

## **ABSTRACT**

### **DESIGN OF INTERACTIVE MULTIMEDIA-BASED LEARNING MEDIA FOR BASIC MATH LESSONS USING THE MULTIMEDIA DEVELOPMENT LIFE CYCLE METHOD**

**(Case Study: SD Negeri Kedondong)**

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*Interactive Learning Media is a type of media that allows users to interact directly with learning content. In this media, students can be actively involved in the learning process of animation videos, quizzes, games and so on. In this research, interactive multimedia will be applied to a primary education institution, SD Negeri Kedondong. This is based on the results of observations and interviews stating that learning activities at SD Negeri Kedondong are still carried out simply and manually so that the need for teaching aids for mathematics subjects that are fun and as another alternative in delivering material by teachers. As a solution to the problem, an interactive multimedia-based learning media is applied to support the learning process of basic mathematics in grade 1 to make it more fun and not monotonous. This system is made using the Multimedia Development Life Cycle (MDLC) method with the stages of conceptualizing, designing, collecting material, making, testing and distributing. The purpose of this research is to be able to apply interactive multimedia-based learning media to support the learning process of basic mathematics in grade 1 SD Negeri Kedondong as well as a tool for delivering material that is fun and not monotonous in the teaching and learning process. The final results in doing the pretest showed that five students got an average score of 74. After the pretest, students learned to use learning media and achieved an average posttest score of 86. From the implementation of the pretest and posttest, it can be concluded that there was an increase of 9.4%. This indicates that interactive multimedia-based learning media applications have succeeded in improving student understanding.*

**Keywords:** *Basic Calculation, Interactive Multimedia, Learning Media, Multimedia Development Life Cycle, Number Recognition.*