

**PENGEMBANGAN MULTIMEDIA INTERAKTIF BERBASIS MODEL
PROBLEM BASED LEARNING PADA MATERI PERUBAHAN WUJUD
BENDA KELAS V SEKOLAH DASAR**

Oleh

Ni Made Sita Rahayu, NIM 1911031143

Program Studi Pendidikan Guru Sekolah Dasar

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan multimedia interaktif berbasis *problem based learning* pada materi perubahan wujud benda kelas V sekolah dasar yang valid, praktis dan efektif. Penelitian ini menggunakan model ADDIE dalam proses pengembangan. Model ADDIE terdiri dari 5 tahap yaitu tahap analisis, tahap desain, tahap pengembangan, tahap implementasi dan tahap evaluasi. Subjek pengembangan ini adalah multimedia interaktif berbasis model *problem based learning* pada materi perubahan wujud benda kelas V sekolah dasar dan objeknya adalah validitas, kepraktisan, dan efektivitas multimedia interaktif yang dikembangkan. Metode pengumpulan data yang digunakan dalam penelitian ini adalah metode kuesioner, observasi dan tes. Hasil penelitian pengembangan multimedia interaktif berbasis *problem based learning* yang dikembangkan adalah valid, praktis dan cukup efektif diterapkan dalam proses pembelajaran yang dibuktikan dengan uji validitas dari ahli materi 0,93, ahli desain pembelajaran 0,91 dan ahli media 0,91; uji kepraktisan dari respon siswa melalui uji coba perorangan sebesar 93,89%, uji coba kelompok kecil sebesar 90,55% dan observasi keterlaksanaan kegiatan pembelajaran sebesar 93,33%; serta uji efektivitas dengan uji-t berkorelasi memperoleh hasil t hitung 8,75 lebih besar dari nilai t tabel untuk $dk = 32$ pada taraf signifikansi 5% 2,04 sehingga H_0 ditolak dan H_1 diterima. Uji *N-gain score* data *pretest* dan *posttest* memperoleh nilai *N-gain score* yaitu 63% termasuk pada kategori cukup efektif. Jadi, dapat disimpulkan bahwa pengembangan multimedia interaktif berbasis *problem based learning* sangat valid, praktis dan cukup efektif diterapkan pada muatan IPA materi perubahan wujud benda untuk kelas V sekolah dasar dalam meningkatkan hasil belajar kognitif siswa.

Kata kunci: multimedia interaktif, *problem based learning*, perubahan wujud benda

**THE DEVELOPMENT OF INTERACTIVE MULTIMEDIA BASED ON THE
PROBLEM-BASED LEARNING MODEL ON THE MATERIAL OF
CHANGES IN THE FORM OF OBJECTS IN GRADE V ELEMENTARY
SCHOOL**

By

Ni Made Sita Rahayu, NIM 1911031143

Program Studi Pendidikan Guru Sekolah Dasar

ABSTRACT

This study aims to develop interactive multimedia based on problem-based learning on the material of changes in the form of objects in grade V elementary schools that are valid, practical and effective. This research uses the ADDIE model in the development process. The ADDIE model consists of 5 stages, namely the analysis stage, design stage, development stage, implementation stage and evaluation stage. The subject of this development is interactive multimedia based on the problem-based learning model on the material of changes in the form of objects in grade V elementary school and the object is the validity, practicality, and effectiveness of the developed interactive multimedia. The data collection methods used in this research are questionnaire, observation and test methods. The results of the research on the development of interactive multimedia based on problem-based learning developed are valid, practical and quite effective in the learning process as evidenced by the validity test from material experts 0.93, learning design experts 0.91 and media experts 0.91; practicality test from student responses through individual trials of 93.89%, small group trials of 90.55% and observations of the implementation of learning activities of 93.33%; and effectiveness test with correlated t-test obtained the results of t count 8.75 greater than the t table value for $dk = 32$ at a significance level of 5% 2.04 so that H_0 is rejected and H_1 is accepted. The N-gain score test of pretest and posttest data obtained an N-gain score of 63%, including in the moderately effective category. So, it can be concluded that the development of interactive multimedia based on problem-based learning is very valid, practical and quite effective in applying to the science content of material changes in the form of objects for grade V elementary schools in improving students' cognitive learning outcomes

Keywords: *interactive multimedia, problem-based learning, changes in the form of objects*