



## The use of artificial intelligence in the teaching-learning process

### O uso da inteligência artificial no processo de ensino aprendizagem

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#### ABSTRACT

We live significant processes of change, cultural, social and even economic due to technological advances. The teaching-learning process requires the need to experience these changes through new teaching tools, such as the use of artificial intelligence in training processes. In this way, there is an urgent need to align formal education with new tools such as "Google Leans", "Take app" and "Humata" developing school education with the new AI tools, rethinking the school curriculum and evaluation processes.

**Keywords:** Artificial Intelligence, Teaching-Learning.

#### RESUMO

Vivemos processos significativos de mudanças, culturais, sociais e até econômicas devido aos avanços tecnológicos. O processo de ensino aprendizagem exige a necessidade de experimentar essas mudanças através das novas ferramentas de ensino, como o uso da inteligência artificial nos processos formativos. Desta forma, urge a necessidade de alinhar a educação formal com as novas ferramentas como "Google Leans", "Tome app" e "Humata" desenvolvendo a educação escolar com as novas ferramentas de IA, repensando o currículo escolar e os processos avaliativos.

**Palavras-chave:** Inteligência Artificial, Ensino Aprendizagem.

#### 1 INTRODUCTION

We live significant processes of change, cultural, social and even economic due to technological advances. The teaching-learning process requires the need to experience these changes through new teaching tools, such as the use of artificial intelligence in training processes. In this way, there is an urgent need to align formal education with new tools such as "Google Leans", "Take app" and "Humata" developing school education with the new AI tools, rethinking the school curriculum and evaluation processes.

#### 2 GOAL

Know the applications that use Artificial Intelligence and insert them into the school context by checking how these tools can be used to answer questions, offer immediate feedback and create a personalized learning environment for each student.



### **3 METHODOLOGY**

This is a literature review, developed with articles published in the period from 2022 to 2023 in the electronic database: UNESCO DIGITAL LIBRARY, where the published articles present the contextualization of the theme addressed, according to the descriptors "AI Tools in Education". The electronic database was chosen because it is a digital library that focuses on publications, documents and materials produced by UNESCO or related to the institution's fields of competence with a worldwide scope. It is important to note that the UNESCO Digital Library produces new digital materials daily within the framework of a major ongoing project "Digitization of our shared history of UNESCO", being a source of high-quality information on UNESCO activities (in education, natural sciences, social sciences and humanities, culture and communication and information) around the world, reporting contemporary research, studies and information.

### **4 DEVELOPMENT**

In this study, it was observed the use of artificial intelligence as a rigid educational model becomes only an instrument of repetition of central ideas, without the development of meaningful learning. In Brazil, the National Common Curricular Base (BNCC, 2018, p. 477/499) indicates the presence of AI in high school curricula through formative or integrated itineraries. In this sense, it is necessary to engage teachers in practical activities that combine different knowledge and lead to creative learning through algorithms and other aspects of computational thinking so that the use of AI is not a way to deceive activities and research.

Important resources can be explored by the school and teachers using the "Google Leans", "Take app" and "Humata" applications so that educators understand the basics of AI and thus teach them properly to students. For this, refresher and specialization courses should be offered to teachers and the promotion of a dialogue on ethics and the insertion of AI as a transversal component of the school curriculum, from the initial grades to high school.

### **5 FINAL CONSIDERATIONS**

Artificial intelligence has not come to compete with the teacher or with the formal process of teaching learning, this presents itself as allied to meaningful learning in various ways, such as by adapting the content, immediate feedback, automation of correction tasks, intelligent collaborative tools, allowing students to work together, sharing ideas and information in a more intelligent and efficient way. The digital transformation in the school is already something present and current, but for this reality to be allied to teaching it is necessary that the teacher is prepared to adapt the technology to his teaching practices, using it in the context of computational thinking.



Important decisions are already being made and planned, the development of public policies on AI in education is in its embryonic phase, but we can agree that there will be a remarkable growth, for example we have countries that at a more advanced level already have laboratories in partnerships such as the private sector implementing the AI system in the educational area.

We realized in this study, in this search that several debates and discussions are being permeated, whether to map curricula, to monitor global education, issues such as entrepreneurship, innovation, due use of information and data and even the ethical concern of Artificial Intelligence in school contexts around the world.



## REFERENCES

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