



An Analysis of Pre-service Teachers' Views Towards the Technological Pedagogical Content Knowledge in Terms of Various Variables

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Technological, pedagogical content knowledge (TPCK) is teacher information model proposed by Mishra and Koehler (2006). For teachers, it is possible to use technological knowledge for educational purposes and to transfer these technologies to classroom environment. In order for teachers to train individuals who can catch up with today's information and technology age, they must possess these knowledge and skills in the first place. In this context, it is necessary to establish TPCK levels in order to identify teacher candidates' possible knowledge and skills inadequacies and provide suggestions for TPCK development levels. For this reason, this study aims to determine TPCK levels of elementary teacher candidates and to examine them in terms of different variables (department, class, gender, university). The study group was 369 junior and senior students (elementary and pre-school teaching) in two state universities in Turkey. Criteria sampling was used to determine the study group. Teacher candidates who took Science and Technology Teaching Course were included in the study. The data were collected by the Technological Pedagogical Domain Information scale originally developed by Schmidt, Baran, Thompson, Koehler, Mishra and Shin (2009) and adapted to Turkish by Kaya, Kaya and Emre (2013). SPSS statistical package software was used for data analysis. The descriptive data obtained from the research are presented by using "arithmetic mean", "percent" and "frequency". Independent samples t-test was conducted to determine whether there were differences of opinions of the prospective teachers based on gender, department, class and university variables. As a result of the research, there were significant differences in total 15 items according to the class variable and they were all in favour of 4-forth year students. According to the department variable, there is a significant difference in 9 items in total, all of which are favoured by the students of Classroom Teacher Education. There was also a significant difference between the opinions of the teacher candidates in total 6 items according to gender variable, and no significant difference was found in favour of male students in the other 5 items except for the item 15.

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