

**PENGARUH *PROBLEM BASED LEARNING* BERBANTUAN APLIKASI
BEBRAS TERHADAP *COMPUTATIONAL THINKING* INFORMATIKA
SISWA KELAS VII SMP NEGERI 3 MENGWI**

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ABSTRAK

Pembelajaran berbasis masalah atau *Problem Based Learning* (PBL) merupakan salah satu metode pembelajaran yang menekankan pada pengembangan keterampilan berpikir kritis dan pemecahan masalah siswa. Dalam era digital saat ini, penerapan teknologi informasi dalam pendidikan semakin penting untuk meningkatkan kualitas pembelajaran. Aplikasi Bebras, yang dikenal sebagai alat untuk melatih keterampilan berpikir komputasional, menawarkan peluang baru dalam pengajaran informatika. Penelitian ini bertujuan untuk mengetahui pengaruh *Problem Based Learning* Berbantuan Aplikasi Bebras terhadap *Computational Thinking Informatika* siswa kelas VII SMPN 3 Mengwi. Jenis penelitian ini adalah kuasi eksperimen. Populasi penelitian ini adalah siswa kelas VII SMPN 3 Mengwi tahun Pelajaran 2023/2024 sebanyak 334 orang atau 11 kelas. Sampel dipilih dengan teknik *random sampling* sehingga diperoleh kelas eksperimen dan kelas kontrol. Data *computational thinking* siswa diperoleh melalui tes uraian. Data dianalisis menggunakan uji-t, dengan taraf signifikansi 5%. Berdasarkan hasil analisis data diperoleh bahwa nilai signifikansi uji hipotesis sebesar $0,000 < 0,05$, yang menunjukkan bahwa terdapat perbedaan *computational thinking infomatika* siswa kelas VII SMP Negeri 3 Mengwi tahun 2023 yang menggunakan model *problem-based learning* berbantuan aplikasi Bebras dengan yang tidak menggunakan model *problem-based learning* berbantuan aplikasi Bebras. Jadi dapat disimpulkan bahwa model *problem-based learning* berbantuan aplikasi Bebras berpengaruh positif terhadap *computational thinking* infomatika siswa.

Kata kunci: Kemampuan *Computational Thinking*, Model *Problem Based Learning*, Aplikasi Bebras.

**THE INFLUENCE OF PROBLEM BASED LEARNING ASSISTED BY
BEBRAS APPLICATION ON COMPUTATIONAL THINKING
INFORMATICS FOR SEVENTH GRADE STUDENTS AT
SMP NEGERI 3 MENGWI**

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ABSTRACT

Problem Based Learning (PBL) is a teaching method that emphasizes the development of students' critical thinking and problem-solving skills. In today's digital era, the integration of information technology in education is increasingly important to enhance the quality of learning. The Bebras application, known as a tool to train computational thinking skills, offers new opportunities in teaching informatics. This study aims to determine the influence of Problem Based Learning assisted by the Bebras application on the computational thinking of seventh grade students at SMPN 3 Mengwi. This type of research is a quasi-experiment. The population of this study includes 334 seventh grade students or 11 classes at SMPN 3 Mengwi in the 2023/2024 academic year. The sample was selected using random sampling techniques to obtain the experimental and control classes. Students' computational thinking data was collected through descriptive tests. Data were analyzed using a t-test with a significance level of 5%. Based on the data analysis results, the significance value of the hypothesis test was $0.000 < 0.05$, indicating that there is a difference in the computational thinking informatics of seventh grade students at SMP Negeri 3 Mengwi in 2023 between those who used the Problem Based Learning model assisted by the Bebras application and those who did not. Therefore, it can be concluded that the Problem Based Learning model assisted by the Bebras application has a positive effect on the computational thinking informatics of students.

Keywords: *Computational Thinking Skills, Problem Based Learning Model, Bebras Application.*