

# SCIENTIFIC INQUIRY SKILLS IMPROVEMENT OF JUNIOR HIGH SCHOOL STUDENTS

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## ABSTRACT

Scientific inquiry skills are components that cannot be separated with scientific method and inquiry learning. Since inquiry-based learning becoming popular, scientific inquiry skills development obtain attentions from teachers and curriculum developer. This research is aimed to give useful information about scientific inquiry skills improvement of junior high school students. Quantitative descriptive research method has been administered in school with KTSP curriculum and in school with Cambridge IGCSE. As many as 244 students have been participated as sample, which are chosen by random sampling technique. An instrument which derived and developed from scientific inquiry skills by Wenning (2007) has been validated and used to obtain data. By the assistance of ANATES software, the result has been presented and analyzed with the result as follow: (1) Generally, there was a fluctuated trend in scientific inquiry skills improvement of junior high school students. The scores obtained are 48.5% for grade 7; 45.5% for grade 8; 53.3% for grade 9. Yet, from 9 stages in scientific inquiry skills, some skills underwent improvement pattern but most of them are fluctuated. (2) It is found that samples from school with Cambridge IGCSE curriculum implementation showed an improvement pattern (score 47.0% -- 50.5% -- 62.5%), while school with KTSP implementation was not perform the same pattern (score 49.2% -- 42.5% -- 44.7%). This research is expected to be useful for teachers and also to enrich references in the study of scientific inquiry skills to be developed in future research.

*Keywords: Cambridge science IGCSE, junior high school, KTSP, scientific inquiry skills, improvement pattern*

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