

ABSTRAK

Euis Sinta Ajahra (2022). Pengembangan Media *Pop-Up Book* Berbasis Pendekatan Investigasi Untuk Meningkatkan Kemampuan Komunikasi Matematis Siswa SMP.

Siswa SMP kesulitan dalam memahami konsep matematika yang abstrak dan membutuhkan dukungan visualisasi dalam pembelajaran. Media *pop-up book* berbasis pendekatan investigasi dikembangkan dengan prinsip dapat memvisualisasikan materi matematika. Tujuan penelitian ini yaitu Untuk mengetahui: (1) bagaimana proses pengembangan media *pop-up book* berbasis pendekatan investigasi; (2) validitas dari media *pop-up book* berbasis pendekatan investigasi; (3) praktikabilitas dari media *pop-up book* berbasis pendekatan investigasi; (4) efektivitas dari media *pop-up book* berbasis pendekatan investigasi; (5) apakah terdapat peningkatan kemampuan komunikasi matematis siswa SMP sebelum dan sesudah menggunakan *pop-up book*. Metode penelitian yang digunakan adalah R&D dengan model 4D (*define, design, develop, disseminate*) yang dilakukan di SMPN 1 Kadipaten. Hasil penelitian menunjukkan validitas media sangat valid pada aspek media oleh ahli media dan aspek materi pada kategori valid oleh ahli materi. Praktikabilitas media mendapatkan kategori sangat praktis. Efektivitas media mendapatkan hasil sangat efektif dengan kategori tinggi. Terdapat peningkatan kemampuan komunikasi matematis siswa SMP dengan kategori tinggi.

Kata kunci : Pengembangan media, *pop-up book*, kemampuan komunikasi matematis , 4D.

ABSTRACT

Euis Sinta Ajahra (2022). Pengembangan Media *Pop-Up Book* Berbasis Pendekatan Investigasi Untuk Meningkatkan Kemampuan Komunikasi Matematis Siswa SMP.

Junior high school students have difficulty understanding abstract mathematical concepts and need visualization support in learning. Pop-up book media based on an investigative approach was developed with the principle of being able to visualize mathematical material. The purpose of this study is to find out: (1) how is the process of developing pop-up book media based on an investigative approach; (2) the validity of the pop-up book media based on an investigative approach; (3) the practicability of the pop-up book media based on an investigative approach; (4) the effectiveness of the pop-up book media based on an investigative approach; (5) whether there is an increase in the mathematical communication skills of junior high school students before and after using the pop-up book. The research method used is R&D with a 4D model (define, design, develop, disseminate) conducted at SMPN 1 Kadipaten. The results showed that the validity of the media was very valid in the media aspect by media experts and the material aspects in the valid category by material experts. Media practicability is categorized as very practical. The effectiveness of the media get very effective results with a high category. There is an increase in the mathematical communication skills of junior high school students in the high category.

Keywords: *Media development, pop-up book, mathematical communication skills, 4D.*

