

## Examination of Graduate Thesis on Mathematics Education in STEM

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Keywords:	Abstract
STEM, mathematics education, graduate theses, document analysis <b>Paper Type:</b> Research	The aim of the study is to analyze the postgraduate theses on mathematics education in the field of STEM. In this study, which adopts a qualitative approach, the document analysis method was used. Within the scope of the research, 21 theses from the YÖK National Thesis Center with the words 'STEM' and 'mathematics' constitute the document of the study. Theses were coded according to year, genre, university, institute, subject area, research approach, sample, research method, data collection tools and data analysis methods, and then they were subjected to descriptive analysis by determining their frequency and percentage. As a result of the research, it was seen that the most postgraduate theses on mathematics education in the field of STEM were published in 2019, the theses on mathematics as a whole were more, the mixed approach was preferred more in the studies, and primary and secondary school students were chosen as the sample group. In addition, it was determined that quasi-experimental and case study methods were preferred more in the studies, interview and achievement tests were used more among the data collection tools, and t-test and ANOVA/ANCOVA from the quantitative analysis methods and content analysis were the most preferred in qualitative methods. In the analysis of the theses reached within the scope of the study; Results showed that STEM activities positively affect interest, attitude and motivation towards mathematics, contribute to mathematics achievement, increase mathematical thinking and problem solving, social communication and cooperation skills.