

ABSTRACT

Indah Sari, 2025, Design of a Learning Management System for Biology Subjects at SMA Negeri 1 Tigo Nagari Using the Php Programming Language and MySQL Database, Bachelor of Information Engineering Education, Faculty of Science and Education, Putra Indonesia University "YPTK" Padang.

This research aims to produce and determine the level of validity, practicality and effectiveness of *Learning Management System* (LMS) media in biology subjects at SMA N 1 Tigo Nagari. This research uses the R&D (research & development) research development method. The research subjects were 35 people. The development model used is the ADDIE model, with the design of the development steps being as follows. (1) Analyze, (2) design, (3) development, (4) Implementation and (5) Evaluate. The results of the validity test by experts, the overall validator test assessment of *Learning Management System* (LMS) media for biology subjects at SMA N 1 Tigo Nagari was 84.71% with a very valid interpretation used. The results of the overall practicality test assessment of *Learning Management System* (LMS) media in biology subjects at SMA N 1 Tigo Nagari were 95.85%, with a very practical interpretation to use. The results of the overall effectiveness test assessment of the effectiveness of *Learning Management System* (LMS) media in biology subjects at SMA N 1 Tigo Nagari were 87.77%, with the interpretation being very effective in use. In conclusion, *Learning Management System* (LMS) media as a learning medium has been tested for its suitability, superiority, and can be used in the learning process in Class X Biology at SMA N 1 Tigo Nagari.

Keywords: *Learning Management System* (LMS), Biology, Learning Media

ABSTRAK

Indah Sari, 2025, Perancangan *Learning Management System* Pada Mata Pelajaran Biologi Di SMA Negeri 1 Tigo Nagari Dengan Menggunakan Bahasa Pemrograman *Php* dan *Database Mysql*, Sarjana Pendidikan Teknik Informatika Fakultas Keguruan Ilmu Dan Pendidikan Universitas Putra Indonesia “YPTK” Padang.

Penelitian ini bertujuan untuk menghasilkan dan mengetahui tingkat validitas, praktikalitas dan efektivitas Media Pembelajaran Berbasis *Learning Management System* (LMS) pada mata pelajaran biologi Di SMA N 1 Tigo Nagari. Penelitian ini menggunakan metode pengembangan penelitian R&D (*research & development*). Subjek penelitian berjumlah 35 orang. Model pengembangan yang digunakan model ADDIE, dengan desain langkah-langkah pengembangannya adalah sebagai berikut. (1)*Analyze*, (2)*design*, (3)*development*, (4)*Implementation* dan (5)*Evaluate*. Hasil uji validitas oleh para ahli secara keseluruhan penilaian uji validator terhadap Media Pembelajaran Pembelajaran Berbasis *Learning Management System* (LMS) Pada Mata Pelajaran Biologi Di SMA N 1 Tigo Nagari sebesar 84,71% dengan interpretasi sangat valid digunakan. Hasil penilaian uji praktikalitas secara keseluruhan penilaian praktikalitas terhadap Media Pembelajaran Berbasis *Learning Management System* (LMS) Pada Mata Pelajaran Biologi Di SMA N 1 Tigo Nagari sebesar 95,85%, dengan interpretasi sangat praktis digunakan. Hasil penilaian uji Efektifitas secara keseluruhan penilaian Efektifitas Media Pembelajaran Berbasis *Learning Management System* (LMS) Pada Mata Pelajaran Biologi Di SMA N 1 Tigo Nagari sebesar 87,77%, dengan interpretasi sangat efektif digunakan. Kesimpulannya, bahwasanya Media Pembelajaran Berbasis *Learning Management System* (LMS) sebagai media pembelajaran sudah teruji kelayakan, keunggulan, dan dapat digunakan pada proses pembelajaran pada mata pelajaran Biologi Kelas X Di SMA N 1 Tigo Nagari.

Kata Kunci: *Learning Management System* (LMS), Biologi, Media Pembelajaran