

ABSTRACT

The use of audio-visual materials has been established from a long period of time. Before the II World War audio-visual materials were used to train army personnel. The good results of audio-visual materials in this area made educators introduce them into classroom teaching. Nowadays audio-visual materials are used systematically in the developed countries, but in the developing countries audio-visual materials are not given the concern needed.

Teachers on the West Bank pay little attention to the use of audio-visual materials either because they are not familiar with them or else they cannot afford buying new equipments.

This must not hinder West Bank teachers from improving their teaching methods by a simple and cheap way: by the use of handmade mock-ups.

The hypothesis of this study stated that there is no statistical significant difference at the 0.05 level between the mean scores of two 8th grade divisions at Shu'fat Preparatory Boys School taught through two different methods: the first division was taught science courses through the traditional method and the second division was taught the same science courses through the non-traditional method - with the help of handmade mock-ups.

Two topics from the 8th grade science curriculum were chosen: "the inclined plane" and "the wheel and the axle".

Two 8th grade divisions at Shu'fat Preparatory Boys School were assigned to both groups randomly: division A was treated as the experimental group, and division B was treated as the control group. The subjects of both groups

were matched on the basis of the average of the row scores of science and mathematics of the first semester of the school year 1981/1982 in which the study was conducted.

Two handmade mock-ups were designed and developed by the researcher and given to the teacher who taught both groups the same science courses. The teacher used the traditional method with the control group. With the experimental group the teacher used handmade mock-ups to help him perform his duties.

The period needed for teaching the two science topics is two weeks, after which all students sat for a special science achievement test prepared by the researcher. The data, then was collected and analyzed.

The t-test statistical procedure was applied for testing the null hypothesis of the study. The correlated t-formula gave a t value of 11.34 which is large enough to reject the null hypothesis at the 0.05 level.

It is recommended that teachers must be encourage to use handmade mock-ups in teaching science on the West Bank. It is recommended, too, that workshops must be added to schools to help teachers produce and use audio-visual materials.