

ABSTRAK

Silva Sofiyatul Huda, 1192070066: “Pengembangan *E-modul* Ajar Berbasis PjBL pada Materi Pencemaran Lingkungan untuk Meningkatkan Keterampilan Berpikir Kreatif Peserta Didik”.

Penelitian ini bertujuan untuk mengembangkan *e-modul* ajar berbasis *Project Based Learning* (PjBL) pada materi pencemaran lingkungan, mengetahui kelayakan dan keterlaksanaan penggunaannya, serta menguji peningkatan keterampilan berpikir kreatif peserta didik. Penelitian menggunakan model pengembangan ADDIE yang meliputi tahap *analyze, design, development, implementation, dan evaluation*. Subjek penelitian berjumlah 30 peserta didik kelas X program keahlian *Broadcasting* dan Perfilman SMK Al-Wafa Ciwidey. Data diperoleh melalui wawancara, observasi, angket, lembar validasi, AABTLT with SAS, serta *pretest* dan *posttest*. Hasil penelitian menunjukkan bahwa *e-modul* ajar berbasis PjBL memperoleh rata-rata validasi sebesar 96,8% dengan kategori sangat layak. Keterlaksanaan pembelajaran selama tiga pertemuan mencapai rata-rata 89,5% dengan kategori sangat efektif. Penggunaan *e-modul* ajar berbasis PjBL juga meningkatkan keterampilan berpikir kreatif peserta didik yang ditunjukkan oleh peningkatan nilai rata-rata *pretest* dari 45 menjadi 81 pada *posttest* dengan nilai *N-Gain* sebesar 0,7 (kategori sedang). Peningkatan tertinggi terdapat pada indikator berpikir lancar (0,9), diikuti berpikir luwes (0,7), sedangkan berpikir orisinal dan elaborasi masing-masing memperoleh *N-Gain* 0,5. Dengan demikian, *e-modul* ajar berbasis PjBL layak dan efektif digunakan untuk meningkatkan keterampilan berpikir kreatif peserta didik pada materi pencemaran lingkungan.

Kata Kunci: *E-modul* Ajar, *Project Based Learning* (PjBL), Pencemaran Lingkungan, Keterampilan Berpikir Kreatif.

ABSTRACT

Silva Sofiyatul Huda, 1192070066: *“Development of a Project Based Learning (PjBL) E-Module on Environmental Pollution to Improve Students’ Creative Thinking Skills”.*

This study aimed to develop a Project-Based Learning (PjBL)-based e-module on environmental pollution, determine its feasibility and implementation, and examine its effectiveness in improving students' creative thinking skills. The study employed the ADDIE development model, which consists of five stages: analyze, design, development, implementation, and evaluation. The participants were 30 tenth-grade students from the Broadcasting and Film Production program at SMK Al-Wafa Ciwidey. Data were collected through interviews, observations, questionnaires, validation sheets, Authentic Assessment Based on Teaching and Learning Trajectory with Student Activity Sheet (AABTLT with SAS), as well as pretests and posttests. The results indicated that the PjBL-based e-module achieved an average validation score of 96.8%, categorized as highly feasible. The implementation of learning across three meetings reached an average score of 89.5%, categorized as highly effective. The use of the PjBL-based e-module also improved students' creative thinking skills, as indicated by the increase in the average pretest score from 45 to 81 on the posttest, with an N-Gain score of 0.7 (moderate category). The highest improvement was found in the fluency indicator (0.9), followed by flexibility (0.7), while originality and elaboration each obtained an N-Gain score of 0.5. Therefore, the PjBL-based e-module is considered feasible and effective for improving students' creative thinking skills in learning about environmental pollution.

Keywords: E-Module, Project-Based Learning (PjBL), Environmental Pollution, Creative Thinking Skills.