THE DEVELOPMENT OF SMA TEXTBOOK BASED ON SCIENTIFIC APPROACH ON MOTION AND CIRCULATORY SYSTEM TOPICS

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ABSTRACT

This study aims to know the assessment of textbook in accordance with Badan Standar Nasional Pendidikan (BSNP) criteria, to determine students' activities in following steps of the scientific, and to know students' understanding of topics showed from their learning outcomes. Research uses the Analysis, Design, Development, Implementation and Evaluation (ADDIE) method. The development procedure starts from the analysis of textbooks from various publishers. Next stage is designing textbooks. After that is development including validation by content and education expert, and biology teacher, and also students. Then do the revision according to the advice of the validators. The products produced are "Buku Ajar Biologi Sistem Gerak dan Sistem Sirkulasi Berbasis Pendekatan Saintifik untuk Kelas XI SMA/MA". The results of the study of textbooks according to BSNP criteria by content expert showed an average value of 96 with very good criteria in motion system topic and 93 with very good criteria in circulatory system topic, and the education expert give 94 with very good criteria in motion system topic and 97 with very good criteria in circulatory system topic, and from biology teacher was 97 with very good criteria in motion system topic and 94 with very good criteria in circulatory system topic, also from students, the average value was 90 with very good criteria. The indicators of students following the scientific approach that assessed by biological teacher got 100 value with very good criteria in both motion and circulatory system topics. Based on the result of T test, it is obtained that the value of $t_{count} > t_{table}$ (8.06 > 1.6736) then Ha is accepted and Ho is rejected. So, it can be concluded that the value of students learning outcomes who are taught using biology textbook developed based on scientific approach in Motion and Circulatory System Topics is significantly higher than students who taught using regular biology textbook.

Key word : *Development, Biology Textbook, Scientific Approach*