

**PENGEMBANGAN BAHAN AJAR KIMIA UNTUK SISWA SMP  
PADA MATERI ASAM BASA MENGGUNAKAN METODE  
FOUR STEPS TEACHING MATERIAL DEVELOPMENT**

**ABSTRAK**

Penelitian ini bertujuan untuk menghasilkan bahan ajar yang layak dipakai dalam pembelajaran Kimia SMP pada materi asam basa dengan menggunakan metode *Four Steps Teaching Material Development* (4S TMD). Bahan ajar tersebut dikonstruksi dengan melakukan keempat tahapan operasional pada metode 4S TMD yaitu tahap seleksi, strukturisasi, karakterisasi dan reduksi didaktik. Dari hasil pengembangan bahan ajar pokok bahasan asam basa, pada tahap seleksi dihasilkan *draft* bahan ajar 1 yang telah divalidasi kesesuaian dengan kurikulum (KD 2.1 dan 2.2), kebenaran konsepnya dan pengembangan nilai terkait bahan ajar tersebut. Pada tahap strukturisasi dihasilkan *draft* bahan ajar 2 berupa peta konsep, struktur makro dan multipel representasi. Tahap karakterisasi meliputi penyusunan instrumen karakterisasi dan diujicoba keterpahaman kepada 25 siswa salah satu SMP Negeri di Kota Bandung. Dari 36 teks yang dikembangkan, terdapat 30 teks dikategorikan mudah dan 6 teks dikategorikan sulit. Karakteristik paragraf yang dikategorikan sulit, yaitu: abstrak, kompleks dan rumit. Teks yang dikategorikan sulit kemudian dilakukan reduksi didaktik. Uji kelayakan bahan ajar dilakukan oleh dosen ahli sesuai dengan standar BSNP. Pada aspek kelayakan konten isi mendapatkan persentase kelayakan sebesar 86,11%, aspek penyajian materi sebesar 80%, aspek kebahasaan sebesar 81,48% dan aspek grafika sebesar 81,48%. Keempat aspek kelayakan bahan ajar berada pada kategori kelayakan baik. Hasil uji kelayakan bahan ajar tersebut menunjukkan bahwa bahan ajar kimia materi asam basa yang dikembangkan menggunakan 4S TMD tersebut layak digunakan dalam proses pembelajaran kimia untuk tingkat pendidikan SMP.

Kata Kunci: Pengembangan bahan ajar, 4S TMD, Asam basa

**DEVELOPMENT OF CHEMISTRY TEACHING MATERIAL  
IN ACID-BASE TOPIC FOR JUNIOR HIGH SCHOOL  
USING FOUR STEPS TEACHING MATERIAL DEVELOPMENT**

**ABSTRACT**

*Purpose of this research is to produce teaching material which is proper to use in junior high school chemistry teaching process using Four Steps Teaching Material Development method (4S TMD). The teaching material was constructed by four stages of operational methods 4S TMD: i.e. selection, structurization, characterization and didactic reduction. From the development of teaching materials subject of acids and bases, at selection phase was produced draft of teaching materials 1 that has validated the suitability of the curriculum (KD 2.1 and 2.2), the truth of the concept and development of value related the teaching materials. At structurization phase has developed a concept map, the macro-structure and multiple representations. At characterization phase includes the preparation characterization instruments and tested of understanding to 25 students on Junior High School in Bandung. From 36 texts has developed, there were categorized 30 texts easily and 6 texts difficult. Characteristics paragraphs are categorized difficult: i.e. abstract, complex and complicated. The feasibility test of teaching materials is done by expert in accordance with the standards of National Education Standards (BSNP). On the feasibility content aspect obtain eligibility percentage of 86.11%, aspects of presentation of the material by 80%, linguistic aspect of 81.48% and graphic aspects of 81.48%. The fourth feasibility aspect of teaching materials in good qualifying category. The results of the feasibility study show that acid-base teaching materials has developed using 4S TMD is appropriate for use in learning process of junior high school level.*

*Keywords: Development of teaching materials, 4S TMD, Acid-base*