



Self-Efficacy in Teaching Science and the Level of Teaching Methods and Techniques of Pre-Service Elementary Teachers

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The purpose of this study is to examine the level of pre-service elementary teachers' self-efficacy beliefs in science teaching and determining their teaching methods and techniques. For this purpose, the Science Teaching Efficacy Belief Instrument (STEBI-B) was conducted to fourth grade students who enrolled in a private university in Turkey to determine their self-efficacy beliefs about science teaching. Additionally, the "form of determining the level of preference of teaching methods and techniques" was applied to examine the level and reason of determining appropriate methods and techniques for teaching objectives in primary third grade science curriculum. Total of 40 pre-service elementary teachers participated in this study. The data collected for self-efficacy beliefs were obtained from the 5-point Likert type scale; therefore, the responses given by the pre-service elementary teachers were added and a related score was obtained regarding their self-efficacy levels. In addition, the grading scale prepared by the researchers was used to assess pre-service elementary teachers' level of the determination of appropriate teaching method and techniques according to the objectives. The data obtained from these scales will be used to investigate the relationship between the level of pre-service elementary teachers' self-efficacy beliefs in science teaching and level of the determining of appropriate teaching method and techniques. As a result of this study, it is expected that the teacher candidates who can design appropriate teaching methods and techniques according to curriculum objectives will possess higher level of self-efficacy beliefs towards science teaching. Besides, the qualitative data obtained about the reasons why they choose that method or technique will be examined. As a result of this examination, it is expected to explained in detail that extent to which they are able to associate their knowledge about teaching methods and techniques with curriculum objectives.

Keywords: *Teacher education, science teaching, self-efficacy, teaching methods and techniques;*

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