

ABSTRAK

Ananda Karina Muslimah. (2023). **Penerapan Model Pembelajaran *Problem-Based Learning* (PBL) Berbantuan *Kahoot* Untuk Meningkatkan Kemampuan Komunikasi Matematis Dan *Self-Regulated Learning* Siswa SMP**

Penelitian ini bertujuan untuk: (1) Mengetahui peningkatan kemampuan komunikasi matematis siswa yang memperoleh model pembelajaran *Problem-Based Learning* (PBL) berbantuan *kahoot* lebih tinggi daripada siswa yang memperoleh model pembelajaran konvensional; (2) Mengetahui *Self-regulated learning* siswa yang memperoleh model pembelajaran *Problem-Based Learning* (PBL) berbantuan *kahoot* lebih baik daripada siswa yang memperoleh model pembelajaran konvensional; (3) Mengetahui korelasi positif antara peningkatan kemampuan komunikasi matematis dengan *self-regulated learning* siswa yang memperoleh model pembelajaran *Problem-Based Learning* (PBL) berbantuan *kahoot*; (4) Mengetahui model *Problem-Based Learning* (PBL) berbantuan *kahoot* efektif untuk meningkatkan kemampuan komunikasi matematis dan *self-regulated learning* siswa. Metode yang digunakan dalam penelitian ini adalah kuasi eksperimen dengan desain penelitian *non-equivalent control group design*, sampel penelitiannya terdiri dari dua kelas. Diperoleh kelas VIII C sebagai kelas eksperimen yang mendapatkan model pembelajaran model *Problem-Based Learning* (PBL) berbantuan *kahoot* dan VIII A sebagai kelas kontrol yang mendapatkan model pembelajaran konvensional. Instrumen yang digunakan dalam penelitian ini berupa soal uraian tes kemampuan komunikasi matematis dan angket *Self-Regulated Learning*. Data yang terkumpul kemudian diolah menggunakan *software IBM SPSS 29.0 for Windows 11*. Hasil analisis data akhir diperoleh bahwa: (1) Peningkatan kemampuan komunikasi matematis siswa yang memperoleh model *Problem-based learning* berbantuan *Kahoot* lebih tinggi daripada kemampuan komunikasi matematis siswa yang memperoleh model pembelajaran konvensional; (2) *Self-regulated learning* siswa yang memperoleh model *Problem-based learning* berbantuan *Kahoot* lebih baik daripada *self-regulated learning* siswa yang memperoleh model pembelajaran konvensional; (3) Terdapat korelasi antara kemampuan komunikasi matematis dan *self-regulated Learning* siswa yang memperoleh model pembelajaran *Problem-based Learning* (PBL) berbantuan *Kahoot*; (4) Pembelajaran PBL terhadap peningkatan kemampuan komunikasi matematis efektivitasnya tergolong tinggi sedangkan *self-regulated learning* siswa efektivitasnya tergolong sedang.

Kata Kunci: *Problem-Based Learning*, *Kahoot*, kemampuan komunikasi matematis, *self-regulated learning*.

ABSTRACT

Ananda Karina Muslimah. (2023). *The application learning model of the Problem-Based Learning (PBL) assisted by Kahoot to Improve Mathematical Communication Skills and Self-Regulated Learning for Junior High School Students*

This aims of study to: (1) find out the increase in the mathematical communication ability of students who received learning model Problem-Based Learning (PBL) that is assisted by Kahoot was higher than students who received conventional learning models; (2) find out that the Self-regulated learning of students who get the Problem-Based Learning (PBL) model with the help of Kahoot is better than students who get the conventional learning model; (3) find out the positive correlation between the increase in mathematical communication skills and the self-regulated learning of students who received the learning model of Problem-Based Learning (PBL) that assisted by Kahoot; (4) find out the Kahoot assisted Problem-Based Learning (PBL) model is effective for improving students' mathematical communication skills and self-regulated learning. The method used in this study was a quasi-experimental research design with a non-equivalent control group design, the research sample consisted of two classes. Class VIII C was obtained as the experimental class which received the Kahoot assisted Problem-Based Learning (PBL) model and VIII A as the control class which received the conventional learning model. The instruments used in this study were in the form of test questions describing mathematical communication abilities and self-regulated learning questionnaires. The collected data is then processed using IBM SPSS 29.0 for Windows 11 software. The results of the final data analysis showed that: (1) The increase in the mathematical communication skills of students who received the Kahoot assisted problem-based learning model was higher than the mathematical communication skills of students who received conventional learning models; (2) The self-regulated learning of students who get the Problem-based learning model assisted by Kahoot is better than the self-regulated learning of students who get the conventional learning model; (3) There is a correlation between mathematical communication skills and self-regulated learning of students who receive the learning model of Problem-based Learning (PBL) that is assisted by Kahoot; (4) The effectiveness of PBL learning towards improving mathematical communication skills is classified as high, while the effectiveness of students of self-regulated learning is classified as moderate.

Keywords: *Problem-Based Learning, Kahoot, mathematical communication skills, self-regulated learning.*

RINGKESAN

Ananda Karina Muslimah (2023). **Penerapan Modél Pangajaran *Problem-Based Learning* Dibantuan *Kahoot* Kanggo Ngaronjatkeun Kamampuh Komunikasi Matematis Sareng Kamandirian Diajar Siswa SMP**

Ieu panalungtikan miboga tujuan pikeun: (1) Mikanyaho ngaronjatna kamampuh komunikasi matematis siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot* leuwih luhur batan siswa anu narima modél pangajaran konvensional; (2) Mikanyaho kamandirian diajar siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot* leuwih hadé batan siswa anu narima modél pangajaran konvensional; (3) Mikanyaho aya patali anu positip antara ngaronjatna kamampuh komunikasi matematis sareng kamandirian diajar siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot*; (4) Mikanyaho modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot* éféktif kanggo ngarajatkeun kamampuh komunikasi matematis sareng kamandirian diajar siswa. Métode anu digunakeun dina ieu panalungtikan nyaéta métode kuasi ékspérimén kalawan desain non-equivalent control group. Sampel panalungtikan diwangun ku 2 kelas. Kelas VIII C dicandak salaku kelas ékspérimén anu nampi modél PBL dibantuan Kahoot sareng kelas VIII A salaku kelas kontrol anu nampi modél pangajaran konvensional. Instrumén anu digunakeun dina ieu panalungtikan nya éta déskripsi tés kamampuh komunikasi matematis sareng angket kamandirian siswa. Data anu dikumpulkeun saterusna diolah ngagunakeun parangkat lunak IBM SPSS 29.0 for windows 11. Hasilna nuduhkeun yén: (1) Ngaronjatna kamampuh komunikasi matematis siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot* leuwih luhur batan siswa anu narima modél pangajaran konvensional; (2) kamandirian diajar siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *Kahoot* leuwih hadé batan siswa anu narima modél pangajaran konvensional; (3) Aya patali anu positip antara ngaronjatna kamampuh komunikasi matematis sareng kamandirian diajar siswa anu narima modél pangajaran *Problem-Based Learning* (PBL) dibantuan *kahoot*; (4) Modél pangajaran PBL dibantuan *kahoot* kana ngarajatna kamampuh komunikasi matematis kagolong luhur sedengkeun kamandirian diajar siswa kagolong sedeng.

Kecap konci: *Problem-Based Learning, Kahoot, kamampuh komunikasi matematis, self-regulated learning.*