



Science Communication Form

Research title	Pre-Service Classroom Teachers' Attitudes toward Graphs and Their Ability to Read and Interpret Them
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Summary and Conclusions:

The aim of this study is to investigate the impact of the following factors on pre-service classroom teachers' attitudes toward graphs and their ability to read and interpret them: (1) high school stream (scientific, literary, information technology, others); (2) academic level at university (freshman, sophomore, junior, senior) and; (3) the number of science and mathematics courses they had taken at the University. Data were collected using two questionnaires: the attitude toward graphs which was developed by Mumba et al. (2009), and the ability to read and interpret them, which was developed by the researchers. The study sample consisted of 122 female students who were enrolled in the classroom teacher major at the University of Petra in Jordan. The results showed that: (1) pre-service teachers' attitudes toward graphs on the overall scale were moderate; and the pre-service teachers valued graphs, expressed moderate interest in graphs, and moderate cognitive competence for graphing, although they did not make enough effort concerning graphs (2) the attitudes of classroom teachers toward graphs became more positive as they advanced in their level of academic year (freshman, sophomore, junior, senior) as well as by the increase in the number of science and mathematics courses they have attended at the University; (3) level of pre-service classroom teachers' ability to read graphs was below the educationally accepted level. In addition, the ability to read graphs seems to increase as students advance further in their academic level.

Keywords: read and interpret graphs, pre-service classroom teacher, attitudes

The benefit of research: Determine the pre-service classroom teachers' attitudes toward graphs and their ability to read and interpret them in order to improve teaching methods.
