Development of TESI-Based Science Learning Innovation (Technology Embedded Scientific Inquiry) to Grow Thinking Skills and Character of Junior High School Students.

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ABSTRACT

This study aims to develop TESI (Technology Embedded Scientific Inquiry)-based science learning innovations to improve problem-solving thinking skills and character of junior high school students. The characters developed in this study include self efficacy and curiosity. The skills developed are problem solving and creative thinking. The product in this study is a learning device with TESI integration innovation. The research method used to develop designs is the adaptation of the Research and Development model according to Borg & Gall (1983: 775). Data collection techniques used in this study include the assessment of learning technology design products based on Embedded Scientific Inquiry, tests to measure problem solving abilities, creative thinking, curiosity, observation and self efficacy observations, observations of learning accomplishments that are oriented towards Embedded Scientific Inquiry Technology. Data will be analyzed descriptively to determine product viability.

This research has been able to develop innovative science learning innovations that effectively improve problem solving skills and curiosity attitudes. There is an increase in problem solving skills with a gain score in the medium category and an increase in curiosity at each meeting. This research also produces learning tools on the theme of heat temperature with very good categories and the potential to foster creative thinking skills and self efficacy. Learning innovation in the form of science learning devices based on Embedded Scientific Technology Inquiry on characters in the 21st century.

Kata Kunci: *Technology Embedded Scientific Inquiry, Thinking skill, character*