

The interaction between the two types of digital maps and the pattern of learning and thinking and its impact on the development of mathematical thinking among primary students

Digital maps are a modern technology, and they are distinguished by their ability to display data and information in an attractive pictorial way, transforming complex and abstract concepts and information into a schematic form that simulates the way the human mind works in reading information, so that its center is a main idea from which several ideas branch out, collecting information and linking ideas in order to reach To the student's mind easily, and to process and retrieve them easily, and there are two types of digital maps (two-dimensional / three-dimensional), and digital maps are used to achieve many educational outcomes, including the development of mathematical thinking, and the effectiveness of digital maps is linked to many variables, including learning and thinking patterns. Therefore, the current research aims to reveal the effect of the interaction between the two patterns of digital maps (two-dimensional / three-dimensional), and the pattern of learning and thinking (right / left / integrated) in the development of mathematical thinking among primary school students. For this purpose, the researcher designed two types of digital maps (two/ three-dimensional), and used the semi-experimental approach. The research was applied to a sample of (90) students who were divided into six groups. and right-handed thinking), and the third and fourth groups (two- and three-dimensional digital maps style with the left-handed learning and thinking style), and the fifth and sixth groups (two- and three-dimensional digital maps style with the integrated learning and thinking style). The average effect of interaction in the development of mathematical thinking skills came in favor of the three-dimensional digital maps with the right and integrated learning style, and in light of that, a set of recommendations and proposals were presented.