

## ABSTRAK

Penelitian pengembangan multimedia interaktif berbasis Problem Based Learning (PBL) pada materi Sistem Persamaan dan Pertidaksamaan Nilai Mutlak Satu Variabel dilakukan di SMA Muhammadiyah 2 Metro kelas X. Masalah yang ada terdapat penggunaan bahan ajar yang belum maksimal karena masih menggunakan buku cetak. Tujuan penelitian pengembangan interaktif yaitu untuk menghasilkan produk yang "layak dan praktis" digunakan sebagai media pembelajaran peserta didik. Metode pengembangan yang digunakan adalah model *Four D Model* atau 4-D yang terdiri dari *Define, Design, Development, dan Disseminate*. Dari hasil validasi diperoleh rata-rata persentase oleh ahli materi sebesar 91,5% dengan interpretasi "sangat layak" dan ahli media diperoleh rata-rata persentase sebesar 85% dengan interpretasi "sangat sayak". Selanjutnya pada uji coba kelompok kecil dilakukan oleh 7 peserta didik kelas X IPA. 1 diperoleh rata-rata persentase sebesar 90% dengan interpretasi "sangat praktis". Berdasarkan hasil penelitian yang didapatkan multimedia interaktif berbasis *Problem Based Learning* (PBL) merupakan bahan ajar yang dikembangkan memenuhi kriteria sangat layak dan sangat praktis untuk digunakan, selain itu dapat mempermudah peserta didik dalam memahami materi dan membantu ketercapaian tujuan pembelajaran.

**Kata kunci:** multimedia interaktif, nilai mutlak, pengembangan, PBL

## ABSTRACT

*Research on the development of interactive multimedia based on Problem Based Learning (PBL) on the System of Equation and Inequality of One Variable Absolute Value was carried out at SMA Muhammadiyah 2 Metro class X. The problem is that the use of teaching materials is not optimal because it is still using printed books. The purpose of interactive development research is to produce a product that is "appropriate and practical" to be used as a learning medium for students. The development method used is the Four D Model or 4-D model consisting of Define, Design, Development, and Disseminate. From the validation results obtained an average percentage by material experts of 91.5% with the interpretation of "very feasible" and media experts obtained an average percentage of 85% with the interpretation of "very poor". Furthermore, in a small group trial conducted by 7 students class X IPA 1, the average percentage was 90% with the interpretation of "very practical". Based on the results of the study, it was found that interactive multimedia based on Problem Based Learning (PBL) is a teaching material developed that meets the criteria of being very feasible and very practical to use, besides that it can make it easier for students to understand the material and help achieve learning objectives.*

**Keywords:** interactive multimedia, absolute value, development, PBL