

## ABSTRACT

**Sarah Rapma Kristina Sitanggang, 4163342029 (2021). The Development Of Student Worksheet by Using Discovery Learning Approach On Ecosystem Material For Grade X SMA Negeri 1 Tebing Tinggi Kab. Serdang Bedagai**

This research aims to know the feasibility level of *the student worksheet based on Discovery Learning* on Ecosystem materials and obtain a decent and effective LKPD used in teaching and learning activities. The type of research used is Research Development (R&D) with a 4-D product development model. This model includes 4 stages, define, design, develop, disseminate. The student worksheet that has been developed was validated by material expert, instructional design expert, graphic design expert and field tests. The results obtained an average percentage of assessment by material expert 94.44% with the category of "very good", instructional design experts by 87.5% with the category of "very good", graphic design experts by 95.23%% with the category "very good", and the percentage of student response in field trials of 93% with the category "good". The final product of LKPD based on the level of feasibility can be categorized as "very good" as teaching and learning materials in teaching and learning activities, especially in ecosystem materials. Based on the results of the effectiveness test, *paired T Test* obtained  $t_{\text{count}} > t_{\text{table}} = 25.60 > 2.03$ , then declared  $H_0$  rejected (significantly higher *posttest* score than *pretest* score). Based on the results of *N-gain score pre-test* and *post-test* score of 0.77 with the category of improvement of learning results on the criteria "High". Based on the results of the study, it can be concluded that student worksheet based on Discovery Learning on Ecosystem materials is feasible and quite effectively used as supporting teaching materials.

**Keywords:** *Development, Student Worksheet (LKPD), Discovery Learning, Ecosystem.*

