

ABSTRAK

Meisyaroh, Kharismatullah (2026). Pengembangan *E-LKPD* Berbasis Problem-Based Learning Dilengkapi Dengan Augmented Reality Tentang Sistem Reproduksi Manusia Untuk Siswa Kelas IX SMP. Skripsi. Tanjungpinang. Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan. Universitas Maritim Raja Ali Haji. Pembimbing I: Adam Fernando, S.Pd., M.Pd. Pembimbing II: Dr. Nurul Asikin, S.Pd., M.Pd.

Kata Kunci: *E-LKPD, Problem Based Learning, Augmented Reality, Sistem Reproduksi Manusia.*

Penelitian ini bertujuan menghasilkan *e-LKPD berbasis problem-based learning* pada materi sistem reproduksi manusia untuk siswa kelas IX SMP yang valid. Metode penelitian yang digunakan adalah penelitian dan pengembangan model 4D hingga tahap *Development*. Teknik pengumpulan data dilakukan melalui wawancara, observasi dan menyebarkan angket. Analisis data yang digunakan meliputi analisis kuantitatif berupa perhitungan skor persentase, serta analisis kualitatif yang mencakup saran dan komentar dari para validator. Teknik pengumpulan data dilakukan melalui wawancara, observasi dan menyebarkan angket. Analisis data yang digunakan meliputi analisis kuantitatif berupa perhitungan skor persentase, serta analisis kualitatif yang mencakup saran dan komentar dari para validator. Hasil analisis menunjukkan bahwa peserta didik membutuhkan bahan ajar menarik, relevan, mudah digunakan serta sesuai dengan tuntutan Kurikulum Merdeka. Berdasarkan hasil penelitian yang diperoleh, tahap desain menghasilkan rancangan bahan ajar yang terbukti layak digunakan sebagai bahan ajar IPA, dengan tingkat validitas sangat valid dan berpotensi mendukung proses belajar. Penelitian selanjutnya disarankan melanjutkan ke tahap *Disseminate* untuk menguji kepraktisan dan efektivitas produk.

ABSTRACT

Meisyaroh, Kharismatullah, (2026). *Development of E-LKPD Based on Problem-Based Learning Equipped with Augmented Reality About Human Reproductive System for Grade IX Junior High School Students. Thesis.* Tanjungpinang. Biology Education, Faculty of Teacher Training and Education. Raja Ali Haji Maritime University. Supervisor I: Adam Fernando, S.Pd., M.Pd. Supervisor II: Dr. Nurul Asikin, S.Pd., M.Pd.

Keywords: *E-LKPD, Problem Based Learning, Augmented Reality, Human Reproductive System.*

This study resulted in a valid e-LKPD (problem-based learning) project on the human reproductive system for ninth-grade junior high school students. The research method used was the research and development of a 4D model up to the development stage. Data collection techniques were conducted through interviews, observations, and questionnaires. Data analysis used included quantitative analysis in the form of percentage score calculations, as well as qualitative analysis that included suggestions and comments from validators. Data collection techniques were conducted through interviews, observations, and questionnaires. Data analysis used included quantitative analysis in the form of percentage score calculations, as well as qualitative analysis that included suggestions and comments from validators. The results of the analysis indicate that students need teaching materials that are interesting, relevant, easy to use, and in accordance with the demands of the Independent Curriculum. Based on the research results obtained, the design stage produced a teaching material design that was proven suitable for use as science teaching materials, with a very valid level of validity and the potential to support the learning process. Further research is recommended to continue to the dissemination stage to test the practicality and effectiveness of the product.