

LEARNING MODULE DEVELOPMENT DIGITAL MAP MAKING AS SPATIAL DATA GEOGRAPHIC INFORMATION SYSTEM

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ABSTRACT

The existence of an easily accessible map in an area is a need that cannot be postponed anymore. This is related to the ease of access that is open to all people. The purpose of this research is to develop a learning module for making digital maps as spatial data for Geographic Information System (GIS).

The method used is Research and Development (R&D), which is adapting the 4D model (define, design, develop, disseminate) from Thiagarajan. The data collection used was a questionnaire. The assessment instrument uses a "Likert scale." Data analysis was performed using quantitative techniques in this study.

Based on the data obtained from the research this time is (1) In the define phase, this research has produced a Geomatics Practicum II module with the title "Making Yogyakarta City Boundary Map Using the ArcGIS Online Application". (2) in the design stage, the module developed in this research has 4 learning activities. (3) the develop stage, the feasibility level of the module compiled from validation by material experts, the feasibility aspect of obtaining a score of 61 is included in the feasible category, the presentation feasibility aspect obtains a score of 140 which is included in the very feasible category. While the feasibility level of the media expert validation on the size aspect obtained a score of 5 which was included in the very feasible category, the cover design aspect received a score of 62 which was included in the very feasible category, then the core design aspect received a score of 149 which was included in the very feasible category. And the development trial for students, namely the feasibility aspect of the material obtaining a score of 1794 is included in the very feasible category, while the media feasibility aspect obtains a score of 1678 is included in the very feasible category. (4) The last stage is the dissemination stage, this last stage cannot be implemented because it is related to research which is limited to development and due diligence, so that it is only within the scope of the Department of Civil Engineering and Planning, Faculty of Engineering-UNY.

Kata Kunci: *digital map, ArcGIS, Geographic Information System*