

**PENGEMBANGAN MEDIA PEMBELAJARAN MATEMATIKA
BERBASIS *GAME* EDUKASI PADA POKOK BAHASAN BILANGAN
BULAT UNTUK SISWA KELAS VII**

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ABSTRAK

Dalam penelitian ini sudah dikembangkan media pembelajaran matematika berbasis *game* edukasi pada pokok bahasan bilangan bulat. *Game* edukasi yang dikembangkan bernama “Operasi Matematika - Robot dan Boneka”, dirancang untuk pemain tunggal agar pemain dapat menemukan dan memahami mengenai operasi bilangan bulat dengan bantuan beberapa karakter sebagai simbol dan petunjuk permainan untuk mengarahkan pemain menuju konsep. Tujuan dari pengembangan media adalah mengetahui rancang bangun, implementasi, dan kevalidan dari media pembelajaran matematika berbasis *game* edukasi pada pokok bahasan bilangan bulat. Pengembangan menggunakan aplikasi *Construct 2* dengan model 4D (*define, design, develop, dan disseminate*), tetapi dalam penelitian hanya sampai pada tahap ketiga yaitu *develop* karena keterbatasan keadaan, biaya, tenaga, dan waktu. Pengujian terhadap produk difokuskan hanya pada validitas saja yang dilakukan oleh ahli media dan ahli materi. Analisis terhadap hasil pengujian dilakukan secara deskriptif kualitatif. Hasil analisis menunjukkan rata rata skor kevalidan media pembelajaran dari ahli media sebesar 4,17 dan ahli materi sebesar 4,5 dengan kriteria sangat valid. Dengan memenuhi kriteria valid, media pembelajaran berbasis *game* edukasi layak untuk dilanjutkan ke tahap uji kepraktisan dan keefektifan dari media yang dikembangkan.

Kata kunci: Media Pembelajaran Matematika, *Game* Edukasi, Bilangan Bulat.

**DEVELOPMENT OF MATHEMATICS LEARNING MEDIA BASED ON
EDUCATION GAME IN THE SUBJECT OF THE ROUND NUMBERS FOR
CLASS VII STUDENTS**

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ABSTRACT

This research has developed a media for learning mathematics based on educational games on the subject of integers. The educational game developed called "Mathematical Operations - Robots and Dolls" designed for single players so that players can find and understand integer operations with the help of several characters as symbols and game instructions to direct players towards concepts. The purpose of media development is to know the design, the implementation, and the validity of educational media based on educational games on the subject of integers. The development of the media was used the Construct 2 application with the 4D model (define, design, develop, and disseminate). Due to limited circumstances, costs, energy, and time, this research only reaches the third stage. The testing of products focused only on validity which is carried out by media experts and material experts. The analysis of the test results was carried out in a descriptive qualitative method. The results showed that the average score of learning media validity from media experts was 4.17 and material experts was 4.5 with very valid criteria. Through fulfilling valid criteria, learning media based on educational games are feasible to proceed to the practicality and the effectiveness test stage of the developed media.

Keywords: *Mathematics Learning Media, Educational Games, Integers.*