

Reimagining the Teaching of STEM Subjects Through Arts-Based and Participatory Methodologies

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Abstract

This special issue of Educational Research for Social Change focuses on rethinking the teaching of science, technology, engineering, arts, and mathematics (STEM) subjects through integrating creative arts-based (thus, STEAM) and participatory methodologies in classrooms. Methods of teaching of STEM subjects, mostly using traditional teaching methods (e.g. lectures, question-and-answer, practical work) have worked to some extent. They have however, been found to present knowledge that students only meet in formal institutions, and through strategies that have little relevance to the students' lives. These strategies and knowledge ultimately leave some students alienated from the intended learning of STEM subjects. And this, in turn, undermines the purpose of education—to enable each learner to develop their talents to the full and to realise their full creative potential including responsibility for their own lives and achievement of their personal aims, goals, and objectives.