

ABSTRAK

Ermika, Tia. 2026. *Efektivitas Model Pembelajaran Kooperatif Tipe Teams Games Tournament (TGT) Berbantuan Wayground terhadap Pemahaman Konsep Matematika Siswa Kelas XI SMA*. Skripsi. Tanjungpinang: Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Dr. Desi Rahmatina, S.Pd., M.Sc. Pembimbing II: Alona Dwinata, S.Si., M.Si.

Kata Kunci: **Efektivitas, Teams Games Tournament (TGT), Wayground, Pemahaman Konsep Matematika.**

Penelitian ini bertujuan menguji efektivitas model pembelajaran kooperatif tipe *Teams Games Tournament* (TGT) berbantuan *Wayground* dalam meningkatkan pemahaman konsep matematika siswa kelas XI SMA pada materi matriks. Penelitian menggunakan pendekatan kuantitatif dengan metode *quasi experiment* dan desain *Nonequivalent Control Group Design*. Populasi penelitian adalah seluruh siswa kelas XI SMA Negeri 5 Tanjungpinang. Sampel dipilih melalui teknik *cluster sampling*, sehingga diperoleh kelas XI.2 sebagai kelas eksperimen dan kelas XI.1 sebagai kelas kontrol. Instrumen penelitian berupa tes pemahaman konsep matematika yang diberikan sebelum (pretest) dan sesudah pembelajaran (posttest). Peningkatan hasil belajar dianalisis menggunakan skor *Normalized Gain* (N-Gain). Hasil uji normalitas Shapiro–Wilk menunjukkan data N-Gain tidak berdistribusi normal, sehingga hipotesis diuji menggunakan uji Mann–Whitney U. Hasil penelitian menunjukkan peningkatan pemahaman konsep matematika siswa pada kelas eksperimen lebih baik daripada kelas kontrol, dengan rata-rata N-Gain masing-masing 0,28 dan 0,13, meskipun keduanya berada pada kategori rendah. Uji Mann–Whitney U menghasilkan nilai signifikansi satu pihak sebesar 0,0125 ($< 0,05$), sehingga H_0 ditolak dan H_a diterima. Dengan demikian, model pembelajaran kooperatif tipe *Teams Games Tournament* (TGT) berbantuan *Wayground* lebih efektif dibandingkan pembelajaran konvensional dalam meningkatkan pemahaman konsep matematika siswa.

ABSTRACT

Ermika, Tia. 2026. The Effectiveness of the Teams Games Tournament (TGT) Cooperative Learning Model, Supported by Wayground, on the Understanding of Mathematical Concepts Among 11th-Grade High School Students. Thesis. Tanjungpinang: Mathematics Education Program, Faculty of Teacher Training and Education, Raja Ali Haji Maritime University. Supervisor I: Dr. Desi Rahmatina, S.Pd., M.Sc. Supervisor II: Alona Dwinata, S.Si., M.Si.

Keywords: Effectiveness, Teams Games Tournament (TGT), Wayground, Understanding of Mathematical Concepts.

This study aims to examine the effectiveness of the Teams Games Tournament (TGT) cooperative learning model, supported by Wayground, in improving 11th-grade high school students' understanding of mathematical concepts related to matrices. The study employed a quantitative approach using a quasi-experimental method and a nonequivalent control group design. The study population consisted of all 11th-grade students at State High School 5 in Tanjungpinang. The sample was selected using cluster sampling, resulting in Class XI.2 as the experimental class and Class XI.1 as the control class. The research instrument consisted of a mathematics conceptual understanding test administered before (pretest) and after instruction (posttest). Improvements in learning outcomes were analyzed using Normalized Gain (N-Gain) scores. The results of the Shapiro–Wilk normality test indicated that the N-Gain data were not normally distributed; therefore, the hypotheses were tested using the Mann–Whitney U test. The results showed that the improvement in students' mathematical concept understanding in the experimental class was greater than that in the control class, with average N-Gain scores of 0.28 and 0.13, respectively, although both fell into the low category. The Mann–Whitney U test yielded a one-tailed p-value of 0.0125 (< 0.05), so H_0 was rejected and H_1 was accepted. Thus, the Teams Games Tournament (TGT) cooperative learning model supported by Wayground is more effective than conventional learning in improving students' understanding of mathematical concepts.