

## ABSTRAK

**Endang Kusuma. NIM. 4173321012. Pengembangan Lembar Kerja Siswa (LKS) Berbasis *Discovery Learning* Pada Materi Hukum Newton Tentang Gravitasi. Skripsi. Jurusan Pendidikan Fisika. Fakultas Matematika dan Ilmu Alam. Universitas Negeri Medan. 2021.**

Penelitian pengembangan ini bertujuan untuk menghasilkan LKS fisika berbasis *discovery learning* pada materi hukum newton tentang gravitasi mendapatkan kelayakan dari ahli materi dan ahli pembelajaran dan menghasilkan LKS fisika berbasis *discovery learning* berdasarkan penilaian guru dan respon siswa setelah menggunakan LKS yang dikembangkan. Subjek dalam penelitian ini adalah siswa kelas X MIPA MAN 2 LABURA yang berjumlah 30 orang siswa. jenis penelitian ini merupakan penelitian pengembangan atau *Research and Developmen* (R&D). Instrumen yang digunakan dalam penelitian ini terdiri dari angket validasi ahli materi dan ahli pembelajar, angket penilaian guru bidang studi fisika dan angket respon siswa terhadap LKS fisika berbasis *discovery learning*. Teknik analisis data yang digunakan dalam penelitian ini adalah deskriptif. Dari hasil analisis data diperoleh validasi ahli materi sebesar 89%, ahli pembelajaran 91%, penilaian guru fisika sebesar 97% dengan masing - masing persentasi tersebut termasuk dalam kategori sangat baik. Respon siswa pada uji coba terbatas dengan sampel 6 orang sebesar 82% termasuk dalam kriteria sangat baik. Sedangkan pada uji coba luas persentasi respon siswa dengan sampel 30 orang sebesar 88% dengan kriteria sangat baik, sehingga berdasarkan hasil validasi, penilaian guru fisika dan respon siswa dapat disimpulkan LKS Fisika berbasis *discovery learning* pada materi hukum newton tentang gravitasi layak digunakan dalam proses pembelajaran.

**Kata Kunci :** Pengembangan, LKS, Discovery Learning, Hukum Newton Tentang Gravitasi.

## ABSTRACT

**Endang Kusuma. NIM. 4173321012. Development of Discovery Learning-Based Student Worksheets on Newton's Law of Gravity. Essay. Department of Physics Education. Faculty of Mathematics and Natural Sciences. Medan State University. 2021.**

This development research aims to produce discovery learning-based physics worksheets on Newton's law of gravity to obtain feasibility from material experts and learning experts and produce discovery learning-based physics worksheets based on teacher assessments and student responses after using the developed worksheets. The subjects in this study were students of class X MIPA MAN 2 LABURA, totaling 30 students. This type of research is research and development (R&D). The instruments used in this study consisted of a material expert and learning expert validation questionnaire, a physics teacher assessment questionnaire and a student response questionnaire to discovery learning-based physics worksheets. The data analysis technique used in this research is descriptive. From the results of data analysis, validation of material experts is 89%, learning experts are 91%, physics teacher assessment is 97% with each of these percentages included in the very good category. Student responses in a limited trial with a sample of 6 people by 82% were included in the very good criteria. Meanwhile, in the wide trial, the percentage of student responses with a sample of 30 people was 88% with very good criteria, so based on the results of validation, assessment of physics teachers and student responses, it can be concluded that the Physics LKS based on discovery learning on Newton's law of gravity is suitable for use in the learning process.

**Keywords:** *Development, LKS, Discovery Learning, Newton's Law of Gravity.*

