

**Development of Teaching Materials and Activities for a Science Teacher Training
Program in Cambodia: Water-Science Teacher Guidebook**

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Abstract

In Cambodia, the development and the introduction of simple and inexpensive teaching materials such as experiment apparatus are high possibility in both teacher education and student education, especially in science. This paper reported and evaluated the teaching materials “Water-Science Teacher Guidebooks” and Activities based on the guidebook, aiming to be used in the upper-secondary chemistry teacher training program in Cambodia. The evaluation showed that the teaching materials and Activities could contribute to improve learners’ knowledge and provide teachers with teaching Activities and materials that were feasible in secondary school classroom settings. Although the experimental materials were not laboratory equipments, they seemed to be able sufficiently serve to science classrooms in Cambodia. It is necessary to develop this kind of teaching activities and materials for not only Cambodia but also other developing countries, where laboratory equipment is may not be readily.

[Keywords]: Teacher guidebook, pre-service teacher, Science teacher quality,
Cambodia, water surface tension