

THE APPLICATION OF GENERATIVE ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION: A NEW PARADOX OF THE 21ST CENTURY

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1 Introduction

In an era where technology is advancing at an unprecedented pace, the world is seeing that artificial intelligence (AI) is no longer a mere scientific fantasy but a pervasive reality in our lives. As a university professor, I can see that the impact of this technology extends to multiple fields, including education, where generative AI is beginning to transform the way students interact with knowledge. However, this technological advance raises new questions about its influence on academic training. It is in this context that a contemporary paradox arises: can the use of generative AI in higher education students in Tarija enrich learning or, on the contrary, limit their critical and creative capacity? This dilemma highlights the complexity inherent in the balance between harnessing technology and holistic student development. As educational systems adopt these advanced tools, it becomes crucial to evaluate their impact not only in terms of efficiency, but also in the preservation of fundamental skills. It is therefore necessary to reflect on how these innovations are redefining teaching and learning processes in the 21st century, posing both unprecedented opportunities and challenges.

2 Body

The implementation of generative artificial intelligence in higher education has ushered in a novel paradigm for students to access and process knowledge. In Tarija, as in many other regions, these tools are beginning to be integrated into the academic environment, facilitating the automatic generation of content, from essays to complex projects. While these technologies offer valuable support to improve efficiency and reduce work time, concerns have been raised that their overuse may lead to a dependency that compromises the development of critical skills, such as analytical thinking and creativity. As an illustrative example, the deployment of generative AI for the generation of summaries or for the correction of grammatical errors enables students to concentrate on the substance and argumentation of their

papers. It is imperative that clear boundaries and guidelines are established to prevent these tools from completely replacing the intellectual effort required for deep and meaningful learning.

Furthermore, the influence of generative artificial intelligence extends beyond the technical domain of learning, impacting pedagogical dynamics and the relationship between teachers and students. In Tarija, educators are beginning to integrate these technologies into their pedagogical toolkits, enabling them to personalize instruction and provide more rapid and precise feedback. Nevertheless, the integration of AI should be accompanied by a pedagogical approach that encourages student autonomy and facilitates their capacity to question and critically evaluate the information generated by these tools. It is of the utmost importance that educators receive sufficient training to integrate AI effectively into their teaching practices, ensuring that its use enhances, rather than replaces, the educational process. In this manner, it can be guaranteed that the technology serves as an enhancement to the learning experience, without compromising the fundamental objectives of higher education.

Ultimately, the integration of generative artificial intelligence in higher education in Tarija gives rise to significant ethical considerations that must be addressed. The ease with which entire academic papers can be generated raises questions about the authenticity and originality of student work. It is therefore incumbent on educational systems to develop clear policies that regulate the use of these technologies, promoting academic integrity and ensuring that learning remains an active and engaged process. While generative AI can be a powerful tool to enhance learning, it can only be so if it is used responsibly and with an approach that prioritizes the student's holistic development. It thus follows that critical reflection and education in digital ethics become fundamental elements to guide students in the appropriate use of these emerging technologies.

3 Conclusion

In conclusion, generative artificial intelligence presents a distinctive opportunity to transform higher education in Tarija. However, its implementation must be

meticulously managed to circumvent adverse effects on the intellectual growth of students. When used in a balanced and conscious manner, these tools can enhance learning and encourage innovation. However, it is crucial to maintain a focus on training students in critical and creative skills. Educators and institutions must collaborate to establish clear ethical and effective guidelines for the use of generative AI. This technology should be utilized as an ally in the construction of knowledge, rather than a substitute for academic effort and reflection. By doing so, the full potential of generative AI can be harnessed while preserving the fundamental values of education.