

ABSTRAK

Dike Dikwatul Hasanah. 2026. **PENGARUH MODEL PEMBELAJARAN *COOPERATIVE PROBLEM SOLVING* (CPS) TERHADAP KETERAMPILAN PEMECAHAN MASALAH PESERTA DIDIK PADA MATERI KINEMATIKA DITINJAU DARI PENGETAHUAN AWAL**

Penelitian ini dilatarbelakangi oleh rendahnya keterampilan pemecahan masalah peserta didik berdasarkan hasil studi pendahuluan materi kinematika gerak melingkar di SMA Negeri 7 Tasikmalaya. Selain itu, pengetahuan awal peserta didik pada konsep kinematika dan vektor juga berkontribusi pada pemahaman konsep. Solusi yang diterapkan peneliti untuk mengatasi masalah tersebut dengan menerapkan model pembelajaran *Cooperative Problem Solving* (CPS). Tujuan dari penelitian ini adalah untuk mengetahui pengaruh model pembelajaran *Cooperative Problem Solving* (CPS) terhadap keterampilan pemecahan masalah peserta didik pada materi kinematika gerak melingkar ditinjau dari pengetahuan awal. Metode penelitian yang digunakan adalah kuasi eksperimen dengan desain *factorial* 2×2 . Populasi penelitian adalah seluruh kelas X SMA Negeri 7 Tasikmalaya sebanyak 6 kelas. Sampel penelitian yaitu kelas X-E3 sebagai kelas eksperimen dan X-E1 sebagai kelas kontrol yang dipilih melalui teknik *cluster random sampling*. Teknik pengumpulan data meliputi pemberian tes pengetahuan awal menggunakan *Force Concept Inventory* (FCI) dan *Test of Understanding of Vectors* (TUV), serta tes keterampilan pemecahan masalah berbentuk soal uraian. Hasil analisis data uji hipotesis menggunakan ANOVA dua arah diperoleh: (1) terdapat pengaruh model pembelajaran *Cooperative Problem Solving* (CPS) terhadap keterampilan pemecahan masalah peserta didik pada materi kinematika gerak melingkar dengan $F_{M \text{ hitung}} > F_{M \text{ tabel}}$ yaitu $20,110 > 3,956$; (2) terdapat perbedaan keterampilan pemecahan masalah peserta didik dengan pengetahuan awal tinggi dan rendah dengan $F_{P \text{ hitung}} > F_{P \text{ tabel}}$ yaitu $5,500 > 3,956$; serta (3) tidak terdapat interaksi antara model pembelajaran *Cooperative Problem Solving* (CPS) dan pengetahuan awal terhadap keterampilan pemecahan masalah peserta didik pada materi kinematika dengan $F_{MP \text{ hitung}} < F_{MP \text{ tabel}}$ yaitu $0,507 < 3,956$. Temuan tersebut mengindikasikan bahwa tahapan model *Cooperative Problem Solving* (CPS) mendorong keterlibatan aktif peserta didik dalam mengonstruksi solusi kolaboratif, sehingga berdampak positif pada keterampilan pemecahan masalah peserta didik. Dengan demikian, model pembelajaran *Cooperative Problem Solving* (CPS) berpengaruh terhadap keterampilan pemecahan masalah peserta didik baik bagi peserta didik dengan pengetahuan awal tinggi maupun rendah secara konsisten.

Kata kunci: *Cooperative Problem Solving*, keterampilan pemecahan masalah, pengetahuan awal, kinematika gerak melingkar.

ABSTRACT

Dike Dikwatul Hasanah. 2026. ***THE EFFECT OF THE COOPERATIVE PROBLE SOLVING (CPS) LEARNING MODEL ON STUDENTS' PROBLEM-SOLVING SKILLS IN KINEMATICS MATERIAL, AS SEEN FROM THEIR PRIOR KNOWLEDGE***

This research is motivated by the low problem-solving skills of students based on the results of a preliminary study on circular motion kinematics at SMA Negeri 7 Tasikmalaya. In addition, students' prior knowledge of kinematics and vector concepts contributes to their conceptual understanding. The solution implemented by the researcher to overcome this issue is by applying the Cooperative Problem Solving (CPS) learning model. The purpose of this study is to determine the effect of the Cooperative Problem Solving (CPS) learning model on students' problem-solving skills in circular motion kinematics viewed from their prior knowledge. The research method used was a quasi-experimental method with a 2×2 factorial design. The research population was all 6 classes of class X of SMA Negeri 7 Tasikmalaya. The research sample was class X-E3 as the experimental class and X-E1 as the control class selected through cluster random sampling technique. Data collection techniques included administering a prior knowledge test using the Force Concept Inventory (FCI) and the Test of Understanding of Vectors (TUV), as well as a problem-solving skills test in the form of essay questions. The results of the hypothesis test data analysis using two-way ANOVA obtained: (1) there is an influence of the Cooperative Problem Solving (CPS) learning model on students' problem solving skills on the material of circular motion kinematics with $F_M \text{ statistic} > F_M \text{ table}$, namely $20.110 > 3.956$; (2) there is a difference in the problem solving skills of students with high and low initial knowledge with $F_P \text{ statistic} > F_P \text{ table}$, namely $5.500 > 3.956$; and (3) there is no interaction between the Cooperative Problem Solving (CPS) learning model and initial knowledge on students' problem solving skills on the material of kinematics with $F_{MP} \text{ statistic} < F_{MP} \text{ table}$, namely $0.507 < 3.956$. These findings indicate that the stages of the Cooperative Problem Solving (CPS) model encourage active student involvement in constructing collaborative solutions, thus positively impacting students' problem-solving skills. Thus, the Cooperative Problem Solving (CPS) learning model consistently influences students' problem-solving skills for both students with high and low prior knowledge.

Keywords: Cooperative Problem Solving, problem-solving skills, prior knowledge, kinematics of circular motion.