

Title: Project-based Model in Physics Learning: The Influence on Computational Thinking Skills on the Eleventh-Grade Natural Science Major Students

Author Names: Diah Aghni Subekti, Sri Latifah, Adyt Anugrah, Megawati Ridwan Fitri, Deden Makbuloh, Subandi and Monirul Islam

Abstract: The low level of computational thinking skills of students is a problem of 21st-century skills. One of the efforts to support 21st-century education is by applying a Project-based learning model. This study aims to determine the effect of the application of a project-based learning model on the computational thinking skills of students in class XI IPA. The research was conducted at MA Al-Hikmah Bandar Lampung. The population in this study was XI IPA class with samples of XI IPA 1 (experimental class) and XI IPA (control class). Using saturated sampling technique with Quasi-Experimental Research design. The results of this study indicate that the t-test value with a significant level of 5% there is an effect of the project-based learning model on the computational thinking skills of students in class XI IPA with a sig value <0.05 which is equal to 0.000 then H_0 is rejected and H_1 is accepted. Therefore, computational thinking skills can be used to solve problems in physics learning by applying indicators of decomposition, abstraction, algorithms, and generalization of patterns.

Key words: Computational thinking, Project-based learning, 21st-century skills, Quasi-experimental design, Physics education

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