

THE EFFECT OF 21th CENTURY SCIENCE LEARNING 5E CYCLE MODEL ON IPA DOMAIN

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ABSTRACT

The study aims to analyze the effect of XXI century science learning on the 5E learning cycle model on science domains (products, processes, and grades) in junior high school students. The research method is quasi-experimental with pretest-posttest control group design. The research population was class VII students of SMP Negeri 8 Yogyakarta, Research Sample 2 classes for experimental class and control class selected by cluster random method. Data display techniques are carried out by tests and instruments about the product domain; non-test techniques with instruments of observation sheet XXI Century science learning implementation and process domain and attitude observation sheets; and questionnaire for attitude domain. The results showed that there was an effect of XXI century science learning on the 5E learning cycle model on science domains (products, processes, and grades) in junior high school students. This is strengthened by the scientific method of the experimental class using the 5E model of science learning has increased with a gain score of 0.3 in the medium category. This skill enhancement is also supported by the results of the multivariate analysis which shows a sig value of 0.043 <0.05 which means that the difference in scientific method skills is caused by the 5E learning device. The attitude of healthy life in the experimental class by using the 5E science learning tool model has increased with a gain score of 0.3 in the medium category. This attitude enhancement is also supported by the results of the multivariate test analysis which shows sig 0.004 <0.05 which means that healthy life differences are caused by 5E learning.

Kata Kunci: *science model 5E learning, Science Domain*