

Observations on the Computer Usage and Performance in Identification of Geometric Transformation among Secondary Schools: Case Study in Selected Schools in Perak.

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Abstract

Over the past years, substantial investment in educational infrastructure system has been made. Considerable attention and resources have been focused on the application of computer technology in the classroom. It is part of the effort made to improve the teaching and learning process. In order to study the effectiveness of computer technology in teaching and learning especially in mathematics, a study on students' preparation and interest on computer technology has been carried out. In this study, the author also observed on the students' performance especially on the topic of geometric transformation.

The purpose of this paper is to identify the students' preparation and interest in using computers and application of computer technology in learning mathematics and to highlight the problems that the students encountered in learning geometric transformations. The study involves a sample of 378 Form Five students from three different schools in Perak. From the survey, the students showed positive attitude towards the use of computer in the school and 57.8% indicated that they strongly believe that technology would help them in the learning process. They believed that drill and practice type of software is most suitable for learning mathematics. Analysis from the questions given on transformation and combinations of transformation showed that 62% of the students were not able to answer the questions correctly. Among the problems listed by the students were: difficulty in visualizing the transformation, confuse with the transformation and difficulty in finding the image of the transformation. The evidence and data gathered from the study will be used to develop a courseware on geometrical transformation.