GEOSPATIAL TECHNOLOGY UTILIZATION TRAINING FOR DISASTER MANAGEMENT FOR GEOGRAPHY TEACHERS OF HIGH SCHOOLS IN MAGELANG TOWN

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ABSTRACT

The occurrence of disasters is a phenomenon that is increasingly occurring, therefore geography teachers have an important task to educate students so that they have the skills to reduce disasters that may occur. Among the efforts to prepare teachers with disaster management skills is through training in the use of technology for disaster management. This training aims to (1) improve the cognitive competence of teachers in disaster management by using geospatial technology. (2) Choosing effective geospatial technology for disaster management, (3) Increasing teacher competence in designing disaster management lessons with geospatial technology.

This service activity is carried out through learning the workshop model. Participants in the activity were 21 private and public high school teachers. The learning method is carried out with the principle of active learning. This training is carried out in three stages, the preparation stage, the implementation stage, and the evaluation stage. Learning methods in training (1) varied lectures, question and answer and discussion on remote sensing materials (2) Demonstration of image utilization and spatial analysis of disasters; (3) Practicum designing disaster mitigation learning with the help of geospatial technology; and (4) Post-training consultation until all participants have mastered the training material. The results of the evaluation were carried out using descriptive statistics and the acquisition of a score.

The results of the workshop activities show that (1) teacher competency training in disaster management using geospatial technology. This increase is included in a high level, namely increasing competence on a scale up from 3 predefined scales. The competence of teachers whose improvement is the highest is determining disasters and ways of mitigating them, (2) Teachers can select and make use of geospatial technology according to the type of disaster, especially with remote sensing technology and geographic information systems. (3) increasing the competence of teachers in designing learning disaster management assisted by geospatial technology. The design that is most widely chosen is to use a problem-based learning model and a scientific approach.

Kata Kunci: *training, geospatial technology, hazard management,*