

ABSTRAK

Rifa Salsabila. 2025. **PENGARUH MODEL *SCIENCE, ENVIRONMENT, TECHNOLOGY, AND SOCIETY* (SETS) BERBANTUAN E-LKPD TERHADAP KEMAMPUAN LITERASI SAINS PESERTA DIDIK PADA MATERI ENERGI TERBARUKAN**

Berdasarkan hasil studi pendahuluan di SMA Negeri 1 Cigalontang diketahui bahwa kemampuan literasi sains peserta didik termasuk dalam kategori rendah. Salah satu penyebabnya yaitu sekolah masih menggunakan model *Discovery Learning*. Upaya yang dapat dilakukan untuk mengatasi permasalahan tersebut yaitu dengan menerapkan model *Science, Environment, Technology, and Society* (SETS) berbantuan E-LKPD terhadap kemampuan literasi sains peserta didik pada materi energi terbarukan. Tujuan penelitian ini adalah untuk mengetahui pengaruh model SETS berbantuan E-LKPD terhadap kemampuan literasi sains peserta didik pada materi energi terbarukan di kelas X SMA Negeri 1 Cigalontang. Penelitian ini menggunakan metode *quasi experiment* dengan desain penelitian *the matching-only posttest-only control group design*. Populasi penelitian ini yaitu semua kelas X SMA Negeri 1 Cigalontang sebanyak 7 kelas dengan jumlah peserta didik 248 orang. Sampel penelitian diambil menggunakan teknik *puspositive sampling* sebanyak 2 kelas yaitu kelas X-5 yang berjumlah 35 peserta didik dan X-6 yang berjumlah 35 peserta didik. Pengukuran kemampuan literasi sains peserta didik dilakukan tes berupa soal uraian setelah perlakuan (*posttest*). Soal berjumlah 5 butir dengan masing-masing soal mencakup 3 indikator kemampuan literasi sains. Hasil uji hipotesis menunjukkan bahwa $t_{hitung} > t_{tabel}$ yaitu $6,57 > 1,67$ yang berarti bahwa H_0 ditolak, sehingga dapat disimpulkan bahwa model pembelajaran SETS berpengaruh terhadap kemampuan literasi sains peserta didik pada materi energi terbarukan.

Kata kunci: E-LKPD, energi terbarukan, kemampuan literasi sains, SETS.

ABSTRACT

Rifa Salsabila. 2025. ***THE EFFECT OF THE SCIENCE, ENVIRONMENT, TECHNOLOGY, AND SOCIETY (SETS) MODEL WITH THE ASSISTANCE OF E-LKPD ON STUDENTS' SCIENCE LITERACY SKILLS ON RENEWABLE ENERGY TOPIC***

Based on the results of preliminary studies at SMA Negeri 1 Cigalontang, it is known that the science literacy skills of students are in the low category. One of the reasons is that schools still use the Discovery Learning model. Efforts that can be made to overcome these problems are by applying the Science, Environment, Technology, and Society (SETS) model assisted by E-LKPD to the science literacy skills of students on renewable energy topic. The purpose of this study was to determine the effect of the SETS model assisted by E-LKPD on the science literacy skills of students on renewable energy topic in class X SMA Negeri 1 Cigalontang. This study used a quasi experiment method with the research design of the matching-only posttest-only control group design. The population of this study were all X grade SMA Negeri 1 Cigalontang as many as 7 classes with a total of 248 students. The research sample was taken using purposive sampling technique as many as 2 classes, namely class X-5 which amounted to 35 students and X-6 which amounted to 35 students. Measurement of students' science literacy skills was carried out in the form of a description question after treatment (posttest). The questions totaled 5 items with each question covering 3 indicators of science literacy skills. The results of hypothesis testing show that $t_{\text{count}} > t_{\text{table}}$ is $6,57 > 1,67$ which means that H_0 is rejected, so it can be concluded that the SETS learning model affects the science literacy skills of students on renewable energy topic.

Keywords: E-LKPD, renewable energy, science literacy skills, SETS.