ABSTRAK

Zahwa Hasanah, NIM 4161121027 (2021). Pengembangan *E-learning* Berbasis *Moodle* pada Materi Pokok Fluida Dinamis Kelas XI SMA.

Penelitian ini bertujuan untuk mengembangakan *e-learning* berbasis *moodle* pada materi pokok fluida dinamis serta menguji kelayakan *e-learning* yang dihasilkan melaui validasis ahli, uji coba lapangan dan uji keefektifan. Penelitian ini termasuk jenis penelitian *research and development* (R&D), menggunakan model *Borg and Gall*. Hasil validasi oleh ahli media menunjukkan bahwa (1) aspek panduan dan informasi *e-learning* dinilai layak dengan rata-rata 4; (2) aspek kinerja program dinilai sangat layak dengan rata-rata 4,2; (3) aspek sistematika/estetika dan prinsip reka bentuk dinilai layak dengan rata-rata 4. Hasil validasi ahli materi menunjukkan bahwa; (1) aspek panduan dan informasi dari *e-learning* dinilai sangat layak dengan rata-rata 4,75; (2) aspek konten/materi multimedia dinilai sangat layak dengan rata-rata 4,5 dan (3) aspek evaluasi dinilai sangat layak dengan rata-rata 4,5. Hasil respon guru fisika SMA Negeri 1 Air Putih yaitu sangat baik dengan rata-rata 4,3. Berdasarkan hasil uji lapangan pada kelompok kecil, *e-learning* yang dikembangakan mendapat respon sangat baik dengan rata-rata 4,18. Hasil uji lapangan pada kelompok besar, *e-learning* berbasis *moodle* yang dikembangkan mendapat respon sangat baik dengan rata-rata 4,2. Tingkat keefektifan *e-learning* berbasis *moodle* berdasarkan perhitungan menggunakan rumus *N-gain* memperoleh 0,72 dengan kategori sangat baik. Dengan demikian *e-learning* berbasis *moodle* pada materi pokok fluida dinamis kelas XI SMA memenuhi kriteria kelayakan media pembelajaran.

Kata Kunci *:* *E-learning, Moodle, Fluida Dinamis*

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ABSTRACT

Zahwa Hasanah, Nim 4161121027 (2021). E-Learning Development Based on Moodle on The Subject Matter of Dynamic Fluid For Class XI High School.

This study aims to develop e-learning based on moodle on dynamic fluid as well as to test the feasibility of the resulting e-learning through expert validation, field trials and effectiveness tests. This research is a type of research and development (R&D) research, using the Borg and Gall model. The results of validation by media experts show that (1) aspects of e-learning guidance and information are considered feasible with an average of 4; (2) the aspect of program performance is considered very decent with an average of 4.2; (3) the systematic/aesthetic aspects and design principles are considered feasible with an average of 4. The results of the material expert validation show that; (1) the guidance and information aspects of e-learning are considered very feasible with an average of 4.75; (2) the aspect of multimedia content/material is considered very feasible with an average of 4.5 and (3) the evaluation aspect is considered very feasible with an average of 4.5. The results of the physics teacher's response at SMA Negeri 1 Air Putih were very good with an average of 4.3. Based on the results of field tests in small groups, the developed e-learning received a very good response with an average of 4.18. The results of the field test in large groups, the Moodle-based e-learning developed received a very good response with an average of 4.2. The effectiveness level of moodle-based e-learning based on calculations using the N-gain formula obtained 0.72 with a very good category. Thus, e-learning based on moodle on the subject matter of dynamic fluid class XI SMA meets the eligibility criteria for learning media.

Key words: E-learning, Moodle, Dynamic Fluids

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