

ABSTRAK

Wali, Maria Angelica Ayu Gloria Jagga (2026), Pengembangan E-Modul Berbantuan Game Edukasi Pada Materi Interaksi Antara Makhluk Hidup dan Lingkungannya Untuk Meningkatkan Motivasi Belajar dan Keterampilan Berpikir Kritis Siswa SMP. Tesis, Pendidikan Dasar, Program Pascasarjana, Universitas Pendidikan Ganesha.

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Kata-kata kunci: E-modul, Game edukasi, Media Pembelajaran Interaktif, Motivasi belajar, Keterampilan berpikir kritis

Penelitian dilatarbelakangi oleh rendahnya motivasi belajar dan keterampilan berpikir kritis siswa dalam pembelajaran IPA serta masih terbatasnya penggunaan media pembelajaran digital yang interaktif. Penelitian ini bertujuan mengembangkan e-modul berbantuan game edukasi pada materi *Interaksi antara Makhluk Hidup dan Lingkungannya* yang layak digunakan untuk meningkatkan motivasi belajar dan keterampilan berpikir kritis siswa SMP. Penelitian menggunakan metode *Research and Development* (R&D) dengan model ADDIE yang dipadukan dengan desain eksperimen semu (*Nonequivalent Control Group Pretest–Posttest Design*). E-modul dikembangkan melalui platform Genially dengan mengintegrasikan sintaks *Discovery Learning*. Subjek penelitian adalah siswa kelas VII SMP Negeri 7 Denpasar. Data dikumpulkan menggunakan lembar validasi ahli, angket kepraktisan, angket motivasi belajar, dan tes keterampilan berpikir kritis, kemudian dianalisis secara deskriptif dan menggunakan MANCOVA.

Hasil penelitian menunjukkan bahwa e-modul yang dikembangkan memenuhi kriteria kelayakan dengan tingkat kepraktisan sebesar 86,15% (kategori sangat praktis). Analisis MANCOVA menunjukkan bahwa penggunaan e-modul berbantuan game edukasi berpengaruh signifikan terhadap motivasi belajar dan keterampilan berpikir kritis siswa. Efektivitas e-modul didukung oleh integrasi sintaks *Discovery Learning*, prinsip *Cognitive Theory of Multimedia Learning* (CTML), model ARCS, dan fitur pembelajaran interaktif yang menciptakan pengalaman belajar aktif, bermakna, dan berpusat pada siswa. Berdasarkan hasil penelitian, e-modul berbantuan game edukasi layak digunakan sebagai media pembelajaran IPA untuk meningkatkan motivasi belajar dan keterampilan berpikir kritis siswa SMP.

ABSTRACT

Wali, Maria Angelica Ayu Gloria Jagga (2026), Development of an Educational Game-Assisted E-Module on the Material of Interactions Between Living Things and Their Environment to Improve Learning Motivation and Critical Thinking Skills of Junior High School Students. Thesis, Elementary Education, Postgraduate Program, Ganesha University of Education.

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Keywords: E-module, Educational Game, Learning Motivation, Critical Thinking Skills, Genially

This study was motivated by students' low motivation to learn and lack of critical thinking skills in science classes, as well as the limited use of interactive digital learning media. The study aimed to develop an educational game-assisted e-module on the topic of *Interactions Between Living Things and Their Environment* to improve junior high school students' learning motivation and critical thinking skills. An R&D approach based on the ADDIE model was employed and combined with a quasi-experimental design using the *Nonequivalent Control Group Pretest–Posttest Design*. The e-module was developed through the Genially platform by integrating the phases of the Discovery Learning model. The participants were seventh-grade students at SMP Negeri 7 Denpasar. Data were collected through expert validation sheets, practicality questionnaires, learning motivation questionnaires, and critical thinking tests. The data were analyzed descriptively, while the effectiveness of the e-module was examined using MANCOVA.

The results indicated that the developed e-module was found to be valid and achieved a practicality score of 86.15%, indicating a very practical level. MANCOVA results revealed that the educational game-assisted e-module had a significant effect on students' learning motivation and critical thinking skills. Its effectiveness was supported by the integration of the Discovery Learning model, the principles of the Cognitive Theory of Multimedia Learning (CTML), the ARCS motivational model, and interactive learning features that promoted active, meaningful, and student-centered learning. In conclusion, the developed educational game-assisted e-module can serve as an effective digital learning resource for science instruction to enhance junior high school students' learning motivation and critical thinking skills.