

**PENGEMBANGAN MEDIA *POP-UP BOOK* DIGITAL DALAM  
PEMBELAJARAN BERBASIS METAKOGNITIF UNTUK  
MENINGKATKAN KEMANDIRIAN DAN MENTAL SET BELAJAR  
SISWA KELAS IV SD MUATAN IPAS MATERI FOTOSINTESIS**

Oleh

**Katarina Ni Made Sonia Putri Wulandari**

**Program Studi Pendidikan Guru Sekolah Dasar**

**Jurusan Pendidikan Dasar**

**ABSTRAK**

Penelitian ini bertujuan untuk mengembangkan media pembelajaran berupa *Pop-Up Book* digital berbasis pembelajaran metakognitif yang valid, praktis, dan efektif untuk meningkatkan kemandirian serta mental set belajar siswa kelas IV SD. Penelitian pengembangan ini menggunakan model ADDIE, yang terdiri atas lima tahap utama: (1) analisis, (2) perancangan, (3) pengembangan, (4) penerapan, dan (5) evaluasi. Subjek penelitian ini adalah media *Pop-Up Book* digital berbasis pembelajaran metakognitif, sedangkan objeknya mencakup aspek validitas, kepraktisan, dan efektivitas dari produk yang dihasilkan. Pengumpulan data dilakukan melalui instrumen berupa angket atau kuisioner. Hasil penelitian menunjukkan bahwa: (1) produk yang dikembangkan memiliki validitas tinggi dengan nilai rata-rata untuk aspek media sebesar 0,95 dan aspek materi 0,95 yang mengindikasikan produk sangat layak digunakan; (2) kepraktisan media berdasarkan respon siswa mendapatkan skor rata-rata 90%, yang termasuk dalam kategori sangat baik; (3) hasil uji-t berkolerasi menunjukkan nilai signifikansi (2-tailed) sebesar 0,001 atau  $p < 0,05$ , yang berarti bahwa *Pop-Up Book* digital berbasis pembelajaran metakognitif pada materi fotosintesis efektif dalam meningkatkan kemandirian belajar dan mental set belajar siswa kelas IV SD. Berdasarkan hasil penelitian, rekomendasi diberikan untuk meningkatkan kualitas media pembelajaran dengan memperkuat integrasi teknologi secara mendalam, merancang desain yang lebih interaktif dan ramah anak, serta mengembangkan aktivitas pembelajaran yang dapat mendorong siswa untuk lebih mandiri sekaligus mengasah kemampuan mental set belajar mereka.

**Kata kunci:** *Pop-Up Book* Digital, Metakognitif, Kemandirian Belajar, Mental Set, Model ADDIE.

**DEVELOPMENT OF DIGITAL POP-UP BOOK MEDIA IN  
METACOGNITIVE-BASED LEARNING TO IMPROVE INDEPENDENCE  
AND LEARNING MENTAL SET OF GRADE IV ELEMENTARY SCHOOL  
STUDENTS IN SCIENCE CONTENT PHOTOSYNTHESIS MATERIAL**

**By**

**Katarina Ni Made Sonia Putri Wulandari**

**Primary School Teacher Education Study Program**

**Elementary Education Department**

**ABSTRACT**

*This study aims to develop learning media in the form of digital Pop-Up Books based on metacognitive learning that is valid, practical, and effective to improve independence and learning mental sets of grade IV elementary school students. This development research uses the ADDIE model, which consists of five main stages: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. The subject of this study is digital Pop-Up Book media based on metacognitive learning, while the objects include aspects of validity, practicality, and effectiveness of the resulting product. Data collection was carried out using an instrument in the form of a questionnaire. The results of the study showed that: (1) the product developed has high validity with an average value for the media aspect of 0.95 and the material aspect of 0.95, indicating that the product is very feasible to use; (2) the practicality of the media based on student responses got an average score of 90%, which is included in the very good category; (3) the results of the correlated t-test showed a significance value (2-tailed) of 0.001 or  $p < 0.05$ , which means that the digital Pop-Up Book based on metacognitive learning on photosynthesis material is effective in improving learning independence and mental set learning of grade IV elementary school students. Based on the results of the study, recommendations are given to improve the quality of learning media by strengthening in-depth technology integration, designing more interactive and child-friendly designs, and developing learning activities that can encourage students to be more independent while honing their mental set learning abilities.*

**Keywords:** *Digital Pop-Up Book, Metacognitive, Learning Independence, Mental Set, ADDIE Model.*