

## ABSTRAK

**Mei Lanie Siagian, NIM 4193341006 (2024), Pengembangan Bahan Ajar dengan Menggunakan Aplikasi *Google Sites* Berbasis *Problem Based Learning* pada Materi Sistem Pencernaan di MAN 2 Labuhanbatu Utara.**

Penelitian ini bertujuan untuk mengembangkan bahan ajar dengan menggunakan aplikasi *google sites* berbasis *problem based learning* berdasarkan tingkat kelayakan dari para ahli, respon guru dan peserta didik, serta mengetahui keefektifan aplikasi *google sites* terhadap hasil belajar siswa Metode yang digunakan R&D, Model 4D (*Define, Design, Develop, Disseminate*). Hasil penelitian menunjukkan bahwa data tingkat kelayakan produk bahan ajar aplikasi *google sites* mendapat kriteria “Sangat Layak” dari penilaian ahli materi dengan persentase 90,90%, penilaian ahli pembelajaran diperoleh kriteria “Sangat Layak” dengan persentase 89,58% dan penilaian ahli desain diperoleh kriteria “Sangat Layak” dengan persentase 97,72%. Respon guru biologi diperoleh kriteria “Sangat Baik” dengan persentase 92,85%. Respon siswa diperoleh respon positif dengan kriteria “Sangat Baik” dengan persentase 93,88%. Hasil uji efektivitas dengan menggunakan rumus *N-gain* diperoleh kriteria “Sedang” dengan persentase 0,57 yang menunjukkan bahwa bahan ajar dengan menggunakan aplikasi *google sites* berbasis *problem based learning* memberikan pengaruh positif dalam kegiatan pembelajaran biologi khususnya pada materi sistem pencernaan.

**Kata Kunci:** Pengembangan, Bahan Ajar, Google Sites

## ABSTRACT

**Mei Lanie Siagian, NIM 4193341006 (2024), Development of Teaching Materials Using the Google Sites Application Based on *Problem Based Learning* on Digestive System Material at MAN 2 North Labuhanbatu.**

This research aims to develop teaching materials using the Google Sites application based on *problem based learning* based on the level of suitability of experts, teacher and student responses, as well as knowing the effectiveness of the Google Sites application on student learning outcomes. The method used is R&D, 4D Model (*Define, Design, Develop, Disseminate*). The results of the research show that the data on the feasibility level of the Google Sites application teaching material product received the "Very Feasible" criterion from the material expert assessment with a percentage of 90.90%, the learning expert assessment obtained the "Very Eligible" criterion with a percentage of 89.58% and the design expert assessment obtained "Very Eligible" criteria with a percentage of 97.72%. The biology teacher's response was "Very Good" with a percentage of 92.85%. Student responses obtained positive responses with the criteria "Very Good" with a percentage of 93.88%. The results of the effectiveness test using the N-gain formula obtained a "Medium" criterion with a percentage of 0.57, which shows that teaching materials using the Google Sites application based on *problem based learning* have a positive influence on biology learning activities, especially on the digestive system material.

**Keywords:** Development, Teaching Materials, *Google Sites*