

ABSTRAK

Anis Andriyati. 2024. **PENGARUH MODEL PEMBELAJARAN QUANTUM TEACHING LEARNING BERBANTUAN WIZER.ME TERHADAP LITERASI SAINS PESERTA DIDIK PADA MATERI GELOMBANG MEKANIK**

Rendahnya kemampuan literasi sains peserta didik di SMA Negeri 1 Sodonghilir dipengaruhi oleh model pembelajaran serta media pembelajaran yang digunakan oleh guru cenderung membosankan. selanjutnya berdasarkan tes literasi sains didapatkan nilai rata-rata 39,12 yang artinya kemampuan literasi sains peserta didik di SMA Negeri 1 Sodonghilir masih sangat rendah. Peneliti menerapkan model pembelajaran *Quantum Teaching Learning* berbantuan aplikasi *wizer.me* dalam mengatasi permasalahan tersebut. Tujuan penelitian ini untuk mengetahui pengaruh model pembelajaran *Quantum Teaching Learning* berbantuan aplikasi *wizer.me* terhadap kemampuan literasi sains peserta didik pada materi gelombang mekanik. Metode Penelitian yang digunakan adalah kuasi eksperimen dengan desain penelitian *nonequivalent control group desain*. Populasi penelitian ini yaitu seluruh kelas XI MIPA SMA Negeri 1 Sodonghilir sebanyak dua kelas dengan jumlah peserta didik 60 orang. Sampel penelitian diambil dengan menggunakan teknik *sampling jenuh* sebanyak dua kelas sampel dengan masing-masing satu kelas kontrol dan satu kelas eksperimen. Untuk mengukur kemampuan literasi sains peserta didik dilakukan tes sebelum perlakuan (*pre-test*) dan setelah diberi perlakuan (*post-test*) berupa soal uraian. Masing-masing soal tersebut mencakup indikator kemampuan literasi sains yang terdiri dari 14 soal essay pada materi gelombang mekanik. Hasil uji hipotesis menggunakan uji t dengan taraf signifikansi ($\alpha = 0,01$) menunjukkan bahwa setelah menggunakan model *quantum teaching learning* berbantuan *wizer.me* diperoleh $t_{hitung} > t_{tabel}$ yaitu $9,4 > 2,66$ sehingga H_0 ditolak dan H_a diterima. Sehingga pada taraf kepercayaan 99% dapat disimpulkan bahwa penerapan model *quantum teaching learning* berbantuan *wizer.me* dapat meningkatkan literasi sains peserta didik.

Kata kunci: Gelombang Mekanik, Literasi Sains, Model Pembelajaran *Quantum Teaching Learning*, *Wizer.me*

ABSTRACT

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The low scientific literacy skills of students at SMA Negeri 1 Sodonghilir are influenced by the learning model and learning media used by teachers which tend to be boring. Furthermore, based on the scientific literacy test, an average score of 39.12 was obtained, which means that the scientific literacy skills of students at SMA Negeri 1 Sodonghilir are still very low. The researcher applied the Quantum Teaching Learning learning model using the wizer.me application to overcome this problem. The purpose of this study was to determine the effect of the Quantum Teaching Learning learning model assisted by the wizer.me application on students' scientific literacy skills on mechanical wave material. The research method used was a quasi-experimental study with a nonequivalent control group design. The population of this study was all class XI MIPA of SMA Negeri 1 Sodonghilir, two classes with a total of 60 students. The research sample was taken using a saturated sampling technique of two sample classes, each with one control class and one experimental class. To measure students' scientific literacy skills, tests were carried out before treatment (pre-test) and after treatment (post-test) in the form of descriptive questions. Each of these questions includes indicators of scientific literacy skills consisting of 14 essay questions on the material of mechanical waves. The results of the hypothesis test using the t-test with a significance level ($\alpha=0.01$) showed that after using the quantum teaching learning model assisted by wizer.me, the calculated $t_{hitung} > t_{tabel}$ was $9.4 > 2.66$ so that H_0 was rejected and H_a was accepted. So at a confidence level of 99% it can be concluded that the application of the quantum teaching learning model assisted by wizer.me can improve students' scientific literacy.

Keywords: Mechanical Waves, Science Literacy, Quantum Teaching Learning Model, Wizer.me