

Designing and implementing scientific investigation activities at junior secondary level

May Hung CHENG and Hing Lun TSOI

Department of Science The Hong Kong Institute of Education Hong Kong, CHINA

Email: maycheng@ied.edu.hk and hltsoi@ied.edu.hk

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Abstract

This paper introduces the design and implementation of three scientific investigation activities at junior secondary levels. The discussion provides insight on the learning objectives and factors to note in designing such activities. The paper also points out the relationship between daily life experiences and scientific investigation activities, as well as the meaning of stimulating students to think in scientific investigation with an aim to promote the quality of learning. An analysis of the work samples suggests that when teachers design tasks that are more open-ended, students are better at mastering scientific investigation activities. Moreover, the paper illustrates how students achieve better understanding of the meaning of scientific inquiries through the writing of reports on their scientific investigation activities. The paper concludes with suggestions for teachers on the design of scientific investigation activities.