School-University Collaboration for Developing Integrated School-Based Curriculum in Southern Part of Thailand

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Abstract: The objective of this study was to develop integrated school-based curriculum for schools around the Ranong Coastal Resources Research Station. This research center is located in the Suksamran sub-district in the southern part of Thailand, and was effected by the Tsunami on December 26, 2004. The Ranong Coastal Resources Research Station is an office affiliated with Kasetsart University in Thailand. The main responsibilities of this research station are research and academic services on natural coastal resource conservation for university instructors, teachers, students and community members. There are 6 primary schools about 15 kilometers distance from the research station. This project was a collaboration between Kasetsart University and schools under the Ranong Educational Service Area Office. All 6 primary schools joined the project. The researchers from Kasetsart University conducted needs assessment regarding curriculum concentrated in local natural resources of primary students, school administrators, and school committees. An integrated school-based curriculum was developed by a team of Kasetsart University researchers, school administrators, teachers and local wisdoms. The curriculum was developed to meet the criteria of the National Learning Standard-based.

The integrated school-based curriculum is composed of 9 learning units: community history, community occupation, local culture, first aid, local herbs, information technology, natural resource conservation, mangrove forests and local tourist destinations. This curriculum is being currently implemented in 6 schools.
Keywords: Integrated School-Based Curriculum, School-University Collaboration

Based on the principle and guidelines provided by the Amended National Education Act 2002, it is hoped that the National Education Plan will 1) lead to a knowledge based economy and society; 2) promote continuous learning; 3) involve all segments of society in designing and decision-making concerning public activities. It is also expected that the National Education Plan will empower Thai people to maintain their Thai identity as well as develop desirable characteristics including virtue, competency, happiness and self-reliance (Office of the Education Council, 2004:19). Wiratchai and others (2004) evaluated the effectiveness of learning reform promoted under the National Education Act, B.E 2542. Wiratchai examined both the effects of learning reform on learners, teachers, administrators and schools, and the behavioral changes of all stakeholders after the learning reform. The research findings indicated rather low rate of behavioral changes in learning reform of the administrators, and teachers, that there was no clear evidences of learning reform effects on students' academic outcomes, and some of the teachers still confused and had misconceptions because of different knowledge learned from different sources. Many teachers, in spite of the learning-reform-based teaching method, still employed the traditional evaluation techniques measuring only memory and content. It was also found that the parents did not clearly understand the concept of child-based teaching put forth in the learning reform. According to these research findings, we can say that, only training approach doesn't work properly. Instead, the acadamics from the university should go out and help teachers by empowering them in the

school. The researchers think that teachers would be willing to change, but they still remain confused. Teachers need professional development to assist them in making educational reform a reality in the classroom.

Academic service to the community is one of the roles of the Thai university. Many professors in Thailand are currently working with schools to empowering administrators and teachers. According to the Amended National Education Act 2002 (AED 2002)**,** schools have to develop their own curriculum appropriate for their own community. AED 2002 also requires community members to participate in developing local curriculum as well as input in the teaching learning process. During this transition period, teachers and schools face a lot of problems. They don't know how to get started in developing their own curriculum with the participation of community members. Furthermore, teacher lack self confidence in student-centered teaching and authentic assessment.

Background

The Ranong Coastal Resources Research Station is a research facility affiliated with Kasetsart University. The Ranong Coastal Resources Research Station was established in 1981 on an area of royal land donated by the Thai Government. This land was located at Praphat Beach near the town of Kamphuan, in the Kapoe District. In 1992 the town of Kamphuan was reclassified as being in the Suksamran sub-district of Ranong Province. After the initial donation of the land the next major development was in 1983 when the area of the Station was fenced. Six years later, laboratories, offices, and dormitories were constructed. The station became fully operational in 1991 and now occupies an area of 220 rai (35 ha. 90 acre). The station is located within the Laem Son National Park, in an area of mangrove forest, about 90 kilometers south of Ranong on the road through the Takua Pa District of Phang-nga Province. The station site is near Praphat Beach, Tambon Kampuan, Suksamran Subdistrict, Ranong Province, four kilometers off Phetkasem Road at: 81 Moo 2 Phetkasem Road, Kilometer 702 (Hat Praphat), 85120, Thailand. The objectives of the station are: 1) To conduct environmental research into natural resources and coastal fisheries and to provide research facilities for university lecturers and researchers. 2) To provide support for students engaged in fieldwork for both education and research. 3) To supply technical and educational services to the local community. 4) To support environmental conservation and marine eco-tourism. (http://www.rdi.ku.ac.th/ Www_ Eng/stations/Ranong.htm)

The Ranong Coastal Resources Research Station has drawn up a blueprint for the protection and conservation of the natural resources found along the Andaman Coast. It has established the Mangrove Forest Natural History Museum and Coastal Resources Park in Honor of His Majesty the King. The aim of this research station is to act as facility center for research and training concerned with the marine environment, in particular, research into the many and varied forms of life found on the Andaman coast, conservation of natural resources, and environmental protection on a regional level. The station is conveniently situated close to a variety of habitats including mangrove forests, sandy beaches, sea grass beds and coral reefs. It also has a hatchery and laboratory facilities for applied biological technology research. The station has an active research program and strong international collaborative links, in particular with institutes from the United Kingdom [The Natural History Museum (NHM) and Plymouth Marine Laboratory (PML)] and Japan [the Japan Society for the Promotion of Science (JSPS)]. The station is currently hosting a European Union funded research program, in conjunction with the NHM and PML, investigating the marine biodiversity of the Ranong region. Other conservation-based activities of the station include the Annual Ranong Sea-Turtle Release Day, mangrove forest planting, and eco-tours. The

Ranong Coastal Resources Research Station was affected by the tsunami on December 26, 2004. (http://www.rdi.ku.ac.th/ Www_ Eng/stations/Ranong.htm)

In the spirit of university-community cooperation, the researchers conducted participatory action research by collaborating with schools under the Ranong Educational Service Area Office and the Ranong Coastal Resources Research Station. There are 6 public primary schools about 15 kilometers distance from the research station. Five of the six schools offer primary education, kindergarten to grade six. Only one school offers education from kindergarten to grade nine. Most of students in each school are Muslim. The main community occupation is fishery and rubber planting. All 6 schools join the project to develop the integrated school-based curriculum concentrate on local resources.

Objectives

The general objective of this research was to develop an integrated school-based curriculum for schools around the Ranong Coastal Resources Research Station. The specific objectives of this study were as follows:

1. To investigate the needs in developing an integrated school based curriculum of 6 primary schools about 15 kilometers distance from the research station.
2. To investigate the opinion of school committees, parents and community leaders in regards to curriculum they wanted their children to learn.
3. To investigate the opinions of 4^{th} to 6^{th} grade students in regards to learning about their community and the reasons why they wanted to learn about these topics.
4. To develop an integrated school-based curriculum under the criteria of the National Learning Standard-based.
5. To make long-term unit lesson plans for 4^{th} to 6^{th} graders.

Research Methodology

Participatory action research was used in this study. School administrators, teachers, school committees and community members joined the project. The research process included:

1. Discussing with the director of the Ranong Educational Service Area Office to set up a collaborative project between Kasetsart University and schools around the Ranong Coastal Resources Research Station.
2. Studying needs in developing an integrated school-based curriculum using focus group interviews. School administrators, teachers, supervisors, and the vice director of the Ranong Educational Service Area Office comprised the focus group.
3. Meeting with school committees, parents and community leaders to gain their input about curriculum content that they wanted their children to learn about their community, and explain the objective of the research project and seek their cooperation.
4. Using questionnaires to collect the opinions of the 4^{th} to 6^{th} grade students about the content that they want to learn about their community and the reasons why they wanted to learn these topics.
5. Analyzing the data collected from school committees, parents, community leaders, and students.
6. Setting up a workshop for brainstorming with supervisors, school administrators, and 4^{th} to 6^{th} grade teachers from the 6 primary schools to develop an integrated school-based curriculum using the criteria of the National Learning Standard Based.
7. Setting up a workshop for brainstorming and making long-term unit lesson plans with school administrators and teachers.

8. Implementing an integrated school-based curriculum in the first semester of the 2006 academic year. (This curriculum is being currently implemented)

Participants

Participants in this study were:

1. 236 fourth to sixth graders of 6 public primary schools about 15 kilometers distance from the Ranong Coastal Resources Research Station.
2. Teachers who taught in 4^{th} to 6^{th} grades in the 6 public primary schools.
3. School administrators of the 6 public primary schools.
4. Parents, community leaders and school committees of the 6 public primary schools.
5. Supervisor from the Ranong Educational Service Area Office.
6. Local wisdom experts.
7. Ranong Coastal Resources Research Station officers.

Research Instruments

Research instruments used to collect data were:

1. Questionnaires to collect the opinions of the 4^{th} to 6^{th} grade students about the content that they want to learn about their communities and the reasons why they wanted to learn these topics.
2. Unstructured interviews to collect the opinions of school committees, parents and community leaders to gain their input about curriculum that they wanted their children to learn about their community.
3. The National Leaning Standard-based for the second grade range (grade 4-6).

Data Collecting

The data were collected by using questionnaires with the students to elicit opinions toward the content that they wanted to learn about their community and the reasons why they wanted to learn these topics. Focus group interviews were used to collect the opinions of the parents, school committees and community leaders toward the curriculum that they wanted their children to learn about their community.

Data Analysis

Percentage and content analysis were employed to analyze the data.

Results

The research results revealed that:

1. All 6 primary schools needed to join the project to develop the integrated school-based curriculum for the second grade range (grade 4-6) while concentrating on their community resources. They decided to work together to develop only one curriculum.

2. Parents, community leaders, and school committees agree with schools and researchers that schools and communities should collaborate to develop integrated school-based curriculum. They want students to learn more about the community including fishing, natural resources conservation, mangrove forests, local herbs, community history, first aid, local culture, community occupations, and information technology.

3. The 4^{th} to 6^{th} graders indicated that they wanted to learn more about fishing, natural resources conservation, tourist destinations, mangrove forests, local herbs, and community history. The students' needs were similar to those of the parents, the community leaders and the school committees.

4. "Suksamran Our Home Town" was the name of the integrated unit and was composed of 9 learning units: community history, community occupation, local culture, first aids, local herbs, information technology, natural resource conservation, mangrove forests and local tourist destinations. Each learning unit blended together concepts, principles, and content from various content areas; English, mathematics, science, etc.

5. The long-term unit lesson plans for the 4th to 6th graders were developed in collaboration among the researchers, the school administrators, teachers, and experts in local wisdom. Teachers used a student-centered approach and use authentic assessment. A student-centered approach encouraged students to be active participants in their own learning. Teachers focused on authentic instruction to promote contextual learning. Contextual learning referred to "learning that occurred in a real-life context or a close situation of a real-life context". (Rogers, Hubbard, Charner, Fraser, and Horne, 1996 cited in Paris, 1998: 4)

6. School administrators, teachers, school committees, parents and experts in local wisdom were willing to join the project. They shared an idea to work together to develop the curriculum even during the weekend. They were willing to write the pretest examination together and willing to implement the curriculum in each school. The curriculum was implemented in 6 schools for the 4th graders. Each school used different ways of integrated teaching appropriate with their school environment. Some schools had only one teacher who took the responsibility of teaching this integrated curriculum because only one teacher taught all requisite content areas. In this situation it was easy for this teacher to integrate the various subjects. Some schools had specific teachers to teach in each subject. They incorporated elements of the integrated curriculum into their respective teaching areas.

Discussion

The integrated school-based curriculum was developed by the collaboration of school administrators, teachers, school committees, experts in local wisdom and researchers. All of them were willing to work together because they had participated in the project from the beginning. They learned how to develop the integrated curriculum from practice. Therefore, they had a sense of ownership, so they were willing to do a good job. Research results confirm research conducted by Boonreang and others (2003: 7) that:

> As outside academics and researchers, we facilitated a process but did not impose a curriculum. Teachers developed a curriculum appropriate to their values and community, so they had ownership. With this sense of ownership, they were willing and able to do a good job.

This research project was correspondence with the recommendation of Piya-Ajariya (2002: 25) that "with academic support of the faculty staff of the teacher education institutions, other than moral support and stimulation, the schools will feel confident of the right direction for the learning reform". This idea was confirmed with Boonreang and others (2004: 7) that "with the process of training only, the teachers could learn about the concepts, but they couldn't transfer their knowledge into practices by themselves". From our project, the teachers had an experience practicing by themselves with the collaborative support of the researchers. Therefore, the teachers developed both conceptual understanding and curriculum practices.

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