

ABSTRAK

Muhammad Gilang Ramadhan. 2025. **PENGARUH MODEL *SCIENCE INTEGRATED LEARNING* TERHADAP KETERAMPILAN PROSES SAINS PESERTA DIDIK PADA MATERI FLUIDA STATIS KURIKULUM MERDEKA**

Penelitian dilatarbelakangi oleh hasil studi pendahuluan di SMA Negeri 8 Tasikmalaya diketahui keterampilan proses sains peserta didik masih kurang. Hal tersebut terjadi karena guru belum sepenuhnya menerapkan model pembelajaran yang mendukung pengembangan keterampilan proses sains peserta didik sesuai dengan tujuan pendidikan nasional. Peneliti berupaya mengatasi masalah tersebut dengan menerapkan model *science integrated learning*. Penelitian ini bertujuan untuk mengetahui pengaruh model *science integrated learning* terhadap keterampilan proses sains peserta didik pada materi fluida statis di kelas XI IPA SMAN 8 Tasikmalaya tahun ajaran 2024/2025. Metode yang digunakan dalam penelitian ini adalah *quasi experiment* dengan desain penelitian *non equivalent control group design*. Populasi penelitian ini yaitu seluruh kelas XI IPA SMAN 8 Tasikmalaya sebanyak 5 kelas yang berjumlah 185 peserta didik. Sampel penelitian diambil menggunakan teknik *purposive sampling*, diperoleh kelas XI IPA 4 sebagai kelas eksperimen dan kelas XI IPA 5 sebagai kelas kontrol masing-masing sampel berjumlah 37 peserta didik. Keterampilan proses sains diukur menggunakan tes berbentuk uraian berjumlah 16 butir soal yang mewakili 8 indikator keterampilan proses sains pada materi fluida statis. Teknis analisis data meliputi validasi ahli, uji coba instrumen, uji prasyarat, dan uji hipotesis. Hasil uji hipotesis menggunakan uji t pada taraf signifikansi ($\alpha = 0,05$) menunjukkan bahwa setelah diterapkannya model pembelajaran *science integrated learning*, diperoleh hasil $t_{hitung} > t_{tabel}$ yakni $7,16 > 1,99$ sehingga H_a diterima dan H_0 ditolak. Dengan demikian, dapat disimpulkan bahwa model pembelajaran *science integrated learning* berpengaruh terhadap keterampilan proses sains peserta didik pada materi fluida statis.

Kata kunci: fluida statis, keterampilan proses sains, *science integrated learning*

ABSTRACT

*Muhammad Gilang Ramadhan. 2025. **THE EFFECT OF SCIENCE INTEGRATED LEARNING MODEL ON STUDENT'S SCIENCE PROCESS SKILLS ON STATIC FLUID MATERIAL OF KURIKULUM MERDEKA***

The research was motivated by the results of preliminary study at SMA Negeri 8 Tasikmalaya, which showed students' science process skills were still lacking. This happens teachers have not fully implemented learning models that support the development of students' science process skills in accordance with national education goals. Researchers try overcome this problem by implementing science integrated learning model. This study determine the effect of the science integrated learning model on students' science process skills in static fluid material class XI IPA SMAN 8 Tasikmalaya in 2024/2025 academic year. The method used study is a quasi-experiment with non-equivalent control group design. The population this study was all class XI IPA SMAN 8 Tasikmalaya as many 5 classes totaling 185 students. The research sample was taken using purposive sampling technique, obtained XI IPA 4 as the experimental class and XI IPA 5 as the control class, each sample totaling 37 students. Science process skills measured using a descriptive test consisting of 16 questions representing 8 indicators of science process skills on static fluid material. Data analysis techniques include expert validation, instrument trials, prerequisite tests, and hypothesis tests. The results of the hypothesis test using the t-test at the significance level ($\alpha = 0,05$) showed that after the implementation the science integrated learning, the results obtained were $t_{calculate} > t_{table}$, namely $7,16 > 1,99$ so that H_a accepted and H_0 was rejected. Thus, it can concluded that the science integrated learning has effect on students' science process skills on static fluid material.

Keywords: static fluid, science integrated learning, science process skiils