

**PENGARUH PENDEKATAN PEMBELAJARAN
BERDIFERENSIASI BERBANTUAN E-MODUL TERHADAP
PEMAHAMAN KONSEP SISWA KELAS IX**

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ABSTRAK

Pemahaman konsep matematika merupakan kemampuan dasar yang penting dalam menunjang keberhasilan belajar siswa. Namun, tingkat pemahaman konsep matematika siswa masih tergolong rendah. Salah satu penyebabnya adalah proses pembelajaran yang belum sepenuhnya memperhatikan perbedaan karakteristik, kemampuan, dan kebutuhan belajar siswa. Oleh karena itu, diperlukan pendekatan pembelajaran yang mampu mengakomodasi keberagaman tersebut. Salah satu alternatif yang dapat digunakan adalah pendekatan pembelajaran berdiferensiasi yang didukung oleh penggunaan e-modul sebagai media pembelajaran. Penelitian ini bertujuan untuk mengetahui pengaruh pendekatan pembelajaran berdiferensiasi berbantuan e-modul terhadap kemampuan pemahaman konsep matematika siswa kelas IX SMP Negeri 5 Singaraja Tahun Ajaran 2025/2026. Populasi penelitian berjumlah 298 siswa dengan teknik pengambilan sampel menggunakan cluster random sampling. Penelitian ini menggunakan metode eksperimen semu (quasi experiment) dengan desain posttest-only control group. Berdasarkan hasil pengundian, kelas IX A yang berjumlah 29 siswa ditetapkan sebagai kelas eksperimen yang mengikuti pembelajaran berdiferensiasi berbantuan e-modul, sedangkan kelas IX B yang berjumlah 30 siswa sebagai kelas kontrol dengan pembelajaran konvensional. Hasil penelitian menunjukkan bahwa rata-rata skor post-test kelas eksperimen sebesar 83,86, sedangkan kelas kontrol sebesar 68,20. Uji hipotesis menggunakan independent sample t-test pada taraf signifikansi 0,05 menghasilkan nilai signifikansi 0,01 ($<0,05$). Hal ini menunjukkan bahwa pendekatan pembelajaran berdiferensiasi berbantuan e-modul memberikan pengaruh positif terhadap pemahaman konsep matematika siswa.

Kata Kunci : Pendekatan Pembelajaran Berdiferensiasi, E-Modul, Pemahaman Konsep Siswa

THE EFFECT OF A DIFFERENTIATED LEARNING APPROACH ASSISTED BY E-MODULES ON THE CONCEPTUAL UNDERSTANDING OF GRADE IX STUDENTS

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ABSTRACT

*Mathematical conceptual understanding is a fundamental ability that plays an important role in students' learning success. However, students' level of conceptual understanding is still relatively low due to learning processes that do not fully accommodate differences in students' characteristics. A differentiated learning approach assisted by e-modules is considered an alternative learning strategy that is oriented toward students' needs. This study aimed to determine the effect of a differentiated learning approach assisted by e-modules on the mathematical conceptual understanding ability of Grade IX students at SMP Negeri 5 Singaraja in the 2025/2026 academic year. The population of this study consisted of 298 students, and the sample was selected using the cluster random sampling technique. This study employed a quasi-experimental method with a posttest-only control group design. Based on the lottery results, Class IX A consisting of 29 students was selected as the experimental group that received learning through a differentiated learning approach assisted by e-modules, while Class IX B consisting of 30 students was selected as the control group that received conventional learning. The results of the study showed that the experimental group obtained an average post-test score of 83.86, while the control group obtained an average post-test score of 68.20. The hypothesis testing using an independent sample *t*-test at a significance level of 0.05 showed a significance value (sig) of 0.01, which is smaller than 0.05. Based on these findings, it can be concluded that the mathematical conceptual understanding of students who participated in the differentiated learning approach assisted by e-modules is better than that of students who participated in the conventional learning approach.*

Keywords: Differentiated Learning Approach, E-Module, Students' Conceptual Understanding