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# Local-based Curriculum Development: A Case Study of Watsamankit Elementary School, Thailand

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# Local-based Curriculum Development: A Case Study of Watsamankit Elementary School, Thailand

**Boonreang Kajornsin<sup>1</sup>**, Pranee Potisook<sup>1</sup>, Pikun Ekwarangkoon<sup>1</sup>, Warunee Lapanachokdee<sup>1</sup>

This paper will discuss five topics: Thai education reform; Teacher and school problems; Participatory action research; Research that used participatory action research to develop a locally-based curriculum; and, What we learned from the research.

#### THAI EDUCATION REFORM

The issues of educational reforms became a highlight of Thai education in 1997 when the reform proposals were more realized and put into action by the authorities involved. The education reforms had been initiated by the Office of the National Education Commission since the promulgation of the 1992 National Scheme of Education, starting with the reform of specific issue on teacher education and teaching and educational personnel development, followed by higher educational reform and reform of teaching and learning system in 1996. (Office of the National Education Commission, 1977: 185-187)

The National Scheme of Education 1992, advocated the Reform of Teacher Education and Teaching and Educational Personal Development with a focus on raising the standards and professionalism of teachers in terms of ethics, academic skills as well as the profession of teachers. The master plan of teacher reform was approved in March, 1996 by the Council of Ministers which also authorized the establishment of a special project for the implementation of the reform. (Office of Education Commission, 1997: 187-192)

The National Education Commission formulated the principles and strategies for higher education reform, approved on 27 August 1996 by the Council of Ministers, which authorized the Office of the National Education Commission to prepare a master plan for higher education reform and submit to the Council of Ministers for subsequent consideration. (Office of the National Education Commission, 1997: 193)

Among the five policies on educational development addressed in the Eighth National Education Development Plan, three of them were aimed at reforming education as follows: 1) To reform the teaching and learning system in order to enable learners at all levels to achieve their full potential in academic knowledge and basic skills, as well as to acquire desirable characteristics. 2) To reform teacher education and the teacher education system in order to enable teachers to improve teaching and learning to help learners to live a happy life in a changing society, and to improve the teaching profession and enhance the status of teachers. 3) To reform educational administration and management to be more flexible; to decentralize educational management so that all sectors of society were appropriately involved in decision-making, so as to provide equitable, high quality, and diversified models of education. (Office of the National Educational commission, 1997: 197)

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Two years after the economic crash and the adoption of the new Constitution, the National Education Act of 1999 was passed. Implementation was to be phased in and completed by 2002. This comprehensive Act addresses: teaching and learning; the revitalization of Thai wisdom; the empowerment of teachers; more student-centered instruction; administrative and fiscal decentralization; and a system of educational standards for quality assurance, and authentic assessment. (Kaewdang, 2001; cited in Jungck with Kajornsin, 2003: 31)

#### TEACHER AND SCHOOL PROBLEMS

According to the National Education Act of 1999, schools have to develop their own curricula which is appropriate in their own community. Community members should participate in developing local curriculum as well as the teaching learning process. In this transition period, the teachers and schools face a lot of problems. They don't know how to get started to develop their own curriculum with the participation of community members. Teachers lack self confidence in developing student-centered teaching and authentic assessment.

# PARTICIPATORY ACTION RESEARCH

Robin Mc Taggart (1997: 28-31) uses the term, "participatory action research" to differentiate it from research that typically involves researchers from the academy doing research on people, making the people objects of the research. Participatory action research engages people from the academy and workplace in an entirely different relationship. Academics and workers in participatory action research are joined by a "thematic concern": a commitment to inform and improve a particular practice. Every participant, academic and worker, must undertake: To improve his or her own work; To collaborate with others engaged in the project to help them improve their work; and, To collaborate with others in their own separate institutional and cultural contexts to more broadly inform the common project. In addition, they are to create the material and political conditions necessary to sustain the common project and its work.

In sum, participatory action research is concerned simultaneously with changing individuals, on the one hand, and, on the other, the culture of the groups, institutions, and societies to which they belong. It is important to emphasize that these changes are not impositions; Individuals and groups agree to work together to change themselves, individually and collectively. Their interests are joined by an agreed upon commitment to a "thematic concern" (Mc Taggart, 1997: 31)

#### THE RESEARCH

According to the characteristics of participatory action research mentioned above, Boonreang Kajornsin and others (Kajornsin et al., 2001; Kajornsin et al., 2002a; Kajornsin et al., 2002b) conducted research to develop a locally-based curriculum.

# **Objectives**

The objectives of this research were:

- 1. To develop a local curriculum appropriate to the community and school contexts through collaboration with school and community members. Community members would participate in developing the local curriculum and the learning-teaching process.
- 2. To implement a local curriculum in the school that would move them from a teacher-centered to student-centered learning. The teachers would learn how to use an integrated learning approach, authentic assessment and rubric assessments. Students would have an experience on authentic learning and authentic assessment.
- 3. To follow, evaluate, and revise the pilot curriculum and then implement a revised curriculum in the next semester. The areas to be developed and evaluated were: teaching behaviors; teaching-learning processes; school management; students' achievement; students' desirable skills and behaviors; administrators, teachers and supervisors' opinions toward the local curriculum; community participation; and, community members' opinions towards the local curriculum.

# **Research Methodology**

Participatory action research was used to develop the local curriculum, as diagrammed in Figure I.

The research process included:

- 1. Studying the potential and needs in developing local curriculum of the selected schools and communities in Ratchaburi province. School administrator, teachers, district supervisors and community leaders provided the information. The results of the study indicated that Watsamankit School and Takratum community had sufficient potential and needs to proceed with the project and develop a local curriculum. The project focused on developing an agricultural curriculum at Watsamankit School
- 2 Setting up a workshop for brainstorming with school administrators, teachers, the district supervisor, and community members to understand *local wisdom* surrounding this school site and develop a locally-based curriculum. Finally, we developed a local curriculum for fifth graders namely: "A Systemic Approach to Integrated Agriculture".
- 3. Setting up a 3-day workshop for brainstorming and making long-term unit lesson plans with the school administrator, teachers district supervisor, and local wisdom.
- 4. Preparing personnel by giving a workshop and arranging a study tour for school administrator, teachers, and the district supervisor to visit schools that used authentic assessment and schools that had succeeded in developing local curriculum.
- 5. Meeting with parents and community leaders to gain their input and explain the objectives of the curriculum, teaching-learning processes and to seek their cooperation.

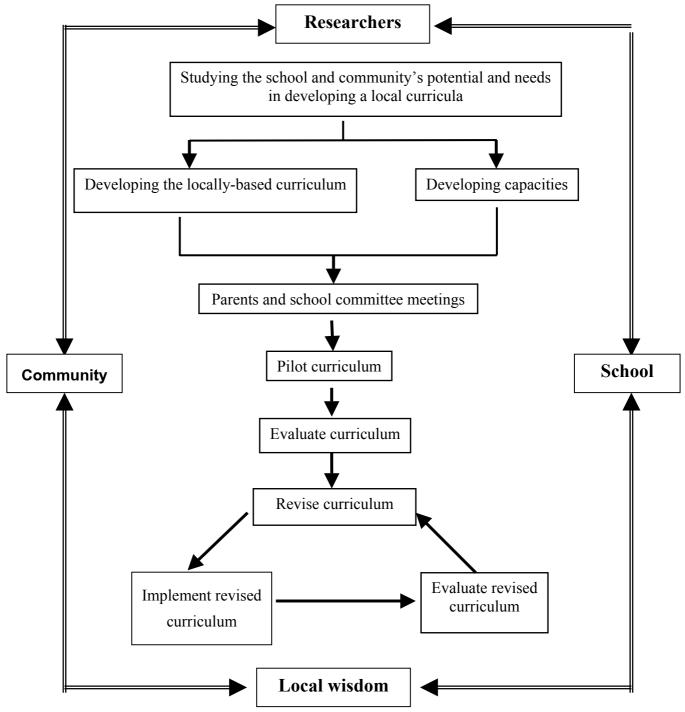


Figure 1: a Participatory Action Research Design

- 6. Developing research instruments such as achievement tests, evaluation forms for students' desirable behaviors, students' desirable skill and worksheet evaluation forms with teachers who took responsibility for local curriculum.
- 7. Piloting the local curriculum: "A Systemic Approach to Integrated Agriculture" with the fifth grade students at Watsamankit School in the second semester of the 2001 academic year. At this stage, we also checked the quality of the curriculum and instruments for collecting data. The community members and representatives of local organizations participated in the teaching-learning process by acting as visiting lecturers, demonstrators, interviewees, and providing some teaching materials.
  - 8. Follow up on the implementation of the local curriculum.

- 9. Setting up 3 focus-group discussions at Watsamankit school. Groups included parents, community members, experts on *local wisdom*, school administrators, teachers and district supervisors. We sought their opinions on the curriculum and any problems identified during implementation.
- 10. Setting up a workshop with teachers for revising the local curriculum and lesson plan.
- 11. Implementing the revised local curriculum in the first semester of the 2002 academic year.
- 12. Evaluating the impacts of the local curriculum on students' knowledge, desirable behaviors, desirable skills, attitudes toward agriculture as an occupation, opinions toward the teaching-learning activities, teachers' behaviors, school management, the school administrator's, teachers', district supervisor's and community members' opinions toward the local curriculum.

# **Participants**

The participants in this study were:

- 1. Fifth graders in 2001 and 2002 at Watsamankit School.
- 2. Teachers who taught the 5th grade in Watsamankit School.
- 3. School administrator.
- 4. School committees.
- 5. District supervisor.
- 6. Local wisdom experts.
- 7. Parents
- 8. Community leaders.
- 9. Representatives of local organization.

## **Research Instruments**

Research instruments used to collect data were:

- 1. Students' achievement tests in "Integrated Agriculture" with reliability coefficient of 0.82. The average difficulty indexes was 0.52. The average of discrimination indexes was 0.52.
- 2. Rubric scoring sheets were used to evaluate students' work sheets, desirable skills and desirable behaviors
- 3. Attitude scales to measure students' attitudes toward agriculture as an occupation. The reliability coefficient is 0.97.
- 4. Questionnaires to assess the students' opinions towards the teaching and learning activities.
- 5. Semi-structured interview forms to interview local wisdom experts, community members, parents, teachers, administrators and supervisors about their opinion toward local curriculum implementation.

# **Data Collecting**

The data were collected through achievement tests, portfolio assessment, questionnaires, observation, in-depth interviews and focus group interviews.

## **Data Analysis**

Various methods were used to analyze data as follow:

- 1. Percentage, mean, standard deviation, and coefficient of variation were employed to analyze the quantitative data.
- 2. Content analysis and member checks were employed to analyze the qualitative data.

#### **Results**

The research results revealed that:

- 1. Watsamankit School developed a locally-based curriculum: "A Systemic Approach to Integrated Agriculture" composed of 8 learning units that focused on: agriculture in Takratum community; the concept of a systemic approach to integrated agriculture; land preparation; production; harvesting; processing; selling; and, occupation related to integrated agriculture.
- 2 Community members and local organizations became involved in developing, implementing, and evaluating the curriculum. They were also involved in the teaching and learning process. They acted as visiting lecturers. Parents, community leaders and school committee members came to demonstrate how to do rice harvest and to teach at the school. The chief local Monk allowed Watsamankit School to use the Wat's land as a demonstration rice field. Parents, community leaders, and local experts lent their farm equipment.
  - 3. The impact of implementing local curriculum revealed that
- 3.1 Students gained more knowledge about integrated agriculture. They developed more desirable behaviors, skills, and attitudes toward agriculture as an occupation. Most students enjoyed the learning activities. They thought that they had more experience of authentic learning. They learned more about their community and they can now apply this knowledge in their daily life.
- 3.2 The school administrator, teachers and district supervisor thought that the local curriculum had positive impacts on the school, students, teachers and community. The **School** and the community developed a closer relationship. Parents and community members participated more in school activities. The teaching-learning milieu was very good, more relaxed and students felt happy while studying. **Students** had more experience in authentic learning. They could apply their knowledge to help their parents. Their work habits improved. Students developed closer relationships with their parents. **Teachers** gained more understanding about student-centered learning, integrated learning approaches, authentic assessment and rubric assessment. They developed a closer relationship with their students, so they could help them on time. They developed better relationships with parents and community members.
- 3.3 Community members were willing and proud to participate in the teaching-learning process. They developed closer relationships with the schools and teachers. They felt more academic value for their children.

#### WHAT WE LEARNED FROM THE RESEARCH

According to the research results and our experiences in working with the teachers, school administrators, district supervisor, community members and students, we can conclude that, typically, school and community members were willing to develop a local-based curriculum, the teachers were eager to use student-centered learning, integrated learning approaches, authentic assessment and rubric assessment. However, they lacked knowledge and self confidence. They lacked experience turning new theories into new practices. In order to enhance their knowledge, capacities and experiences, we found it important and necessary:

- 1. To develop long-term relationships with the school and community. So, we were available to support, consult and advise them throughout the whole process of developing, implementing, assessing and revising a local curriculum. During the curriculum implementation, we visited the teachers twice a month. Consequently, we could help them when they faced the problems, encourage the development of their self confidence in the new teaching and learning processes, and, assessing the process.
- 2. That the teachers were "learning-on-the-job". They developed a local curriculum specific to their contexts a curriculum based in their "real world". Since we invited them to collaborate with the researchers and community members at the first stage to develop the local curriculum, all the components in curriculum were relevant to them.
- 3. 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.
- 4. That teachers had the experience of taking concepts (integrated learning, student-centered, etc.) and developing them into an actual curricular practices. 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.
- 5. To include community members as participants right from the beginning and through all stages of the curriculum development project helping them to understand the curriculum objectives and teaching learning processes. Therefore, we sought and gained their input and cooperation.
- 6. That the whole school began to work as a team. Working as a team was very important, especially for using an integrated learning approach. All the teachers who taught in the same level should discuss more among themselves for how to coordinate their lesson plan. From our research project, we found that in the small elementary school (Watsamankit School) all teachers could join the team to develop a local curriculum.

From the discussion above we would like to conclude that we could develop a local-based curriculum, promote empowered teachers and community through participatory action research. We believed that after we left this school, local curriculum development could be continuously implemented by teachers, school and community. Therefore, we would recommend that university academics use participatory action research to help schools to develop locally-based curriculum, to promote empowered teachers, schools and communities in Thailand.



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