# ABSTRAK

Penelitian yang dilakukan adalah kuasi eksperimen dengan membandingkan kelas eksperimen dan kelas kontrol yang memiliki dasar kemampuan yang sama. Penelitian dilaksanakan berdasarkan masalah hasil belajar pada mata pelajaran Dasar-Dasar Teknik Geospasial siswa kelas X Teknik Geoamatika dan Geospasial SMK Negeri 1 Percut Sei Tuan yang berada di bawah nilai KKM. Hasil belajar yang rendah diakibatkan oleh rendahnya kemampuan kolaborasi dan kerja sama tim untuk memahami Dasar-Dasar Geospasial. Dapat dinyatakan bahwa hasil belajar yang baik diperoleh sejalan dengan kemampuan kerja sama dan kolaborasi siswa. Model pembelajaran *Team Based Project* menuntun proses pembelajaran siswa agar aktif berkolaborasi antar sesamanya. Maka, dapat dirumuskan bahwa penelitian yang dilakukan adalah bertujuan untuk mengetahui pengaruh model pembelajaran *Team Based Project* terhadap hasil belajar Dasar-Dasar Teknik Geospasial siswa kelas X Teknik Geomatika dan Geospasial SMK Negeri 1 Percut Sei Tuan Tahun Ajaran 2025/2026.

Siswa kelas X Teknik Geomatika dan Geospasial Tahun Ajaran 2025/2026 memiliki total jumlah 60 siswa, yang terbagi atas 2 kelas yaitu TGS 1 dan TGS 2. Kelas TGS 1 berjumlah 30 siswa dan kelas TGS 2 berjumlah 30 siswa. Berdasarkan teknik pengambilan sampel *purposive sampling,* diperoleh bahwa kelas eksperimen adalah TGS 1 dan kelas kontrol adalah TGS 2. Kelas eksperimen adalah kelas yang diberikan perlakuan model pembelajaran *Team Based Project* dan kelas kontrol adalah kelas yang diberikan perlakuan model pembelajaran konvensional (*Direct Learning*).

Hasil penelitian menunjukkan perolehan rata-rata nilai *pre-test* kelas eksperimen sebelum perlakuan adalah sebesar 52. Setelah perlakuan, diperoleh rata-rata nilai *post-test* kelas eksperimen adalah sebesar 83. Dilanjut pada kelas kontrol sebelum perlakuan diperoleh rata-rata nilai *pre-test* adalah sebesar 50. Lalu, setelah perlakuan, diperoleh rata-rata nilai *post-test* kelas kontrol adalah sebesar 76. Perolehan uji hipotesis menyatakan bahwa nilai $t_{hitung} > t_{tabel}$ (5.016>1,671), sehingga dapat dinyatakan bahwa Hipotesis Nol ($H_0$) ditolak dan Hipotesis Alternatif ($H_a$) diterima. Dapat diartikan bahwa model pembelajaran *Team Based Project* berpengaruh signifikan terhadap hasil belajar Dasar-Dasar Teknik Geospasial siwa Kelas X Teknik Geomatika dan Geospasial SMK Negeri 1 Percut Sei Tuan Tahun Ajaran 2025/2026.

***Kata Kunci :*** *Model Pembelajaran Team Based Project, Teknik Geospasial, Penelitian Kuasi Eksperimen*

# *ABSTRACT*

*The research conducted was a quasi-experiment comparing experimental and control classes with the same basic abilities. The research was conducted based on learning outcomes in the subject of Fundamentals of Geospatial Engineering for 10th grade students majoring in Geoamatic and Geospatial Engineering at SMK Negeri 1 Percut Sei Tuan who scored below the minimum passing grade. Low learning outcomes were caused by low collaboration and teamwork skills in understanding Geospatial Fundamentals. It can be stated that good learning outcomes are obtained in line with students' collaboration and teamwork skills. The Team-Based Project learning model guides the learning process so that students actively collaborate with each other. Therefore, it can be concluded that the purpose of this study is to determine the effect of the Team-Based Project learning model on the learning outcomes of 10th grade students in Geomatics and Geospatial Engineering at SMK Negeri 1 Percut Sei Tuan in the 2025/2026 academic year.*

*The 2025/2026 academic year Geomatics and Geospatial Engineering class X has a total of 60 students, divided into 2 classes, namely TGS 1 and TGS 2. Class TGS 1 has 30 students and class TGS 2 has 30 students. Based on purposive sampling, it was determined that the experimental class was TGS 1 and the control class was TGS 2. The experimental class was given the Team-Based Project learning model, while the control class was given the conventional learning model (Direct Learning).*

*The results showed that the average pre-test score of the experimental class before the treatment was 52. After the treatment, the average post-test score of the experimental class was 83. In the control class, the average pre-test score before the treatment was 50. Then, after the treatment, the average post-test score for the control class was 76. The hypothesis test results showed that the t-count > t-table (5.016>1.671), so it can be stated that the Null Hypothesis ($H_0$) is rejected and the Alternative Hypothesis ($H_a$) is accepted. This means that the Team-Based Project learning model has a significant effect on the learning outcomes of the Fundamentals of Geospatial Engineering for Grade X students majoring in Geomatics and Geospatial Engineering at SMK Negeri 1 Percut Sei Tuan in the 2025/2026 academic year.*



***Keywords :*** *Team-Based Project Learning Model, Geospatial Techniques, Quasi-Experimental Research.*