

ABSTRAK

Sandy Yudha. Inovasi Multimedia Interaktif Berbasis Android Pada Materi Kimia Semester Ganjil Kelas X SMA/MA. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan. 2022

Penelitian ini bertujuan untuk mengembangkan multimedia interaktif berbasis android untuk meningkatkan hasil belajar dan memotivasi peserta didik, melihat hubungan motivasi dan hasil belajar peserta didik, serta memperoleh data respon peserta didik terhadap penerapan multimedia interaktif berbasis android dalam pembelajaran kimia. Penelitian ini merupakan penelitian pengembangan (R&D). Mengacu pada model ADDIE (*Analyst, Design, Development, Implementation, Evaluation*). Subjek penelitian ini sejumlah satu kelas terdiri dari 34 orang peserta didik yang dilakukan secara *purposive sampling*. Instrumen penelitian berupa angket wawancara, angket kelayakan berdasarkan BSNP dan angket motivasi belajar serta tes hasil belajar. Teknik analisis yang digunakan adalah teknik analisis data deskriptif dan statistik inferensial yaitu uji t (*one sample t-test*) serta uji korelasi. Hasil penelitian diperoleh bahwa multimedia interaktif berbasis android yang dikembangkan telah layak sesuai dengan BSNP dengan perolehan rata-rata kelayakan dari 2 ahli materi sebesar 3.74 (Layak), rata-rata kelayakan ahli media sebesar 3.55 (Layak), dan rata-rata kelayakan dari 2 orang guru sebesar 3.83 (Layak). Hasil uji t diperoleh nilai sig. = 0,000 < 0,05 yang menunjukkan H_0 ditolak, H_a diterima yaitu hasil belajar peserta didik yang diajarkan dengan menggunakan multimedia interaktif berbasis android lebih tinggi dari pada nilai KKM yang ditetapkan disekolah yaitu 75, dengan nilai rata-rata hasil belajar peserta didik sebesar 86,91. Motivasi dan hasil belajar peserta didik memiliki hubungan yang positif dengan kekuatan yang sangat kuat dengan diperoleh nilai *Pearson Correlation* sebesar 0,941 dan koefisien determinasi sebesar 88,5%. Respon peserta didik terhadap penggunaan multimedia interaktif berbasis android ini sangat baik dengan nilai rata-rata persentase 88%.

Kata Kunci: Multimedia Interaktif, Android, Kimia



ABSTRACT

Sandy Yudha. Android-Based Interactive Multimedia Innovation in Odd Semester Chemistry Materials for Class X SMA/MA. Thesis. Medan: Postgraduate Program, State University of Medan. 2022

This study aims to develop interactive multimedia based on Android to improve learning outcomes and motivate students, to see the relationship between motivation and student learning outcomes, and to obtain data on students' responses to the application of Android-based interactive multimedia in chemistry learning. This research is development research (R&D). Referring to the ADDIE model (Analyst, Design, Development, Implementation, Evaluation). The subject of this study was one class consisting of 34 students, which was carried out by purposive sampling. The research instruments were interview questionnaires, feasibility questionnaires based on BSNP, learning motivation questionnaires, and learning achievement tests. The analysis technique used is descriptive data analysis technique and inferential statistics, namely the t-test (one sample t-test) and correlation test. The results showed that the developed Android-based interactive multimedia was feasible according to the BSNP, with an average feasibility of 2 material experts of 3.74 (Eligible), an average media expert eligibility of 3.55 (Eligible), and an average feasibility of 2 teachers of 3.83 (Decent). The results of the t-test obtained $\text{sig.} = 0.000 < 0.05$, which indicates H_0 is rejected, H_a is accepted, that is, the learning outcomes of students taught using interactive multimedia based on Android are higher than the KKM score set at school, namely 75, with an average value of student learning outcomes of 86, 91. Students' motivation and learning outcomes have a positive relationship with very strong strength with a Pearson Correlation value of 0.941 and a coefficient of determination of 88.5%. Student responses to using Android-based interactive multimedia were very good, with an average percentage of 88%.

Keywords: Interactive Multimedia, Android, Chemistry

