

iJEResearch

International Journal of Education and Research Vol-1, Number 3, December- 2024 | Peer-Reviewed Journal ISSN 2764-9733 | ijeresearch.org DOI: 10.5281/zenodo.14357948

CHATBOTS: CHATGPT AS A TEACHING AND LEARNING TOOL IN THE AREA OF NATURAL SCIENCES

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ABSTRACT

This article aims to analyze the role of chatbots in education, focusing on the use of the ChatGPT language model as an innovative tool for teaching and learning in Natural Sciences, where there are several abstract and complex topics. Artificial Intelligence (AI) has revolutionized technology and, by exploring the potential of ChatGPT, research was conducted to find possible ways to integrate this technology effectively in the educational context, with regard to Natural Sciences. The use of chatbots offers an interactive and personalized approach to engage students in different ways. By applying ChatGPT to the Natural Sciences area, this study highlights how technology can provide adaptive educational support, promoting conceptual understanding and facilitating problem-solving and deepening the content covered in class. We evaluated the effectiveness of ChatGPT in promoting autonomous learning and the development of critical skills. We conclude that the integration of chatbots as one of the teaching and learning agents, especially using ChatGPT, can enhance the acquisition and sharing of knowledge in schools, offering a more playful approach to contemporary education. However, it is also highlighted that the use of chatbots should be mediated by educators in order to establish limits on the use of such technologies, since this tool is just one complement among many others that can assist in teaching and learning in schools and should not be seen as the only way of retaining content and interacting in the classroom.