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Enhancing STEM Education with AI: Fostering Soft Skills and Inclusion

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Abstract

This research explores integrating interactive activities and AI-driven tools to enhance students' soft skills and computational thinking, focusing on increasing diversity and inclusion in STEM education. Latin America faces significant gender gaps in STEM fields, and this study aims to address these disparities by fostering essential soft skills such as communication, collaboration, and problem-solving. Utilizing tools like the SS Chatbot, Tinkercad, and the Marshmallow Challenge, the initiative promotes experiential learning, equipping students with technical and interpersonal competencies. Results from a survey assessing the chatbot's usability and effectiveness revealed high satisfaction levels, demonstrating the potential of AI to support personalized learning. This study highlights the role of AI in overcoming barriers to STEM education. It prepares students for future challenges, offering insights into the scalability and impact of such innovative educational models.

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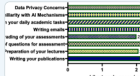
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