

## ABSTRAK

**Hilda Ester Lina Br Marpaung, NIM 4182141018 (2018), Pengembangan LKPD Berbasis *Problem Based Learning* (PBL) Pada Materi Keanekaragaman Hayati Kelas X SMA Negeri 1 Pangururan T.P 2022/2023.**

Penelitian ini bertujuan untuk: menghasilkan LKPD berbasis *Problem Based Learning* (PBL) pada materi keanekaragaman hayati kelas X SMA Negeri 1 Pangururan T.P 2022/2023 yang layak digunakan. LKPD dikembangkan dengan model pengembangan 4D Thiagarajan (*define, design, develop, dan disseminate*). Penelitian ini dilaksanakan pada bulan juni-agustus 2022. Uji coba kelayakan produk LKPD dilaksanakan di SMA Negeri 1 Pangururan, Kabupaten Samosir, Sumatera Utara. Subjek dalam penelitian ini adalah dosen ahli materi, dosen ahli pembelajaran, dosen ahli desain, guru biologi kelas X SMA Negeri 1 Pangururan dan peserta didik kelas X SMA Negeri 1 Pangururan. Teknik pengumpulan data dilakukan dengan menggunakan wawancara, angket, dan tes. Hasil penelitian ini menunjukkan LKPD berbasis *Problem Based Learning* (PBL) pada materi keanekaragaman hayati yang dikembangkan layak di SMA Negeri 1 Pangururan. Hal ini dapat dilihat dari persentase rata-rata yang diperoleh dari validator ahli materi sebesar 98% dengan kategori sangat layak, validator ahli pembelajaran sebesar 92% dengan kategori sangat layak, validator ahli *desain* sebesar 94%, guru bidang studi biologi sebesar 97% dengan kategori sangat layak. Uji coba perorangan mendapat hasil sebesar 93% dengan kategori baik, kelompok kecil mendapat hasil sebesar 94% dengan kategori baik, dan kelompok terbatas mendapat hasil sebesar 96% dengan kategori baik. N-gain hasil belajar peserta didik memperoleh nilai sebesar 0,73 dengan kriteria tinggi. Sikap peduli lingkungan peserta didik berada pada angka 78,5 dengan kriteria tinggi.

**Kata kunci:** *Pengembangan LKPD, 4D Thiagarajan, Keanekaragaman Hayati.*

## ***ABSTRACT***

**Hilda Ester Lina Br Marpaung, NIM 4182141018 (2018), Development of LKPD based on Problem Based Learning (PBL) on Biodiversity Material for Class X SMA Negeri 1 Pangururan T.P 2022/2023.**

This study aims to: produce Problem Based Learning (PBL) worksheets on biodiversity material for class X SMA Negeri 1 Pangururan T.P 2022/2023 which are suitable for use. LKPD was developed with the Thiagarajan 4D development model (define, design, develop, and disseminate). This research was conducted in June-August 2022. The LKPD product feasibility trial was carried out at Pangururan 1 Public High School, Samosir Regency, North Sumatra. The subjects in this study were material expert lecturers, learning expert lecturers, desain expert lecturers, biology teachers in class X SMA Negeri 1 Pangururan and students in class X SMA Negeri 1 Pangururan. Data collection techniques were carried out using interviews, questionnaires, and tests. The results of this study indicate that the developed LKPD based on Problem Based Learning (PBL) on biodiversity material is feasible at SMA Negeri 1 Pangururan. This can be seen from the average percentage obtained from the material expert validator by 98% in the very feasible category, the learning expert validator by 92% in the very feasible category, the desain expert validator by 94%, the biology study teacher by 97% by the category very worth it. Individual trials got 93% results in the good category, small groups got 94% results in the good category, and the limited group got 96% results in the good category. N-gain student learning outcomes obtain a value of 0.73 with high criteria. The environmental care attitude of students is at 78.5 with high criteria.

**Keywords:** *LKPD development, 4D Thiagarajan, Biodiversity.*