Abstract

The Effect of Using the Interactive Classroom in Teaching Geometry on the Development of Preparatory Stage Students' achievement, Visual Thinking Skills and Affective Satisfaction

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The study aims at recognizing the effect of using the interactive classroom (theinteractive board) in teaching geometry on the development of third year preparatory stage students' achievement, visual thinking skills and affective satisfaction. To achieve the study's aim, the researcher selected a random sample of students (84 students) divided to two groups: the experimental group (46 students) and the control group (38 students). The researcher reconstructed a geometry unit (the analytical geometry unit) to be suitable for electronic use inside the classrooms, and prepared three measuring tools (achievement test – visual thinking skills test and the affective satisfaction measure). After the implementation of the study tools, **the following results were evident**:

1-The experimental group students over performed the control group students in the achievement test.

2-The experimental group students over performed the control group students in the visual thinking skills test

3- A high degree of affective satisfaction was evident among the experimental group students as a result of using interactive classroom during their studies.

In light of these results, the researcher recommends the following:

1- Carrying out a similar study and measuring its effect on other independentvariables such as tendency towards mathematics, systemic thinking, motivation, learning hardships, and teachers' performance.

2- Carrying out similar studies at different educational stages and other mathematics branches.

3-Carrying out a study that would convey how much the mathematics teachers are convinced to use that method in teaching.

4- Carrying out a similar study tackling variant groups of students such as (gifted udents, slow learners, students with learning problems, etc.) and measuring the effect of interactive classrooms on those variant groups of students.

5- conducting astudy to figure out how far the teachers of mathematic Are convinced of this approach in teaching.

6- Carrying out an analytical study to specify the availability of the mathematic activities and exercises that would enhance the students' visual thinking in textbooks at variant stages.

Key words:
Interactive Classrooms – Achievement - Visual thinking – Affective satisfaction - electronic learning