

ABSTRAK

Liya Nur Fatimah : Pengaruh Pendekatan *Science-Technology-Engineering-Arts-Mathematics* (STEAM) Terhadap Keterampilan Literasi Sains Siswa Pada Materi Perubahan Lingkungan

Penelitian ini bertujuan untuk menganalisis pengaruh pendekatan *Science-Technology-Engineering-Arts-Mathematics* (STEAM) terhadap keterampilan literasi sains pada materi perubahan lingkungan. Metode penelitian ini menggunakan metode *quasi eksperiment* dengan bentuk *pretest-posttest nonequivalent control group design*. Instrumen yang digunakan yaitu lembar observasi, soal *essay* dengan indikator keterampilan literasi sains, lembar asesmen kinerja produk, dan angket pernyataan. Penentuan sampel menggunakan teknik *purposive sampling* terdiri dari 35 siswa kelas eksperimen dan 35 siswa kelas kontrol dari salah satu SMA Plus di Kabupaten Sumedang. Data hasil penelitian berupa nilai rata-rata keterampilan literasi sains siswa pada kelas eksperimen yaitu 85,43. Nilai tersebut lebih besar dari pada nilai rata-rata siswa pada kelas kontrol yaitu 81,62. Perolehan nilai *N-gain* secara keseluruhan pada kelas eksperimen berada pada kriteria tinggi dengan nilai 0,72 sedangkan kelas kontrol berada pada kriteria sedang dengan nilai *N-gain* 0,67. Penelitian ini menunjukkan bahwa H_a diterima dan H_0 ditolak. Hasil uji-t dengan aplikasi SPSS menunjukkan nilai *Sig.2-tailed* sebesar $0,000 < 0,05$ artinya terdapat perbedaan keterampilan literasi sains siswa antara kelas kontrol dengan kelas eksperimen. Kesimpulan penelitian ini adalah pendekatan pembelajaran *Sains, Technology, Engeenering, Arts, Mathematics* (STEAM) dapat berpengaruh terhadap keterampilan literasi sains siswa pada materi perubahan lingkungan.

Kata Kunci : Keterampilan Literasi Sains, STEAM, Perubahan Lingkungan

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ABSTRAK

Liya Nur Fatimah : *The Effect of Science-Technology-Engineering-Arts-Mathematics (STEAM) Approach on Student Science Literacy Skills on Environmental Change Learning*

This study aims to analyze the effect of the Science-Technology-Engineering-Arts-Mathematics (STEAM) approach on science literacy skills on the subject of environmental change. This research method uses a quasi-experimental method in the form of a pretest-posttest nonequivalent control group design. The instruments used were observation sheets, essay questions with indicators of scientific literacy skills, product performance assessment sheets, and questionnaires. Determination of the sample using purposive sampling technique, consisting of 35 experimental class students and 35 control class students from one of SMA Plus in Sumedang Districts. The data from study results in the form of the average score of students' scientific literacy skills in classes using STEAM is 85,43. The score is greater than the average score of students in the control class, which is 81.62. The result N-gain score in the experimental class is in the high criteria with a score of 0.72 while the control class in the moderate criteria with N-gain score of 0.67. The results of this study indicate that H_a is accepted and H_0 is rejected. The results of the t-test with the SPSS application showed a Sig.2-tailed value of $0.000 < 0.05$, meaning that there were various students' scientific literacy skills between the control class and the experimental class. The conclusion of this study is that the Science, Technology, Engineering, Arts, Mathematics (STEAM) learning approach can affect students' scientific literacy skills on environmental change material.

Keywords : *Scientific Literacy Skills, STEAM, environmental change material.*

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SUNAN GUNUNG DJATI
BANDUNG