

ABSTRAK

Penelitian yang dilakukan bertujuan untuk mengembangkan *prototype* buku teks pelajaran berbasis intertekstual pada materi sifat koligatif larutan sebagai sumber bahan ajar mandiri siswa. Penelitian ini dilakukan karena ditemukannya ketidaktepatan deskripsi konsep dan kurangnya keterlibatan representasi kimia dalam dua buah buku teks pelajaran kimia SMA kelas XII yang digunakan di kota Bandung. Penelitian yang digunakan adalah *Research and Development (R&D)* dengan metode deskriptif dan evaluatif. Pengembangan produk buku teks pelajaran dilakukan dengan merumuskan indikator dan konsep pada materi sifat koligatif larutan berdasarkan hasil analisis kompetensi dasar pada kurikulum 2013, perumusan representasi kimia level makro, level submikroskopik dan level simbolik berdasarkan hasil analisis konsep pada enam buah *textbook* kimia dasar, perumusan *outline* buku, serta penyusunan *prototype* buku teks pelajaran. Instrumen yang digunakan berupa tabel validasi kesesuaian indikator dengan kompetensi dasar dan kesesuaian indikator dengan konsep, tabel analisis representasi kimia pada buku kimia SMA, tabel analisis konsep materi sifat koligatif larutan pada tujuh buah *textbook* kimia dasar, tabel representasi kimia untuk pengembangan buku teks, tabel perumusan *outline*, tabel validasi kriteria kelayakan buku teks, lembar analisis grafik Fry dan lembar analisis tes rumpang. Hasil penilaian ahli menunjukkan bahwa produk buku teks pelajaran yang dikembangkan sudah cukup memenuhi kriteria kelayakan buku teks pelajaran dengan beberapa perbaikan berdasarkan saran dari ahli. Hasil uji keterbacaan menggunakan Grafik Fry menunjukkan bahwa teks berada pada tingkat 11 sehingga memenuhi kriteria sasaran pembaca yaitu kelas X, XI atau XII. Uji rumpang menunjukkan bahwa produk buku teks memiliki tingkat keterbacaan tinggi sehingga dapat digunakan sebagai sumber bahan ajar mandiri siswa.

Kata Kunci: Prototype Buku Teks Pelajaran, Representasi Kimia, Sifat Koligatif Larutan, Representasi Level Makro, Level Submikroskopik dan Level Simbolik.

ABSTRACT

This study is aimed to develop a prototype of chemistry textbooks learning material based to the inter textual on the subject of colligative properties of solution as a students' source of self-teaching materials. This study is conducted because it was found inaccuracies concept and shortcoming involvement of chemical representation on two chemistry textbooks material in level XII of Senior High School in Bandung. The method of the research is a Research & Development on descriptive and evaluative methods. The development of textbook products are carried out by formulating indicators and concept on the material colligative properties of solution based on the analysis of basic competencies in 2013's Curriculum, formulating chemical representation on the macro, sub micro and symbolic level based on the analysis of the six basic chemistry textbooks, formulating of outline book, and prototyping textbooks. The instruments used in this study are a validation table of suitability indicators with the basic competencies and suitability indicators with the concept, analysis table of chemical representation on chemistry textbooks learning material in Senior High School, analysis table of colligative properties concept on the seven basic chemistry textbooks, analysis table of chemical representation to develop textbooks, table of outline formulation, validity table of textbook eligibility criteria, sheet of the Fry Graph analysis, and sheet of cloze test analysis. The results of expert assessment showed that the prototype of chemistry textbook products is enough met the eligibility criteria of books with some improvements based on expert advice. The result using Fry Graph formula showed that the text is at the level of 11 in accordance with the class X, XI or XII of senior high school as the target reader. Cloze test result showed that the product has a high readability so it can be used as a source of self-teaching materials for students.

Keyword: Prototype of Chemistry Textbooks Learning Material, Chemical Representation, Colligative Properties of Solution, Macro Level Representation, Sub micro Level Representation, Symbolic Level Representation.