

ABSTRAK

Pengembangan Modul Praktikum SMK Berwawasan Lingkungan Mata Pelajaran Analisis Bahan Organik Kompetensi Keahlian Kimia Analisis

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Kegiatan praktikum di SMK Negeri 2 Depok pada mata pelajaran Analisis Bahan Organik belum menggunakan modul praktikum. Panduan praktikum yang biasa digunakan adalah lembar kerja praktikum. Namun lembar kerja praktikum itu dirasa kurang efektif karena konten yang disajikan kurang lengkap, kurang mengeksplorasi wawasan lingkungan, dan memiliki risiko hilang sehingga menjadi kendala peserta didik dalam belajar. Oleh karena itu, modul praktikum berwawasan lingkungan dapat menjadi salah satu bahan ajar pendukung pada mata pelajaran Analisis Bahan Organik. Tujuan penelitian ini adalah (1) Menghasilkan produk berupa modul praktikum kimia berwawasan lingkungan yang dikembangkan sesuai dengan model ADDIE. (2) Mengetahui validitas, kepraktisan, dan efektivitas produk berupa modul praktikum kimia berwawasan lingkungan. Jenis penelitian ini merupakan *Research & Development* yang mengacu pada model pengembangan ADDIE. Sampel dalam penelitian ini adalah peserta didik kelas XI Kimia Analisis berjumlah 60 anak. Metode pengumpulan data yang digunakan adalah wawancara, validasi produk dan instrumen, tes, portofolio, dan angket. Metode analisis data yang digunakan adalah analisis deskriptif kuantitatif dan kualitatif. Hasil penelitian ini adalah (1) Modul praktikum kimia berwawasan lingkungan sesuai dengan tahapan model pengembangan ADDIE. (2) Modul praktikum memenuhi kriteria sangat valid dengan persentase 94,672%, sangat praktis dengan persentase 90,749%, efektivitas bervariasi dengan rentang nilai 0,071 – 1 berdasarkan *N-Gain*, sangat efektif berdasarkan portofolio dengan persentase 87,515%.

Kata kunci: Modul praktikum kimia berwawasan lingkungan; Praktikum kimia berkesinambungan

ABSTRACT

Development of Environmentally Friendly Practicum Module in Vocational High School for Organic Material Analysis Subject of Analytical Chemistry Skills Competency

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Practical activities at SMK Negeri 2 Depok specifically on the subject of Organic Material Analysis has not used the practicum module. The practical guide that commonly used is the practicum worksheet. However, the practicum worksheets are considered less effective because the content presented is incomplete, does not explore environmental insights, and has the risk of being lost so that it becomes an obstacle for students in learning. Therefore, the environmentally friendly practicum module can be one of the supporting teaching materials in the subject of Organic Material Analysis. The aims of this study were (1) Produce a product of environmentally friendly chemistry practicum module that developed according to the ADDIE model. (2) Knowing the validity, practicality, and effectiveness of the product of an environmentally friendly chemistry practicum module. The type of this study is Research & Development which refers to the ADDIE development model. The sample in this study were students of XI Chemical Analysis class totaling 60 children. The data collection methods were interviews, product and instrument validation, tests, portfolios, and questionnaires. The data analysis methods is quantitative and qualitative descriptive analysis. The results of this study are (1) Environmentally friendly chemistry practicum module is in accordance to the stages of the ADDIE development model. (2) The practicum module gets the very valid criteria with a percentage of 94.672%, very practical with a percentage of 90.749%, effectiveness varies with a value range of 0.071 – 1 based on N-Gain, very effective based on portfolio with a percentage of 87.515%.

Keywords: Environmentally friendly chemistry practicum module; Continous procedure chemistry practicum