



Innovative Pedagogies for Strengthening STEM Education in Senegal: An Analytical Framework for Policy Makers

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Abstract

In Senegal, STEM (Science, Technology, Engineering, and Mathematics) education faces challenges in terms of curriculum implementation and pedagogical approaches. A systematic review of existing literature on effective teaching strategies and a consultation with Senegalese educators. The analysis identified key themes such as project-based learning, interactive digital resources, and community engagement in STEM education. Innovative pedagogies can significantly improve student performance in STEM subjects by making the learning process more engaging and relevant to students' lives. Policy makers should support the integration of these innovative teaching methods into school curricula and provide professional development for teachers.

Keywords: *African contexts, Curriculum reform, Innovative pedagogies, Methodology, STEM education, Systematic review, Theory of change*

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