

**THE EFFECT OF PREDICT-OBSERVE-EXPLAIN (POE) STRATEGY ON  
STUDENTS' CONCEPTUAL MASTERY AND CRITICAL THINKING IN  
LEARNING VIBRATION AND WAVE**

**RESEARCH PAPER**

**submitted as one of requirements to achieve Bachelor Degree on Department of  
International Program on Science Education**



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**APPROVAL SHEET**  
**“THE EFFECT OF PREDICT-OBSERVE-EXPLAIN (POE) STRATEGY ON**  
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## **DECLARATION**

I do hereby declare with respect that every written aspect in the research paper entitled “THE EFFECT OF PREDICT-OBSERVE-EXPLAIN (POE) STRATEGY ON STUDENTS’ CONCEPTUAL MASTERY AND CRITICAL THINKING IN LEARNING VIBRATION AND WAVE” is genuinely pure result of my own original ideas, efforts, and not copied or plagiarized from other papers. The opinion or finding of experts or other contained in this research paper have been quoted or referenced based on scientific code from UPI and in accordance with ethical sciences that applies in scholar society. This declaration is created truthfully and consciously, when subsequently founded an infringement towards scientific ethics, or if there is a claim of any other towards the authenticity of this paper, hence I am willing to be responsible and accept academics sanctions corresponds to applicable rules.

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