

ABSTRAK

Mia Sumiati Amalu Solihah. 2025. **PENGARUH MODEL PEMBELAJARAN MASTER (*MOTIVATING, ACQUIRING, SEARCHING, TRIGGERING, EXHIBITING, AND REFLECTING*) TERHADAP KEMAMPUAN LITERASI SAINS PESERTA DIDIK PADA MATERI MOMENTUM DAN IMPULS**

Hasil studi pendahuluan menunjukkan kemampuan literasi sains peserta didik di MAN 1 Kota Tasikmalaya masih rendah dengan rata-rata persentase 29,01%. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran MASTER terhadap kemampuan literasi sains peserta didik pada materi momentum dan impuls di kelas XI Saintek MAN 1 Kota Tasikmalaya tahun ajaran 2024/2025. Metode penelitian yang digunakan adalah *quasi-experiment* dengan desain *pretest-posttest control group design*. Populasi penelitian mencakup 5 kelas XI Saintek MAN 1 Kota Tasikmalaya dengan total 150 peserta didik. Sampel dipilih melalui teknik *cluster random sampling*, diperoleh XI Saintek 2 sebagai kelas eksperimen dan XI Saintek 1 sebagai kelas kontrol. Untuk mengukur kemampuan literasi sains peserta didik dilakukan tes berbentuk pilihan ganda pada materi momentum dan impuls sebanyak 25 soal yang mencakup tiga aspek kompetensi literasi sains. Analisis data dilakukan melalui uji prasyarat (uji normalitas dan uji homogenitas), uji hipotesis (uji-t), dan uji *N-Gain*. Hasil uji hipotesis menunjukkan setelah model pembelajaran MASTER digunakan, diperoleh $t_{hitung}(4,63) > t_{tabel}(1,67)$ pada taraf signifikansi 0,05 sehingga H_a diterima. Artinya, pada taraf signifikansi 0,05, ada pengaruh model pembelajaran MASTER terhadap kemampuan literasi sains peserta didik pada materi momentum dan impuls di kelas XI Saintek MAN 1 Kota Tasikmalaya tahun ajaran 2024/2025. Model pembelajaran MASTER mendorong peserta didik lebih aktif dalam mencari informasi, menganalisis dan mengevaluasi data sehingga kemampuan literasi sains peserta didik meningkat menjadi lebih baik. Penelitian ini dapat menjadi referensi bagi guru untuk meningkatkan kualitas pembelajaran dengan menggunakan model pembelajaran MASTER, khususnya pada literasi sains, serta menjadikan proses pembelajaran menjadi lebih menarik.

Kata kunci: Kemampuan Literasi Sains, Model Pembelajaran MASTER, Momentum dan Impuls

ABSTRACT

Mia Sumiati Amalu Solihah. 2025. ***THE EFFECT OF MASTER LEARNING MODEL (MOTIVATING, ACQUIRING, SEARCHING, TRIGGERING, EXHIBITING, AND REFLECTING) ON STUDENTS' SCIENTIFIC LITERACY SKILLS ON MOMENTUM AND IMPULSE MATERIALS***

The results of the preliminary study showed that the science literacy skills of students at MAN 1 Tasikmalaya City were still low with an average percentage of 29,01%. This study aims to determine the effect of MASTER learning model on students' science literacy skills on momentum and impulse material in class XI Science and Technology MAN 1 Tasikmalaya City in the 2024/2025 academic year. The research method used was quasi-experiment with pretest-posttest control group design. The study population included 5 classes of XI Saintek MAN 1 Tasikmalaya City with a total of 150 students. The sample was selected through cluster random sampling technique, obtained XI Saintek 2 as the experimental class and XI Saintek 1 as the control class. To measure students' science literacy skills, a multiple-choice test was conducted on momentum and impulse material as many as 25 questions covering three aspects of science literacy competencies. Data analysis was done through prerequisite test (normality test and homogeneity test), hypothesis test (t-test), and N-Gain test. The results of the hypothesis test showed that after the MASTER learning model was used, $t_{\text{statistic}} (4,63) > t_{\text{table}} (1,67)$ was obtained at a significance level of 0,05 so that H_a was accepted. That is, at a significance level of 0,05, there is an effect of the MASTER learning model on the science literacy skills of students on momentum and impulse material in class XI Saintek MAN 1 Tasikmalaya City in the 2024/2025 academic year. The MASTER learning model encourages students to be more active in finding information, analyzing and evaluating data so that students' science literacy skills improve for the better. This study can be used as a reference for teachers to improve the quality of learning by using the MASTER learning model, especially in science literacy, and make the learning process more interesting.

Keywords: Scientific Literacy Skills, MASTER Learning Model, Momentum and Impulse