

ABSTRAK

Nisa Nisriana Nurfa. 2021. **PENGEMBANGAN MEDIA PEMBELAJARAN *LEARNING MANAGEMENT SYSTEM (LMS)* BERBASIS *MOODLE* SEBAGAI DAYA DUKUNG PEMBELAJARAN FISIKA PADA MATERI MOMENTUM DAN IMPULS**

Media pembelajaran *Learning Management System (LMS)* berbasis *Moodle* dikembangkan untuk mendukung pembelajaran fisika pada materi momentum dan impuls. Tujuan penelitian ini adalah menghasilkan media pembelajaran LMS berbasis *Moodle* dengan kriteria valid dan praktis pada tahap *Design, Development, and Formative Evaluation*. Penelitian ini dilakukan dengan menggunakan metode *Research and Development (R & D)* melalui tahap model pengembangan McKenney. Tahap *Needs and Context Analysis* dilakukan dengan pengumpulan data melalui angket, wawancara tidak terstruktur, studi literatur, dan survei lapangan. Angket diberikan kepada 2 guru fisika dan 40 siswa kelas X SMAN 18 Garut. Wawancara tidak terstruktur dilakukan bersama 2 guru fisika di SMAN 18 Garut. Data angket dianalisis secara kuantitatif, sedangkan data wawancara hanya digunakan untuk menyesuaikan dengan data hasil analisis angket siswa. Tahap *Design, Development, and Formative Evaluation* dilakukan perancangan kerangka desain dan fitur media pembelajaran berdasarkan hasil *Needs and Context Analysis*. Fitur yang dikembangkan dalam penelitian ini yaitu *topics format* dan *enrolled users*. Setelah dilakukan evaluasi diri, rancangan diuji validitasnya oleh 3 ahli media, 3 ahli materi, dan 3 ahli bahasa. Selanjutnya tahap uji coba lapangan dilakukan untuk mengetahui sejauh mana kepraktisan media pembelajaran yang dikembangkan. Pengolahan data kuantitatif dalam bentuk skor angket kebutuhan dan kepraktisan dilakukan dengan menggunakan presentase, serta validitas menggunakan nilai kriteria kevalidan. Hasil penelitian menunjukkan bahwa rata-rata nilai validasi sebesar 0.85 dengan kriteria valid. Selanjutnya tahap uji kepraktisan dilakukan untuk mengetahui sejauh mana kepraktisan media pembelajaran yang dikembangkan. Terdapat dua tahap uji kepraktisan yang dilakukan yaitu evaluasi kelompok kecil didapat nilai rata-rata sebesar 86.8% dengan kriteria sangat praktis dan uji lapangan didapat nilai rata-rata sebesar 77.3% dengan kriteria praktis. Hasil rata-rata presentase analisis angket uji kepraktisan didapat nilai sebesar 82,1% dengan kriteria praktis. Oleh karena itu, media pembelajaran LMS berbasis *moodle* yang dikembangkan memenuhi kriteria valid dan praktis untuk digunakan sebagai media pembelajaran di SMAN 18 Garut.

Kata kunci: daya dukung pembelajaran, *Learning Management System (LMS)*, media pembelajaran, momentum dan impuls, *Moodle*.

ABSTRACT

Nisa Nisriana Nurfa. 2021. ***DEVELOPMENT OF MOODLE BASED LEARNING MANAGEMENT SYSTEM (LMS) LEARNING MEDIA AS SUPPORT FOR LEARNING PHYSICS IN MOMENTUM AND IMPULS MATERIALS***

The Moodle-based Learning Management System (LMS) learning media was developed to support physics learning on momentum and impulse materials. The purpose of this study is to produce Moodle-based LMS learning media with valid and practical criteria at the Design, Development, and Formative Evaluation stages. This research was conducted using the Research and Development (R & D) method through the McKenney development model stage. The Needs and Context Analysis stage was carried out by collecting data through questionnaires, unstructured interviews, literature studies, and field surveys. Questionnaires were given to 2 physics teachers and 40 students of class X SMAN 18 Garut. Unstructured interviews were conducted with 2 physics teachers at SMAN 18 Garut. The questionnaire data was analyzed quantitatively, while the interview data was only used to adjust the data from the student questionnaire analysis. In the Design, Development, and Formative Evaluation stages, the design framework and learning media features are designed based on the results of Needs and Context Analysis. The features developed in this research are topics format and enrolled users. After self-evaluation, the design was tested for validity by 3 media experts, 3 material experts, and 3 linguists. Furthermore, the field trial phase was carried out to determine the practicality of the developed learning media. Quantitative data processing in the form of needs and practicality questionnaire scores is carried out using percentages, and validity using validity criteria values. The results showed that the average validation value was 0.85 with valid criteria. Furthermore, the practicality test phase is carried out to determine the practicality of the developed learning media. There are two stages of practicality test carried out, namely the small group evaluation, the average value was 86.8% with very practical criteria and the field test obtained an average value of 77.3% with practical criteria. The results of the average percentage of practicality test questionnaire analysis obtained a value of 82.1% with practical criteria. Therefore, the Moodle-based LMS learning media that was developed met the valid and practical criteria to be used as learning media at SMAN 18 Garut.

Keywords: learning support capacity, Learning Management System (LMS), learning media, momentum and impulse, Moodle.