PENGEMBANGAN E-PENUNTUN PRAKTIKUM KIMIA SMA SKALA MIKRO KELAS X BERBASIS INKUIRI TERBIMBING

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ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan dan menjelaskan karakteristik, kevalidan, keterbacaan, dan kepraktisan buku e-penuntun praktikum kimia SMA skala mikro kelas berbasis inkuiri terbimbing. Jenis penelitian ini menggunakan model pengembangan ADDIE. Tahapan-tahapan yang dilakukan dalam penelitian ini yaitu, 1) analisis, 2) desain, dan 3) pengembangan. Teknik pengumpulan data yang digunakan adalah angket, analisis dokumen dan validasi. Instrumen yang digunakan dalam penelitian ini meliputi, angket pendapat guru kimia dan siswa SMA se-Bali, lembar analisis dokumen, lembar validasi, lembar keterbacaan, dan lembar kepraktisan. Karakteristik buku e-penuntun praktikum kimia SMA skala mikro meliputi 1) bahan dan alat kimia yang digunakan dalam skala mikro, 2) dikemas dalam bentuk digital, 3) terintegrasi model pembelajaran inkuiri terbimbing, 4) dilengkapi dengan video praktikum kimia skala mikro. Hasil buku e-penuntun praktikum kimia skala mikro menunjukkan hasil yang dikembangkan memenuhi kriteria kevalidan yang ditinjau dari aspek isi sebesar 0,96, media sebesar 3,73, dan bahasa sebesar 3,77 yang termasuk dalam kategori sangat valid. Uji keterbacaan buku penuntun paktikum kimia memperoleh persentase rata-rata 2,91% cukup jelas, 31,25% jelas, dan 65,83% sangat jelas. Uji kepraktisan ini melibatkan guru kimia dan siswa kelas X13. Uji kepraktisan oleh guru memperoleh nilai skor rata-rata sebesar 3,70 yang tergolong dalam kategori sangat praktis. Uji kepraktisan oleh siswa memperoleh nilai skor rata-rata sebesar 3,50 yang tergolong dalam kategori sangat praktis. Berdasarkan hasil uji produk yang telah dilakukan, menunjukkan bahwa buku penuntun pratikum kimia SMA skala mikro kelas X berbasis inkuiri terbimbing dapat digunakan sebagai alternatif sumber belajar didalam proses pembelajaran praktikum.

Kata Kunci: buku penuntun praktikum kimia SMA, digital, skala mikro, inkuiri terbimbing, validitas, keterbacaan, praktikalitas.

DEVELOPMENT OF AN E-GUIDE FOR MICRO-SCALE HIGH SCHOOL CHEMISTRY PRACTICUM FOR CLASS X BASED ON GUIDED INQUIRY

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ABSTRACT

This research aimed to describe and explain the characteristics, validity, readability, and practicality of the guided inquiry-based high school practicum manual developed for class X. This type of research uses the ADDIE development model. The stages carried out in this research are, 1) analysis, 2) design, and 3) development. Data collection techniques used were questionnaires, document analysis, and validation. The instruments used in this study included a questionnaire for the opinions of chemistry teachers and senior high school students throughout Bali, document analysis sheets, validation sheets, readability sheets, and practicality sheets. The characteristics of the e-guide for micro-scale high school chemistry practicum include 1) materials and chemical tools used on a micro-scale, 2) packaged in digital form, 3) integrated guided inquiry learning model, 4) equipped with a micro-scale chemistry lab video. The results of the micro-scale chemistry practicum e-guide book show that the results developed meet the validity criteria in terms of content aspect of 0.96, media of 3.73, and language of 3.77 which are included in the very valid category. The readability test of the chemistry lab manual obtained an average percentage of 2.91% clear enough, 31.25% clear, and 65.83% very clear. This practical test involved chemistry teachers and class X13 students. The practicality test by the teacher obtained an average score of 3.70 which is classified as very practical. The practicality test by students obtained an average score of 3.50 which was classified as very practical. Based on the results of the product tests that have been carried out, it shows that the guided inquiry-based micro-scale high school chemistry practicum guidebook for class X can be used as an alternative source of learning in the practicum learning process.

Keywords: handbook for high school chemistry practicum, digital, micro-scale, guided inquiry, validity, readability, practicality.