ABSTRAK

Sifra Febrika Jaya Sidabutar, NIM 4203311075 (2024). Pengembangan e-LKPD Berbasis *Discovery Learning* untuk Meningkatkan Kemampuan Penalaran Matematis Peserta Didik.

Penelitian ini bertujuan untuk mengetahui kevalidan, kepraktisan, dan keefektifan produk e-LKPD berbasis *discovery learning* yang dikembangkan terhadap proses pembelajaran matematika untuk meningkatkan kemampuan penalaran matematis peserta didik. Penelitian ini dilakukan di SMP Negeri 35 Medan pada semester genap T.A. 2023/2024. Desain penelitian ini menggunakan desain Penelitian dan Pengembangan (*Research and Development*) dengan menggunakan model ADDIE. Subjek pada penelitian ini adalah 40 orang siswa kelas VIII-1 dan objek penleitian ini adalah Lembar Kerja Peserta Didik (e-LKPD) yang dikembangkan berbasis *discovery learning*. Berdasarkan hasil penelitian diperoleh bahwa produk e-LKPD berbasis *discovery learning* yang dikembangkan dinyatakan sangat valid dengan rata-rata 88,49% untuk ahli materi dan 92,36% untuk ahli media sehingga layak untuk diimplementasikan, praktis dengan persentase angket respon guru 90% dan persentase angket respon siswa 85,98% yang berarti sangat praktis serta diperoleh respon positif dari guru dan siswa, dan peningkatan kemampuan penalaran matematis peserta didik mencapai kategori tinggi dengan nilai *N-Gain* 0,85. Analisis data menggunakan uji kevalidan, kepraktisan, dan keefektifan menunjukkan bahwa e-LKPD berbasis *discovery learning* yang dikembangkan valid, praktis, dan efektif digunakan pada proses pembelajaran matematika serta mampu meningkatkan kemampuan penalaran matematis peserta didik.

Kata Kunci: e-LKPD Berbasis *Discovery Learning*, Kemampuan Penalaran Matematis

ABSTRACT

Sifra Febrika Jaya Sidabutar, NIM 4203311075 (2024). Development of e-LKPD Based on Discovery Learning to Improve Students' Mathematical Reasoning Ability.

This research aims to determine the validity, practicality, and effectiveness of discovery learning-based e-LKPD products developed for the mathematics learning process to improve students' mathematucal reasoning abilities. This research was conducted at SMP Negeri 35 Medan in the even semester of T.A. 2023/2024. This research design uses a Research and Development design using the ADDIE model. The subjects in this research were 40 students in class VIII-1 and the object of this research was the Student Woorksheet (e-LKPD) which was developed based on discovery learning. Based on the research results, it was found that the e-LKPd product based on discovery learning that was developed was declared very valid with an average of 88,49% for material experts and 92,36% for media experts so that it was feasible to be implemented, practically with a teacher response questionnaire percentage of 90% and the percentage of student responses to the questionnaire was 85,98%, which means it was very practical dan received positive responses from teachers and students, and the increase in students' mathematical reasoning abilities reached the high category with an N-Gain value 0f 0,85. Data analysis using validity, practicality, and effectiveness tests shows that discovery learning-based e-LKPD developed is valid, practical, and effective for use in the mathematical learning process and is able to improve students' mathematical reasoning abilities.

Keywords: e-LKPD Based on Discovery Learning, Mathematical Reasoning Ability