

## **ABSTRACT**

*This study aims was to produce Problem Based Learning (PBL) learning video media on algebra material that is valid, practical, and has a potential effect on student learning outcomes. The type of research used Research and Development (R&D). Tessmer's development research method focused on two stages, namely the preliminary stage and the prototyping stage using a formative evaluation flow consisting of self evaluation, expert review, one-to-one, small group, and field test stages. Data collection techniques used validation sheets, questionnaires, interviews, and tests. The subjects in this study were VII.10 grade students of SMPN 13 Palembang. The research results from the validation of media, material, and technical quality aspects show that Problem Based Learning (PBL) video media for mathematics learning in algebra material was declared valid. In the one-to-one stage, students who were used as research subjects gave very good responses to the media used. At the small group stage with practical categories. The potential effect was based on the results of the student post test at the field test stage with a percentage of 87%. Based on the results of the study it can be concluded that the video media for mathematics learning based on Problem Based Learning (PBL) on algebra material was stated to be valid, practical, and had a potential effect on student learning outcomes.*

**Keywords:** *Development, Learning Video Media, Problem Based Learning.*

## ABSTRAK

Penelitian ini bertujuan untuk menghasilkan media video pembelajaran matematika berbasis *Problem Based Learning* (PBL) pada materi aljabar yang valid, praktis, dan mempunyai efek potensial terhadap hasil belajar siswa. Jenis penelitian yang digunakan adalah *Research and Development* (R&D). Metode penelitian pengembangan dari Tessmer yang difokuskan pada dua tahapan yaitu tahap *preliminary* dan tahap *prototyping* menggunakan alur *formative evaluation* yang terdiri dari tahap *self evaluation*, *expert review*, *one-to-one*, *small group*, dan *field test*. Teknik pengumpulan data yang digunakan adalah lembar validasi, angket, wawancara, dan tes. Subjek dalam penelitian ini adalah peserta didik SMPN 13 Palembang kelas VII.10. Hasil penelitian dari validasi aspek media, materi, dan kualitas teknis menunjukkan bahwa media video pembelajaran matematika berbasis *Problem Based Learning* (PBL) pada materi aljabar dinyatakan valid. Pada tahap *one-to-one*, siswa yang dijadikan subjek penelitian memberikan respon sangat baik terhadap media yang digunakan. Pada tahap *small group* dengan kategori praktis. Efek potensial berdasarkan hasil *post test* siswa pada tahap *field test* dengan persentase sebesar 87%. Berdasarkan hasil penelitian dapat disimpulkan bahwa media video pembelajaran matematika berbasis *Problem Based Learning* (PBL) pada materi aljabar dinyatakan valid, praktis, dan memiliki efek potensial terhadap hasil belajar siswa.

**Kata Kunci:** Media Video Pembelajaran, Pengembangan, *Problem Based Learning*.