

ABSTRAK

Yulia S a h a n a Samosir, NIM 4193131048 (2023). Pengembangan Bahan Ajar Berbentuk Buku Elektronik Terintegrasi Keterampilan Generik Sains Pada Materi Kesetimbangan Kimia.

Pemilihan bahan ajar merupakan bagian penting dalam pembelajaran, oleh karena itu guru sekiranya dapat mengembangkan bahan ajar yang sesuai untuk upaya meningkatkan efektivitas proses pembelajaran. Maka dilakukan penelitian bertujuan menghasilkan bahan ajar berbentuk buku elektronik yang terintegrasi Keterampilan Generik Sains (KGS) untuk meningkatkan keterampilan berfikir tingkat tinggi peserta didik pada materi Kesetimbangan Kimia pada SMA kelas XI di sekolah menengah atas Swasta Laksamana Martadinata Medan melalui penelitian dan pengembangan atau (Research & Development, R&D) model 4D (Define, Design, Development, and Disseminate). Pengembangan bahan ajar dimulai dari (1) analisis buku (terdapat empat buku yang dianalisis) dan analisis konsep (2) perancangan bahan ajar, (3) standarisasi bahan ajar dengan menggunakan angket penilaian BSNP yang telah dimodifikasi, (4) revisi dan pengembangan bahan ajar), dan (5) uji coba lapangan bahan ajar dan tahap revisi akhir. Bahan ajar terdiri dari fitur-fitur seperti; “Untuk Diingat”, “Pemahaman Dasar”, “Konsep Kimia” dan beberapa gambar yang berfungsi sebagai tambahan untuk meningkatkan KGS dan fitur untuk menambah pengetahuan dan menarik minat peserta didik terhadap materi pembelajaran, seperti; “Info Kimia”, “Warta Kimia”, dan “Tokoh Kimia”. Pada bahan ajar terdapat “Contoh Soal” dan “Mandiri Kimia” untuk lebih melatih pemahaman peserta didik. Berdasarkan hasil standarisasi oleh ahli materi dan ahli media, bahan ajar melalui tahap revisi untuk dihasilkan bahan ajar yang sangat layak digunakan dalam pembelajaran. Kemudian dilakukan ujicoba lapangan untuk memperoleh respon guru dan peserta didik sebagai pengguna bahan ajar dan didapatkan hasil bahan ajar sangat baik digunakan sebagai sumber belajar dan sangat menarik bagi peserta didik.

Kata kunci : Penelitian dan pengembangan, bahan ajar berupa buku elektronik, keterampilan generik sains, kesetimbangan kimia.

ABSTRACT

Yulia Sahana Samosir, NIM 4193131048 (2023). Development of Teaching Materials in the Form of Electronic Books Integrated with Generic Science Skills in Chemical Equilibrium.

i Selection of teaching materials is an important part of learning, therefore teachers can develop appropriate teaching materials to increase the effectiveness of the learning process. Thus, the research was conducted to develop teaching materials in the form of electronic books integrated with Generic Science Skills (KGS) to improve students' high level thinking skills in chemical equilibrium material in Class XI Senior High School at Laksamana Martadinata Private High School Medan through research and development (R&D) the 4D model (Define, Design, Development, and Disseminate). The development of teaching materials starts from (1) book analysis (four books were analysed) and concept analysis, (2) design of teaching materials, (3) standardisation of teaching materials using a modified BSNP assessment questionnaire, (4) revision and development of teaching materials, and (5) field testing of teaching materials and final revision. The teaching materials consist of features such as "To Remember", "Basic Understanding", "Chemical Concepts" and several pictures that serve as supplements to enhance the KGS, and features that increase knowledge and attract students' interest in the learning material, such as "Chemical Info", "Chemical News" and "Chemical Figures". In the teaching materials, there are "Sample Questions" and "Practice" to further train students' understanding. Based on the results of standardisation by material experts and media experts, the teaching materials go through the revision stage to produce teaching materials that are very suitable for use in learning. Then, field tests were conducted to obtain the reactions of teachers and students as users of the teaching materials, and the results showed that the teaching materials were very well used as learning resources and very interesting for students.

Keywords: Research and development, teaching materials in the form of electronic books, generic science skills, Chemical Equilibrium.