Using Metaphors to Investigate Pre-service Secondary Mathematics Teachers' Perceptions of Mathematics and Mathematics Teacher Concepts

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ABSTRACT The aim of this study is to examine the metaphorical images of pre-service mathematics teacher attending the 'pedagogical formation certificate program' concerning mathematics and its nature, and also the concept of mathematics teacher. Metaphors generated by these trainees with regard to mathematics and the mathematics teacher and to analyze whether there is a clear pattern or structure that underpins these metaphors. 280 mathematics trainee teachers took part in this study that was carried out at four different state universities. The data for the study were collected by asking a series of open-ended questions and analyzed using an internal analysis method. After completion of the analysis stage, it is concluded that, participants produced more negative metaphors towards both mathematics and mathematics teacher concepts than similar studies towards teacher trainee. The teacher trainees attending this program may be investigated why they attended this program and why they want to become a mathematics teacher by employing smaller sample groups and various qualitative methods.