

# PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS SERIOUS GAME UNTUK MATERI SATUAN PANJANG SISWA KELAS 3 SD

Oleh

I Putu Kevin Kencana Putra, NIM 1713011030  
Jurusan Matematika

## ABSTRAK

Penelitian ini dilatar belakangi karena kurangnya pemanfaatan media pembelajaran, khususnya dalam pembelajaran matematika pada jenjang sekolah dasar. Penelitian pengembangan ini memiliki tujuan untuk memperoleh media pembelajaran berbasis *Serious game* yang berguna untuk guru dan siswa. Judul dari *Serious game* yang dikembangkan adalah "*Fruit Math*". *Fruit Math* memiliki peran selaku media pembelajaran pada materi satuan panjang untuk peserta didik kelas III SD. Dalam proses pengembangannya, menerapkan 3 dari 4 langkah – langkah pada 4D model yakni *define*, *design*, serta *development*. *Serious game* yang dikembangkan memiliki tiga level dengan tantangan yang berbeda. Peneliti melakukan uji coba terbatas kepada 10 peserta didik kelas III di SD N 5 Singapadu Kaler guna mengetahui tingkat validitas, kepraktisan serta efektifitas dari *serious game* yang dikembangkan. Data validitas peneliti peroleh dari angket penilaian oleh ahli perangkat pembelajaran serta ahli materi. Data kepraktisan peneliti peroleh dari angket respon peserta didik serta angket respon guru. Data keefektifan peneliti peroleh dari hasil tes siswa sesudah penggunaan *serious game* yang dikembangkan. Hasil rata – rata uji coba validitas, kepraktisan serta keefektifan media yang diperoleh secara berturut – turut adalah 2,65 dengan kriteria valid, 4,67 dengan kriteria layak dan sesuai dengan kriteria efektif dikarenakan ketuntasan klasikal siswa hingga 90% serta lebih dari ketuntasan minimal yang sudah ditetapkan yakni 75%. Maka, media pembelajaran *serious game* "*Fruit Math*" sesuai dengan kriteria selaku media pembelajaran yang baik.

**Kata kunci:** *Media Pembelajaran, Serious game, Satuan Panjang*

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# **DEVELOPMENT OF SERIOUS GAME-BASED LEARNING MEDIA FOR 3RD GRADE STUDENTS' UNIT OF LENGTH MATERIAL**

**Oleh**

**I Putu Kevin Kencana Putra, NIM 1713011030  
Jurusan Matematika**

## **ABSTRACT**

*This research is motivated by the lack of use of learning media, especially in learning mathematics at the elementary school level. The purpose of this development research is to obtain a Serious Game-based learning media that is useful for teachers and students. The title of the developed Serious Game is "Fruit Math". Fruit Math acts as a learning media in unit-length material for third-grade students of elementary school. In developing this serious game, three of the four steps of the 4D model were applied, namely, define, design, and development. The developed Serious Game consists of three levels with different challenges. The researcher conducted a limited trial on ten third-grade students at SD Negeri 5 Singapadu Kaler to determine the developed serious games' level of validity, practicality, and effectiveness. The validity data was obtained from an assessment questionnaire by learning device experts and material experts. The practicality data were obtained from students' and teachers' responses to the questionnaires. The effectiveness data were obtained from the results of student tests after using the developed serious games. The average results of the media's validity, practicality, and effectiveness were 2.65 with valid criteria, 4.67 with proper criteria and meet the effective criteria because students' classical mastery reached 90% and was more than the minimum criteria of mastery that has been met, which is 75%. These results show that the serious game learning media "Fruit Math" meets the criteria as a good learning media.*

**Keywords:** *Learning Media, Serious Game, Unit-length Math*

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