

Abstract

The Impact of a Proposed Active Learning Unit on the Development of Visual Thinking Skills and Achievement among Basic Stage Students in the Capital Secretariat – Sa+na'a

A Thesis Submitted to Faculty of Education in Partial Fulfillment of the Requirements for the Master's Degree in Education

Majoring: Mathematics Curriculum & Teaching Methods (1445 Hijri – 2023)

By:

Omaima Mohammed Hamed Al-Hajj

Supervisor:

Prof. Abdullah Abbas Mahdi

Professor of Mathematics Curriculum and Teaching Methods

Faculty of Education - Sana'a

This study aimed to determine the impact of a proposed active learning unit on the development of visual thinking skills and achievement among basic stage students in the Capital Secretariat-Sana'a. To achieve the study's objectives and answer its questions, the researcher adopted the experimental approach on a sample consisting of 60 female students from the fifth grade at Al-Jalaa Girls' Public School in Al-Tahrir Directorate, who were purposefully selected. The students were divided into two classes, with one class randomly selected as the experimental group consisting of 30 students who studied the engineering and measurement unit using the proposed active learning unit, and the other class serving as the control group consisting of 30 students who studied the unit using the traditional method found in the student's textbook. The study focused on the seventh unit (the engineering and measurement unit) from the mathematics textbook for the fifth grade, second semester of the academic year 2023-2022 AD. To achieve the study's objective, the researcher prepared the study materials and tools. After verifying the validity of the tools, the researcher used them to collect data on visual thinking skills and achievement. The results of the study showed that the use of active learning had a positive impact on the development of visual thinking skills and achievement among fifth-grade female students.

The Keywords: Active learning, Visual Thinking Skills, Achievement.