

ABSTRAK

Nadillah, H. 2023. Pengembangan E-LKPD Berbasis *Collaborative Learning* Untuk Meningkatkan Pemahaman Konsep Fisika Peserta Didik Pada Materi Fluida Statis. Tesis. Program Magister Pendidikan IPA Universitas Jambi, Pembimbing I. Prof. Dr. M. Rusdi, S.Pd.,M.Sc. Pembimbing II. Dr. Tanti, S.Si.,M.Si.

Corpuz (2002) menyatakan bahwa pembelajaran fisika akan menjadi bermakna bagi peserta didik jika mereka memiliki pemahaman yang koheren terhadap konsep-konsep fisika. Namun, kenyataannya tingkat pemahaman konsep peserta didik MA Baabussalam Tebo masih tergolong rendah. Berdasarkan hasil studi pendahuluan yang peneliti lakukan dengan mengedarkan *The Four-Tier Buoyancy Instrument* kepada tiga puluh orang peserta didik kelas XII IPA di Madrasah Aliyah (MA) Baabussalam Tebo diketahui persentase rata-rata peserta didik yang memiliki pemahaman konsep pada materi gaya apung hanya 19.53%. Dalam hal ini, proses pembelajaran fisika dalam meningkatkan pemahaman konsep membutuhkan media berupa E-LKPD berbasis *collaborative learning*, agar peserta didik secara bersama-sama dapat bertukar ide dan pengetahuan dalam mengkonstruksi konsep fisika. Penelitian ini bertujuan untuk mengembangkan E-LKPD berbasis *collaborative learning* dalam meningkatkan pemahaman konsep fisika peserta didik. Penelitian ini menggunakan pendekatan *research and development* (R&D) dengan model ADDIE yang terdiri dari lima tahapan. Hasil penelitian menunjukkan bahwa E-LKPD berbasis *collaborative learning* dapat meningkatkan pemahaman konsep peserta didik. Hal ini terlihat dari hasil validasi konseptual bernilai rata-rata 98,45% yang berkriteria sangat baik. Berdasarkan kriteria penilaian guru sangat baik dengan nilai rata-rata 91,2% dan memperoleh respon positif oleh peserta didik. Selain itu, berdasarkan perhitungan N-Gain terhadap nilai persentase pre-test dan post-test peserta didik diperoleh hasil 72% yang berkategori efektif dalam meningkatkan pemahaman konsep fisika peserta didik pada materi fluida statis.

Kata Kunci : E-LKPD, fisika, fluida statis, model *collaborative learning*, pemahaman konsep

ABSTRACT

Nadillah, H. 2023. Development of E-LKPD based on collaborative learning to improve students' understanding of physics concepts on static fluid materials. Thesis. Master Program in Science Education Jambi University, Supervisor I. Prof. Dr. M. Rusdi, S.Pd., M.Sc. Supervisor II. Dr. Tanti, S.Si.,M.Sc.

Corpuz (2002) states that physics learning will be meaningful to learners if they have a coherent understanding of physics concepts. However, the reality is that the level of understanding of the concepts of MA Baabussalam Tebo students is still relatively low. Based on the results of a preliminary study conducted by researchers by distributing The Four-Tier Buoyancy Instrument to thirty students of class XII science at Madrasah Aliyah (MA) Baabussalam Tebo, it is known that the average percentage of students who have an understanding of concepts in floating force material is only 19.53%. In this case, the physics learning process in improving concept understanding requires media in the form of collaborative learning-based E-LKPD, so that students can jointly exchange ideas and knowledge in constructing physics concepts. This study aims to develop collaborative learning-based E-LKPD in improving students' understanding of physics concepts. This research uses a research and development (R&D) approach with the ADDIE model consisting of five stages. The results showed that collaborative learning-based E-LKPD can improve students' understanding of concepts. This can be seen from the results of conceptual validation with an average value of 98.45% which has very good criteria. Based on the assessment criteria, the teacher is very good with an average score of 91.2% and received a positive response by students. In addition, based on the calculation of N-Gain on the percentage value of pre-test and post-test students, 72% results were obtained which were categorized as effective in increasing students' understanding of physics concepts in static fluid materials.

Keywords: *E-LKPD, physics, static fluid, collaborative learning model, concept understanding*