

**PENGEMBANGAN KOMIK DIGITAL BERBASIS PMRI
PADA MATERI KELILING DAN LUAS
BANGUN DATAR SISWA KELAS IV
DI SD NEGERI 5 SUMERTA**

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ABSTRAK

Tujuan penelitian ini adalah (1) mendeskripsikan rancang bangun komik digital berbasis PMRI pada materi keliling dan luas bangun datar, (2) mengetahui kelayakan media komik digital berbasis PMRI pada materi keliling dan luas bangun datar, dan (3) mengetahui efektivitas media komik digital berbasis PMRI pada materi keliling dan luas bangun datar. Penelitian pengembangan ini menggunakan model pengembangan ADDIE (*Analyze, Design, Development, Implementation, Evaluation*). Metode pengumpulan data yang digunakan adalah metode kuesioner dan tes. Teknik analisis data menggunakan teknik analisis deskriptif kuantitatif dan analisis statistik inferensial uji-t. Hasil penelitian pengembangan ini menunjukkan bahwa: (1) media komik digital merupakan media elektronik berbentuk sebuah tautan atau *link* yang dapat mengarahkan ke sebuah buku digital yaitu buku komik digital yang memuat alur cerita tentang permasalahan matematika, sajian materi dan kuis. (2) kelayakan media komik digital berbasis PMRI berdasarkan hasil uji materi pembelajaran memperoleh skor 95,45%, hasil uji desain pembelajaran memperoleh skor 90%, hasil uji media pembelajaran memperoleh skor 93,75%, uji perorangan memperoleh skor 85%, dan uji kelompok kecil memperoleh skor 84,72% dengan keseluruhan persentase skor berada pada kualifikasi sangat baik, serta (3) hasil uji efektivitas produk memperoleh $t_{hitung} = 2,10 > t_{tabel} = 1,70$ pada taraf signifikansi 5% untuk $db = 27$ sehingga H_0 ditolak dan H_1 diterima yaitu H_1 memuat keputusan nilai *post-test* lebih dari KKTP yang menunjukkan bahwa terdapat perubahan signifikan pada hasil belajar siswa setelah penggunaan media komik digital berbasis PMRI. Dengan demikian dapat disimpulkan bahwa produk media komik digital layak dan efektif digunakan dalam pembelajaran khususnya pada mata pelajaran Matematika materi keliling dan luas daerah bangun datar.

Kata Kunci: ADDIE, Komik Digital, PMRI, Matematika, Keliling, Luas

**PMRI-BASED DIGITAL COMIC DEVELOPMENT
ON TRAVELING AND WIDE MATERIALS
FLAT BUILDING FOR GRADE IV STUDENTS
AT SD NEGERI 5 SUMERTA**

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ABSTRACT

The objectives of this study are (1) to describe the design of PMRI-based digital comics on circumferential materials and flat building area, (2) to determine the feasibility of PMRI-based digital comic media on circumferential materials and flat building area, and (3) to determine the effectiveness of PMRI-based digital comic media on mobile materials and flat building area. This development research uses the ADDIE (Analyze, Design, Development, Implementation, Evaluation) development model. The data collection methods used are questionnaire and test methods. The data analysis technique uses quantitative descriptive analysis techniques and t-test inferential statistical analysis. The results of this development research show that: (1) digital comic media is an electronic media in the form of a link or link that can lead to a digital book, namely a digital comic book that contains a storyline about mathematical problems, material presentations and quizzes. (2) the feasibility of PMRI-based digital comic media based on the results of the learning material test obtained a score of 95.45%, the results of the learning design test obtained a score of 90%, the results of the learning media test obtained a score of 93.75%, the individual test obtained a score of 85%, and the small group test obtained a score of 84.72% with the overall percentage of scores being at very good qualifications, and (3) the results of the product effectiveness test obtained $t\text{-count} = 2.10 > t\text{-table} = 1.70$ at a significance level of 5% for $db = 27$ so that H_0 was rejected and H_1 was accepted, namely H_1 contained a post-test score decision more than $KKTP$ which showed that there was a significant change in student learning outcomes after the use of PMRI-based digital comic media. Thus, it can be concluded that digital comic media products are feasible and effective to be used in learning, especially in Mathematics subjects, circumferential materials, and flat building area.

Keywords: ADDIE, Digital Comics, PMRI, Mathematics, Traveling, Spacious