ABSTRACT

DESIGNING INTERACTIVE MULTIMEDIA AS A LEARNING MEDIA FOR HYDROPOWER PLANTS USING THE MULTIMEDIA DEVELOPMENT LIFE CYCLE METHOD

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One of the producers of environmentally friendly electrical energy is the Hydroelectric Power Plant (PLTA). In Indonesia, many hydropower plants have been established, one of which is the Ketenger Hydropower Plant. To provide education to the community, PLTA Ketenger allows visitors to conduct industrial visits. But in its implementation, the media used to convey the material is less effective. As indicated by the outcomes of a questionnaire conducted using random sampling, it also shows that 71% of respondents feel that the media delivered is less effective. Interactive learning media can be considered as an option to introduction to the Ketenger Hydropower Plant to make it more interesting and effective. The Multimedia Development Life Cycle (MDLC) is used due to its suitable stages for designing interactive multimedia. After the research is done and the learning media has been validated using a black box that gets a percentage of functionality of 89.6% from the user and SUS which gets an average score of 77.67 which means that interactive multimedia applications are feasible as interactive learning media to recognize hydropower plants.

Keywords: Apps, MDLC, Learning Media, Interactive Multimedia, Hydroelectric Power Plant