

## ABSTRAK

**Widya Syahputri, NIM 4202141004 (2024). Pengembangan LKPD Berbasis PJBL Menggunakan *Live worksheet* Pada Materi Keanekaragaman Hayati Kelas X**

Penelitian ini bertujuan untuk mengetahui kelayakan LKPD, kemenarikan peserta didik terhadap LKPD dan tingkat efektifitas penggunaan LKPD. Penelitian ini dilakukan pada bulan Mei-Agustus 2024. LKPD hasil pengembangan selanjutnya dinilai kelayakannya oleh ahli materi, ahli pembelajaran, ahli desain dan guru biologi yang masing-masing 1 orang. Untuk uji kemenarikan dan efektifitasnya diambil dari peserta didik kelas X<sub>7</sub> SMA Negeri 18 Medan. Model pengembangan pada LKPD *live worksheet* ini yaitu model 4D yang meliputi tahapan definisi (*define*), perancangan (*design*), pengembangan (*development*) dan penyebaran (*disseminate*). Instrumen dalam penelitian ini yaitu; Instrumen kelayakan menurut ahli materi, ahli pembelajaran, ahli desain dan guru biologi; instrumen kemenarikan menurut peserta didik dan instrumen tes kognitif. Hasil penelitian menunjukkan LKPD *live worksheet* pada materi keanekaragaman hayati yang dikembangkan dikategorikan sangat layak menurut ahli materi, ahli pembelajaran dan guru biologi. Sedangkan menurut ahli desain dikategorikan cukup layak. Kemenarikan menurut peserta didik terhadap LKPD dikategorikan sangat menarik. Efektifitas LKPD berbasis PJBL menggunakan *Live worksheet* pada materi keanekaragaman hayati yang dikembangkan memberikan hasil yang lebih efektif terhadap hasil belajar dengan kategori sedang ( $N\text{-gain} = 0,69$ ).

Kata kunci: LKPD, PJBL, Keanekaragaman Hayati, *Live worksheet*, 4D

## ABSTRACT

**Widya Syahputri, NIM 4202141004 (2024). Development of PJBL-Based LKPD Using *Live Worksheets* on Biodiversity Material for Class X**

This study aims to determine the feasibility of LKPD, students' interest in LKPD and the level of effectiveness of LKPD use. This study was conducted in May-August 2024. The LKPD results of the development were then assessed for feasibility by material experts, learning experts, design experts and biology teachers, 1 person each. For the test of attractiveness and effectiveness, it was taken from class X7 students of SMA Negeri 18 Medan. The development model for this LKPD live worksheet is the 4D model which includes the stages of definition (define), design (design), development (development) and dissemination (disseminate). The instruments in this study were; Feasibility instruments according to material experts, learning experts, design experts and biology teachers; attractiveness instruments according to students and cognitive test instruments. The results of the study showed that the LKPD live worksheet on the biodiversity material that was developed was categorized as very feasible according to material experts, learning experts and biology teachers. Meanwhile, according to design experts, it was categorized as quite feasible. The students' interest in LKPD is categorized as very interesting. The effectiveness of LKPD based on PjBL using Live worksheet on the developed biodiversity material provides more effective results on learning outcomes with a moderate category (N-gain = 0.69).

Keywords: LKPD, PJBL, Biodiversity, Live worksheet, 4D