

The effectiveness of learning cycle strategy supported with Web Quest on developing some mathematical practices and engagement learning among preparatory school students

Abstract

The aim of the research is to identify the effectiveness of the five- learning cycle strategy supported by the Web Quest in developing some mathematical practices and Learning engagement among first-grade Preparatory school students. The quasi-experimental curriculum was used and the research sample reached (70 students) among them (35 students) as an experimental group that studied the relative numbers unit from During the five-cycle learning strategy supported by the Web Quest) and (35 students of a control group studied the unit of relativistic preparation through the traditional method) from a school in Mahalla East, affiliated to Gharbia, a mathematical practice test and a scale for engagement learning were built and verify Their validity and reliability, the results of the study showed that the experimental group, which was studied using cycle learning supported with Web Quest- learning, outperformed the control group in mathematical practices and the scale of mathematics engagement learning ,and there is a positive correlation between the scores of mathematical practices test and the scale of engagement learning among first-grade Preparatory school students, and a number of recommendations were recommended, the most important of which are: employing a five- cycle learning strategy supported by the Web Quest in mathematics teaching.

Keywords: five- learning cycle strategy, WebQuest, mathematical practices, learning engagement.