

ABSTRACT

The study investigated the relative effects of the Guided Discovery and Expository Teaching methods on the performance of students at the recall, algorithmic thinking, and problem solving taxonomic levels. The students in forms 4A and 4B of a secondary high school were randomly assigned to two groups, efforts being made to ensure that both groups contained high and low ability students. The Guided Discovery group was taught by a Guided Discovery method, while the Expository group was taught by an Expository method. The content consisted of selected concepts from the topics vectors and matrices and the lessons were taught over a period of six weeks.

The data collected from the post test were analysed using the two way analysis of variance method.

The results of the analysis were as follows:

1. The high ability students performed significantly better than low ability students.
2. There were no significant difference between methods on overall performance, or at any of the three taxonomic levels.

3. There was no significant interaction between ability level and teaching method, on overall performance or performance at the three taxonomic levels.

The results indicated that in general, the performance of students taught by either method was not significantly greater than for those taught by the other method. Specifically, the performance in most instances was approximately equal. There were instances however, when greater performance was recorded by a particular group, for example, high ability students at the problem solving level.

In spite of the fact that neither method seemed to be superior, the need to employ a certain level of selectivity in the choice of either of the two methods was implied. This was so, at least, at the fourth form level. In view of the above it would seem that the Guided Discovery method should be used intermittently with the meaningful Expository method.