

PROSPECTIVE MATHEMATICS TEACHERS' CONCEPTUAL STRUCTURE ABOUT CONTINUITY

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Abstract

The purpose of this research is to identify prospective mathematics teachers' conceptual structures about "continuity" that is the basic subject of the mathematics. Participants of the research were 152 prospective mathematics teachers' studying in one of the public universities in Turkey. The Free Word Association Test was used as the data collection tool. The "Continuity", key concept was presented to prospective mathematics teachers' through the Word Association Test. Data obtained from the test results were recorded in frequency table. Conceptual networks that present prospective mathematics teachers' conceptual structures about continuity key concept was drawn by using a "cut-off point" technique on the frequency table. Based on the research findings, 17 categories with regard to "Continuity" was derived and a total of 73 words were collected. In this study, 60 and higher frequency categories that were associated with "Continuity" key word were more important and remarkable. These categories were; "Limit and Function". In conclusion it is recommended to conduct further research by stating mathematical terms to define the relation on students' minds.

Keywords: Prospective Mathematics Teacher, Conceptual Structure, Word Association Test, Continuity.