

ABSTRAK

Rahmi, Safira. 2022. “Pengaruh Model Pembelajaran *Problem Based Learning* (PBL) dan Jenis Kelamin Terhadap Kemampuan *High Order Thinking Skills* (HOTS) Peserta Didik SMA Negeri 1 Kecamatan Payakumbuh”. Program Pascasarjana Universitas Jambi, Pembimbing: (I) Dr. Drs. Ngatijo, M.Si (II) Prof. Dr. rer. nat. Drs. Asrial, M.Si.

Kata Kunci: *Problem Based Learning*, Jenis Kelamin, HOTS, Laju Reaksi.

Penelitian ini merupakan penelitian eksperimen dengan judul “Pengaruh model pembelajaran *Problem Based Learning* (PBL) dan jenis kelamin terhadap kemampuan *high order thinking skills* (HOTS) peserta didik SMA Negeri 1 Kecamatan Payakumbuh”. Penelitian ini bertujuan untuk melihat pengaruh dari model pembelajaran PBL terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh, pengaruh jenis kelamin terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh, serta interaksi model pembelajaran PBL dan jenis kelamin terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh.

Penelitian tentang pengaruh atau penerapan model pembelajaran *problem based learning* (PBL) terhadap kemampuan *high order thinking skills* (HOTS) pada materi kimia telah banyak dilakukan oleh peneliti lain dan hasilnya memberikan pengaruh positif terhadap hasil penelitian yang diperolehnya. Diperlukan upaya baru atau pembaruan pada penerapan model PBL dan jenis kelamin terhadap HOTS yang dikembangkan oleh Marzano.

Metode penelitian yang digunakan pada penelitian ini adalah metode kuantitatif dengan *Quasi eksperimen* atau eksperimen semu dengan menggunakan desain faktorial 2 x 2 dan teknik Analisis varian (ANOVA) dua jalur. Teknik *sampling* yang digunakan yaitu *Simple Random Sampling* dan instrument yang digunakan yaitu soal tes *essay* berupa *pretest* dan *posttest*. Teknik analisis data menggunakan Anova 2 Jalur pada uji hipotesis.

Hasil penelitian menunjukkan bahwa hipotesis (1) terdapat pengaruh model pembelajaran PBL terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh, (2) tidak terdapat pengaruh jenis kelamin terhadap kemampuan HOTS peserta didik yang menunjukkan bahwa tidak ada perbedaan yang signifikan kemampuan berpikir tingkat tinggi antara peserta didik laki-laki dan peserta didik perempuan SMA Negeri 1 Kecamatan Payakumbuh, serta (3) tidak terdapat interaksi model PBL dan jenis kelamin terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh.

Berdasarkan hasil penelitian terdapat pengaruh model PBL terhadap kemampuan HOTS peserta didik pada materi laju reaksi dan tidak terdapat pengaruh jenis kelamin serta interaksi model PBL dan jenis kelamin terhadap kemampuan HOTS peserta didik SMA Negeri 1 Kecamatan Payakumbuh. Disarankan untuk melakukan penelitian dengan model pembelajaran dan materi lain serta faktor jenis kelamin disarankan melakukan penelitian dengan waktu yang mencukupi agar tercapai hasil yang maksimal.

ABSTRACT

Rahmi, Safira. 2022. "The Effect of Problem Based Learning (PBL) Model and Gender on the High Order Thinking Skills (HOTS) of Students in SMA Negeri 1 Payakumbuh District". Jambi University Postgraduate Program, Supervisor: (I) Dr. Drs. Ngatijo, M.Si (II) Prof. Dr. rer. nat. Drs. Asrial, M.Si.

Keywords: Problem Based Learning, Gender, HOTS, Reaction Rate.

This research is an experimental study with the title "The effect of Problem Based Learning (PBL) learning model and gender on the ability of high order thinking skills (HOTS) students of SMA Negeri 1 Payakumbuh District". This study aims to see the effect of the PBL learning model on the HOTS abilities of students in SMA Negeri 1 Payakumbuh District, the effect of gender on the HOTS abilities of students in SMA Negeri 1 Payakumbuh, as well as the interaction of PBL learning models and gender on the HOTS abilities of state high school students. 1 Payakumbuh District.

Research on the effect or application of problem based learning (PBL) learning models on high order thinking skills (HOTS) in chemistry has been carried out by many other researchers and the results have a positive influence on the research results obtained. New efforts or updates are needed on the application of the PBL and gender model to HOTS developed by Marzano.

The research method used in this study is a quantitative method with quasi-experimental or quasi-experimental using a 2 x 2 factorial design and two-way analysis of variance (ANOVA) technique. The sampling technique used is Simple Random Sampling and the instrument used is essay test questions in the form of pretest and posttest. The data analysis technique used 2-way Anova in hypothesis testing.

The results of the study indicate that the hypothesis (1) is that there is an effect of the PBL learning model on the HOTS ability of students in SMA Negeri 1 Payakumbuh District, (2) there is no influence of gender on the HOTS ability of students which indicates that there is no significant difference in higher order thinking skills between male students and female students of SMA Negeri 1 Payakumbuh District, and (3) there is no interaction between the PBL model and gender on the HOTS ability of the students of SMA Negeri 1 Payakumbuh District.

Based on the results of the study, there was an effect of the PBL model on the HOTS ability of students on the reaction rate material and there was no effect of gender and the interaction of the PBL model and gender on the HOTS ability of students in SMA Negeri 1 Payakumbuh District. It is recommended to conduct research with learning models and other materials as well as gender factors. It is recommended to conduct research with sufficient time in order to achieve maximum results.