ABSTRAK

ARI RAMAYANTI RAHAYU, Pengembangan Buku Ajar Biologi SMA Berbasis Pendekatan Saintifik untuk Kelas XI Semester II. Tesis: Program Pascasarjana Universitas Negeri Medan. 2016.

Pengembangan buku ajar penting dilakukan guru agar pembelajaran lebih efektif, efisien, serta sesuai dengan kompetensi yang ingin dicapai. Guru dapat mengembangkan sendiri bahan ajar di sekolah masing-masing dengan mengarahkan pembelajaran pada proses pendekatan saintifik. Beberapa guru kurang mampu mengembangkan sumber belajar, misalnya buku ajar biologi khususnya SMA secara mandiri untuk mendukung pembelajaran dengan menggunakan pendekatan saintifik. Pendekatan saintifik memiliki karakteristik "*doing science*" dengan lima langkah-langkah atau tahapan-tahapan secara terperinci yang memuat instruksi untuk siswa melaksanakan kegiatan pembelajaran. Penelitian ini bertujuan untuk mengembangkan bahan ajar berupa buku ajar biologi SMA berbasis pendekatan saintifik untuk kelas XI semester II. Penelitian ini menggunakan model pengembangan 4-D. Prosedur pengembangan terdiri dari beberapa tahap; (1) Analisis Masalah; (2) Perancangan buku ajar; dan (3) Uji coba lapangan. Hasil penelitian menunjukkan persentase skor rata-rata penilaian buku ajar biologi SMA berbasis pendekatan saintifik untuk kelas XI semester II oleh validator ahli materi dari aspek kelayakan isi adalah 81,4% (baik) dan dari aspek kelayakan penyajian 90,6% (sangat baik). Sedangkan hasil persentase skor rata-rata penilaian buku ajar biologi SMA berbasis pendekatan saintifik untuk kelas XI semester II oleh validator ahli media dari aspek kelayakan penyajian adalah 98,9% (sangat baik). Tanggapan guru dan siswa terhadap buku ajar biologi SMA berbasis pendekatan saintifik untuk kelas XI semester II termasuk ke dalam kriteria sangat baik.

Kata Kunci: Pengembangan, Buku Ajar, Biologi, Pendekatan Saintifik

ABSTRACT

ARI RAMAYANTI RAHAYU**,** Development of Biology Textbook-Based Scientific Approach for High School Class XI 2nd Semester. Postgraduate Program, State University of Medan. 2016.

Developing textbook is essential to be carried out by teacher in order that learning process becomes more effective, efficient and in accordance with the expected competencies. Teacher should be able to design an improvement of teaching material at school by referring learning process to a scientific approach. But in fact, many teachers are not able to expand the learning sources, such as textbook especially High School Biology textbook to support learning process by utilizing scientific approach. The scientific approach possesses a characteristic like "doing science" including 5 steps or stages specifically which contains instructions for the students to do learning activities. The aim of this research is to develop learning material in terms of Biology Textbook-Based Scientific Approach for High School Class XI 2nd Semester. This research used 4-D developmental model. The procedure consists of some stages such as; (1) problem analysis; (2) learning material design; and (3) field trials. The results showed that the average assessment percentage of Biology Textbook-Based Scientific Approach for High School Class XI 2nd Semester by validation of subject-matter experts with respect to the aspect of feasibility content is 81,4% (good) and feasibility display is 90,6% (very good). Whereas the average assessment percentage percentage of Biology Textbook-Based Scientific Approach for High School Class XI 2nd Semester by validation of media experts with respect to the aspect of feasibility display is 98,9% (very good). The responses from teacher and students towards Biology Textbook-Based Scientific Approach for High School Class XI 2nd Semester can be concluded as "very good" criteria.

Keywords: Development, Textbook, Biology, Scientific Approach