

Artificial Intelligence: Challenges and Opportunities in Distance Education Governance at UFMT

Inteligência Artificial: Desafios e Possibilidades de Governança da Educação a Distância na UFMT

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Abstract

The introduction of Digital Information and Communication Technologies (DICT) in the Brazilian educational context has presented a range of challenges, including difficulties related to digital infrastructure in schools, the training of teachers to mediate teaching and learning processes, and ethical risks associated with data privacy and algorithmic bias. In this context, this study constitutes part of the first stage of a master's research project linked to the Graduate Program in Education at the Federal University of Mato Grosso (UFMT). The objective of the investigation is to analyze the challenges and opportunities related to the use of Artificial Intelligence in pedagogical practices developed in undergraduate and teacher education programs offered through distance education. The methodological approach is based on exploratory studies, a literature review, and the initial stage of a documentary analysis, with the aim of providing an initial understanding of the use of Artificial Intelligence within the governance processes of distance education at UFMT. At this stage, the study presents the results of the first phase of the investigation, based on a documentary analysis of distance education governance processes at UFMT, as well as reflections derived from a survey conducted in partnership with the University in Rede Association. This survey is documented in the report entitled Artificial Intelligence and Higher Education in Brazil – Recommendations for Institutional and Governance Policies, in addition to the analysis of UFMT governance documents and reflections on the Brazilian Artificial Intelligence Plan, with a focus on the provision of distance higher education.

Keywords: Artificial intelligence. Distance education. Pedagogical practices. Governance.



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Resumo

A introdução das Tecnologias Digitais da Informação e da Comunicação no contexto educacional brasileiro tem apresentado uma série de desafios, dentre os quais é possível citar as dificuldades com a infraestrutura digital das escolas, na formação de professores para mediação dos processos de ensino e aprendizagem e, ainda, os riscos éticos associados à privacidade de dados e aos vieses de algoritmos. Nesse contexto, este trabalho é parte integrante da primeira etapa de uma investigação de estudo de mestrado, vinculado ao Programa de Pós-Graduação em Educação da Universidade Federal de Mato Grosso (UFMT). O objetivo da investigação é analisar os desafios e as possibilidades de uso da Inteligência Artificial nas práticas pedagógicas desenvolvidas em cursos de bacharelado e licenciaturas ofertados a distância. O percurso metodológico baseou-se em estudos exploratórios, revisão bibliográfica e na primeira etapa de um estudo documental, com a finalidade de promover uma aproximação sobre a utilização da Inteligência Artificial no contexto dos documentos de governança da Educação a Distância na UFMT. Assim, pretende-se, neste momento, apresentar os resultados da primeira etapa da investigação a partir de uma análise documental sobre governança da EaD na UFMT e reflexões apresentadas a partir de um levantamento realizado em parceria com a Associação Universidade em Rede no documento intitulado: Inteligência Artificial e Ensino Superior no Brasil – Recomendações para políticas institucionais e de governança, documentos de governança da UFMT e reflexões sobre o Plano Brasileiro de Inteligência Artificial, com foco na oferta da educação superior a distância.

Palavras-chave: Inteligência artificial. Educação a distância. Práticas pedagógicas. Governança.

1. Introduction

The global health crisis caused by COVID-19 (an acronym for coronavirus disease) in 2019 created a challenging environment for teaching. Consequently, new demands and complexities emerged in supporting teaching and learning processes, intensifying the need for studies and research in educational contexts—particularly through the analysis of experiences conducted during and after the pandemic, when in-person classes were replaced by Digital Information and Communication Technologies (DICT) as the sole alternative. This change required the adoption of new teaching and learning technologies and methodologies that could adapt to the new context and the emerging challenges.

Given this scenario, the urgent need to seek alternatives for the continuing education of education professionals became evident. The effort to explore this topic in greater depth took the form of a research project aimed at understanding the use of DICT in higher education, both from the perspective of distance learning teacher-training programs and bachelor's degree programs. Thus, this study emerged as an integral part of the first phase of research for a master's thesis conducted within the context of the distance-learning teacher-training and bachelor's degree programs offered by the Federal University of Mato Grosso (UFMT).

In the first stage of the research, we conducted an in-depth review of the technical literature and scientific studies published over the past five years. This stage was carried out through a research project aimed at understanding the use of DICTs in higher education, focusing specifically on AI in distance higher education at UFMT, from the perspective of both teacher-training programs and bachelor's degree programs.

For the purposes of this research, we adopt a definition of Artificial Intelligence (AI) based on literature reviews in the field of generative artificial intelligence. From this perspective, such systems differ from previous models in their ability to produce new content based on interaction with the user, since “generative AI models can generate outputs that [...] are completely new and unique in relation to the human input received” (Correia et al., 2024, p. 20).

In addition, this study will cover discussions related to GPT (Generative Pre-trained Transformer)-based systems, such as ChatGPT, which is understood as a generative AI model recently introduced in social and educational contexts (Correia et al., 2024). Such systems operate through natural language interactions, functioning as conversational interfaces accessible to non-expert users, which has significantly expanded their use in various contexts, including educational ones. Thus, the focus of this study is on generative AI, particularly that based on large-scale language models, with an emphasis on its educational applications in the context of distance higher education.

As the research progressed, it became apparent that the experience of emergency remote learning during the COVID-19 pandemic intensified the process of “platformization,” cementing public institutions’ dependence on large technology corporations. According to Gonsales et al. (2025), this trend granted some of these institutions access to vast amounts of organizational data and personal data from students and faculty, often without any corresponding guarantees of transparency or respect for digital sovereignty. This process of digital transition has highlighted the extent to which technological infrastructure has come to influence the very logic of educational management and practice, paving the way for the emergence of AI as a central theme in education policy and research.

In 2022, the launch of ChatGPT¹ marked the moment when AI took center stage in the higher education agenda, shifting the debate from ICT to a discussion about digital transformation, ethics, and data governance.

As a result of the readings, reflections, and debates on AI in higher education, a notable trend emerged regarding the growth in the number of courses offered through distance learning (DL) in Brazil, especially during the 2019–2021 period—the peak of the pandemic. The distance learning model is strongly supported by the intensive use of DICT, which, to a certain extent, raises a debate about AI in education as a challenging topic—both from the perspective of those who use it in teaching practice and from that of the students themselves. This reality highlights the urgent need for a critical approach to the topic in educational contexts.

As noted by Almeida et al. (2024), researchers at the University of São Paulo (USP), in an article published in the *Jornal da USP*, the integration of ICTs into education still faces numerous challenges, particularly with regard to emerging technologies such as AI, whose adoption in the educational setting requires attention to pedagogical, ethical, and structural aspects.

According to the authors Almeida et al. (2024), among the main challenges highlighted are the intensification of exclusion related to representation, limited skills and competencies, incorrect diagnoses, the lack of training and professional development for educators, underestimating the potential of AI for education, the indiscriminate use of technology in education, surveillance and lack of data security, the absence of copyright and intellectual property protections, and the platformization of teaching.

Despite the challenges, advances in AI open up opportunities to enhance teaching and learning processes, personalize educational pathways, and expand access to knowledge. As Gonsales et al. (2025, p. 20) state, “artificial intelligence (AI) has been presented as a transformative force in education, promising to revolutionize everything from the traditional classroom to pedagogical and administrative practices.” When used ethically, critically, and in alignment with pedagogical objectives, AI can contribute significantly to the

¹ ChatGPT can be understood not only as an artificial intelligence model but also as a conversational interface, since “the ‘chat’ at the beginning of ‘ChatGPT’ refers [...] to the software’s interface—similar to a chatbot—which is capable of interpreting conversational text, analyzing it, and providing a human-like response (output)” (Correia et al., 2024, p. 20). This interface is supported by Natural Language Processing systems, which enable interactions in natural language and make its use accessible to users without technical knowledge (Correia et al., 2024, p. 20). In this context, the launch of ChatGPT represented a milestone by enabling the generation of text through “conversational interaction in natural language” (Santos; Chagas; Bottentuit Junior, 2024, p. 5). 7), establishing it as an example of a GPT-based generative model capable of producing new and contextualized responses based on user inputs (Correia et al., 2024, p. 18).

transformation of educational practices and generate positive impacts on people's lives, strengthening the social role of education in an increasingly digital and interconnected world.

2. Methodology

This study adopts a qualitative, exploratory approach with the aim of understanding how AI has been used in the day-to-day governance of distance learning programs offered at the Federal University of Mato Grosso. The choice of a qualitative approach is justified by the nature of the subject matter, which requires an in-depth understanding of institutional processes, policies, and practices.

To achieve this objective, bibliographic research is used in conjunction with documentary research. As part of the documentary research, sources were carefully selected. The selection criteria were guided by the relevance of the information identified in the bibliographic research, which highlighted the importance of analyzing documentary sources related to institutional governance documents, including administrative plans and projects that guide distance education at UFMT.

After conducting the literature review, the data were subjected to thematic analysis, understood as an analytical procedure aimed at identifying patterns of meaning in sets of textual data. As highlighted by Rosa and Mackedanz (2021, p. 11), thematic analysis "involves searching through a dataset [...] or a series of texts to identify recurring patterns of meaning." This approach is well-suited to documentary research, as it enables the systematic interpretation of content found in institutional, regulatory, and academic documents.

This methodology makes it possible to understand how AI is integrated into institutional governance processes in coordination with pedagogical practice, a process that will be carried out in two stages. The results presented here correspond to the first stage of analysis of UFMT's governance documents, focusing on the application of AI in the governance processes of bachelor's and teacher-training programs offered through distance learning.

The methodology employed seeks to understand the overall landscape of AI in the context of distance education in Brazil, linking this analysis to a study of UFMT's governance documents that guide the institution's offering of teacher education and bachelor's degree programs. Thus, the results enable integrated reflections on the findings of the literature review and the main Brazilian governance instruments – such as the Brazilian Artificial Intelligence Policy – in conjunction with UFMT's guiding governance documents.

However, it should be noted that this study constitutes the first stage of a broader investigation, focusing on research and documentary analysis within the context of distance education governance processes at UFMT. Thus, although this study aims to discuss the challenges and possibilities of using AI in distance higher education, these elements are analyzed here based on documentary evidence and the literature, and do not, at this time, include an in-depth analysis of pedagogical course materials or specific teaching practices.

3. Results and Discussion

To provide the reader with the context of this research, this section discusses the implications of AI use in Brazilian public universities, examining the structural, political, and institutional factors that influence its adoption in higher education. First, we address the expansion of distance higher education in Brazil and the challenges arising from the incorporation of AI into distance learning, highlighting how this technology impacts pedagogical practices and management models. Next, we analyze the Brazilian Artificial Intelligence Plan (PBIA), highlighting its guidelines and implications for the field of education, particularly in university education and research. Finally, a literature review on the regulation of AI in UFMT's governance plans is presented, seeking to understand how this institution has integrated AI into its governance processes.

3.1. The expansion of Higher Education in Brazil and the Challenges of AI in the Context of Distance in Higher Education

In Brazil, there are 2,561 institutions of higher education (Brazil, 2024), and universities account for 8% of the institutions offering higher education, which are regulated based on their purpose, organization, and specific characteristics. This definition is set forth in Law No. 5,540/1968, known as the “University Reform,” which states: “Higher education, inseparable from research, shall be provided at universities and, exceptionally, at standalone institutions organized as public or private entities” (Brazil, 1968, Art. 2). This legal instrument establishes a normative distinction between “universities” and “stand-alone institutions.”

Thus, it is necessary to understand universities through the interplay of the three pillars – teaching, research, and community outreach – as well as through the pedagogical-scientific, administrative, and financial autonomy that characterize Brazilian university models. From another perspective, colleges, university centers, or standalone institutions may have a profile more oriented toward teaching and professional training, with less emphasis on research and extension activities, which is a defining feature of this academic organizational category.

According to the Anísio Teixeira National Institute for Educational Studies and Research (INEP), in 2024, Brazil had 2,561 higher education institutions (HEIs), the majority of which were colleges, accounting for 74.1% of the total. Despite this predominance, only 11.0% of undergraduate students were enrolled in these institutions, whereas universities – which accounted for just 8.0% of all HEIs (206 institutions) – accounted for 53.0% of undergraduate enrollments (Brasil/INEP, 2024, p. 9). In this context, the scope of this research is limited to the study of public universities, particularly in analyzing the impact on their academic organization, with a focus on the use of AI in the context of pedagogical practices employed in distance learning courses.

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However, this concern is based on the assumption that, in addition to understanding the use of AI in the context of teaching practices, it is essential to consider the complex nature of universities, which are structured around the three pillars of teaching, research, and community engagement – dimensions that are essential to the daily operations of a public institution of higher education.

Thus, the use of AI must be understood not only in the context of these institutions’ teaching activities, but also with a focus on activities aimed at the production of scientific and technological knowledge, reaffirming the need for coordination with outreach, research, and innovation initiatives carried out within universities.

Another aspect that stands out in the literature review is the representation of public institutions in the context of Brazilian higher education. Data from the 2024 Higher Education Census reveal the predominance of private institutions and the composition of the different administrative categories, highlighting significant contrasts for the analysis of course offerings and enrollment. According to INEP data, of the 2,561 higher education institutions, 2,224 (87.6%) are private and only 317 (12.4%) are public. However, when considering only universities, it is observed that the majority are public (56.3%) as opposed to the private sector (43.7%), whose academic structure is predominantly composed of colleges (77.8%) (Brazil, 2024).

Thus, it can be stated that a large part of the scientific and technological knowledge produced in the country originates in public universities, due to their institutional nature, organizational structure, and social mission. With the aim of deepening our understanding of this aspect, this literature review sought to analyze the

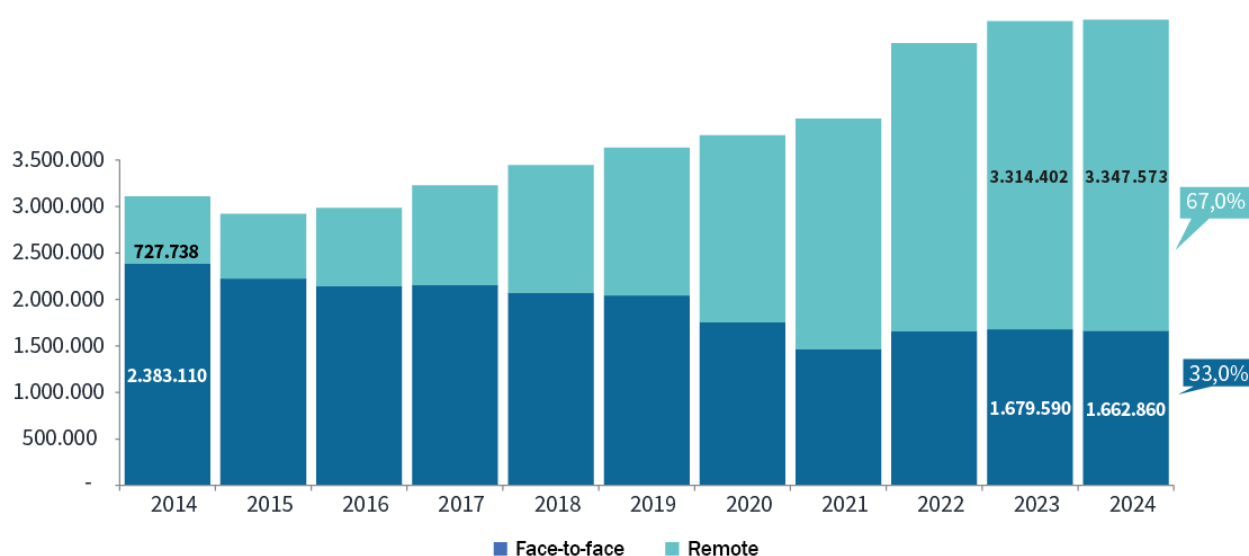
governance process of a public university, identifying how AI has been positioned in the current context. Based on this analysis, the study sought to understand how pedagogical and academic processes developed in distance learning are guided by the incorporation of AI.

The topic of distance education deserves special attention when considering the expansion of higher education institutions in Brazil, in line with the growth of distance education (EaD). This growth highlights the importance of investigating how this phenomenon has impacted the day-to-day operations of universities, especially in the post-pandemic period.

The debate over distance learning offerings intensified in 2025 with the launch of Brazil's new Distance Learning Policy, enacted by Decree No. 12,456 of May 19, 2025, which establishes the new regulatory framework for distance learning (Brazil, 2025). The new distance education policy was introduced to address challenges related to quality assurance, particularly with regard to assessment processes and in-person attendance at learning centers. Among its innovations is the introduction of a blended learning format, which combines in-person and distance learning activities, expanding the range of program options previously limited to exclusively in-person or fully distance learning modalities. This policy calls into question the credibility of a fully online educational system, while recommending in-person attendance as a strategy for addressing issues related to the ethical use of technology, such as the integrity of assessment processes and the challenges of engaging those involved in the learning process. From this perspective, the aim is to encourage in-person experiences in institutional settings where pedagogical or teaching and learning practices take place.

In this context, current legislation redefines distance education, which is no longer understood as a mode of instruction but is now characterized as a delivery format. This means that distance education is now perceived as an organizational model applicable to both in-person and online courses (Brazil, 2025), which has experienced rapid growth, as shown by the 10-year period (2013–2023) presented in Figure 1 below.

Figure 1 - Growth in the number of new students enrolled in undergraduate distance learning programs compared to on-campus programs in Brazil (2014–2024).



An analysis of the data on the growth of distance learning shows that the number of new students enrolled in in-person courses fell by 30.2%, while distance learning courses saw significant growth of 360.0%. This expansion raised the percentage share of distance learning from 23.4% in 2014 to 66.8% in 2024, demonstrating its consolidation as the dominant format of instruction. In 2024, more than 3 million students enrolled in distance learning; in face-to-face education, that number was lower, representing just over 1.5 million students.

While this expansion represents increased access and the democratization of educational opportunities, it also highlights that distance learning is more vulnerable to the challenges arising from the use of AI in an academic context. This is because the advances and challenges inherent in the use of ICTs impact the pedagogical and operational structure of distance learning courses.

Thus, the focus on distance education in this research context is justified because it is a modality of higher education in which the challenges related to the use of ICTs are particularly acute, making it a prime area of analysis for this study, especially in light of the emerging challenges associated with the integration of AI into educational processes.

3.2. The Brazilian Artificial Intelligence Plan in the Context of Brazilian Higher Education

The discussion on AI in Brazil, as a matter of public policy, gained momentum with the creation of the Brazilian Artificial Intelligence Strategy (EBIA), launched in April 2021 and officially implemented in April 2022 by the Ministry of Science, Technology, and Innovation (MCTI). The EBIA was developed between 2019 and 2020, based on contributions from studies, research, and consultations with experts, companies, and public agencies. (Brazil, 2021)

EBIA is organized into 9 (nine) thematic areas and 3 (three) cross-cutting areas, which include Legislation, Regulation and Ethical Use, AI Governance and International Aspects, and 6 (six) vertical pillars covering Education, Workforce and Training, Research, Development, and Innovation (R&D&I), and Entrepreneurship; Applications in productive sectors; Applications in government; and Public Safety. In the field of education, EBIA emphasized the importance of critical training for teachers and students, as well as the promotion of digital skills to facilitate entry into the labor market (Brazil, 2021).

Although EBIA represented one of the first important steps in the debate on distance learning in Brazil, subsequent developments culminated in the Brazilian Artificial Intelligence Plan (PBIA), published in 2024, which expanded upon EBIA's vision and began to organize the discussion in a more comprehensive manner, aligned with the country's social, environmental, and educational needs, as stated in the PBIA "The Plan draws inspiration from international experiences, adapting them to the Brazilian reality in order to leverage the country's comparative advantages, such as its clean energy mix, cutting-edge research capacity, and technological expertise" (Brazil, 2025, p. 13).

In line with the United Nations Sustainable Development Goals (SDGs), the PBIA supports this perspective, noting that: "'AI for the benefit of all' should be directed toward solving concrete problems in society, contributing to the achievement of the United Nations Sustainable Development Goals (SDGs)" (Brazil, 2025, p. 25).

Thus, in line with the global commitments of the 2030 Agenda – particularly SDGs 4 and 17, which call for inclusive, equitable, and quality education focused on scientific and technological development – Brazil has been consolidating policies aimed at integrating AI into education.

Thus, the Brazilian Artificial Intelligence Strategy (EBIA) defined the first strategic pillars for the application of AI in the country, prioritizing the field of education. Subsequently, the Brazilian Artificial Intelligence Plan (PBIA) reinforced a human-centered approach and the use of AI as a tool for social and economic development. In this context, Law No. 14,533 (Brazil, 2023) established the National Digital Education Policy (PNED).

As a result of the convergence of these policies, it is possible to identify a process of continuity that extends from international commitments to the implementation of national policies, linking digital transformation and AI to the challenges and opportunities of distance higher education.

When analyzing the possibilities for integrating AI into education, it is essential to align these initiatives with current public policies. Law No. 14,533/2023, which establishes the National Digital Education Policy (PNED), sets forth in Article 1, Paragraph 2, four structural pillars that are directly related to the implementation of AI in higher education: digital inclusion, digital education in schools, digital training and specialization, and research and development in ICTs (Brazil, 2023).

In the context of distance higher education, the implementation of EBIA, PBIA, and PNED must comply with the guidelines of the General Personal Data Protection Law (LGPD), Law No. 13,709 (Brazil, 2018). This alignment is essential to ensure that challenges related to data surveillance, protection, and security are properly managed. It is worth noting that as digital technologies and AI gain ground in the educational context, the volume of personal data associated with students and faculty tends to increase, which requires the establishment of a governance framework to protect this information.

In this regard, Brazil's General Data Protection Law (LGPD) serves as a cornerstone for the viability and legitimacy of any digital education policy. The PNED reinforces this perspective by including, in Article 3, subsection IV, the responsibility to promote digital rights. This demonstrates that, in Brazil, digital education is not only about access to technology, but also about learning to use it ethically and safely.

Given the landscape outlined by the 2030 Agenda, international multilateral organizations, regional political institutions such as the European Commission, and the national policies that have been presented, it is clear that the integration of AI into distance higher education is taking place against a backdrop of major technological transformations and stringent regulation. These documents and regulations not only guide the responsible adoption of emerging technologies but also reveal the tensions between the benefits and challenges that the use of AI can bring.

3.3. Literature Review – Regulation of Artificial Intelligence within the Framework of UFMT's Governance Plan

Although this was an exploratory study, the research included a literature review on AI regulations within the Federal University of Mato Grosso. The study was divided into two stages: an analysis of UFMT's main governance plans, and a second stage dedicated to analyzing pedagogical and academic documents. As previously mentioned, the results of this investigation are limited to the first stage, which refers to the documentary analysis of UFMT's governance plans.

The literature review began with the main regulatory and strategic documents of the Federal University of Mato Grosso: (i) the Bylaws; (ii) the General Regulations; (iii) the Institutional Development Plan (PDI); and (iv) the Information Technology Master Plan, as these documents constitute the legal and guiding foundations of the university.

These documents were selected because of their macro-level significance as the institution's internal and conceptual regulatory framework; they define its mission, structure, pedagogical principles, and guidelines for technological innovation.

Consequently, these documents were prioritized as primary sources, as they allow for an analysis of aspects related to how an institution regulates and plans the use of digital technologies, with a specific focus on the use of AI in educational and institutional contexts.

The Bylaws of the Federal University of Mato Grosso (UFMT), approved by SESu Ordinance No. 628 of September 3, 2008, published in the Official Gazette on September 4, 2008, Section 1, page 12 (UFMT, 2008), do not mention Artificial Intelligence in any of their versions.

Although no article was found that mentions "artificial intelligence," "AI," "innovation," or directly equivalent terms, such as "computational intelligence," some articles – for example, Article 47–refer to research-

related practices that implicitly mention the fundamental objective of producing and disseminating scientific, technological, artistic, and cultural knowledge. (UFMT, 2008, Art. 47). With regard to the field of distance education, it is important to highlight the contribution of Article 42, which recognizes “distance” as a modality for teaching activities.

Another normative governance document, common in institutions of higher education, is the institution’s general regulations. In the specific case of UFMT, general regulations are called for but do not exist. This information came from an analysis of the Institutional Development Plan (PDI) 2024–2028, which explicitly states: “Another document of extreme importance to the institution is the General Regulations, which, although provided for, do not exist.” (UFMT, 2023, p. 78)

In the analysis of UFMT’s PDI, it is important to note that this strategic planning tool is the document that defines guidelines, goals, priorities, organizational structure, missions, and actions for a five-year period (UFMT, 2023).

Thus, we sought to identify references to the field of “Artificial Intelligence” in UFMT’s amended Institutional Development Plan (PDI) (2024–2028), including a specific analysis of the chapters pertaining to the institution’s governance and its administrative and pedagogical organization. In the “Objectives, Goals, and Strategies” section, the document highlights an institutional goal aimed at modernizing technology management through the use of AI at UFMT. The full excerpt from the PDI states:

“Develop new integrated applications using mobile technologies, management dashboards (business intelligence), and artificial intelligence to improve the user experience, automate tasks, increase productivity, and provide relevant information for management” (UFMT, 2023, p. 160).

In the academic and educational context, there is mention of the availability of undergraduate and graduate courses in AI. Considering the objectives of this research, the future implementation of an Artificial Intelligence program via distance learning (EaD–Second Cycle of the Bachelor’s Degree in Science and Technology) at the Faculty of Science and Technology on the Várzea Grande Campus (UFMT, 2023) is noteworthy.

From an information technology perspective, the institution’s Information Technology Master Plan (PDTIC) for 2024–2029 was analyzed. The planning process involved the institution’s academic and administrative units and was therefore designed to identify opportunities for IT solutions to improve the institution’s processes, define short, medium, and long-term action plans, and identify the data and infrastructure architectures that best meet its needs. (UFMT, 2023).

The PDTIC at UFMT notes that the implementation of a Digital Transformation Plan involves “initiatives related to service transformation, automation, artificial intelligence, data governance, integration, and interoperability” (UFMT, 2023, p. 15)

The connection between the PDI and the PDTIC emerges as a significant finding in this research, since IT and AI work in tandem when it comes to incorporating emerging digital technologies into education, innovation, and academic management processes.

4. Conclusion

This study sought to understand how AI has been used in the context of distance learning courses offered at UFMT, drawing on evidence from recent literature and a documentary analysis. The findings to date point to three key insights. First, the rapid expansion of distance education in Brazil – as a modality closely linked to mediation processes via ICT– has brought AI to the center of the pedagogical and governance debate, which is increasingly strained by processes of personalization and efficiency, accompanied by ethical, epistemological, and data sovereignty risks (Alves, 2023; Gonsales et al., 2025).

Second, at the institutional level of UFMT, the core documents (Bylaws, PDI, and PDTIC 2020 –2022) still lack clear and operational guidelines for AI, which creates a gap between the centrality of the topic in the higher education system and its implementation in local regulations (UFMT, 2008; 2019; 2024).

Third, when examining the policy plans and regulatory instruments in which ICTs serve as a cross-cutting theme (PNED, PBIA, LGPD, and the 2025 Distance Learning Framework), a legal foundation with great potential to guide AI policies in higher education becomes apparent, provided that these are embedded through institutional instruments with explicit objectives, responsibilities, and metrics (Brazil, 2023; 2025).

The findings to date point to gaps in UFMT's governance plan; institutional documents highlight several factors that warrant attention: the bylaws recognize digital modalities and media but do not address AI; the General Regulations remain absent (as identified in the 2024-2028 Institutional Development Plan); and the 2024-2029 PDTIC organizes ICT infrastructure and services, identifying strategies geared toward the use of AI at the institution (UFMT, 2008; 2019; 2024).

Based on these gaps, several key challenges stand out: (i) the regulatory challenge, related to the need to regulate the ethical and safe use of AI, especially with regard to data protection; (ii) the training challenge, which involves equipping teachers and administrators with the skills to use these technologies critically; (iii) the technological challenge, associated with dependence on external platforms; and (iv) the challenge of integrating and aligning pedagogical, technological, and administrative dimensions with national public policy documents and guidelines.

On the other hand, there are significant opportunities, such as the modernization of academic management, the personalization of learning, and alignment with national public policies, which can strengthen the institution's position in the context of the digital transformation of higher education. In light of this, it is recommended that UFMT move forward with the development of an institutional Artificial Intelligence policy structured around a governance plan that enables the incorporation of institutional guidelines, addressing the educational dimension through continuing education programs, and the technological dimension, through the development of solutions focused on educational processes, learning, and management, ensuring, above all, data protection and institutional autonomy.

Among its limitations, this first stage was based on an analysis of governance documents and recent literature, without analyzing course materials. Future research should combine an in-depth analysis of pedagogical documents – including mixed methods (semi-structured interviews, questionnaires, and content analysis) – to estimate the causal effects of specific uses of AI, as well as to map the challenges and possibilities of using AI in UFMT's distance higher education programs.

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