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Teaching the First Intermediate Grade Female Students by Using Mathematics Laboratory, and its Effect on their Mathematical Thinking Skills and Achievement

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Abstract

The study aimed at identifying the effect of using mathematics laboratory on the mathematical thinking skills and achievement of the first intermediate grade students in the city of Baghdad. The sample consisted of (50) female students and was distributed into two groups: the experimental group which was taught by using the mathematics laboratory method, and the control group which was taught by using the normal method.

The researchers used two tools: the mathematical thinking test that was developed by the researchers, and the achievement test that was also developed by them. The two tools were twsted for validity and reliability. The data was analyzed by using ANCOVA . The findings were as follows:

There were statistical significant differences between the two groups in both mathematical thinking skill and achievement test grades in favor of the experimental group that was taught by using the mathematics laboratory method.

The researchers recommended that mathematics laboratory should be used in schools and a field study should be conducted about the effect of using mathematics laboratory on another mathematical topics in different stages of education.

Keywords: Mathematics laboratory, Mathematical thinking skills, chievement.

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