

ABSTRAK

Adilla Octaviany Dewi. 2025. **PENGARUH MODEL *CHILDREN LEARNING IN SCIENCE* (CLIS) BERBANTUAN *VASCAK PHYSICS* TERHADAP HASIL BELAJAR KOGNITIF PESERTA DIDIK PADA MATERI TERMODINAMIKA**

Penelitian ini dilatarbelakangi oleh hasil studi pendahuluan di SMAN 1 Cihaurbeuti, diketahui hasil belajar kognitif peserta didik masih rendah, karena tidak adanya motivasi belajar, serta pembelajaran yang kurang interaktif. Upaya yang dilakukan untuk mengatasi masalah tersebut, salah satunya dengan menerapkan model *Children Learning In Science* (CLIS). Praktikum dapat dilakukan melalui laboratorium virtual *Vascak*. Tujuan penelitian ini adalah untuk mengetahui pengaruh model *Children Learning In Science* (CLIS) berbantuan *Vascak Physics* terhadap hasil belajar kognitif peserta didik pada materi termodinamika di kelas XI MIPA SMAN 1 Cihaurbeuti. Metode yang digunakan dalam penelitian ini adalah kuasi eksperimen dan desain penelitian *the matching only posttest control group design*. Populasi penelitian ini melibatkan semua kelas XI MIPA SMAN 1 Cihaurbeuti, terdiri dari 7 kelas dengan jumlah peserta didik 250 orang. Sampel penelitian menggunakan teknik *purposive sampling* sebanyak 2 kelas, kelas XI MIPA 3 sebagai kelas eksperimen dan XI MIPA 7 sebagai kelas kontrol, dengan masing-masing kelas sebanyak 36 orang. Instrumen penelitian yang digunakan untuk mengukur hasil belajar kognitif berupa soal uraian sebanyak 5 soal, setiap soal mengukur level kognitif C1-C4. Pengujian hipotesis menggunakan uji t pada taraf signifikansi ($\alpha = 0,05$) menunjukkan bahwa $t_{hitung} = 16,61 > t_{tabel} = 1,99$ berarti H_a diterima, sehingga dapat disimpulkan bahwa model CLIS berpengaruh terhadap hasil belajar kognitif peserta didik pada materi termodinamika.

Kata kunci: hasil belajar kognitif, model *Children Learning In Science* (CLIS), termodinamika

ABSTRACT

*Adilla Octaviany Dewi. 2025. **THE EFFECT OF CHILDREN LEARNING IN SCIENCE (CLIS) MODEL ASSISTED BY VASCAK PHYSICS ON STUDENTS' COGNITIVE LEARNING OUTCOMES ON THERMODYNAMIC MATERIAL***

This research is motivated by the results of preliminary studies at SMAN 1 Cihaurbeuti, it is known that the cognitive learning outcomes of students are still low, due to the absence of learning motivation, and less interactive learning. Efforts are made to overcome these problems, one of which is by applying the Children Learning In Science (CLIS) model. Practicum can be done through Vascak Physics virtual laboratory. The purpose of this study was to determine the effect of Children Learning In Science (CLIS) model assisted by Vascak Physics on students' cognitive learning outcomes in thermodynamics material in class XI MIPA SMAN 1 Cihaurbeuti. The method used in this research is quasi-experiment and the matching only posttest control group design. The population of this study involved all XI MIPA classes of SMAN 1 Cihaurbeuti, consisting of 7 classes with a total of 250 students. The research sample used purposive sampling technique as many as 2 classes, XI MIPA 3 class as the experimental class and XI MIPA 7 as the control class, with each class of 36 people. The research instrument used to measure cognitive learning outcomes was in the form of 5 description questions, each question measuring the C1-C4 cognitive level. Hypothesis testing using the t test at the significance level ($\alpha = 0.05$) shows that $t_{\text{count}} = 16,61 > t_{\text{table}} = 1,99$ means H_a is accepted, so it can be concluded that the CLIS model affects the cognitive learning outcomes of students on thermodynamic material.

Keyword: cognitive learning outcomes, Children Learning In Science (CLIS) model, thermodynamics