

ABSTRACT

DEVELOPING THE TUTORIAL MULTIMEDIA IN APPLICATION OF ARCVIEW GIS UPON GEOGRAPHY INFORMATION SYSTEM SUBJECT IN YEAR 2010

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Geography Information System (GIS) is a subject of information system which is begun from the data input, data processing hence create the data output. GIS is important for students as prospective teacher to comprehend since it will be taught to the school students. While being explained in the application, the students can understand the materials however they still missed some points in the next meeting. Thus, the complementary is needed in learning.

The objective of this research is to obtain tutorial multimedia for the GIS subject of GIS Arcview Software for students of Geography Study Program that can be used to increase the students' skill in operating GIS Arcview software.

This research is the development based on R & D Cyle Borg and Gall's model (1983). The data gained was analyzed qualitatively and quantitatively. The analysis technique for the data which belongs to qualitative data is elaborated by using words composed into exemplified text, which presented in form of narrative text. Meanwhile, the quantitative data was analyzed by using table, diagram, and inferential statistics. Inferential statistics used *one sample t-test* analysis. Test value was measured at 75.

Having conducted the research of tutorial multimedia in GIS subject is interactive CD which featured with the menu components of material options, formative test, interactively completed with animations, pictures, and videos. Therefore, it can be concluded that the effectiveness of tutorial multimedia shown by means score of students' learning achievement that obtains 76,9 means that this multimedia is able to help students to comprehend GIS Arcview materials.

Keywords: learning, tutorial multimedia, comprehension, learning achievement