

## A REVIEW OF STUDIES ON STEM EDUCATION IN TURKEY

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### Abstract

The aim of this study is to compile studies about STEM education in Turkey. STEM is an educational approach that focuses on integrating knowledge and skills of science, technology, mathematics and engineering on engineering design-oriented and aims to provide students with the skills of interdisciplinary collaboration, thinking systematically, creativity and the ability to solve problems in the most appropriate way. The recent research findings in science education reveal the necessity of using an engineering design-based approach for the development of science teaching. As a result of the field search, a lot of researches are carried out regarding STEM where a large number of researches are conducted in the international field and the schools are trained, Considering the fact that it is not yet widespread in Turkey; it is important that awareness of STEM occurs in undergraduate courses in education faculties first. When studies conducted up to today are evaluated, studies have been carried out in general for similar purposes and similar results have been achieved. The institutional infrastructure of STEM education in Turkey has begun to be formed. However, the need for experimental study and research continues to increase. STEM education, which is interpreted as a learning process that starts in the classroom and continues after school, has a great responsibility to build universities, educational institutions and families for the construction of the culture. In the new studies on STEM, it is also important to develop and test teaching materials on how to teach science subjects and concepts through engineering process.

**Keywords:** STEM Fields, STEM Education, Literature Scanning.