

## ABSTRAK

**Cristina Yolanda Br. Ginting, NIM 4173121007 (2024). Desain Lembar Kerja Peserta Didik (LKPD) Berbasis *Discovery Learning* untuk Meningkatkan Hasil Belajar Peserta Didik pada Materi Elastisitas dan Hukum Hooke.**

Penelitian ini bertujuan untuk: (1) mengetahui kelayakan LKPD berbasis *discovery learning* pada materi elastisitas dan Hukum Hooke, (2) mengetahui respon peserta didik terhadap LKPD berbasis *discovery learning* pada materi elastisitas dan Hukum Hooke yang telah dikembangkan, dan (3) mengetahui keefektifan LKPD berbasis *discovery learning* pada materi elastisitas dan Hukum Hooke yang telah dikembangkan di kelas XI IPA 1 di SMA Swasta St. Petrus Medan. Jenis penelitian ini merupakan *Research and Development* menggunakan model ADDIE dengan tahapan *analysis, design, development, implementation, dan evaluation*. Sampel pada penelitian ini yaitu 10 peserta didik kelas XI IPA 1 untuk uji coba kelompok kecil dan 36 peserta didik kelas XI IPA 1 untuk uji coba kelompok besar. Instrumen pada penelitian ini yaitu lembar wawancara, lembar observasi, lembar validasi materi, lembar validasi desain, angket respon peserta didik, dan lembar tes yaitu *pretest dan posttest*. Hasil penelitian menunjukkan bahwa LKPD berbasis *discovery learning* yang dikembangkan berada kategori sangat layak digunakan dalam proses pembelajaran berdasarkan hasil uji validasi ahli materi (86,67%), ahli desain (89%) dan guru fisika (91%). Pada uji coba LKPD diperoleh respon peserta didik dari 36 orang peserta didik adalah 94%. Berdasarkan perhitungan N-gain, LKPD berbasis *discovery learning* termasuk dalam kategori tinggi untuk meningkatkan hasil belajar peserta didik dengan nilai 0,71. Dapat disimpulkan bahwa LKPD berbasis *discovery learning* layak, praktis, dan efektif digunakan untuk meningkatkan hasil belajar peserta didik.

**Kata Kunci :** Pengembangan ADDIE, Discovery Learning, Hasil Belajar, Elastisitas dan Hukum Hooke.



## ABSTRACT

**Cristina Yolanda Br. Ginting, NIM 4173121007 (2024). Design of Student Worksheets (LKPD) Based on Discovery Learning to Improve Student Learning Outcomes on Elasticity and Hooke's Law Material.**

This research aims to: (1) determine the feasibility of discovery learning-based worksheets on elasticity and Hooke's Law material, (2) determine students' responses to discovery learning-based worksheets on elasticity and Hooke's Law material that has been developed, and (3) determine the effectiveness of worksheets based on discovery learning on elasticity and Hooke's Law material which has been developed in class XI IPA 1 at St. Petrus High School Medan. This type of research is Research and Development using the ADDIE model with stages of analysis, design, development, implementation and evaluation. The sample in this study was 10 students from class XI IPA 1 for the small group trial and 36 students from class XI IPA 1 for the large group trial. The instruments in this research are interview sheets, observation sheets, material validation sheets, design validation sheets, student response questionnaires, and test sheets, namely pretest and posttest. The research results show that the discovery learning-based worksheets developed is in the very suitable category for use in the learning process based on the validation test results of material experts (86.67%), design experts (89%) and physics teachers (91%). In the worksheets trial, the response obtained from 36 students was 94%. Based on the N-gain calculation, discovery learning-based worksheets is included in the high category for improving student learning outcomes with a value of 0.71. It can be concluded that discovery learning-based worksheets is feasible, practical and effective to use to improve student learning outcomes.

**Keywords :** ADDIE Development, Discovery Learning, Learning Outcomes, Elasticity and Hooke's Law.

