

# PENGEMBANGAN MULTIMEDIA INTERAKTIF TIGA DIMENSI BERBASIS *PROBLEM BASED LEARNING* PADA MUATAN IPAS MATERI DENAH TEMPAT TINGGALKU KELAS III SEKOLAH DASAR

Oleh

I Kadek Ricki Krisnawan, NIM 2111031108

Program Studi Pendidikan Guru Sekolah Dasar

## ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan rancang bangun, mengetahui hasil validitas ditinjau dari uji ahli isi, uji ahli desain instruksional, uji ahli media pembelajaran, uji pendidik, uji perorangan, dan uji kelompok kecil pada muatan IPAS materi denah tempat tinggal kelas III sekolah dasar serta mengetahui efektivitas multimedia interaktif tiga dimensi berbasis *problem based learning* pada muatan IPAS materi denah tempat tinggal kelas III sekolah dasar. Penelitian ini menggunakan model pengembangan *ADDIE*. Metode pengumpulan data dilaksanakan melalui metode nontes berupa angket/kuesioner dan metode tes berupa tes hasil belajar. Hasil penelitian pengembangan ini terdiri dari (1) rancang bangun multimedia interaktif tiga dimensi berbasis *problem based learning* berupa *flowchart* dan *storyboard* berdasarkan tahapan model *ADDIE* untuk menghasilkan multimedia interaktif dengan objek tiga dimensi yang berbentuk *file Microsoft Power Point* dan dapat diakses melalui link *Google Drive*, (2) hasil validitas multimedia interaktif tiga dimensi dinyatakan sangat valid berdasarkan hasil penilaian ahli isi pembelajaran sebesar 94,64% yang dikualifikasikan sangat baik, penilaian ahli desain instruksional sebesar 93,75% yang dikualifikasikan sangat baik, penilaian ahli media pembelajaran sebesar 93,18% yang dikualifikasikan sangat baik, uji coba pendidik sebesar 94,79% yang dikualifikasikan sangat baik, uji coba perorangan sebesar 96,52% yang dikualifikasikan sangat baik, dan uji coba kelompok kecil sebesar 94,67% yang dikualifikasikan sangat baik, (3) berdasarkan hasil uji efektifitas menggunakan rumus uji *t one sample* diperoleh nilai  $t_{hitung} = 4,971$  sedangkan nilai  $t_{tabel}$  pada taraf signifikansi 5% dan  $dk = n - 1 = 19 - 1 = 18$  diperoleh nilai  $t_{tabel} = 1,734$ . Hasil tersebut menunjukkan  $t_{hitung} > t_{tabel}$  sehingga  $H_0$  ditolak dan  $H_1$  diterima. Maka dapat disimpulkan bahwa multimedia interaktif 3D berbasis *problem based learning* muatan IPAS materi denah tempat tinggal efektif diterapkan pada peserta didik sekolah dasar.

**Kata Kunci:** pengembangan, multimedia interaktif 3D, *problem based learning*, IPAS.

**DEVELOPMENT OF THREE-DIMENSIONAL INTERACTIVE  
MULTIMEDIA BASED ON PROBLEM BASED LEARNING ON THE  
SCIENCE CONTENT OF MY RESIDENCE PLAN FOR GRADE III OF  
ELEMENTARY SCHOOL**

**By**

**I Kadek Ricki Krisnawan, NIM 2111031108**

**Elementary School Teacher Education Study Program**

**ABSTRACT**

*This study aims to describe the design, determine the validity results reviewed from the content expert test, instructional design expert test, learning media expert test, educator test, individual test, and small group test on the science content of my residence plan for grade III of elementary school and determine the effectiveness of three-dimensional interactive multimedia based on problem based learning on the science content of my residence plan for grade III of elementary school. This study uses the ADDIE development model. The data collection method is carried out through a non-test method in the form of a questionnaire and a test method in the form of a learning outcome test. The results of this development research consist of (1) the design of three-dimensional interactive multimedia based on problem based learning in the form of flowcharts and storyboards based on the stages of the ADDIE model to produce interactive multimedia with three-dimensional objects in the form of Microsoft Power Point files and can be accessed via the Google Drive link, (2) the results of the validity of the three-dimensional interactive multimedia are stated to be very valid based on the results of the assessment of learning content experts of 94.64% which are qualified as very good, the assessment of instructional design experts of 93.75% which are qualified as very good, the assessment of learning media experts of 93.18% which are qualified as very good, educator trials of 94.79% which are qualified as very good, individual trials of 96.52% which are qualified as very good, and small group trials of 94.67% which are qualified as very good, (3) based on the results of the effectiveness test using the one sample t-test formula, the calculated t value = 4.971 was obtained while the t-table value at a significance level of 5% and  $dk = n - 1 = 19 - 1 = 18$  was obtained ttable value = 1.734. The results show that  $t_{count} > t_{table}$  so that  $H_0$  is rejected and  $H_1$  is accepted. So it can be concluded that 3D interactive multimedia based on problem based learning of the content of the science of the material of the layout of my residence is effectively applied to elementary school students.*

**Keywords:** *development, 3D interactive multimedia, problem based learning, science.*