



Alternative understanding about scientific inquiry

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Abstract

Scientific inquiry has been widely seen as an important approach of science education for facilitating understanding of science and development of scientific thinking. Through analysis of pupils' written proposals and final reports, this research attempted to explore pupils' alternative understanding about scientific inquiry. The analysis showed that pupils did not always learn about what science was and acquired scientific way of thinking just by hands-on activities. On the contrary, some pseudoscientific explanations were commonly found in pupils' work and reports. Improving pupils' understanding of the different types of investigation, the establishment of concept of evidence, and enhancing science as argument should be the future of directions of scientific inquiry learning.

Keywords: scientific inquiry; nature of science; scientific thinking