

ABSTRAK

Misykah Auliya Al Baits “Pengembangan Komik Digital Berbantuan Webtoon Untuk Meningkatkan Literasi Sains Peserta Didik Pada Materi Fluida Dinamis”

Kurangnya kemampuan peserta didik di Indonesia seperti rendahnya tingkat literasi sains. Penelitian ini bertujuan untuk mengetahui kelayakan, keterlaksanaan pembelajaran, peningkatan literasi sains, dan respon peserta didik terhadap pembelajaran yang berbeda. Pendekatan penelitian ini adalah campuran kuantitatif dan kualitatif dengan metode penelitian R&D model ADDIE. Subjek penelitian ini adalah peserta didik kelas XI MIPA MA Husainiyah Cicalengka. Instrumen penelitian ini meliputi validasi ahli materi dan media. Observasi keterlaksanaan, tes soal literasi sains, dan angket respon peserta didik. Analisis data dilakukan dengan uji validitas Aiken's V, perhitungan nilai observasi, uji *N-Gain*, perhitungan hasil angket, dan uji Wilcoxon. Hasil penelitian menunjukkan bahwa media dinilai layak dengan nilai 0,87 dalam interpretasi “Tinggi”. Keterlaksanaan pembelajaran aktivitas guru bernilai 90,11% dan hasil aktivitas peserta didik mencapai 89,22%. Hasil *N-Gain* memiliki nilai sebesar 0,52 dengan kategori “Sedang”. Hasil uji hipotesis menunjukkan nilai signifikansi 0.000 dimana menjelaskan bahwa terdapat perbedaan kemampuan literasi sains peserta didik antara sebelum dan sesudah diterapkannya perlakuan. Respon peserta didik setelah melakukan pembelajaran dikatakan baik dengan persentase penilaian sebesar 72,70%. Dengan demikian komik digital berbantuan webtoon dikatakan dapat digunakan dalam pembelajaran, dapat meningkatkan literasi sains peserta didik, dan mendapatkan respon baik dari peserta didik.

Kata Kunci: fluida dinamis, komik digital, literasi sains, media interaktif

ABSTRACT

The lack of students' abilities in Indonesia, such as the low level of scientific literacy, is a significant concern. This study aims to determine the feasibility, implementation, improvement of scientific literacy, and students' responses toward different learning approaches. The research employed a mixed-method approach, using the R&D ADDIE model. The subjects of this study were XI MIPA students at MA Husainiyah Cicalengka. The research instruments included expert validation for both material and media, observation of learning implementation, scientific literacy test items, and student response questionnaires. Data analysis was carried out using Aiken's V validity test, observation score calculations, *N-Gain* analysis, questionnaire result calculations, and the Wilcoxon test. The results showed that the media was deemed feasible with a score of 0.87, interpreted as "High". The implementation of learning activities for teachers reached 90.11%, while student activities achieved 89.22%. The *N-Gain* score was 0.52, categorized as "Moderate." The hypothesis test results showed a significance value of 0.000, indicating that there was a difference in students' scientific literacy abilities before and after the treatment was applied. Students' responses to the learning process were considered good, with an assessment percentage of 72.70%. Thus, the digital comics supported by Webtoon are considered suitable for use in learning, can improve students' scientific literacy, and receive positive responses from students.

Keywords: dynamic fluid, digital comics, scientific literacy, interactive media

