



## PROSPECTIVE ELEMENTARY SCHOOL TEACHERS' INTERPRETATION OF NON TRADITIONAL- ARITHMETIC OPERATIONS

Lecturer Melike Tural Sönmez  
İstanbul Aydın University  
[melikesonmez@aydin.edu.tr](mailto:melikesonmez@aydin.edu.tr)

### Abstract

Although standard operational algorithms provide with efficient written methods, they are incompatible with intuitive approaches. Children are expected to interpret problems in meaningful way and link conceptual and calculational aspect of mathematics in primary education in mathematics program. Through encouraging informal written strategies and mental methods, children develop confidence in their own approaches to problem solving and feel enthusiasm for mathematics. In that sense; teachers should encourage their students to use students' own strategies and accept students' solutions if it is correct. The aims of this study to reveal prospective elementary school teachers' interpretation about nontraditional operational algorithms. The participants was 36 prospective elementary mathematics teachers studying in their third year in the department of elementary education in Turkey. In this study, qualitative case study design was used to collect data. The findings of this study analyzed into four headings.

**Keywords:** mathematics education, prospective elementary school teachers, standard operational algorithms, pedagogical content knowledge.