

ABSTRAK

Wati, Sucsenia. 2025. *Pengaruh Pembelajaran Terdiferensiasi Menggunakan Media Aritsosmar terhadap Kemampuan Pemahaman Konsep Matematis Peserta Didik*. Skripsi. Tanjungpinang: Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Alona Dwinata, S.Si., M.Si. Pembimbing II: Dr. Nur Izzati, S.Pd., M.Si.

Kata Kunci: Pembelajaran Terdiferensiasi, Media Aritsosmar, Kemampuan Pemahaman Konsep Matematis

Penelitian ini bertujuan mengetahui pengaruh pembelajaran terdiferensiasi menggunakan media Aritsosmar terhadap kemampuan pemahaman konsep matematis peserta didik. Populasi penelitian adalah peserta didik kelas VII SMP Negeri 13 Bintan yang terdiri dari 4 kelas dengan total 133 peserta didik. Penelitian menggunakan pendekatan kuantitatif dengan jenis penelitian *quasy experimental* dan desain *nonequivalent control group design*. Sampel penelitian terdiri dari dua kelas yaitu kelas VII.1 dan VII.4 yang dipilih melalui teknik *cluster sampling*. Teknik pengumpulan data menggunakan teknik tes dan observasi. Instrumen yang digunakan terdiri atas instrumen utama berupa *pretest* dan *posttest*, dan instrumen pendukung berupa tes kesiapan belajar, lembar observasi, modul ajar, dan media Aritsosmar. Data yang dianalisis berupa data kualitatif mengenai keterlaksanaan kegiatan pembelajaran dan data kuantitatif berupa data N-Gain pemahaman konsep matematis yang diperoleh dari hasil *pretest* dan *posttest*. Hasil analisis deskriptif menunjukkan bahwa rata-rata N-Gain pemahaman konsep matematis kelas eksperimen sebesar 0,58 lebih tinggi dari kelas kontrol yang hanya sebesar 0,47. Hasil uji hipotesis non parametrik menggunakan uji *mann-whitney* menghasilkan nilai *asympt. sig.* sebesar $0,02 < 0,05$, artinya H_0 ditolak dan H_a diterima, hal ini berarti median N-Gain kemampuan pemahaman konsep matematis kelas eksperimen lebih tinggi secara signifikan dibandingkan kelas kontrol. Dengan demikian dapat disimpulkan, bahwa pembelajaran terdiferensiasi menggunakan media Aritsosmar berpengaruh terhadap kemampuan pemahaman konsep matematis peserta didik.

ABSTRACT

Wati, Sucsenia. 2025. *The Effect of Differentiated Learning Using Aritsosmar Media on Students' Mathematical Concept Understanding Ability*. Thesis. Tanjungpinang: Department of Mathematics Education, Faculty of Teacher Training and Education, Raja Ali Haji Maritime University. Advisor I: Alona Dwinata, S.Si., M.Si. Advisor II: Dr. Nur Izzati, S.Pd., M.Si.

Keywords: *Differentiated Learning, Aritsosmar Media, Mathematical Concept Understanding Ability*

This study aims to determine the effect of differentiated learning using Aritsosmar media on students' mathematical concept understanding ability. The study population was students of class VII SMP Negeri 13 Bintan consisting of 4 classes with a total of 133 students. The research used a quantitative approach with a quasy experimental type of research and a nonequivalent control group design. The research sample consisted of two classes, namely VII.1 and VII.4 which were selected through cluster sampling technique. Data collection techniques used test and observation techniques. The instruments used consisted of main instruments in the form of pretests and posttests, and supporting instruments in the form of learning readiness tests, observation sheets, teaching modules, and Aritsosmar media. The data analyzed were qualitative data regarding the implementation of learning activities and quantitative data in the form of N-Gain data on understanding of mathematical concepts obtained from pretest and posttest results. The results of descriptive analysis showed that the average N-Gain of mathematical concept understanding of the experimental class was 0.58 higher than the control class which was only 0.47. The results of non-parametric hypothesis testing using the mann-whitney test resulted in an asymp. sig. value of $0.02 < 0.05$, meaning that H_0 is rejected and H_a is accepted, this means that the median N-Gain of mathematical concept understanding ability of the experimental class is significantly higher than the control class. Thus it can be concluded, that differentiated learning using Aritsosmar media has an effect on students' mathematical concept understanding ability.