

ABSTRAK

ARMAYA SARI. Pengembangan Media Pembelajaran Berbasis Android Menggunakan Aplikasi Tiktok Pada Pembelajaran IPA-Biologi di Masa New Normal. Tesis. Program Pasca Sarjana Universitas Negeri Medan. Juli 2022.

Penelitian ini bertujuan untuk mengetahui tingkat kelayakan media pembelajaran berbasis android menggunakan aplikasi tiktok pada materi IPA-Biologi semester ganjil untuk siswa kelas 8 di SMP Negeri 6 Kota Tebingtinggi menurut ahli desain pembelajaran, ahli media pembelajaran, materi pembelajaran. Mengetahui tingkat kelayakan media pembelajaran berbasis android menggunakan aplikasi tiktok pada materi IPA-Biologi semester ganjil untuk guru dan siswa kelas 8 di SMP Negeri 6 Kota Tebingtinggi menurut guru, jenis penelitian yang digunakan adalah penelitian pengembangan yang sering disebut *Research & Development*. dengan model pengembangan *ADDIE*. Data yang diperoleh merupakan data deskriptif (wawancara) dan kualitatif (angket skala Likert) dan data kuantitatif (soal pilihan berganda). Analisis data di uji dengan normalitas, uji homogenitas, uji *t-test (independent sample t-test)* dan menghitung *n-Gain*. Hasil penelitian menunjukkan bahwa tingkat kelayakan media pembelajaran yang dikembangkan setelah dilakukan validasi dinyatakan valid yaitu nilai dari ahli desain pembelajaran 86,6%, ahli media pembelajaran 87%, dan ahli materi pembelajaran 82,4%. Media yang diujicobakan kepada siswa memiliki kriteria sangat layak yaitu persentase 86,83% sedangkan kelayakan menurut guru sebesar 85,14 % dengan kriteria sangat layak. Nilai rata-rata *pre-test* kelas kontrol berbeda dengan nilai pretest kelas eksperimen namun masih berada pada taraf yang sama berdasarkan uji *t* yang telah dilakukan. Nilai rata-rata *pre-test* pada kelas kontrol yaitu $24,68 \pm 7,787$ (nilai rata-rata \pm standard deviasi), sedangkan nilai rata-rata *pretest* untuk kelas eksperimen yaitu $28,90 \pm 9,392$. Nilai rata-rata *post-test* kelas kontrol berbeda signifikan dengan nilai rata-rata *post-test* kelas eksperimen berdasarkan uji *t* yang telah dilakukan. Nilai rata-rata *post-test* pada kelas kontrol yaitu $52,96 \pm 11,092$, sedangkan nilai rata-rata *post-test* untuk kelas eksperimen yaitu $80,77 \pm 7,688$. Dari hal tersebut dapat diasumsikan bahwa pengembangan media pembelajaran melalui aplikasi tiktok dapat meningkatkan kualitas belajar siswa SMP N 6 Tebing Tinggi pada materi IPA semester ganjil. Uji *N gain* perlu dilakukan untuk melihat tingkat keefektifan dari media pembelajaran yang telah diberikan. Nilai *N gain* dari kedua kelompok perlakuan kelas kontrol 37,416 (tidak efektif) dan kelas eksperimen 72,801 (cukup efektif).

Kata kunci: Media Pembelajaran, Hasil Belajar, Aplikasih Tiktok

ABSTRACT

ARMAYA SARI. Development of Android-Based Learning Media Using Tiktok Applications in Science-Biology Learning in the New Normal Period. Thesis. Medan State University Postgraduate Program. July 2022.

This study aims to determine the feasibility level of android-based learning media using the tiktok application on odd semester science-biology material for 8th grade students at SMP Negeri 6 Tebingtinggi according to learning design experts, learning media experts, and learning materials. Knowing the feasibility level of android-based learning media using the tiktok application on the odd semester science-biology material for teachers and 8th grade students at SMP Negeri 6 Tebingtinggi City according to the teacher, the type of research used is development research which is often called Research & Development. with the ADDIE development model . The data obtained are descriptive data (interviews) and qualitative (Likert scale questionnaire) and quantitative data (multiple choice questions). Data analysis was tested with normality, homogeneity test, t-test (independent sample t-test) and calculating n-Gain. The results showed that the feasibility level of the learning media developed after validation was declared valid, namely the value of learning design experts 86.6%, learning media experts 87%, and learning materials experts 82.4%. The media that was tested on students had very feasible criteria, namely the percentage of 86.83% while the feasibility according to the teacher was 85.14% with very feasible criteria. The mean value of the control class pre-test is different from the experimental class's pretest value but is still at the same level based on the t-test that has been done. The mean value of the pre-test in the control class was 24.68 ± 7.787 (mean value \pm standard deviation), while the mean value of the pretest for the experimental class was 28.90 ± 9.392 . The mean value of the control class post-test was significantly different from the average post-test value of the experimental class based on the t-test that had been carried out. The average post-test score for the control class was 52.96 ± 11.092 , while the post-test average for the experimental class was 80.77 ± 7.688 . From this it can be assumed that the development of learning media through the tiktok application can improve the learning quality of students at SMP N 6 Tebing Tinggi in odd semester science material. N gain test needs to be done to see the level of effectiveness of the learning media that has been given. The N gain value of the two treatment groups was 37.416 (not effective) and experimental class was 72.801 (quite effective).

Keywords: Learning Media, Learning Outcomes, Tiktok Application