

**PENGEMBANGAN E-KOMIK BERBASIS *PROBLEM BASED*  
*LEARNING MUATAN IPAS CAHAYA DAN BUNYI DI*  
*SEKITAR KITA PADA SISWA KELAS V SD NEGERI 5*  
**PANJER DENPASAR SELATAN****

**Oleh**

**Tjok Istri Sri Ayuning P, NIM 2111031383**

**Jurusan Pendidikan Dasar**

**ABSTRAK**

Penelitian ini bertujuan (1) mendeskripsikan rancang bangun e-komik berbasis *problem based learning*, (2) mendeskripsikan hasil kelayakan e-komik berbasis *problem based learning* menurut penilaian para ahli, uji coba perorangan dan uji coba kelompok kecil, dan (3) mengetahui efektivitas e-komik berbasis *problem based learning*. Penelitian ini menggunakan model pengembangan ADDIE. Metode yang digunakan dalam pengumpulan data menggunakan metode angket atau kuesioner dan tes. Data penelitian dianalisis dengan menggunakan analisis deskriptif kuantitatif. Hasil penelitian ini melalui tahap (1) Rancang bangun berupa media elektronik berupa e-komik berbasis *problem based learning* berdasarkan rancang bangun yang dirancang melalui beberapa tahapan yaitu: tahap analisis, tahap perancangan, tahap pengembangan, tahap implementasi, dan tahap evaluasi. (2) Uji kelayakan media e-komik berbasis *problem based learning* menurut ahli isi pembelajaran memperoleh persentase skor 93,33% dengan kualifikasi sangat baik, ahli desain pembelajaran memperoleh skor sebesar 91,66% dengan kualifikasi sangat baik, ahli media pembelajaran memperoleh skor sebesar 96,78% dengan kualifikasi sangat baik, uji coba perorangan memperoleh skor 86,35% dengan kualifikasi baik, uji coba kelopok kecil memperoleh skor 82,32% dengan kualifikasi baik. Dengan demikian media elektronik berupa e-komik berbasis *problem based learning* dinyatakan layak. (3) Uji efektivitas menggunakan 30 orang peserta didik memperoleh  $t_{hitung}$  sebesar 2,7111 untuk  $t_{tabel}$  dk = 29 dan taraf signifikansi  $5\% = 2,045$ . Hal ini berarti  $t_{hitung} > t_{tabel}$  sehingga  $H_0$  ditolak dan  $H_1$  diterima yang berbunyi hasil rata-rata *post-test* siswa lebih dari nilai BSKAP. Dengan demikian dapat disimpulkan bahwa produk e-komik berbasis *problem based learning* efektif untuk digunakan pada muatan IPAS materi cahaya dan bunyi di sekitar kita kelas V Sekolah Dasar.

**Kata kunci:** *Problem based learning*, IPAS, Cahaya dan Bunyi

**DEVELOPMENT OF A PROBLEM-BASED LEARNING-BASED E-COMIC  
ON THE SCIENCE COURSE "LIGHT AND SOUND AROUND US" FOR  
GRADE V STUDENTS OF STATE ELEMENTARY SCHOOL 5 PANJER,  
SOUTH DENPASAR**

**By**

**Tjok Istri Sri Ayuning P, NIM 2111031383**

**Elementary Education Department**

**ABSTRACT**

*This study aims to (1) describe the design of an e-comic based on problem-based learning, (2) describe the feasibility of an e-comic based on problem-based learning according to expert assessments, individual trials, and small group trials, and (3) determine the effectiveness of the e-comic based on problem-based learning. This study uses the ADDIE development model. The data collection method used was a questionnaire and a test. The research data were analyzed using quantitative descriptive analysis. The results of this study through stages (1) Design in the form of electronic media in the form of e-comics based on problem based learning based on the design designed through several stages, namely: analysis stage, design stage, development stage, implementation stage, and evaluation stage. (2) The feasibility test of e-comics media based on problem based learning according to learning content experts obtained a score percentage of 93.33% with very good qualifications, learning design experts obtained a score of 91.66% with very good qualifications, learning media experts obtained a score of 96.78% with very good qualifications, individual trials obtained a score of 86.35% with good qualifications, small group trials obtained a score of 82.32% with good qualifications. Thus, electronic media in the form of e-comics based on problem based learning was declared feasible. (3) The effectiveness test using 30 students obtained a t count of 2..7111 for t table dk = 29 and a significance level of 5% = 2.045. This means that  $t \text{ count} > t \text{ table}$ , so  $H_0$  is rejected and  $H_1$  is accepted, which states that the average post-test results of students are greater than the BSKAP score. Thus, it can be concluded that e-comic products based on problem-based learning are effective for use in the science content of light and sound around us in grade V of elementary school.*

**Keywords:** Problem-based learning, science, light and sound