

Culture-inclusive health science classes for indigenous children of Taiwan

Abstract

Health science educational program is the foundation for solving the health disparity, since the life expectancy for the indigenous Taiwanese is shorter by ten years, than the national average. There is an urgent need to establish a health science educational program for the young Taiwanese indigenous children. The general goal is to develop self-empowerment health education programs for the indigenous Taiwan children, primarily focused on fifth grade students and their parents in a community participated program, with the teaching of yaki and yutas (Tayal), the elders of the tribe. Our approach is to integrate the traditional culture and knowledge into the health science education program in order to maintain the self-identity of indigenous people while learning the modern science.

Based on the culture context of the Tayal GAG, we had developed two major course modules. The development procedure of the course materials were based on the modified ADDIE (Analysis, Design, Development, Implementation, and Evaluation) approach, with a parallel design framework. The evaluation of the new education initiative was based on the learning performance of the children on both the tribal culture knowledge and the modern health science knowledge. At the same time, both the experience of participated teachers and students were also monitored in order to improve the curriculum. The results demonstrated: (1) the students had the remarkable progress on understanding what was a healthy body mass index and how human body maintain calories, (2) the students did not shown significant change on their attitudes and behavior for maintaining their health status.

By this approaches, it is possible to design culture-inclusive health science classes for fourteen different tribal groups of Taiwan indigenous children. We have continued our work with a different ethnic group of Paiwan, to validate the new approaches for parallel design framework.

(The work is supported by the National Science Foundation, Taiwan- NSC,
NSC 100-2511-S-027-001-)

Keyword : Taiwan indigenous peoples, science education, culture, community participated program