

ABSTRAK

PENGEMBANGAN MODUL MATA PELAJARAN IPA UNTUK PENDIDIKAN KONSERVASI LINGKUNGAN BERDASARKAN PENDIDIKAN EMANSIPATORIS DI KELAS VA SDN DAYUHARJO

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Penelitian ini merupakan penelitian dan pengembangan bahan ajar modul mata pelajaran IPA untuk menanamkan pendidikan konservasi lingkungan pada siswa kelas VA SDN Dayuharjo tahun ajaran 2016/2017 berdasarkan pendidikan emansipatoris dengan harapan siswa semakin sadar dan peduli terhadap lingkungan. Penelitian ini termotivasi dari sikap dan perilaku siswa kelas VA SDN Dayuharjo yang kurang menyadari akan pentingnya lingkungan.

Metode penelitian yang digunakan adalah *Research and Development (R&D)* dengan menggunakan 5 langkah pengembangan bahan menurut Tomlinson yang diadaptasi dan telah dimodifikasi, yaitu meliputi: (1) analisis kebutuhan, (2) desain produk, (3) validasi, (4) revisi, (5) implementasi dan (6) evaluasi. Modul dikembangkan berdasarkan 9 dari 16 prinsip pengembangan bahan ajar Tomlinson, yaitu (1) *Material should achieve impact*, (2) *Material should help learners to develop confidence*, (3) *What is being taught should be perceived by learners as relevant and useful*, (4) *Materials should require and facilitate learner self-investment*, (5) *Materials should take into account that learners differ in learning styles*, (6) *Materials should take into account that learners differ in affective attitudes*, (7) *Materials should maximize learning potential by encouraging intellectual, aesthetic and emotional involvement which stimulates both right and left brain activities*, (8) *Materials should not rely too much on controlled practice*, dan (9) *Materials should provide opportunities for outcome feedback*. Modul hasil penelitian ini dievaluasi oleh ahli IPA, ahli bahasa, guru kelas VA sebelum diimplementasikan. Dari hasil evaluasi didapatkan skor rata-rata 3,68 sehingga modul masuk dalam kategori “sangat layak” untuk diimplementasikan lebih lanjut. Kegiatan pembelajaran dalam modul juga dievaluasi oleh seluruh siswa kelas VA dengan mengisi angket yang dibuat oleh peneliti untuk mengetahui ketercapaian 9 prinsip pengembangan bahan ajar Tomlinson.

Modul pembelajaran IPA dapat dikategorikan layak digunakan, dikarenakan sebanyak 22 siswa kelas VA menyatakan bisa mengikuti pembelajaran menggunakan modul berdasarkan panduan. Peneliti meyakini bahwa sebanyak 22 siswa tertarik terhadap isi dalam modul dengan bukti bahwa mereka membaca dan memahami panduan, memperhatikan dan berpartisipasi aktif dalam kegiatan berdiskusi maupun demonstrasi. Antusias, senyum dan kerjasama baik yang terjalin antar siswa memberikan kesan bahwa siswa merasa senang dan nyaman. Keterlibatan aktif siswa dalam mengikuti eksperimen dan keberhasilan 5 kelompok dalam bekerjasama membuktikan bahwa mereka mampu bekerja secara individu maupun kelompok dalam mengikuti kegiatan dalam modul berdasarkan panduan.

Kata kunci : pengembangan, modul, pendidikan konservasi lingkungan, pendidikan emansipatoris

ABSTRACT

SCIENCE MODULE DEVELOPMENT OF ENVIRONMENTAL CONSERVATION EDUCATION BASED ON EMANCIPATORY EDUCATION IN CLASS VA OF SD N DAYUHARJO

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This research was a research and development in science teaching materials module to implement environmental conservation education for VA students of SD N Dayuharjo academic year 2015/2016 based on emancipatory education. The expectation was the students became more aware and care to the environment. This research was motivated attitudes and behaviors of Grade VA Students SDN Dayuharjo who are less aware of the importance of the environment.

Research methodology used was was Research and Development (R&D) by using 5 steps to develop teaching materials according to Tomlinson with adaptation and modification such as: (1) needs' analysis, (2) product design, (3) validation, (4) revision, (5) implementation and (6) evaluation. Module developed by using 9 principles out of 16 Tomlinson's principles of teaching materials such as (1) *Material should achieve impact*, (2) *Material should help learners to develop confidence*, (3) *What is being taught should be perceived by learners as relevant and useful*, (4) *Materials should require and facilitate learner self-investment*, (5) *Materials should take into account that learners differ in learning styles*, (6) *Materials should take into account that learners differ in affective attitudes*, (7) *Materials should maximize learning potential by encouraging intellectual, aesthetic and emotional involvement which stimulates both right and left brain activities*, (8) *Materials should not rely too much on controlled practice*, and (9) *Materials should provide opportunities for outcome feedback*. The module of this research had been evaluated by Natural Science Expert, Linguist, and Teacher of Grade VA before being implemented. The evaluation results obtained an average 3,68, so that the module included in the category "very worth it" to be implemented further. Learning activities in the module are also evaluated by students of Grade VA by filling out a questionnaire created by researchers to know the achievement 9 Tomlinson's principles of teaching materials.

Science teaching module can be categorized very proper to used, because 22 students of Grade VA explained that they did follow the lesson using the module based on guidelines. The researcher also believed that 22 students were interested in the contents of the guidelines with evidence that they read and understand the guidelines, paid attention, and actively participated in discussion activities as well demonstration. Enthusiasm, smile, and good cooperation between students gave impressions that they feel happy and comfortable. Active involvement of students in following experiments and the success of 5 group in doing cooperation proved that they were able to work individually and as a group in following the activities using the module based on guidelines.

Keywords: development, module, environmental conservation education, emancipatory education