

ABSTRACT

Juwita Pardede, NIM. 4203141020 (2020). The Development of Case Based Learning Module on the Topic of Coordination System in Class XI Science.

This module development research was carried out based on the results of observations of student needs, namely only using textbooks, where the textbooks, there is no teaching material that can measure students' abilities independently, so modules were needed. The purpose of this study was to determine module development, module feasibility (material experts, learning experts, and design experts), teacher and student responses to modules, and effectiveness testing in students' critical thinking skills. This module development model refers to the 4D model (Define, Design, Develop, and Disseminate). The module was designed according to the needs of students who were arranged according to the module preparation guidelines. The module was tested for feasibility by material experts (87), learning experts (97.5), and design experts (100) with a very feasible category, and teacher responses (95.31) and students (95.69) with a very feasible category, the module was printed and distributed to students of class XI IPA as experimental class. The effectiveness in learning was tested with a critical thinking skills test in two classes, namely the experimental class and the control class, the results were in the form of normalized N-Gain and analyzed by t-test, with the results show that there is a significant difference between the experimental critical thinking skills N-gain and the control class critical thinking skills N-gain, where the Sig. (2-tailed) value of <0.001 the experimental class obtained an NGain result of 0.73 with a high category. The developed module on the topic of coordination system is used to improve critical thinking skills.

Keywords: Case Based Learning, Modules, N-gain Critical Thinking Skills, and Critical Thinking Skills.