ABSTRAK

Suci Febriyanti Marpaung: ***Pengembangan E-Jobsheet dengan Aplikasi Liveworksheets pada Mata Pelajaran Dasar-Dasar Teknik Geospasial Kelas X Konsentrasi Keahlian Teknik Geomatika di SMK Negeri 1 Percut Sei Tuan*****. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2025**

Latar belakang penelitian ini didasari oleh kebutuhan akan media pembelajaran yang menarik dan interaktif dalam mendukung proses pembelajaran pada mata pelajaran Dasar-Dasar Teknik Geospasial. Penelitian ini bertujuan untuk: (1) Menganalisis tahapan pengembangan *e-jobsheet* dengan aplikasi *liveworksheets* yang digunakan pada mata pelajaran Dasar-Dasar Teknik Geospasial untuk peserta didik kelas X Teknik Geomatika 1 semester ganjil tahun ajaran 2025/2026 di SMK Negeri 1 Percut Sei Tuan. (2) Menganalisis kelayakan produk *e-jobsheet* dengan aplikasi *liveworksheets* yang digunakan pada mata pelajaran Dasar-Dasar Teknik Geospasial untuk peserta didik kelas X Teknik Geomatika 1 semester ganjil tahun ajaran 2025/2026 di SMK Negeri 1 Percut Sei Tuan. Metode penelitian yang digunakan adalah *Research and Development* (R&D) dengan model pengembangan 4D yang dimodifikasi menjadi 3D (*Define, Design, Develop*). Instrumen yang digunakan berupa angket. Angket digunakan untuk menguji kelayakan *e-jobsheet* melalui validasi ahli materi dan ahli media. Hasil penelitian menunjukkan bahwa produk *e-jobsheet* yang dikembangkan memperoleh nilai rata-rata dari ahli materi sebesar 4,39 (kategori "sangat layak"), serta memperoleh nilai rata-rata dari ahli media sebesar 4,20 (kategori "sangat layak"). Dengan demikian pengembangan *e-jobsheet* dengan aplikasi *liveworksheets* menurut para ahli sangat layak digunakan peserta didik kelas X Teknik Geomatika di SMK Negeri 1 Percut Sei Tuan.

Kata Kunci : Pengembangan Media Pembelajaran, *E-Jobsheet*, *Liveworksheets*, dan Dasar-Dasar Teknik Geospasial

ABSTRACT

Suci Febriyanti Marpaung: ***Development of E-Jobsheet using Liveworksheets Application on Basic Geospatial Engineering Subject for Grade X Geomatics Engineering Expertise Concentration at SMK Negeri 1 Percut Sei Tuan . Thesis. Faculty of Engineering. Medan State University*****. 2025**

This research was motivated by the need for engaging and interactive learning media to support the learning process in the subject of Basic Geospatial Engineering. The objectives of this study are: (1) To analyze the stages of developing an e-jobsheet using the liveworksheets application in the subject of Basic Geospatial Engineering for Grade X Geomatics Engineering students in the odd semester of the 2025/2026 academic year at SMK Negeri 1 Percut Sei Tuan, and (2) To analyze the feasibility of developing an e-jobsheet using the liveworksheets application in the subject of Basic Geospatial Engineering for Grade X Geomatics Engineering students in the odd semester of the 2025/2026 academic year at SMK Negeri 1 Percut Sei Tuan. The research employed a Research and Development (R&D) approach using the 4D development model, which was modified into three stages, namely Define, Design, and Develop. The instrument used was a questionnaire to assess the feasibility of the e-jobsheet through validation by material experts and media experts. The results showed that the developed e-jobsheet received an average score of 4.39 from material experts (categorized as "highly feasible") and an average score of 4.20 from media experts (categorized as "highly feasible"). Therefore, the development of an e-jobsheet using the liveworksheets application is considered highly feasible for use by Grade X Geomatics Engineering students at SMK Negeri 1 Percut Sei Tuan.

Keywords **:** *Development of Learning Media, E-Jobsheet, Liveworksheets, Basic Geospatial Engineering*