

**PENGEMBANGAN MEDIA E-KOMIK BERBASIS
DISCOVERY LEARNING PADA MATA PELAJARAN
MATEMATIKA MATERI PECAHAN DI
KELAS IV SD NEGERI 1ULAKAN**

Oleh

Luh Deary Keistal Dewi, NIM 2111031375

Program Studi Pendidikan Guru Sekolah Dasar

ABSTRAK

Penelitian ini bertujuan untuk (1) mendeskripsikan rancang e-komik berbasis *discovery learning*, (2) mengetahui kelayakan e-komik berbasis *discovery learning*, (3) mengetahui efektivitas e-komik berbasis *discovery learning* pada materi pecahan. Penelitian ini adalah penelitian pengembangan yang menggunakan model pengembangan ADDIE yang terdiri dari lima tahapan, yaitu tahap analisis, perancangan, pengembangan, implementasi, dan evaluasi. Subjek penelitian pengembangan ini adalah siswa kelas IV sekolah dasar dengan jumlah 22 siswa. Metode pengumpulan data yang digunakan adalah metode wawancara, observasi, angket, dan tes pilihan ganda. Teknik analisis data yang digunakan adalah deskriptif kuantitatif, kualitatif, dan analisis statistik inferensial. Hasil penelitian pengembangan ini berupa (1) hasil uji rancang bangun media e-komik ini berupa media digital yang berisikan materi pelajaran, gambar dan musik latar yang berbasis *discovery learning* dan digambarkan dengan *flowchart* dan *storyboard*, (2) kelayakan media e-komik berbasis *discovery learning* ditunjukkan hasil dari uji ahli isi mata pelajaran sebesar 90,38% (sangat baik), uji ahli desain instruksional sebesar 90,62% (sangat baik), uji ahli media pembelajaran sebesar 92,5% (sangat baik), uji coba perorangan sebesar 92,35% (sangat baik), dan uji coba kelompok kecil sebesar 91,89% (sangat baik), serta (3) hasil uji efektivitas media e-komik berbasis *discovery learning* yang berdasarkan pada hasil uji-t satu sampel diperoleh nilai t_{hitung} sebesar 1,722 dan t_{tabel} berdasarkan taraf signifikansi 5% dengan $dk - (n - 1) = 22 - 1 = 21$ sebesar 1,721. Hasil tersebut menunjukkan bahwa $t_{hitung} > t_{tabel}$ ($1,722 > 1,721$), sehingga H_0 ditolak dan H_1 diterima. Maka dapat disimpulkan bahwa media e-komik berbasis *discovery learning* layak dan efektif digunakan pada materi pecahan muatan matematika siswa kelas IV SD Negeri 1 Ulakan.

Kata Kunci: Pengembangan, e-komik, *Discovery Learning*, Matematika, Pecahan.

**DEVELOPMENT OF DISCOVERY LEARNING-BASED E-COMIC MEDIA
IN MATHEMATICS SUBJECT ON FRACTION MATERIAL FOR FOURTH
GRADE STUDENTS OF SD NEGERI 1 ULAKAN**

By

Luh Deary Keistal Dewi, NIM 2111031375

Program Studi Pendidikan Guru Sekolah Dasar

ABSTRACT

This study aims to: (1) describe the design of a discovery learning-based e-comic, (2) determine the feasibility of the discovery learning-based e-comic, and (3) examine the effectiveness of the discovery learning-based e-comic on fraction material. This is a development research using the ADDIE development model, which consists of five stages: analysis, design, development, implementation, and evaluation. The subjects of this development research were fourth-grade elementary school students, totaling 22 students. Data collection methods used in this study were interviews, observations, questionnaires, and multiple-choice tests. The data analysis techniques used were descriptive quantitative, qualitative, and inferential statistical analysis. The results of this development research include: (1) the design output of the e-comic media, which is a digital media containing learning materials, images, and background music based on the discovery learning model, represented through a flowchart and storyboard; (2) the feasibility of the discovery learning-based e-comic media, as shown by the results of expert validations: subject matter expert at 90.38% (very good), instructional design expert at 90.62% (very good), learning media expert at 92.5% (very good), individual trial at 92.35% (very good), and small group trial at 91.89% (very good); and (3) the effectiveness of the discovery learning-based e-comic media, as evidenced by the results of a one-sample t-test, which yielded a t_{count} value of 1.722 and a t_{table} value of 1.721 at a 5% significance level with degrees of freedom $(n - 1) = 22 - 1 = 21$. Since $t_{\text{count}} > t_{\text{table}}$ ($1.722 > 1.721$), H_0 is rejected and H_1 is accepted. Therefore, it can be concluded that the discovery learning-based e-comic media is feasible and effective for use in teaching fraction material in mathematics for fourth-grade students at SD Negeri 1 Ulakan

Keywords: Development, e-comic, Discovery Learning, Mathematics, Fractions