

Thinking What No One Else Has Thought: Investigating the Scientific Creativity of Primary School Students in a Science Class

ABSTRACT

For the advancement of humanity, scientific creativity is a crucial skill for coming up with innovations, addressing existing issues and interpreting particular scientific phenomena. The present study aimed to determine the scientific creativity level of 23 primary school students. In a single cross-sectional study, a descriptive survey questionnaire modelled on the Scientific Structure Creativity Model (SSCM) incorporated a seven-item scientific creativity test specifically designed to align with the backgrounds of primary school students. The results show that the students have a balance between a low or intermediate scientific creativity level. Of the 23 respondents, 8 have a low scientific creativity level, 8 have an intermediate scientific creativity level and 7 have a high scientific creativity level. The respondents are the most scientifically creative in creative science problem solving. The researchers recommend an intervention such as integrating the arts into the STEM curriculum to help develop students scientific creativity.