

## **Pre-service Teachers' Metaphors Regarding the Concept of Scientific Thinking**

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**ABSTRACT** The aim of this research was to analyze pre-service teachers' perceptions of the concept 'scientific thinking' through metaphors. Phenomenology, one of qualitative research designs, was used in the study. Participants of the study consisted of 180 pre-service teachers, including 146 females and 34 males and studying in different departments of the education faculty at Kocaeli University in Turkey, in spring semester of 2013-2014 academic year. They were asked to complete the sentence "Scientific thinking is like ..... because .....". The collected data was analyzed using content analysis technique. According to the findings, pre-service teachers produced a total number of 139 valid metaphors regarding the concept of scientific thinking. These metaphors were divided into 15 different conceptual categories in accordance with their common features. The results indicated that the pre-service teachers had multiple and distinctive perceptions regarding the concept of "scientific thinking".