

ABSTRAK

Nurfadhilah, Tiara Rossa (2024). **Peningkatan Kemampuan Pemahaman Konsep Matematis dan Kemandirian Belajar Siswa SMA Melalui Model *Problem-Based Learning* Berbantuan *Quizizz*.**

Penelitian ini bertujuan untuk: (1) Mengetahui apakah pencapaian kemampuan pemahaman konsep matematis siswa yang menggunakan model *Problem-Based Learning* berbantuan *Quizizz* lebih baik daripada siswa yang memperoleh model *Problem-Based Learning*; (2) Mengetahui apakah peningkatan kemampuan pemahaman konsep matematis siswa yang menggunakan model *Problem-Based Learning* berbantuan *Quizizz* lebih tinggi daripada siswa yang menggunakan model *Problem-Based Learning*; (3) Mengetahui apakah kemandirian belajar siswa yang memperoleh model *Problem-Based Learning* berbantuan *Quizizz* lebih baik daripada siswa yang menggunakan model *Problem-Based Learning*; (4) Mengetahui apakah terdapat korelasi positif antara kemampuan pemahaman konsep matematis dan kemandirian belajar siswa yang memperoleh model *Problem-Based Learning* berbantuan *Quizizz*. Metode yang digunakan dalam penelitian ini adalah kuasi eksperimen dengan desain *nonequivalent control group design*. Subjek dari penelitian ini salah satu SMA kelas X di Kabupaten Bandung sebanyak dua kelas, yaitu kelas X-H sebagai kelas kontrol dan kelas X-I sebagai kelas eksperimen dengan masing-masing kelas terdiri dari 36 siswa. Instrumen penelitian adalah tes uraian dan angket. Data dianalisis menggunakan *SPSS 23.0 for Windows*. Hasil penelitian ini menunjukkan bahwa: (1) Pencapaian kemampuan pemahaman konsep matematis siswa yang menggunakan model *Problem-Based Learning* berbantuan *Quizizz* lebih baik daripada siswa yang memperoleh model *Problem-Based Learning*; (2) Kemampuan pemahaman konsep matematis siswa yang menggunakan model *Problem-Based Learning* berbantuan *Quizizz* lebih tinggi daripada siswa yang memperoleh model *Problem-Based Learning*; (3) Kemandirian belajar siswa yang menggunakan model *Problem-Based Learning* berbantuan *Quizizz* lebih baik daripada siswa yang memperoleh model *Problem-Based Learning*; (4) Terdapat korelasi positif antara kemampuan pemahaman konsep matematis dan kemandirian belajar pada siswa.

Kata Kunci: Kemandirian Belajar, Pemahaman Konsep Matematis, *Problem-Based Learning*, *Quizizz*.

ABSTRACT

Nurfadhilah, Tiara Rossa (2024). *Improvement Mathematical Concept Understanding Ability and Self-Regulated Learning of High School Student Through Problem-Based Learning Model Assisted by Quizizz.*

This research aims to: (1) Find out whether the achievement of mathematical concept understanding ability of student use the Problem-Based Learning model assisted by Quizizz is better than student use the Problem-Based Learning model; (2) Find out whether the increase in mathematical concept understanding ability of student use the Problem-Based Learning model assisted by Quizizz is higher than student use the Problem-Based Learning model; (3) Knowing whether the self-regulated learning of students use the Problem-Based Learning assisted by Quizizz is better than students use the Problem-Based Learning model; (4) Knowing whether there is a positive correlation between the ability to understand mathematical concepts and the self-regulated learning of students who obtains the Problem-Based Learning model assisted by Quizizz. The method used in this research is a quasi-experiment with a nonequivalent control group design. The subjects of this research were one of the X grade high school in Bandung Regency as many as two classes, namely class X-H as the control and class X-I as the experimental class with each class consisting of 36 students. The research instrument were a description test and a questionnaire. Data were analyzed using SPSS 23.0 for Windows. The results of the study show that: (1) The achievement of mathematical concept understanding ability of student who use the Problem-Based Learning model assisted by Quizizz is better than student who use the Problem-Based Learning model; (2) The mathematical concept understanding ability of student who use the Problem-Based Learning model assisted by Quizizz is higher than student who use the Problem-Based Learning model; (3) The self-regulated learning of student who use the Problem-Based Learning model assisted by Quizizz is better than student who obtain the Problem-Based Learning model, (4) There is a positive correlation between mathematical concept understanding ability and self-regulated learning in students.

Keywords: Mathematical Concept Understanding, Problem-Based Learning, Self-Regulated Learning, Quizizz.

ABSTRAK

Nurfadhlilah, Tiara Rossa (2024). *Ningkatkeun Kamampuh Pamahaman Konsép Matematis jeung Kamandirian Diajar Siswa SMA Ngaliwatan Modél Problem-Based Learning Pitulung Quizizz.*

Panalungtikan ieu miboga tujuan pikeun: (1) Nangtuken naha kamampuh pamahaman konsép matematis siswa nu ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih sae batan siswa anu ngagunakeun modél Problem-Based Learning; (2) Nangtuken naha kamampuh pamahaman konsép matematis siswa nu ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih luhur batan siswa anu ngagunakeun modél Problem-Based Learning; (3) Mikanyaho naha kamandirian diajar siswa anu ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih sae batan siswa anu ngagunakeun modél Problem-Based Learning; (4) Mikanyaho naha aya korelasi anu positip antara kamampuh pamahaman konsép matematis jeung kamandirian diajar siswa nu ngagunakeun modél Problem-Based Learning pitulung Quizizz. Métode anu digunakeun dina ieu panalungtikan nyaéta kuasi ékspérímén kalawan desain nonequivalent control group. Subjek dina ieu panalungtikan nyaéta salah sahiji SMA kelas X di Kabupaten Bandung nu mibanda dua kelas, nyaéta kelas X-H salaku kelas kontrol jeung kelas X-I salaku kelas ékspérímén unggal kelas diwangun ku 36 peserta didik. Instrumén panalungtikan nyaéta uraian jeung angket. Data dianalisis ngagunakeun SPSS 23.0 for Windows. Hasil panalungtikan nunjukkeun yén: (1) Kamampuh pamahaman konsép matematis siswa ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih sae batan siswa anu ngagunakeun modél Problem-Based Learning; (2) Kamampuh pamahaman konsép matematis siswa anu ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih luhur batan siswa anu ngagunakeun modél Problem-Based Learning; (3) Kamandirian diajar siswa nu ngagunakeun modél Problem-Based Learning pitulung Quizizz leuwih sae batan siswa anu ngagunakeun modél Problem-Based Learning; (4) Aya korelasi positip antara kamampuh pamahaman konsép matematis jeung kamandirian diajar siswa.

Kecap Konci: Kamandirian Diajar, Pamahaman Konsep Matematis, Problem-Based Learning, Quizizz.