Contribution ID: **259** Type: **Oral Presentation**

AI and students learning of Mathematics: A bibliometric study

Thursday 24 July 2025 10:30 (15 minutes)

Oral presentation

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Abstract

Introduction: Mathematics skills are essential for academic curricula despite the difficulties some students reveal on the topic. To help the development of adolescents' mathematical skills is being implemented the Erasmus project: MathIA (Artificial Intelligence Model to enrich and improve mathematical skills in adolescent students) and this study is framed on this project.
Objectives: In this paper we want to present the publications that are being made concerning artificial intelligence and Mathematics teaching and learning and, consequently, discuss the pertinence of this topic in Education.
Methods: A bibliometric study was conducted to achieve the defined goal. An online search was made on b-On and Google platforms searching publications between 2020 and 2025 and using descriptors such as Mathematics AND Artificial intelligence AND Teaching Learning. The four languages of the MathIA project were considered in the articles search: Portuguese, English, Spanish and Italian. From the search 31 articles were selected after title and abstract reading. Currently, full texts are being analyzed.
Results: As the data analysis is being made, we do not have results yet. We expect to present them in the congress grouped by categories like the number of studies, the specific topic studied, the population, and the research methodology.
Conclusions: At the end of the data analysis, we hope findings will make it possible to understand the current trends in IA research in mathematics teaching as well as the way this topic is being studied.

Keywords

Artificial Intelligence, Mathematics, Bibliometric study.

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Session Classification: Session 20: "IA y M learning"

Track Classification: Design/Research methods: Design/Research methods