



## **Constructing Elementary Science modules to improve design and production literacy— car as an example**

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### **Abstract**

“Design and production” is one of the eight scientific and technological illiteracies which are announced on Taiwan new science curriculum. The purpose of this project is to develop elementary science modules in order to improve pupil’s competencies of design and production. A team of two teacher college professors, two experienced science teachers and two graduate students cooperated to develop modules through the dialogue integrated with theories and practical experiences. In this study, it provides teachers or science educators a modular framework consisting of design loops, scaffolding instructions, and five thinking-provoking elements. Meanwhile, the example of car activities shows the promising implementation in elementary science class.

**Keywords:** design and production, elementary science, science and technology, scientific literacy