

## ABSTRAK

Berkat Waruwu : Pengembangan Modul Pembelajaran Pada Mata Pelajaran Gambar Teknik Di SMK Negeri 5 Medan Kelas X Program Keahlian Desain Pemodelan Dan Informasi Bangunan. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2024.

Penelitian ini dilakukan berdasarkan nilai mata pelajaran Gambar Teknik yang rendah dan masih kurang tersedianya bahan ajar terutama berbasis modul pada proses pembelajaran pada kelas X DPIB di SMK Negeri 5 Medan. Penelitian ini bertujuan untuk: (1) Mengetahui proses pengembangan modul yang tepat untuk mendukung proses pembelajaran pada mata pelajaran Gambar Teknik, (2) Mengetahui kelayakan modul mata pelajaran Gambar Teknik berdasarkan penilaian ahli media/modul, ahli materi, guru mata pelajaran dan siswa kelas X DPIB. Penelitian ini menggunakan metode Research and Development (R&D) dengan model ADDIE meliputi tahapan analisis (analyze), perancangan (design), pengembangan (development), implementasi (implementation), dan evaluasi (evaluation). Instrumen yang digunakan pada penelitian ini adalah angket. Angket digunakan untuk menguji tingkat kelayakan modul melalui validasi dari ahli media, ahli materi, guru mata pelajaran, dan pengguna. Validasi yang dilakukan didapat skor akumulasi sebesar 85,5% dengan rincian ahli media memberikan skor 88%, ahli materi I memberikan skor 87,5%, dan ahli materi II (guru mata pelajaran) memberikan skor 81,2%. Berdasarkan penilaian para ahli maka dapat disimpulkan bahwa modul pelajaran Gambar Teknik yang telah dikembangkan dinyatakan layak digunakan.

**Kata Kunci:** Pengembangan Modul, Research and Development (R&D), Gambar Teknik, ADDIE

## **ABSTRACT**

*Berkat Waruwu: Development of Learning Modules in Engineering Drawing Subjects at SMK Negeri 5 Medan Class X Building Modeling and Information Design Expertise Program. Scription. Faculty of Engineering. Medan State University. 2024.*

*This research was conducted based on the low score of the Engineering Drawing subject and the lack of availability of teaching materials, especially module-based in the learning process in class X DPIB at SMK Negeri 5 Medan. This study aims to: (1) Determine the process of developing the right module to support the learning process in the subject of Engineering Drawing, (2) Determine the feasibility of the module of the subject of Engineering Drawing based on the assessment of media/module experts, material experts, subject teachers and students of class X DPIB. This study uses the Research and Development (R&D) method with the ADDIE model including the stages of analysis, design, development, implementation, and evaluation. The instrument used in this study is a questionnaire. The questionnaire is used to test the feasibility level of the module through validation from media experts, material experts, subject teachers, and users. The validation carried out obtained an accumulation score of 85.5% with details of media experts giving a score of 88%, material expert I giving a score of 87.5%, and material expert II (subject teacher) giving a score of 81.2%. Based on the assessment of experts, it can be concluded that the Technical Drawing lesson module that has been developed is declared suitable for use.*

*Keywords: Module Development, Research and Development (R&D), Image Engineering, ADDIE*