

PENGARUH MODEL PEMBELAJARAN *RELATING, EXPERIENCING, APPLYING, COOPERATING, TRANSFERRING* TERHADAP KETERAMPILAN PROSES SAINS SISWA SMP

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan keterampilan proses sains antara siswa yang dibelajarkan dengan model pembelajaran *Relating, Experiencing, Applying, Cooperating, Transferring* (REACT) dan siswa yang dibelajarkan dengan pembelajaran konvensional. Penelitian ini merupakan penelitian kuantitatif dengan metode eksperimen semu. Desain penelitian menggunakan *pretest-posttest control group design*. Populasi penelitian adalah seluruh siswa kelas VIII SMP Negeri 1 Singaraja tahun ajaran 2023/2024. Sampel penelitian berjumlah 138 siswa yang diambil dengan teknik *cluster random sampling* sebanyak empat kelas yaitu siswa kelas VIII A8 dan VIII A3 sebagai kelompok eksperimen, VIII A10 dan VIII A4 sebagai kelompok kontrol. Data keterampilan proses sains dikumpulkan melalui instrumen tes dengan soal pilihan ganda. Data keterampilan proses sains dianalisis dengan analisis statistik deskriptif dan inferensial. Statistik inferensial menggunakan uji T Sampel Bebas (*Independent Sample T Test*) dengan taraf signifikansi 0,05. Hasil penelitian memperoleh nilai rata-rata *posttest* kelompok eksperimen sebesar 78,09 termasuk kategori baik, sedangkan kelompok kontrol sebesar 71,56 termasuk kategori cukup. Nilai rata-rata *N-Gain score* kelompok eksperimen dan kelompok kontrol secara berturut-turut sebesar 0,53 dan 0,37 dengan kedua nilai berada pada kualifikasi sedang. Uji T Sampel Bebas memperoleh nilai signifikansi (*2-tailed*) sebesar 0,004 kurang dari taraf signifikansi 0,05 sehingga H_0 ditolak dan H_a diterima. Berdasarkan hasil penelitian, dapat disimpulkan bahwa terdapat perbedaan keterampilan proses sains antara siswa yang dibelajarkan menggunakan model pembelajaran REACT dan siswa yang dibelajarkan menggunakan pembelajaran konvensional.

Kata-kata kunci: Model pembelajaran REACT, pembelajaran konvensional, keterampilan proses sains.

***THE EFFECT OF RELATING, EXPERIENCING, APPLYING,
COOPERATING, TRANSFERRING LEARNING MODEL ON SCIENCE
PROCESS SKILLS OF JUNIOR HIGH SCHOOL STUDENTS***

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ABSTRACT

This research aims to analyze the differences in science process skills between students who are taught using the Relating, Experiencing, Applying, Cooperating, Transferring (REACT) learning model and students who are taught using conventional learning. This research is quantitative research with quasi-experimental method. This research design uses pretest-posttest control group design. The research population was all students in class VIII of SMP Negeri 1 Singaraja for the 2023/2024 academic year. The research sample consisted of 138 students taken using the cluster random sampling technique in four classes, namely student in classes VIII A8 and VIII A3 as the experimental group, VIII A10 and VIII A4 as the control group. Data on science process skills is collected through test instruments with multiple choice questions. Data on science process skills were analyzed using descriptive and inferential statistical analysis. Inferential statistics use the Independent Sample T Test with a significance level of 0.05. The research result obtained an average of posttest score for the experimental group of 78.09, which was in the good category, while the control group was 71.56, which was in the fair category. The average N-gain score of the experimental group and control group was 0.53 and 0.37 respectively, with both scores being in the medium qualification range. The Independent Sample T Test obtained a significance value (2-tailed) of 0.004, less than the significance level of 0.05 so that H_0 was rejected and H_a was accepted. Based on the research result, it can be concluded that there are differences in science process skills between students who are taught using the REACT learning model and students who are taught using conventional learning.

Keyword: REACT learning model, conventional learning, science process skills.