

PENGEMBANGAN LKPD IPA BERMUATAN *NATURE OF SCIENCE* UNTUK MENINGKATKAN LITERASI SAINS PESERTA DIDIK SMP

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui kelayakan LKPD IPA bermuatan *Nature of Science* (NOS) yang telah dikembangkan. Tujuan lainnya adalah mengetahui peningkatan literasi sains peserta didik setelah menggunakan LKPD IPA tersebut.

Jenis penelitian ini adalah penelitian dan pengembangan. Prosedur penelitian dan pengembangan diadaptasi dari model 4-D yang meliputi tahap *define* (pendefinisian), *design* (perancangan), *develop* (pengembangan), dan *disseminate* (penyebarluasan). Penelitian ini dilaksanakan di SMP N 2 Mlati, Kabupaten Sleman. Subjek uji coba dalam penelitian ini adalah peserta didik kelas VIII D tahun pelajaran 2016/2017 yang berjumlah 29 orang. Instrumen yang digunakan dalam penelitian ini meliputi lembar validasi LKPD IPA, lembar observasi keterlaksanaan pembelajaran IPA bermuatan NOS, lembar angket respon peserta didik terhadap LKPD IPA, dan soal *pretest* serta *posttest* literasi sains. Teknik analisis data kelayakan LKPD IPA dan respon peserta didik terhadap LKPD IPA adalah konversi skor kuantitatif menjadi nilai kualitatif dengan lima kategori, teknik analisis data keterlaksanaan pembelajaran IPA bermuatan NOS adalah perhitungan persentase, sedangkan teknik analisis data skor *pretest* dan *posttest* literasi sains adalah *paired sample t-test* dan perhitungan *gain score* ternormalisasi (*n-gain score*).

Hasil penelitian ini menunjukkan bahwa LKPD IPA bermuatan NOS layak digunakan dalam pembelajaran IPA berdasarkan hasil penilaian dosen ahli dan guru IPA. Kategori kelayakan LKPD IPA tersebut menurut dosen ahli dan guru IPA masing-masing adalah sangat baik (A). Selain itu, hasil penelitian juga menunjukkan bahwa literasi sains peserta didik mengalami peningkatan secara signifikan setelah menggunakan LKPD IPA bermuatan NOS. Peningkatan literasi sains peserta didik tersebut berada dalam kategori tinggi dengan *n-gain score* sebesar 0,71.

Kata Kunci: LKPD, IPA, *Nature of Science* (NOS), Literasi Sains, Peserta Didik SMP

**THE DEVELOPMENT OF SCIENCE STUDENT WORKSHEET
CONTAINING NATURE OF SCIENCE TO IMPROVE SCIENTIFIC
LITERACY OF JUNIOR HIGH SCHOOL STUDENTS**

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ABSTRACT

This study aims to find out the appropriateness of science student worksheet containing nature of science that has been developed. It also aims to find out the improvement of students' scientific literacy after using the worksheet.

This study is research and development. The research and development procedure adapted the 4-D model which includes the steps of define, design, develop, and disseminate. The research was conducted at SMP N 2 Mlati, Sleman District. Subject of this research and development were 29 students of the class VIII D in the school year 2016/2017. The instruments of this research and development include validation sheet of science student worksheet, observation sheet of the implementation of science learning containing NOS, questionnaire sheet of students responses to the worksheet, and scientific literacy pretest and posttest. The data analysis technique of the appropriateness of science student worksheet and students responses to the worksheet is quantitative score conversion to qualitative value with five categories, the data analysis technique of the implementation of science learning containing NOS is a percentage calculation, while the data analysis techniques of scientific literacy pretest and posttest's score are paired sample t-test and normalized gain score (n-gain score) calculation.

The result of this study shows that science student worksheet containing NOS is appropriate to be used for science learning according to the assessment of expert lecturers and science teachers. The appropriateness category of the science student worksheet based on the assessment of expert lecturers and science teachers is very well (A). Furthermore, the result of this study also shows that students' scientific literacy improve significantly after using the worksheet. The improvement of students' scientific literacy is in the high category with n-gain score of 0,71.

Key Words : Student Worksheet, Science, Nature of Science (NOS), Scientific Literacy, Junior High School Students