

ABSTRAK

Afrianti, Loranza. 2024. *Pengembangan Film 3D Ethnomathematics Animation Konteks Budaya Jambi Berbasis TPACK untuk Meningkatkan Kemampuan Pemecahan Masalah Siswa*. Tesis, Jurusan Magister Pendidikan Matematika, Pascasarjana Universitas Jambi, Pembimbing (I) Dr. Dra. Mujahidawati, M.Si. (II) Dr. Ilham Falani, S.Pd., M.Si.

Kata Kunci : Budaya Jambi; film 3D *ethnomathematics animation*; kemampuan pemecahan masalah; TPACK

Penelitian ini dilatarbelakangi rendahnya kemampuan pemecahan masalah siswa SMP Negeri 22 Kota Jambi berdasarkan hasil wawancara dengan guru mata pelajaran dan berdasarkan tes awal yang dipilih siswa secara acak. Tujuan penelitian ini adalah untuk mengetahui proses pengembangan media pembelajaran film 3D *ethnomathematics animation* dan untuk mengetahui kelayakan film animasi 3D *ethnomathematics animation* konteks Budaya Jambi dalam meningkatkan kemampuan pemecahan masalah siswa ditinjau dari kevalidan, kepraktisan dan keefektivan. Jenis penelitian yang dilakukan adalah penelitian pengembangan ADDIE yang terdapat lima tahapan pengembangan yaitu analisis, perancangan, pengembangan, implementasi dan evaluasi. Subjek penelitian ini adalah siswa kelas VII I SMP Negeri 22 Kota Jambi. Hasil penelitian menunjukkan bahwa desain Film 3D *ethnomathematics animation* dari tingkat kevalidan dari aspek materi 92% (Sangat Valid), tingkat kevalidan dari aspek desain 85% (Cukup Valid), tingkat kepraktisan oleh guru 91% (Sangat Praktis) dan tingkat kepraktisan kelompok kecil 90% (Sangat Praktis) dan keefektifan untuk tes kemampuan pemecahan masalah siswa dari pemberian *pretest* sebesar 54,01% dan terjadinya peningkatan pada saat pemberian *posttest* sebesar 70,03% dengan nilai N-Gain 0,3598 dengan kriteria sedang. Sehingga dapat diketahui bahwa film animasi 3D *ethnomathematics animation* layak digunakan sebagai sumber belajar yang dapat meningkatkan kemampuan pemecahan masalah siswa.

ABSTRACT

Afrianti, Loranza. 2024. *Development of TPACK-Based Jambi Cultural Context 3D Ethnomathematics Animation Film to Improve Students' Problem Solving Skills*. Thesis, Department of Master of Mathematics Education, Postgraduate Jambi University, Supervisor (I) Dr. Dra. Mujahidawati, M.Si. (II) Dr. Ilham Falani, S.Pd., M.Si.

Keywords: Jambi Culture; 3D ethnomathematics animation film; problem-solving abilities; TPACK

This research was motivated by the low problem-solving ability of students of SMP Negeri 22 Jambi City based on the results of interviews with subject teachers and based on initial observations chosen by students randomly. The purpose of this study is to determine the process of developing 3D ethnomathematics animation film learning media and to determine the feasibility of 3D ethnomathematics animation animation films in the context of Jambi Culture in improving students' problem-solving abilities in terms of validity, practicality and effectiveness. The type of research carried out is ADDIE development research which has five stages of development, namely analysis, design, development, implementation and evaluation. The subject of this study was a grade VII I student of SMP Negeri 22 Jambi City. The results showed that the design of 3D ethnomathematics animation film from the level of validity of the material aspect was 92% (Very Valid), the level of validity of the design aspect was 85% (Quite Valid), the level of practicality by teachers was 91% (Very Practical) and the level of practicality of small groups was 90% (Very Practical) and the effectiveness for the problem-solving abilities test from pretest administration was 54.01% and there was an increase in posttest administration of 70.03% with an N-Gain value of 0.3598 with criteria keep. So it can be known that 3D ethnomathematics animation films are suitable to be used as learning resources that can improve students' problem-solving abilities.