



Candidates of Mathematics Teacher's Opinions about the Relationship Between Physics and Mathematics Lessons

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Abstract

Expertise in physics entails to use mathematics effectively and efficiently (Redish and Bing 2009). Turkish national department of education report that physics and mathematics lessons must be compatible in schools. But according to Redish (2005), although mathematics that mentioned as the language of science used in physics it is not the same as taught by mathematicians. In this context the aims of this study is getting candidates of mathematic teacher's opinions about whether there is a relationship between physics and mathematics lessons. Qualitative case study method is used in this study. In case studies one or more cases is examined deeply. It is focused how factors (environments, individuals, events, etc.) related to a case affect the case and how they affected by the case (Yıldırım, 2008:77). Participants of study group are selected with Maximum variation sampling method of purposeful sampling. According to this, study group of the research includes 20 candidates of mathematics teacher studying at a state university in Turkey and taking "Physics I" lesson during 2013-2014 education period. The data of the study will be collected by interviews with candidates. In the interviews the semi-structured interview form will be developed by examining of researchers the studies in the literature and by acquiring of expert opinion will be used. In the analysis of data obtained in accordance with qualitative research the content analysis will be applied. In content analysis similar data in the context of specific codes and themes are combined and interpreted (Yıldırım and Şimşek, 2008:227). Accordingly, the codes obtained from research data with frequency under its related themes will be presented with the help of tables.