



Inquiry into primary pupils' science projects: Implication for design of inquiry learning

Winnie Wing Mui SO

**Department of Mathematics, Science, Social Sciences and Technology
The Hong Kong Institute of Education
HONG KONG**

Email: wiso@ied.edu.hk

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Abstract

This research mainly analyzes inquiry learning of a group of Hong Kong primary pupils through science projects. Research targets were sixteen outstanding teams of a large scale inter-school science project exhibition in 2003 (The 6th Primary Science Project Competition). Through pupils' written project reports and oral presentations, the research attempted to explore the ideas eliciting the inquiry, the ways pupils designed the inquiry activities, the investigations conducted, the interpretation of data, the scientific explanation made, the science understanding, the application of science in daily life and the self reflection of work when pupils engaged in inquiry science projects. Pupils' reflections of the process of inquiry learning were also analyzed. It is hoped that the analysis would provide practical examples and implication for designing inquiry science learning. The analysis of pupils' project showed that pupils had different ideas for scientific exploration; they also posed questions and hypothesis in designing the investigations. They controlled variables for comparison, collected, organized and analyzed the information. This helped them construct science understanding and apply science in daily life which is a valuable outcome of inquiry science learning. Finally, a framework of an inquiry science model was constructed for reference.

Key words: Science projects, Inquiry learning.