ABSTRAK

Nora Deselia Saragih. (8186182002). Pengembangan LKPD IPA Berbasis Keterampilan Proses Sains Untuk Meningkatkan Keterampilan Berpikir Kritis Siswa Pada Materi Zat Tunggal dan Campuran Kelas V SDN 158468 Lumut 5. Program Pascasarjana Universitas Negeri Medan. 2022.

Penelitian ini berlatarbelakang pada penggunaan Lembar Kerja Peserta Didik (LKPD) dan proses pembelajaran yang belum menumbuhkan keterampilan proses sains. Penelitian ini bertujuan untuk mengetahui kelayakan LKPD IPA berbasis Keterampilan Proses Sains (KPS) untuk meningkatkan Kemampuan berpikir kritis siswa dalam pembelajaran IPA dan juga untuk mengetahui keefektifan penggunaan LKPD IPA Berbasis Keterampilan Proses Sains (KPS) untuk meningkatkan kemampuan berpikir kritis siswa yang dikembangangkan menurut penilaian para ahli, guru wali kelas, dan peserta didik. Alasan dilakukan penelitian ini karena hasil belajar IPA masih rendah dan pembelajaran IPA cenderung hanya menggunakan bahan ajar cetak. Penelitian ini merupakan penelitian pengembangan melalui model 4D oleh Thiagarajan. Hasil Penelitian menunjukkan bahwa : (1) berdasarkan validasi ahli materi dengan rata-rata skor 3,65 dan validasi ahli media dengan rata-rata skor 3,78 maka LKPD yang dikembangkan termasuk dalam kriteria sangat baik dan dinyatakan sangat valid serta layak untuk digunakan. (2) LKPD IPA berbasis Keterampilan Proses Sains dikatakan efektif digunakan dalam pembelajaran dengan asumsi nilai IPA siswa lebih tinggi saat menggunakan LKPD IPA. Sedangkan untuk keterampilan berpikir kritis siswa meningkat dengan persentase 72% pada ujicoba I dan 88% pada ujicoba II. (3) Berdasarkan data ketuntasan berpikir kritis siswa sebelum menggunakan LKPD IPA diperoleh rata-rata nilai 60,72 sedangkan setelah menggunakan LKPD diperoleh data ketuntasan berpikir kritis siswa rata-rata 81,04 dengan gain score 0,52 masuk kedalam kategori sedang. Berdasarkan data tersebut, LKPD IPA berbasis keterampilan proses sains dinyatakan efektif untuk digunakan dalam pembelajaran. (4) LKPD IPA berbasis keterampilan proses sains dikategorikan praktis karena hasil respon siswa dari ujicoba I dan uji coba 2 mengalami kenaikan yaitu dari 76,90% menjadi 86,44%.

Kata Kunci : LKPD IPA, Keterampilan Proses Sains, Keterampilan Berpikir Kritis.

ABSTRACT

Nora Deselia Saragih. (8186182002). Development of Science Student Worksheets Based on Science Process Skills to Improve Students' Critical Thinking Skills on Single and Mixed Substances Class V SDN 158468 Lumut 5. Graduate Program, State University of Medan. 2022.

This research is based on the use of Student Worksheets and the learning process that has not developed science process skills. This study aims to determine the feasibility of Science Process Skills-based Science Student Worksheets to improve students' critical thinking skills in science learning and also to determine the effectiveness of using Science Process Skills-Based Science Student Worksheets to improve students' critical thinking skills which were developed according to the assessment of experts, teachers. homeroom teachers, and students. The reason for doing this research is because science learning outcomes are still low and science learning tends to only use printed teaching materials. This research is a development research through 4D model by Thiagarajan. The results showed that: (1) based on material expert validation with an average score of 3.65 and media expert validation with an average score of 3.78, the Student Worksheet developed was included in the very good criteria and was declared very valid and worth using. (2) Science Student Worksheets based on Science Process Skills are said to be effective in learning with the assumption that students' science scores are higher when using Science Student Worksheets. Meanwhile, students' critical thinking skills increased by a percentage of 72% in the first test and 88% in the second trial. (3) Based on the data on students' critical thinking mastery before using the Science Student Worksheet, an average score of 60,72 was obtained, while after using the Student's Worksheet, the students' critical thinking mastery data obtained an average of 81,04 with a gain score of 0.52 which was in the medium category. Based on these data, Science Student Worksheets based on science process skills were declared effective for use in learning. (3) Science student worksheets based on science process skill are categorized as practical because he result of student resnponse from trial I and trial II have increased from 76,90% to 86,44%.

Keywords: Science Student Worksheet, Science Process Skills, Thinking Skills Critical.