

ABSTRACT

ANDI NADYA SHIVANANDA 2025 THE EFFECT OF GAMIFICATION APPROACH ON STUDENTS' INTRINSIC MOTIVATION AND COGNITIVE LEARNING OUTCOMES (AN EXPERIMENTAL STUDY ON ECOSYSTEM MATERIAL IN GRADE X OF SMAN 5 TASIKMALAYA FOR THE 2024/2025 ACADEMIC YEAR)

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Monotonous biology learning can lead to low intrinsic motivation and cognitive learning outcomes among students. The gamification approach offers a solution by integrating game elements into learning. This study aims to analyze the effect of the gamification approach on students' intrinsic motivation and cognitive learning outcomes in the ecosystem topic for Grade X students at SMAN 5 Tasikmalaya. The research method used was an experimental design with a matching-only posttest-only control group design. The sample consisted of two classes: the experimental class (X4), which implemented gamification, and the control class (X1), which used the scientific approach. The research instruments included an intrinsic motivation questionnaire and a cognitive learning outcomes test. Data were analyzed using the independent sample t-test with the assistance of SPSS. The results showed a significant difference between the experimental and control classes. The average intrinsic motivation score in the experimental class was 61.28, higher than the control class, which scored 55.50 ($p = 0.001$). Cognitive learning outcomes also improved, with an average score of 29.69 in the experimental class compared to 20.56 in the control class ($p = 0.000$). Thus, the gamification approach has been proven effective in enhancing students' intrinsic motivation and cognitive learning outcomes, making it a viable alternative for more interactive and engaging learning.

Keywords: Gamification, Cognitive Learning Outcomes, Intrinsic Motivation, Biology Learning