JÚNIOR
Maria Jose BALDESSAR

Resumen

Con el crecimiento de la oferta de cursos en línea en Brasil, especialmente tras la pandemia de Covid-19, ha surgido la necesidad de intensificar los debates sobre la calidad de los cursos desde la perspectiva de los alumnos, considerando que ellos son los clientes de este servicio. El presente trabajo tiene el objetivo de promover una discusión sobre los modelos disponibles para evaluar la percepción de calidad de los servicios educativos desde la perspectiva de la Educación Superior en línea. Entre los modelos más utilizados, Servqual ha sido una herramienta exitosa en los procesos de gestión administrativa y educativa, considerando los niveles de percepción de calidad de los alumnos.

Palabras clave: Educación Superior a Distancia. Modelos de evaluación de la calidad. Pandemia de Covid-19.

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Introduction

Cruz and Lima (2019) highlighted the trajectory of distance education in Brazil, which began in the late 1970s, specifically in 1978, with the launch of the *Telecurso 2.º Grau* program by the Roberto Marinho Foundation (FRM) in partnership with the Padre Anchieta Foundation (FPA). Initially broadcast in São Paulo, Rio de Janeiro, Brasília, and Goiânia, this educational program expanded nationwide on July 14, 1978. According to Mattar (2022), distance education can also be referred to by other names, such as distance teaching and learning; distributed teaching and learning; online teaching, learning, and education; open teaching, learning, and education; and e-learning.

Over the past 45 years, this teaching modality has undergone significant transformations influenced by public policies and advancements in technologies that facilitated the dissemination of content to students. Mattar (2022) characterizes distance education as a modality where teachers and students are spatially separated, planned by educators or institutions, and supported by various communication technologies. The author discusses the evolution of these technologies, which initially involved mailing printed materials to students and later incorporated a range of digital transmission platforms, such as radio, television, telephone, and computers. A significant leap occurred in the late 20th century with the development of the internet (Mattar, 2022).

In higher education, data from the 2021 Higher Education Census published by the National Institute for Educational Studies and Research Anísio Teixeira (INEP, Brazil, 2021) show that the number of students enrolling in undergraduate distance education courses increased by 474%. During the same period, enrollments in on-campus courses decreased by 23.4%. In basic education, these numbers have always been less pronounced, as distance education at other educational levels has historically been regulated as a complementary support to in-person education (Giolo, 2018).

Giolo (2018) also explains that, in the case of the pronounced expansion of enrollments, especially in higher education courses at private institutions, there was no equivalent correspondence between actual student demand and adequate supply, with a focus on meeting key quality criteria. This explosion in the number of enrollments in distance education courses was further influenced by a significant external factor: the COVID-19 pandemic, which impacted the world between 2020 and 2021.

Sampaio, Pires, and Carneiro (2022) emphasize that the COVID-19 pandemic served as a catalyst for the expansion of distance education in Brazil and worldwide, often referred to as

emergency remote learning. It is important to note that, in the literature, these concepts are sometimes treated as synonyms, particularly when studies describe and analyze the context of education during the pandemic in Brazil and globally.

To adapt to the new context, pedagogical practices required adjustments. Virtual environments, traditionally associated with distance education, gave way to virtual meeting platforms such as Google Meet, Teams, or Zoom. These spaces required adjustments and adaptations not only from students but also from technical, administrative, and teaching staff. There was a pressing need to adapt pedagogical and administrative practices to a model that, despite existing for over four decades in Brazil, remained far from the standards of in-person education (Mattos, 2022; Nepomuceno; Algebaile, 2021).

Mattos (2022) also notes that, while higher education institutions (HEIs) previously explored hybrid teaching models often offering only individual courses or specific modules in a virtual format the pandemic forced them to comply with regulations mandating the complete closure of physical spaces, thereby adopting a fully online teaching model. This shift necessitated not only administrative adjustments but also curricular and pedagogical changes, as well as retraining for instructors, many of whom were unprepared for distance education and unfamiliar with the various technological tools that facilitate and enhance online teaching.

As a result, this new educational model, implemented on an emergency basis and lacking the necessary adjustments to meet quality standards, has been the subject of deeper analysis. These studies focus on the perceptions of students, teachers, administrators, and other stakeholders involved in the process to ensure that this teaching format can be offered within the educational system while maintaining standards comparable to those of in-person or hybrid education.

It is worth noting that the pandemic introduced a landscape of uncertainties for HEIs and public authorities, compounded by technical and administrative challenges. These issues highlighted that, despite the consistent growth in enrollment numbers, this teaching modality still lacks mechanisms to ensure the quality of its offerings (Sampaio; Pires; Carneiro, 2022). To manage the evaluation of higher education programs (not exclusively distance education programs), the national public authority utilizes a management model known as the *National System for the Evaluation of Higher Education* (*Sistema Nacional de Avaliação da Educação Superior*) (SINAES).

The *SINAES* (*National System for the Evaluation of Higher Education*) was established by Law No. 10,861, on April 14, 2004, comprising three main components: the evaluation of

The growth of higher education in virtual environments due to the Covid-19 Pandemic: what are the mechanisms for supply and quality control? institutions, courses, and student performance (Brazil, 2004). The results of these evaluations enable an overview of the quality of higher education courses and institutions in Brazil. However, this evaluation mechanism has a more managerial nature, aiming to promote public policies in the broader scope of higher education rather than directly regulating course offerings based on supply and demand.

In this regard, dos Santos et al. (2017) highlighted how managerial quality control mechanisms used in business and industrial contexts can be applied to education, considering that teaching is a service and thus subject to the same evaluative models. In these models, students are treated as clients, and service quality has become fundamental in educational institutions, especially private ones, due to intense competition and high enrollment rates (dos Santos et al., 2017).

Although the government has institutionalized tools for evaluating higher education courses in Brazil, particularly through *SINAES*, these evaluation models reflect the ideal of education as a service. Thus, they are based on proposals like those described by dos Santos et al. (2017), which have also been adopted by several researchers to analyze student satisfaction and regulate the excessive offering of distance higher education courses, especially after the pandemic period.

Additionally, Nascimento (2022) emphasizes a conceptual distinction between the evaluations conducted by public authorities and those carried out through *SINAES*. The former is based on an analysis of pedagogical criteria and includes predetermined items (often legally defined), while evaluative models from administrative and business sectors use scales that measure client satisfaction with a product or service offered.

Thus, this study aims to highlight discussions regarding evaluation models for distance higher education courses in Brazil, considering the significant increase in their availability, particularly after the pandemic. These evaluative models are not associated with managerial proposals aimed at promoting public policies but rather focus on ensuring quality control in the delivery of this service to its target audience. Accordingly, the study is structured into three theoretical sections: the historical and evolutionary contextualization of distance higher education, with the pandemic as a temporal marker; key concepts of quality evaluation and existing models within the broader context of services; and existing models applied in the educational context, which could be systematically adopted for evaluating the provision of distance higher education courses in Brazil.

Distance Higher Education – Historical Evolution and Pandemic Context

Article 80 of the Brazilian Education Guidelines and Framework Law (Lei de Diretrizes e Bases da Educação Brasileira - LDB) provides for the possibility of public sector incentives for the development and implementation of distance education programs across all educational modalities (Brazil, 1996). However, this article was effectively regulated only in 2017, more than two decades after the publication of the LDB, through Decree No. 9,057, dated May 25, 2017.

During the more than two decades before its regulation, the provision of distance higher education courses saw a significant increase in enrollments, particularly in courses offered by private higher education institutions, as noted in data from the most recent Higher Education Census (Brazil, 2021). Although the decree established guidelines for accrediting institutions based on appropriate criteria to offer distance courses, it did not include references to regulatory mechanisms for quality control of these courses. It is important to highlight that accreditation is carried out by the Ministry of Education (MEC).

In this context, Santos (2018) mentions that, although the first institution to offer a distance higher education course in the country was the Federal University of Mato Grosso in 1995, the formal accreditation of institutions for this modality despite the absence of prior regulation of Article 80 of the LDB occurred in 1999. According to Santos (2018), the first institutions accredited by MEC to offer this modality were the Federal Universities of Ceará and Pará. These universities offered full licensure courses in Biology, Physics, Mathematics, and Chemistry and Bachelor's and Full Licensure courses in Mathematics, respectively.

Another finding from Santos's (2018) study highlights the expansion of distance higher education in Brazil, with a growing enrollment rate compared to the in-person modality. This trend is also associated with the growth of the Student Financing Program (*Fundo de Financiamento Estudantil* - Fies). According to the author, these data strongly suggest a correlation between Fies support and the expansion of distance education, predominantly offered by private higher education institutions. Through the student financing program, more opportunities were made available to individuals who previously lacked the means to invest in their education or that of their families. This facilitated the increase in enrollments at private institutions.

It is important to emphasize, however, that this increase in enrollments in higher education in Brazil was not necessarily linked or associated with principles ensuring the quality of the educational product being offered (Santos, 2018).

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Castro and Araujo (2018) complement the data on the Brazilian educational context by highlighting that distance education has become a strategy to meet training demands at all educational levels. The authors also emphasize that in the educational field, this modality represents an alternative for the expansion of higher education due to its potential to serve a large population while reducing government investment in the area (Castro & Araujo, 2018).

Following measures to ease regulations, not only regarding the accreditation of hubs and decentralized units for offering distance higher education, Decree No. 9,057 of May 25, 2017, eliminated the requirement for prior MEC authorization to establish and conduct in-person activities related to distance education courses (Brazil, 2017). In this regard, Santos (2018) states that institutions authorized by MEC to offer distance education courses are granted autonomy to establish hubs, provided they have favorable quality indicators. However, these quality indicators, according to current legislation, apply to both in-person and distance modalities.

The data from the Higher Education Census, however, did not fully capture the realities experienced during the pandemic in Brazil and worldwide. According to Nascimento and da Cruz (2021), the pandemic led to the closure of educational institutions globally, significantly advancing the remote learning model facilitated by information and communication technologies. This transition from in-person education to distance education to address the global emergency further deepened existing educational inequalities, particularly in Brazil. Nascimento and da Cruz (2021) note that the pandemic can be seen as a catalyst for consolidating distance education in Brazil, which had already been on a growth trajectory over the decades. The authors also highlight that the pandemic introduced a vision of the “financialization” of higher education, transforming it into a service-oriented model, thus promoting its intrinsic connection to the massification of education through the popularization of this teaching modality (Nascimento & da Cruz, 2021).

Castro and Araujo (2018) support the perspective presented by the aforementioned authors, asserting that distance education has contributed to the expansion and massification of higher education, primarily emphasizing the private sector. This shift alleviates the State from its responsibility to promote education as a public good and constitutional right for Brazilian citizens. Consequently, the ongoing expansion of remote education was further accelerated by the pandemic. This period introduced emergency remote learning in contexts where only in-person education was previously adopted, reinforcing the market-oriented logic that has promoted utilitarianism in

contemporary higher education (Nascimento & da Cruz, 2021). In light of this, the following section will present a theoretical approach to quality evaluation models in administrative and business contexts, given that these models are also being proposed for the educational sphere, adopting a perspective of education as a product and students as clients.

Quality Evaluation in Administrative and Business Models

Quality Evaluation in Administrative and Business Models

Zeithaml (2000) assesses that, in the business context, concepts of quality, according to market logic, have traditionally been rooted in a company's profitability. In other words, the quality of a service offered would be measured by the company's profit levels, disregarding user satisfaction with the service provided.

However, the same author emphasizes the intrinsic relationship between consumer satisfaction with the services offered by a company, not only in terms of the profit it generates but also through quality measures (Zeithaml, 2000). Therefore, the concept of the quality of a product or service, while it may vary depending on the economic sector, hinges on the logic of compliance and suitability for use, aligned with meeting customer expectations. Thus, it is essential to consider not only the perspective of the business owner or manager, focused on profits or outcomes, but also the user's perception, measured as a form of quality management.

Louro (2000) presents a series of evaluation models based on marketing principles for brands. According to the author, the Perceived Quality of Services (PQS) is a concept that encompasses consumers' or clients' subjective perceptions of the benefits of a product or service concerning its functionalities and use alternatives (Louro, 2000). Furthermore, the author mentions that PQS includes variables of specific benefits, serving as a support measure for other indices, often involving comparisons with reference products. In this context, evaluating products or services based on benchmarks is important, implying that for customers to provide a more accurate quality analysis, they should also be familiar with what is offered by competitors.

Lopes, Hernandez, and Nohara (2009) introduce two service quality measurement scales that have been adopted in business and industrial contexts, or for evaluating the value of market products: the *Service Quality Gap Analysis (Servqual)* and the RSQ scale. According to the authors, the first scale, initially proposed by Parasuraman, Zeithaml, and Berry in the late 1980s (1988), is the most widely used for evaluating service providers but is not as commonly employed for

The growth of higher education in virtual environments due to the Covid-19 Pandemic: what are the mechanisms for supply and quality control? assessing products. It has been adapted to various scenarios and contexts beyond administrative and business spheres.

Parasuraman, Zeithaml, and Berry (1988) constructed the scale by grouping 22 paired items into five dimensions of quality: tangibles, reliability, responsiveness, assurance, and empathy. According to Mello, Dutra, and Oliveira (2001), the Servqual model initially consisted of 10 analysis dimensions but was soon adjusted to improve its psychometric properties for analyzing results.

In the Servqual model, the first item in each pair identifies the expected performance level, and the second identifies the perceived service level. To operationalize it, the difference between perceived performance and service expectations is calculated. In other words, it compares what the service actually delivered against the expectations the client had before receiving it. Each pair of items produces an index, defined as the difference between perceived and desired service, which can be positive or negative. The larger the index, the better the service is perceived by consumers. As observed, the Servqual scale is based on the principle that quality definition, from the client's perspective, is subjective and depends not only on the inherent quality of the product itself but also on the expectations it generated for the client. Furthermore, it is important to note that the scale is used not only for evaluating products but also services, including educational services.

The Servqual scale has been successfully applied in business, educational, and various service provider environments, such as banking services, but it has not yielded strong results in companies offering products, like retail chains. Therefore, Dabholkar, Thorpe, and Rentz (1996) proposed measuring additional dimensions beyond those assessed by the Servqual scale, resulting in a total of 28 questions covering: physical aspects, reliability, personal interactions, problem-solving, and internal retailer policies.

Lopes, Hernandez e Nohara (2009), ao compararem ambas as escalas, concluíram que, sob uma ótica gerencial, tanto as escalas Servqual quanto a RSQ podem ser bem aplicáveis a ambientes empresariais, sendo a RSQ com mais potencial de ser adotada em ambientes varejistas, implicando questões de lealdade do consumidor que não eram previstas pela Servqual. Ao se considerar a educação também como um serviço, Mello, Dutra e Oliveira (2001) expõem as particularidades do sistema como um todo, que é composto por uma função de interesse social e de cunho cidadão, mas também se configura uma atividade que gera lucro e rentabilidade.

Thus, within the context of higher education institutions (HEIs), it can be assumed that managers are indeed faced with the provision of a service, with students being considered clients of

the institution. This situation is particularly applicable to private HEIs, which, through the expansion of enrollments in their distance education networks especially with an additional boost during the pandemic have become practical examples of education as a product. Nunes-Silva, Malacarne, and De-Bortoli (2021) describe education as an intangible asset that generates significant organizational value across various economic sectors. According to the authors, the production of knowledge and other education-related activities not only bolster advancements in science, technology, and innovation but also promote the transformation of high-value human capital (Nunes-Silva, Malacarne, & De-Bortoli, 2021). Santos et al. (2017) also applied another quality measurement scale used in administrative models, which can also be applicable to educational contexts: the ECSI (European Customer Satisfaction Index) model. This scale incorporates constructs or variables such as image, expectation, quality, satisfaction, value, loyalty, trust, and word-of-mouth. However, as can be observed, it is not as commonly used as the previously discussed models. This is because the inclusion of more variables makes the psychometric analysis more costly for researchers.

The educational system, being part of the resource-generating process and thus contributing to the economy, and as a service, should also be subject to quality control processes similar to those mentioned above for businesses in general. The subsequent section will delve deeper into issues related to quality evaluation models for educational services, focusing specifically on distance education in Brazil, using the referenced frameworks as a basis.

Quality Evaluation in Educational Models

Mello, Dutra, and Oliveira (2001) recognize two mechanisms proposed for evaluating the quality of educational institutions: internal and external. External control is exercised by bodies such as the Ministry of Education (MEC) and its administrative agencies, which have a degree of autonomy to intervene in decision-making processes and impartiality to identify adjustments that need to be made in organizational matters. Internal control, on the other hand, allows for greater managerial involvement in more tangible areas of operation, potentially becoming just a corporate ritual without any practical actions regarding necessary changes in management practices aimed at institutional quality (Mello; Dutra; Oliveira, 2001).

Of the models mentioned in the previous section, the Servqual internal control model is widely used in the process of quality evaluation in the educational field. The dimensions of the

The growth of higher education in virtual environments due to the Covid-19 Pandemic: what are the mechanisms for supply and quality control? scale, adapted to the educational model, according to Oliveira and Ferreira (2008), consist of five judgment criteria, which will be described in more detail below. The first criterion is reliability, that is, whether the institution delivers what it promises to the student, which could be considered, for example, the curriculum and courses offered on time.

Tangibility refers to the material items necessary for the proper offering and execution of services, thereby meeting the reliability criterion. Responsiveness concerns the degree of commitment from the employees listed within the institution. It is important to highlight, in the educational context, that these individuals can be characterized as the faculty or professors of the institution (Oliveira & Ferreira, 2008). Assurance, closely related to the responsibility criteria, also refers to the employees, specifically in terms of their knowledge and competencies. Finally, empathy, which means identifying the needs of others, would be the institution's ability to recognize the needs of its clients, or students.

Given the degree of subjectivity in the perception of the above criteria, Parasuraman, Zeithaml, and Berry (1988) developed a methodology in which there is a comparison between students' expectations and perceptions regarding the quality of the service provided, which they termed gaps. There are also five gaps defined in the evaluation model, which are: a discrepancy between consumers' real expectations and the perceptions of executives; a gap between management's perception of customer expectations and the quality specifications of the product to be delivered; a difference between what is actually delivered and the product's quality specifications; a distinction between the real quality of the product and what is externally communicated by the company; and finally, the gap between what the customer expects and what the company actually expects.

The questions for measuring these five quality dimensions, combined with the perception of the gaps for the parametrization of two sections for each Likert scale score, may yield a negative result. A negative result indicates negative perceptions of the service, while a positive result indicates customer satisfaction with the product presented.

The Servqual scale has thus been used in various studies to analyze the impact of the quality of education offered in Brazil. Oliveira and Ferreira (2008) applied the generic Servqual scale using 38 questionnaires for students in the Production Engineering program at the São Paulo State University (UNESP) to measure perceptions among incoming students and 28 for students nearing graduation. Since none of the dimensions achieved a mathematically positive result, the outcome indicates that students' perceptions of the education in the Production Engineering program at

UNESP are below expectations, and that there are service failures contributing to the unsatisfactory results listed.

The study by Prass, Sant'Anna, and Godoy (2010) also adopted the Servqual scale to evaluate the perception of service quality among students from the Business Administration, Nursing, and Psychology programs, consisting of a more representative sample of 534 students. The data also indicated negative perceptions of the students regarding the services offered by the evaluated courses.

Prass, Sant'Anna, and Godoy (2010) further mention that research on the use of evaluation models like Servqual, applicable to the educational field, not only serves as a benchmark for future analyses of service quality but is also essential for organizational and managerial development. Managers, therefore, when adopting the opinions of their clients—students in this case—to meet their expectations regarding quality, rely on mechanisms based on the Servqual scale.

However, there is a point to be highlighted, which concerns the evaluation mechanisms for distance courses. Most studies presented in the literature have applied quality evaluation models like Servqual to analyze factors that could assess students' satisfaction with in-person courses. Indeed, the expansion of remote teaching models in Brazil and around the world, which were intensified with the advent of the pandemic, brought to light the need to apply these already established models, used for in-person courses, to distance education models as well.

Nascimento and Cruz (2021) pointed out that in the case of remote learning prompted by the pandemic (emergency remote learning), it should be emphasized that this was almost a secondary form of distance education. This is because, in traditional distance education, courses are planned, and materials are also designed and developed with the support of instructional design professionals. Additionally, pedagogical coordination offers support to instructors in developing materials, which are then distributed through specific media (Nascimento & Cruz, 2021).

In the case of emergency remote learning during the pandemic, however, there was no such pedagogical or technical support. Professionals had to adapt to digital technologies and tools autonomously. In this context, it is crucial to conduct a distinct evaluation between the remote teaching models adopted before and after the pandemic, as many nuances and biases could affect the results obtained through the application of questionnaire models like Servqual. This point

The growth of higher education in virtual environments due to the Covid-19 Pandemic: what are the mechanisms for supply and quality control? reinforces the conceptual distinction between distance education and remote learning, despite the literature often using the terms interchangeably.

Nascimento (2022) indicated, in her work, the Servqual evaluation model of student perceptions in the Business Administration course at the Federal University of Pernambuco, regarding the pedagogical aspect of the course during the pandemic period, which promoted emergency remote learning. According to the author, the results of this study point to the need for improvements in remote learning across all quality dimensions, with students expressing notable dissatisfaction with the quality of distance education offered by the course in question. Nascimento (2022) also emphasizes that the Servqual questionnaire was an effective tool for data collection, successfully achieving its goal of analyzing the "clients" perceptions of the service provided, thereby promoting mechanisms for suggesting managerial and administrative changes to align what is expected with what is offered.

Ferreira Júnior (2022) also conducted a similar study, evaluating the perceptions of high school students from a public school in the municipal network of Natal, also using Servqual. The author also praised the effectiveness of the tool, which was highly effective in addressing managerial issues regarding emergency remote learning in the school setting. Ferreira Júnior (2022) further suggests that this tool be applied to analyze the perceptions of other actors in the teaching-learning process, such as instructors, public managers, and school administrators, so that a broader view can be adopted on how the improvement processes for educational management in the distance education modality should be conducted.

Victor (2021) also addressed the need to evaluate higher education institutions and their courses, considering that education is a service categorized as an intangible good aimed at meeting the specific needs of educators, learners, managers, and society. The author emphasizes that the perception of quality is not always compared to the expectation one has of it. Therefore, it is crucial to assess the reasons for user dissatisfaction in order to promote improvements in the quality of the service provided.

Final considerations

This study provided elements that suggest the expansion of distance education in Brazil, which occurred over more than four decades since its implementation, with a more significant focus

emerging from the need for emergency remote learning due to the closure of educational spaces caused by the outbreak of the COVID-19 pandemic worldwide. This growth, which initially is not solely associated with the pandemic scenario, is strongly related to the instrumentalization of teaching and learning, bringing the concept of education as a commodity. This concept cannot necessarily be considered good or bad, but it is important to consider it in the process of evaluating the current courses offered within the Brazilian educational system, since current regulations do not provide specific rules for distance education, particularly concerning quality aspects in managerial contexts.

Among the tools presented in the literature, quality perception evaluation models, such as Servqual, have been successfully adopted not only for evaluating in-person courses but also, more recently, for remotely offered courses. Therefore, the use of these tools has proven to be an important mechanism for managerial control. When used in combination with other public and administrative management tools, they can guide the Brazilian educational system, particularly regarding distance education courses, to a more appropriate level for promoting quality education to its students. A crucial factor in applying this tool in managerial contexts is evaluating the quality of teaching from the perspective of the "client," that is, the student. This actor in the process can contribute important insights and views to the joint construction of this process to consolidate the distance education modality in Brazil, which has become increasingly evident after the pandemic.

As future perspectives for new research, it is suggested to expand the use of the Servqual scale in academic settings for evaluating the quality of courses at various levels and modalities, aiming to promote mechanisms of dialogue between institutions and students regarding the perception of the services provided. This will enable the analysis of a broader sample scope of data from the application of this evaluation model, originally intended for administrative and managerial spheres, for educational models.

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