

ABSTRAK

Zulfahri Simanullang, NIM 4161121028 (2021). Pengembangan *E-Learning* Berbasis *Moodle* Pada Materi Usaha Dan Energi Kelas XI Di Madrasah Aliyah Negeri 1 Tapanuli Tengah .

Penelitian ini merupakan penelitian pengembangan yang bertujuan untuk mengembangkan dan merancang media pembelajaran *E-learning* berbasis *moodle*. Jenis penelitian ini adalah R&D (*research and development*) dengan model pengembangan Borg and Gall dengan 7 langkah yaitu studi pendahuluan (*research and information collection*), perancangan (*planning*), pengembangan produk (*develop preliminary from of productt*), uji coba lapangan awal (*preliminary field testing*), revisi hasil uji coba (*main product revision*), uji lapangan produk utama (*main field testing*), dan uji coba lapangan skala luas (*operational field testing*). Sampel pengujian media ini adalah siswa kelas XI IPA 1 Madrasah Aliyah Negeri 1 Tapanuli Tengah. Instrumen yang digunakan dalam penelitian ini adalah angket untuk analisis kebutuhan, angket respon siswa dan guru. Instrumen validasi ahli materi, ahli media dan tes hasil belajar. Hasil validasi dari ahli media terhadap media pembelajaran berbasis *moodle* memiliki presentase 83,34% dengan kriteria sangat baik. Hasil validasi dari ahli materi terhadap materi dalam pembelajaran berbasis *moodle* pada materi usaha dan energi memiliki presentase 87,12% dengan kriteria sangat baik. Hasil respon guru terhadap media pembelajaran *e-learning* berbasis *moodle* memiliki presentase 92,88% dengan kriteria sangat baik. Hasil uji coba skala kecil memiliki presentase 85,07% dengan kriteria sangat baik. Hasil uji lapangan skala besar memiliki 86,88% dengan kriteria sangat baik. Berdasarkan hasil penelitian pengembangan *e-learning* berbasis *moodle* pada materi usaha dan energi memenuhi kriteria kelayakan media pembelajaran. Tingkat keefektifan *e-learning* berbasis *moodle* berdasarkan perhitungan menggunakan rumus N-gain memperoleh 0,62 dengan kategori baik, dengan demikian *e-learning* berbasis *moodle* pada materi usaha dan energi kelas XI di madrasah aliyah negeri 1 tapanuli tengah memenuhi kriteria kelayakan media pembelajaran.

Kata Kunci : Media pembelajaran, Moodle, Penelitian R&D

ABSTRACT

Zulfahri Simanullang, NIM 4161121028 (2021). Developing E-Learning Based on Moodle in Business and Energy Materials for the Eleventh Grades at Madrasah Aliyah Negeri 1 Tapanuli Tengah.

The objective of this study was to develop and design learning media that was E-Learning Based on Moodle that fulfill the feasibility level of learning media in business and energy materials for the eleventh grade. This study was conducted by using Research and Development design with a Borg and Gall development model with 7 steps, there are research and information collection, planning, develop preliminary from of product, preliminary field testing, main product revision, main field testing, and wide-scale field trials / feasibility tests (*operational field testing*). The sample of the study was to try this media was students of class XI IPA 1 Madrasah Aliyah Negeri 1 Tapanuli Tengah. The instruments was used in this study were questionnaire for needs analysis, questionnaire for students and teacher responses. The instruments validation of experts materials, a learning media expert and the result of test. The data were gathered by conducting analysis questionnaire, validation of student responses. The results of validation toward design learning media E-Learning Based on Moodle in business and energy materials have a percentage of 83.34% with very good criteria. The results of validation from experts toward materials in learning based on Moodle in business and energy materials had a percentage of 87.12% with very good criteria. The results of the teacher's response toward design learning media E-Learning Based on Moodle to had a percentage of 92.88% with very good criteria. The results of small-scale trials have a percentage of 85.07% with very good criteria. Large scale field test results have 86.88% with very good criteria. Based on the results of the study is about developing e-learning based on moodle in business and energy materials, it fulfills the eligibility criteria for learning media. The level of effectiveness of developing e-learning based on moodle conduct on calculations using the N-gain formula obtained 0.62 with a good category, Thus E-learning based on moodle in business and energy materials for the eleventh grades at madrasah aliyah negeri 1 tapanuli tengah fulfill the eligibility criteria for learning media

Keywords: Learning media, Moodle, R&D research