

EFEKTIVITAS BAHAN AJAR IPA TERPADU TIPE *CONNECTED* PADA TEMA TEKANAN UNTUK MENINGKATKAN KEMAMPUAN LITERASI SAINS SISWA

Abstrak

Penelitian ini bertujuan untuk melihat dampak penggunaan bahan ajar terhadap peningkatan kemampuan literasi sains siswa pada konsep tekanan. Penelitian ini dilakukan menggunakan desain penelitian dan pengembangan (R & D). Penyusunan bahan ajar menggunakan model pengembangan *four steps teaching material development* dengan tahapan seleksi, strukturisasi, karakterisasi, dan reduksi didaktik. Bahan ajar kemudian di uji keterpahaman dan uji kelayakan oleh lima validator. Metode penelitian menggunakan pre-eksprimen dengan *one group pre-test post-test design* yang dilakukan di salah satu SMP Pidie Jaya, Aceh. Pengumpulan data dilakukan dengan lembar validasi untuk mengukur kelayakan, tes awal dan tes akhir untuk mengukur literasi sains aspek pengetahuan sains, proses sains serta kuesioner untuk mengukur aspek sikap sains. Berdasarkan hasil analisis data diperoleh persentase rerata hasil uji kelayakan 77,60. Rerata *n-gain* kemampuan literasi sains aspek pengetahuan dan proses sains 0,54 dan untuk aspek sikap sains diperoleh rata-rata *n-gain* 0,38. Hasil uji beda menggunakan *uji paired-samples t-test* dengan menggunakan SPSS v.16 menunjukkan bahwa terjadi peningkatan signifikan kemampuan literasi sains aspek pengetahuan sains, proses sains dan sikap sains dengan menggunakan bahan ajar IPA terpadu tipe *connected*.

Kata kunci : Bahan ajar IPA terpadu, tipe *connected*, tekanan, literasi sains

**EFFECTIVENESS OF TEACHING MATERIALS TYPES OF SCIENCE
CONNECTED THEME ON PRESSURE TO IMPROVE ABILITY
SCIENCE LITERACY STUDENTS**

Abstract

This study aims to look at the impact of the use of teaching materials to improve ability science literacy of students on the concept of pressure. This study was conducted using a design research and development (R & D). Preparation of teaching materials development model four steps of teaching material development with the selection process, structure, characterization, and didactic reduction. Teaching materials are then tested *comprehensible* and due diligence by five validator. The research method using pre-experimental with one group pre-test post-test design carried out in one of the junior Pidie Jaya, Aceh. The data collection is done with sheets validation to measure the feasibility, preliminary tests and final tests to measure science literacy aspects of science knowledge, the process of science as well as a questionnaire to measure the attitude aspect of science. Based on the analysis of data obtained by the average percentage of 77.60 feasibility test results. The average N-gain science literacy and science process knowledge aspect 0.54 and for aspects of science attitudes gained an average of 0.38 N-gain. The results of different tests using paired-samples t-test using SPSS v.16 shows an increase science literacy aspects of science knowledge, the process of science and science attitude by using the integrated science teaching materials connected types.

Keywords : Science teaching materials, type of connected, pressure, science literacy .