

Cognitive Perceptions of Teacher Candidates Related to STEM Applications

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Keywords:

STEM
Word Association
Test (WAT)
Cognitive
Perception

Paper Type:

Research

Abstract

The aim of this study is to reveal the cognitive perceptions of pre-service teachers about STEM, who are studying in Education Faculties, where teachers who play a key role in the successful implementation of STEM education, which the whole world has been interested in recently, are trained. The research was carried out according to the cross-sectional scanning model. For this purpose, data were collected and analyzed with the Word Association Test (WAT) from a total of 78 teacher candidates studying at Kastamonu University, Faculty of Education, Computer and Instructional Technologies Education, Science Education and Mathematics Education Programs. As a result of the research, it was found that the words robotics, coding and arduino are associated with the cognitive structures of the pre-service teachers regarding STEM education, and they especially perceive the words Science and Mathematics as course and course topics. It is also seen that the perceptions of teacher candidates towards STEM do not define an integrated structure. In order for this perception to change, the courses on the STEM integrated approach should find more place in the curriculum.