

ABSTRAK

PENERAPAN MODEL PROBLEM BASED LEARNING BERBANTUKAN MEDIA SMART APPS CREATOR (SAC) UNTUK MENINGKATKAN HOTS SISWA SMA PADA MATERI REAKSI REDOKS

Teddy Hardiansyah

Email: teddyhardiansyah306@gmail.com

Higher order thinking skills (HOTS) merupakan salah satu tuntutan dalam pelaksanaan kurikulum 2013 yang harus dimiliki oleh peserta didik. *Higher order thinking skills* (HOTS) yang rendah disebabkan salah satunya karena model pembelajaran yang digunakan tidak mampu mengakomodir HOTS siswa dan minimnya penggunaan media pembelajaran dalam kegiatan belajar mengajar yang mampu merangsang HOTS siswa. Model *problem based learning* (PBL) berbantuan media pembelajaran diterapkan untuk melibatkan peserta didik dalam menyelesaikan masalah yang sesuai dengan tahapan metode ilmiah, sehingga *higher order thinking skills* (HOTS) peserta didik dapat dikembangkan. Penelitian ini bertujuan untuk mendeskripsikan pengaruh penerapan model *problem based learning* berbantuan media *smart apps creator* (SAC) untuk meningkatkan HOTS siswa SMA pada kajian reaksi redoks. Metode yang digunakan dalam penelitian ini yaitu metode *Quasi-Experimental Designs* dengan jenis rancangan penelitian yang digunakan adalah *Nonequivalent Control Group Design*, sampel penelitian yang dipilih ialah X MIA 2 sebagai kelas kontrol dan X MIA 3 sebagai kelas eksperimen. Penelitian dilaksanakan di SMA Negeri 2 Tanjung Morawa pada bulan agustus 2023. Teknik pengumpulan data menggunakan tes uraian bermuatan HOTS, lembar observasi dan angket respon siswa. Hasil penelitian diperoleh dimana terdapat pengaruh yang signifikan dalam penerapan model *problem based learning* berbantuan media *smart apps creator* (SAC) dalam meningkatkan HOTS siswa pada materi reaksi redoks dengan uji *Independent sampel t-test* pada $\alpha=0,05$ diperoleh *sig. 2-tailed* sebesar 0,000 dari nilai postes kelas kontrol dan eksperimen, nilai *N-gain* sebesar 0,55 pada kategori sedang. Selain itu dalam keterlaksanaan pembelajaran mendapatkan persentase rata-rata sebesar 88,19 % , dan persentase rata-rata respon siswa terhadap penggunaan media pembelajaran berbasis masalah sebesar 90,83%, sehingga dapat disimpulkan bahwa model *problem based learning* (PBL) berbantuan media pembelajaran interaktif dapat membantu melatih *higher order thinking skills* (HOTS) siswa.

Kata Kunci: *Higher Order Thinking Skills* (HOTS), *Problem Based Learning* (PBL), Media Pembelajaran Interaktif, *Smart Apps Creator* (SAC).

ABSTRACT

APPLICATION OF PROBLEM BASED LEARNING MODEL ASSISTED BY SMART APPS CREATOR (SAC) MEDIA TO INCREASE HIGH SCHOOL STUDENTS' HOTS ON REDOX REACTION MATERIAL

Teddy Hardiansyah

Email: teddyhardiansyah306@gmail.com

Higher order thinking skills (HOTS) is one of the demands in the implementation the 2013 curriculum that must be owned by students. The low level of *higher order thinking skills* (HOTS) is caused by one of the reasons that the learning models used is not able to accommodate students' HOTS and the minimal use of learning media in teaching and learning activities that are able to stimulate students' HOTS. The *problem based learning* (PBL) model assisted by learning media is applied to involve students in solving the problems in accordance with the stages of the scientific method, so that students' *higher order thinking skills* (HOTS) can be developed. This research aims to describe the effect of applying a *problem based learning* model assisted by *smart apps creator* (SAC) media to increase of high school students' HOTS in the study of redox reactions. The method used in this research is the *Quasi-Experimental Designs* method with the type of research design used is *Nonequivalent Control Group Design*, the research sample chosen are X MIA 2 as the control class and X MIA 3 as the experimental class. The research was carried out at SMA Negeri 2 Tanjung Morawa in August 2023. The data collection technique uses a description test containing HOTS, observation sheets and student response questionnaires. The research results were obtained where there was a significant influence in the application of the *problem based learning* model with the assistance of *smart apps creator* (SAC) media in increasing students' HOTS in redox reaction material with the *independent sample t-test* at $\alpha=0.05$, obtained sig. 2-tailed by 0.000 from the pos-test value of the control and experiment classes, the N-gain value by 0.55 in the medium category. Appart from that, the implementation of learning obtained an average percentage of 88.19%, and the average percentage of the student responses to the use of *problem based learning* media was 90.83%, so it can be concluded that the *problem based learning* (PBL) model is assisted by interactive learning media can help to train the students' *higher order thinking skills* (HOTS).

Keywords: *Higher Order Thinking Skills (HOTS), Problem Based Learning (PBL), Interactive Learning Media, Smart Apps Creator (SAC)*.