

ABSTRAK

Nur Azizah, An Nisa. 2025. *Pengembangan Media Berbasis Lectora Inspire untuk Mengukur Kemampuan ICT dan Hasil Belajar Siswa Kelas VII SMP/MTs*. Skripsi, Program Studi Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Jember.
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Kata Kunci: Media Pembelajaran, *ICT*, *Lectora Inspire*, Pengembangan 4-D, Pembelajaran IPA

Perkembangan teknologi informasi dan komunikasi menuntut integrasi media pembelajaran interaktif dalam pembelajaran IPA untuk mendukung efektivitas penyampaian materi dan peningkatan keterampilan siswa. Namun, hasil analisis kebutuhan di beberapa sekolah menunjukkan bahwa pembelajaran masih didominasi menggunakan metode konvensional dan dengan pemanfaatan media berbasis *ICT* masih minim, sehingga siswa mengalami kesulitan dalam memahami materi dan kurang aktif dalam proses belajar. Penelitian ini bertujuan untuk mengembangkan media pembelajaran berbantuan *Software Lectora Inspire* pada materi ekologi dan pelestarian lingkungan serta menguji validitas, praktis, dan keefektifannya dalam meningkatkan hasil belajar dan keterampilan *ICT* siswa.

Penelitian dilaksanakan di MTs Negeri 2 Bondowoso pada semester genap tahun ajaran 2024/2025 dengan subjek 32 siswa kelas VII. Jenis penelitian ini adalah Research and Development (R&D) dengan model pengembangan 4-D (*Define, Design, Develop, Disseminate*). Data dikumpulkan melalui wawancara, observasi, angket, dan tes hasil belajar, dengan instrumen berupa lembar validasi ahli, angket respon siswa, observasi keterampilan *ICT*, serta tes *pretest* dan *posttest*.

Hasil analisis menunjukkan bahwa media berbasis *Lectora Inspire* dinyatakan sangat valid dengan skor koefisien korelasi validasi $\alpha > 0,91$ dari tiga validator, terdiri atas dua dosen ahli dan satu guru praktisi. Kepraktisan media tergolong sangat baik dengan presentase rata-rata respon pengguna sebesar 87%. Keefektifan media juga ditunjukkan oleh rata-rata keterampilan *ICT* siswa mencapai 89,84% dengan kategori baik dan nilai *N-Gain* sebesar 0,70 dengan kategori tinggi serta. Media ini dikembangkan dengan tampilan interaktif, berisi materi ekologi dan pelestarian lingkungan sesuai CP dan IKTP, serta dilengkapi video pembelajaran dan latihan soal berbentuk *game* edukasi interaktif. Hasil ini menunjukkan bahwa media pembelajaran berbasis *Lectora Inspire* layak digunakan dalam proses pembelajaran untuk meningkatkan hasil belajar dan keterampilan *ICT* siswa. Produk pengembangan ini berupa media interaktif berbasis *HTML* yang dapat diakses secara *online* melalui perangkat komputer dan *smartphone*.

ABSTRACT

Nur Azizah, An Nisa. 2025. *Development of Lectora Inspire-Based Media to Measure ICT Skills and Learning Outcomes of Grade VII Junior High School/MTs Students*. Thesis, Biology Education Study Program, Faculty of Teacher Training and Education, Muhammadiyah University of Jember.
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Keyword: Learning Media, ICT, *Lectora Inspire*, 4-D Development, Science Learning

The development of information and communication technology demands the integration of interactive learning media in science learning to support the effectiveness of material delivery and improve student skills. However, the results of needs analysis in several schools show that learning is still dominated by conventional methods and the use of ICT-based media is still minimal, so that students have difficulty in understanding the material and are less active in the learning process. This study aims to develop learning media assisted by Lectora Inspire Software on ecology and environmental conservation materials and to test its validity, practicality, and effectiveness in improving students' learning outcomes and ICT skills.

The study was conducted at MTs Negeri 2 Bondowoso during the even semester of the 2024/2025 academic year, involving 45 seventh-grade students. This research is a type of Research and Development (R&D) using the 4-D development model (Define, Design, Develop, Disseminate). Data were collected through interviews, observations, questionnaires, and learning achievement tests using instruments such as expert validation sheets, student response questionnaires, ICT skills observation sheets, and pretest-posttest assessments.

The analysis results indicate that the media is highly valid, with an α score > 0.8 based on assessments from two subject-matter experts and one teaching practitioner. The effectiveness is demonstrated by an average N-Gain score of 0.74 (categorized as high) and student ICT skills reaching 85% (categorized as good). The media is also considered highly practical, with an average user response rate of 96%. The developed media features an interactive design, includes content on ecology and environmental conservation aligned with CP and IKTP, and is equipped with instructional videos and educational games. These findings suggest that Lectora Inspire-based learning media is suitable for use in science instruction to improve student learning outcomes and ICT competence. The final product is an interactive HTML-based learning media accessible both online via computers and smartphones.