

ABSTRAK

Pramudya Putra Adhitya Nurusman “Penerapan *Project Based Learning* Berdiferensiasi *VAK Learning Style Teamwork* Untuk Meningkatkan Keterampilan Pemecahan Masalah Peserta Didik Pada Materi Kinematika”

Penelitian ini bertujuan untuk mengetahui keterlaksanaan dan perbedaan keterampilan pemecahan masalah peserta didik setelah diterapkan model pembelajaran PjBL berdiferensiasi *VAK Learning Style Teamwork* di kelas eksperimen dan model PBL di kelas kontrol pada materi kinematika. Metode penelitian yang digunakan adalah metode *quasi experiment* (percobaan semu) dengan jumlah sampel 36 orang untuk kelas eksperimen dan 36 orang untuk kelas kontrol dengan menggunakan desain penelitian *Pre-test Post-test Only Control Group Design*. Populasi penelitian ini adalah kelas 11 SMAN Jatinangor, dengan sampel dua kelas yakni: 11.7 sebagai kelas eksperimen dan 11.5 sebagai kelas kontrol. Instrumen yang digunakan meliputi Lembar Observasi (LO) dan tes keterampilan pemecahan masalah. Hasil menunjukkan bahwa rata-rata persentase keterlaksanaan pembelajaran melalui LO di kelas eksperimen sebesar 87,56% dengan interpretasi sangat baik, pada kelas kontrol sebesar 82,38% dengan interpretasi sangat baik. Rata-rata *N-Gain* kelas eksperimen sebesar 0,70 dengan interpretasi tinggi dan kelas kontrol 0,62 dengan interpretasi sedang. Uji hipotesis dengan *independent sample t-test* menghasilkan $0,001 < 0,05$, sehingga H_a diterima dan H_0 ditolak. Kesimpulannya, terdapat perbedaan signifikan dalam keterampilan pemecahan masalah antara model PjBL berdiferensiasi dan PBL, dengan PjBL lebih efektif berdasarkan nilai keterlaksanaan pembelajaran. Implikasi pembelajaran menggunakan model PjBL berdiferensiasi yaitu terpenuhinya kebutuhan belajar berdasarkan prinsip diferensiasi dengan melihat gaya belajar mereka serta mengkolaborasikan peserta didik untuk menciptakan suatu proyek berdasarkan hasil belajar dalam kelompoknya. Pembelajaran lebih aktif karena peserta didik memiliki profil gaya belajarnya masing-masing untuk belajar baik individu maupun kelompok.

Kata Kunci: *Project Based Learning*, *Problem Based Learning*, Berdiferensiasi, *Visual Auditory Kinesthetic Learning Style*, Keterampilan Pemecahan Masalah, Kinematika

ABSTRACT

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This research aims to determine the implementation and differences in students' problem-solving skills after applying the Project-Based Learning (PjBL) model differentiated by VAK Learning Style Teamwork in the experimental class, and the Problem-Based Learning (PBL) model in the control class on the topic of kinematics. The research method used was a quasi-experimental design with a total sample of 36 students in the experimental class and 36 students in the control class, employing the Pre-test Post-test Only Control Group Design. The research population was Class 11 students at SMAN Jatinangor, with two sample classes: 11.7 as the experimental class and 11.5 as the control class. The instruments used in this study were Observation Sheets and problem-solving skill tests. The results showed that the average percentage of instructional implementation based on observation sheets in the experimental class was 87.56% (interpreted as very good), while in the control class it was 82.38% (also very good). The average *N-Gain* in the experimental class was 0.70 (high interpretation), while in the control class it was 0.62 (moderate interpretation). The hypothesis test using an independent sample t-test yielded a significance value of $0.001 < 0.05$, indicating that H_a was accepted and H_0 was rejected. In conclusion, there is a significant difference in problem-solving skills between students taught using the differentiated PjBL model and those taught using the PBL model, with differentiated PjBL proving to be more effective based on the instructional implementation results. The implication of implementing the differentiated PjBL model is that it fulfills students' learning needs based on differentiation principles by considering their individual learning styles and encouraging collaboration to create a project based on their learning outcomes in groups. Learning becomes more active as students are empowered according to their learning profiles, both individually and collaboratively.

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