

**PENGARUH MODEL *CREATIVE PROBLEM SOLVING*  
BERBASIS *HUMAN-CENTERED DESIGN* TERHADAP  
*SCIENTIFIC REASONING SKILLS* DAN *CREATIVE  
THINKING SKILLS* PADA MATERI SUHU DAN KALOR**

**(Rifa Anjiana, 2026)**

**ABSTRAK**

Penelitian ini dilatarbelakangi oleh rendahnya *scientific reasoning skills* dan *creative thinking skills* peserta didik pada pembelajaran Fisika. Penelitian ini bertujuan untuk menganalisis pengaruh model pembelajaran *Creative Problem Solving* (CPS) berbasis *Human-Centered Design* (HCD) terhadap *scientific reasoning skills* dan *creative thinking skills* peserta didik pada materi suhu dan kalor. Metode penelitian yang digunakan adalah kuasi eksperimen dengan desain *nonequivalent control group design*. Populasi penelitian meliputi peserta didik kelas XI SMA Negeri 8 Kota Tasikmalaya Tahun Pelajaran 2025/2026. Sampel ditentukan melalui teknik *purposive sampling*, yaitu satu kelas sebagai eksperimen yang menerapkan CPS berbasis HCD dan satu kelas kontrol yang menggunakan *Discovery Learning* berbasis HCD. Teknik pengumpulan data menggunakan tes *two-tier multiple choice* untuk mengukur *scientific reasoning skills* dan tes uraian untuk mengukur *creative thinking skills*. Instrumen telah melalui uji validitas dan reliabilitas. Analisis data dilakukan menggunakan uji ANCOVA dan MANCOVA. Hasil penelitian menunjukkan bahwa model CPS berbasis HCD berpengaruh signifikan terhadap *scientific reasoning skills*, *creative thinking skills*, serta keduanya secara simultan.

**Kata Kunci:** *Creative Problem Solving, Human-Centered Design, Scientific Reasoning Skills, Creative Thinking Skills*

***THE EFFECT OF THE HUMAN-CENTERED DESIGN BASED  
CREATIVE PROBLEM SOLVING MODEL ON SCIENTIFIC  
REASONING SKILLS AND CREATIVE THINKING SKILLS IN  
THE TOPIC OF TEMPERATURE AND HEAT***

**(Rifa Anjiana, 2026)**

***ABSTRACT***

*This study was motivated by the low level of students' scientific reasoning skills and creative thinking skills in Physics learning. The purpose of this study was to analyze the effect of the Human-Centered Design (HCD)-based Creative Problem Solving (CPS) learning model on students' scientific reasoning skills and creative thinking skills in the topic of temperature and heat. The research employed a quasi-experimental method with a nonequivalent control group design. The population consisted of eleventh-grade students of SMA Negeri 8 Kota Tasikmalaya in the 2025/2026 academic year. The sample was selected using purposive sampling, comprising one experimental class implementing HCD-based CPS and one control class applying HCD-based Discovery Learning. Data were collected using a two-tier multiple-choice test to measure scientific reasoning skills and an essay test to assess creative thinking skills. The instruments were validated and tested for reliability. Data were analyzed using ANCOVA and MANCOVA. The findings indicate that the HCD-based CPS model has a significant effect on students' scientific reasoning skills, creative thinking skills, and both variables simultaneously.*

***Keywords:*** *Creative Problem Solving, Human-Centered Design, Scientific Reasoning Skills, Creative Thinking Skills*