

CHAPTER I

INTRODUCTION

Background

Reformation of learning method would play important role in educational reformation. Today, the Basic Education Curriculum 2001 aims to reform the learning according to the Constitution of Thailand Kingdom of 1997 and National Education Act of B.E. 2542 (1999) and its revision (Second Edition) in B.E 2545 (2002) in sections 24 and 27. Schools must arrange teaching contents and activities according to the interests and the preferences of learners. The differences in individuals, local communities, type of societies, as well as indigenous knowledge will be highly regarded. The desired characteristics of learning as a part of family, community, society, and country will be identified and pursued. School curriculum therefore should be responsive to the needs of learners and their local environment. At the same time the state should also identify a blue print of curriculum of the country as the guideline or framework of all teaching contents in school curriculum so that the state can develop consistent targets for learners and achieve the guideline of the Basic Education Curriculum of B.E. 2544.

There are nine identifiable objectives of the Curriculum (Department of Curriculum and Instruction Development, Ministry of Education, 2002 b : 4) that aims to enable learners to:

1. Appreciate their own values as persons, discipline themselves, follow of the tenets of Buddhism or their respective religions, respectful to values of ethics and morality.
2. Be creative, learn eagerly, love reading, and love searching for knowledge.
3. Have internationally-acknowledged knowledge, catch up with the changes and development on technologies.
4. Be skills and potentials to utilize communication and technology know-how. Learners have abilities to adjust timely to relevant thinking processes and working means to each situation.
5. Have skills on processes in mathematics, sciences, thinking skills, and skills for daily living.
6. Be fond of physical exercises, take care of themselves, and maintain good health and acceptable personalities.
7. Have efficiency in production and consumption. Learn to be the producers and keepers of moral values rather than being blind consumers.
8. Understand the history of Thailand, conserve the pride of being Thais, and practice good citizenship in holding to Thai ways of life and the Democracy with King as the Head of the State.
9. Be aware preservers of the Thai Language, Arts, Cultures, Traditions, sports, indigenous knowledge, natural resources, and environment.

10. Be concerned with their country and their local environment. Keep intentions to create usefulness and good things for the society.

The objective of such curriculum thus tantamount to achievements of the desired characteristics of learners in all aspects, i.e. their knowledge basis, ethnic and moral values, self-improvement into good citizenry with practical know-how to work, conservation the values honored by the Thais, as well as natural resources and environment, including intentions to create benefits for the public.

The development of learners in all aspects must rely on the school curriculum development. Wattanaporn Rangabtook (2002 : 2-3) has argued that the curriculum is the plan, the guideline, or the framework of the school to arrange itself to develop learners to be knowledgeable and achievers of their highest potentials. The curriculum is a guideline for administrators, teachers and relevant sectors to develop themselves. Therefore the curriculum is the guiding framework for administrators, teachers and relevant sectors to arrange their accumulated experience for the learners to develop within themselves knowledge, skills, ethics and moral values, and the other desired characteristics. It can be argued that curriculum is the heart of the education because education without curriculum lacks direction. The main components of the curriculum should be composed of targets and policies of education, objectives of each subject, contents of each subject, teaching techniques and evaluation, materials for the curriculum as well as media for teaching (Thamraong Buasri, 2002 : 2 and Wichai Prasitwutthiwach, 1999 : 50–52). In arranging the curriculum for basic education in schools, each school needs to arrange the individual contents of these eight components into main two parts, which are foundation courses and elective courses. Students can take the courses under the given criteria in annual or semester basis. Most of schools arrange their courses for learners in each class level separately as either foundation or elective courses. The Basic Education Curriculum of B.E.2544 (Basic Education Curriculum, 2001) categorizes basic education into four grade level. Each grade level covers three class levels. It increases the flexibility of the arrangements of curriculum and teaching. Students from different grades or levels can study together sometimes in certain subjects of their interests. This flexibility allows them to learn naturally, socially and culturally (the gregarious culture of togetherness). Until recently, the arrangement for a common course for learners from different grades is done in the forms of club activity, extra-curriculum, and additional courses. Interested learners arrange their own activities while course advisors provide advice. The instruction is different from the normal class instruction as provided in foundation or elective courses. Nevertheless the implementation of the Basic Education Curriculum of B.E 2544 from the Department of Curriculum and Instruction Development, Ministry of Education (2001 : 13) allows opportunities for schools to add extra courses for any subjects. Schools set the codes for subjects available for learners in any of the grade level to enroll. Therefore, it can be shown that the current curriculum facilitates integrated courses for students from different classes.

A common learning among learners from different grade level or classes enhances learners' capacity to adapt to society in many aspects such as work behavior, leadership, follower-ship, learning exchanges, interpersonal relationship, cooperation among learners from different ages, being part of group, sharing life experience, and other social skills. In this study, the researcher studies common learning in certain subjects by the groups of students who come from different grade

level or classes. These subjects provide learning experience, which focuses on local contents (promotion of advanced thinking skills, awareness on environment, and cooperative behavior in learning). It is expected that the arranged learning experiences will become a guideline to arrange curricula for other subjects that enable learners from different classes to learn together in their shared interests, skills, and preferences. This opportunity develops learners' potential to the maximum realization for their knowledge, thoughts, minds, physical skills, interests, preferences, including skills to co-exist with others in society.

Developing the thought and intelligence of the youth is interesting for scholars both in developed and developing countries. In the United States, for example, many a research have identified that learners can perform well in examinations in parts related to their basic skills, while they fail in parts related to reasons and logics. For Thailand case, some movements on the teaching for students have proposed certain concepts to be used in teaching, i.e., "Know How to Think, Know How to Do and Know How to Solve Problems," or the religion-based "thinking correctly according to the principles of *Yoniso-manasikana*" (Reflective Thinking Skill). These concepts, however, can not be used in very general audience or the public and therefore the problems related to the building of the advanced thinking remain (Thisana Khamanee, 1998 : 47). The same drawback has been acknowledged by (National Institute for Learning Reform) under the Office of the National Education Commission (1998 : 10). In sum, learning should be focused on learners to have social skills and to implant the necessity in learners to think, to analyze, to criticize, and to become creative. This is shown clearly, for example, from learning vision of science, which is made under the framework of education development (Knowledge-Based Society). The framework has stated that "all learners must receive supports to develop their thinking capacities, their learning capabilities, their knowledge-seeking impulse, their problem-solving capacities, and their eagerness to search and to create knowledge" (Department of Curriculum and Instruction Development, Ministry of Education, 2002 a : 4). In arranging the teaching methods for science at the level of basic education, the Department of Curriculum and Instruction Development (Ministry of Education) identifies the quality of learners who study science in acquired skills to create knowledge and development of advanced thinking process. In addition to skills and development of advanced thinking for learners' lives in the globalized society, the other basic skills for learners in the future are composed of learning skills, thinking skills, and communication skills (Department of Curriculum and Instruction Development, Ministry of Education, 1999 : 2). Therefore it is deemed necessary that the curriculum in all groups of subjects must arrange various learning activities and to focus these on the process to promote the identified skills, especially the advanced thinking skill for learners.

In addition, young learners should have sufficient thinking skills for their survival in society. They also need skills and basic knowledge in management and working together in groups. This present study attempts to promote a method in which learners coming from different classes or levels can perform common learning activities for manners and purpose stated above. Living together in a society, its members must behave themselves, take responsibilities, discipline themselves, assist others, and show devotion and intention to improve. These ideal characters enable

every society member to work with others (Department of Curriculum and Instruction Development, 1999 : 3). Working together means accomplishing common tasks as a group of people with same objectives and targets whose fulfillment require systematic working processes and good interpersonal relationship. The positive results appear if two aspects as the followings are respected.

1. Group working process with certain encouraging behaviors such as members' assisting one another to identify group objectives, awareness of the shared problems, ability to plan synchronously together, proper behaviors either as leaders or as followers, and capability to make decision with others.
2. Good interpersonal relationship with colleagues with marks such as cooperation in all activities, acceptance of capabilities of others, assistance to colleagues in appropriate times, self-constraint in control of emotions, and ever-present attempts to improve relationship among group members.

In the learning process, the members of group must perform the group activities themselves and focus on cooperation in all three aspects as stated by the Department of Curriculum and Instruction Development (1999 : 52) : (1) Heart or intention and willingness to perform all activities as learning process or group work, (2) Head or concepts about activities within the learning process or group work which facilitate thoughts, analyses, decision-makings, and summarizing of what they learn, (3) Hand or activity performance in tasks by themselves as well as discussion and expression of opinions among the group members.

Arranging learning experience for students to create advanced thinking skills and cooperative behavior in learning according to a curriculum that focuses on relationships and lives of the learners must thus rely on teaching methods focusing on teaching processes or the direct experience to daily living in society. Environment, for example, is increasingly becoming an interesting subject related to urgent problems in Thai society because of environmental crises in Thailand such as deforestation, clean water crisis, irregular weather, irregular rain falls, droughts, floods, soil erosions, all of which are partially connected to human behavior. The population boom and urban expansion as the results of agricultural development, industry, rapid construction and higher consumption influence the environment directly. Both urban and rural areas of Chiang Mai are facing environmental problems of overused natural resources, forest fires, floods, garbage problem, and water and air pollution. Therefore it is urgent to divulge knowledge, create awareness, and promote proper behavior among young learners toward their own environments. These young learners will be the main future forces in developing and rehabilitating the environment conditions in their own locals, country and the world. Qualified young learners would result in better life quality for people in the world of the future.

In this study, the researcher is challenged to create an integrated local curriculum with a process-based analytical endeavor. This local curriculum's contents would include the learners' own environment in Chiang Mai City and these contents may become a guideline to arrange a learning experience for grade level 4 students of Regina Coeli College. The objective of the researcher is to use the study's results as guidelines for development of an integrated local curriculum that promotes advanced thinking skills, awareness to the students' own environment, and cooperative behavior in learning among them.

Objectives of the Study

1. To develop an integrated local curriculum encompassing teaching methods that emphasize the process-based analyses for grade level 4 students who study in the groups with members coming from different classes or levels.
2. To study the results of the implementation of this integrated local curriculum on the development of advanced thinking skills, awareness to the students' local environment, and cooperative behavior in learning among the students who take this local environmental course.

Limitations of the Study

1. The samples are taken from the population of the students from Mathayom Suksa 4 and 5 of Regina Coeli College in first semester of year 2007.

2. The limitations related to the contents of the study are covering the following contents.

2.1 The plan to arrange a learning experience on local environment for the students of Mathayom Suksa 4 and 5 is built with three Learning Units in 18 weeks of teaching set in 36 periods (50 minutes each). Each learning unit has respective guideline for arranging learning activities that emphasize on direct experience. It can be done by integrated learning utilizing a process-based analyses, which are learning through projects (Project Work), Creative Thinking Learning, learning through problem-solving process (Problem-Based Learning), and learning by students' own initiative (Self-Directed Learning). The plan for the implementation of this learning method is considered proper to the contents of each plan on at least two methods.

2.2 Training for advanced thinking of the students will be guided by the promotion of advanced thinking skill methods by Benjamin Bloom, which is composed of:

- 1) Student's ability to analyze information.
- 2) Student's ability to synthesize information.
- 3) Student's ability to evaluate information.

2.3 The building of the awareness among the students' for their own environment is composed of the followings.

- 1) Creation of awareness to the learners' environment.
- 2) Encouragements for proper behaviors in such environment.
- 3) The positive achievement of behaving themselves in their environment.

2.4 Cooperative behaviors in learning attempts among the students are identified as the followings.

- 1) Participation in group activities through free expression of opinions.
- 2) Listening and accepting opinions of other group members.
- 3) Working on the assigned tasks with willingness.
- 4) Voluntary assistance to one another.

Variables Used in the Study

Variables in this study are identified as the followings.

The independent variables.

1. The local integrated curriculum that emphasizes on the process.
2. Learning in group activities of the students coming from different classes.

The dependent variables are the results of the implementation of the developed local integrated curriculum on three aspects, which are set as the followings.

1. The acquired levels of advanced thinking skills.
2. The levels of awareness to the students' own environment.
3. The levels of cooperation in the process-based learning process.

Definitions of Terms

Local curriculum means the plan for arranging learning activities on a subject related to local environment. The subject code is Vor 40281 (1 credit, whose status is an elective course for grade level 4 students of the Regina Coeli College. The contents of the course are focused on Natural Environment and Society and are used in the context of the Society in Chiang Mai.

Developing local curriculum means designing and creating the curriculum on integrated local environment that focuses on process-based analyses that enable the students coming from different classes or levels to achieve advanced thinking skills and higher awareness to local milieu. They can develop their cooperative behavior in learning throughout the learning units divided into three units.

The interpreted teaching method that focuses on the process (Process - Based) means arranging the learning experiences for the students by using the learning processes termed Project Work, Creative Thinking Learning, Problem-Based Learning, and Self-Directed Learning of at least two methods that are appropriate to the contents of each learning unit.

The results of using the curriculum means the acquired advanced thinking skill, awareness to the local environment, cooperative behavior in learning of grade level 4 students who study in groups that mix students from various classes in the developed curriculum.

Other impacts means the results of the development of the curriculum such as problems and obstacles appearing during and after the implementation of this curriculum.

Grade level 4 students means students at Mathayom Suksa 4 and 5 in the first semester of year 2007 of Regina Coeli College Muang District, Chiang Mai Province.

The group that mixes members from different classes means the group of students of Mathayom Suksa 4 and 5 who take the course on Local Environment that the researcher has created for a semester. The numbers of students in each class or level are 20 from Mathayom Suksa 4 and 20 for Mathayom Suksa 5; all are 40 students.

Advanced thinking skills means the ability to analyze, synthesize, and evaluate information.

Analysis ability means the ability of the students to analyze information or the whole picture of the environment, divide it into small parts and rearrange these small parts into categories based on identified criteria so that they see and understand the relationships of all parts of information. This ability can be judged from the scores of their assignments during the course and the scores from the evaluation form created by the researcher to measure this ability.

Synthesis ability means the ability of the students to integrate their knowledge and thinking to perceive the environment differently or to propose creative solutions departing from known methods. This ability can be fathomed from the scores of their tasks during the course and the score on the evaluation form created by the researcher to measure student's abilities to synthesize information.

Ability to evaluate information means the ability of the students to judge the values or qualities of their environment by comparing the identified criteria found in the environment against the appropriate theoretical criteria for a sound environment added with certain thoughts and performances. This ability can be reflected from the scores of accomplished tasks during the course and the scores of evaluation forms created by the researcher to measure this ability.

Local awareness means appreciation of the values and acquired responsibilities toward the local environment from the students who express this awareness through behaviors, conceptual understanding, and positive attempts related to their local environment. The level of this awareness is reflected from the scores of their accomplished tasks during the course and the scores on the evaluation form made by the research on the awareness to the local environment.

Cooperation in learning means the cooperative behavior of the students who study in the group of different classes during their participation in the group activity shown through expressing of opinions, listening and accepting opinion of other group members, accomplishing the assignments, and assisting each other. The level of this cooperation can be measured from the actual cooperative behavior in learning and the self evaluation form set by the researcher to measure cooperation behavior in learning.

Expected Benefits of the Study

1. Getting a sample of local curriculum that can be used in arranging teaching activity to grade level 4 students.
2. Building a concept of arranging the learning that can develop the advanced thinking skills, awareness to the local environment and cooperation in learning among the students.
3. Creating evaluation forms on advanced thinking skills for grade level 4 students.
4. Creating a useful guideline for educators who are interested to develop curricula to teach environment-related subjects.
5. Producing a guideline in developing the curriculum for both compulsory and elective courses responsive to abilities and interests of the learners. This curriculum is expected to be a reflexive curriculum that promotes learning in groups with members coming from different classes in Mathayom Suksa level. This curriculum can lead the development of appropriate subjects for students within each "Grade Level" to study together.

Framework of the Study

This study is about the development of an integrated local curriculum that utilizes process-based teaching methods and analyses as well as the study of the effects of the implementation of such local curriculum to the students' advanced thinking skills, the level of awareness to their local environment, and the level of cooperation in learning. The framework that links all of these concepts is shown in Figure 1.

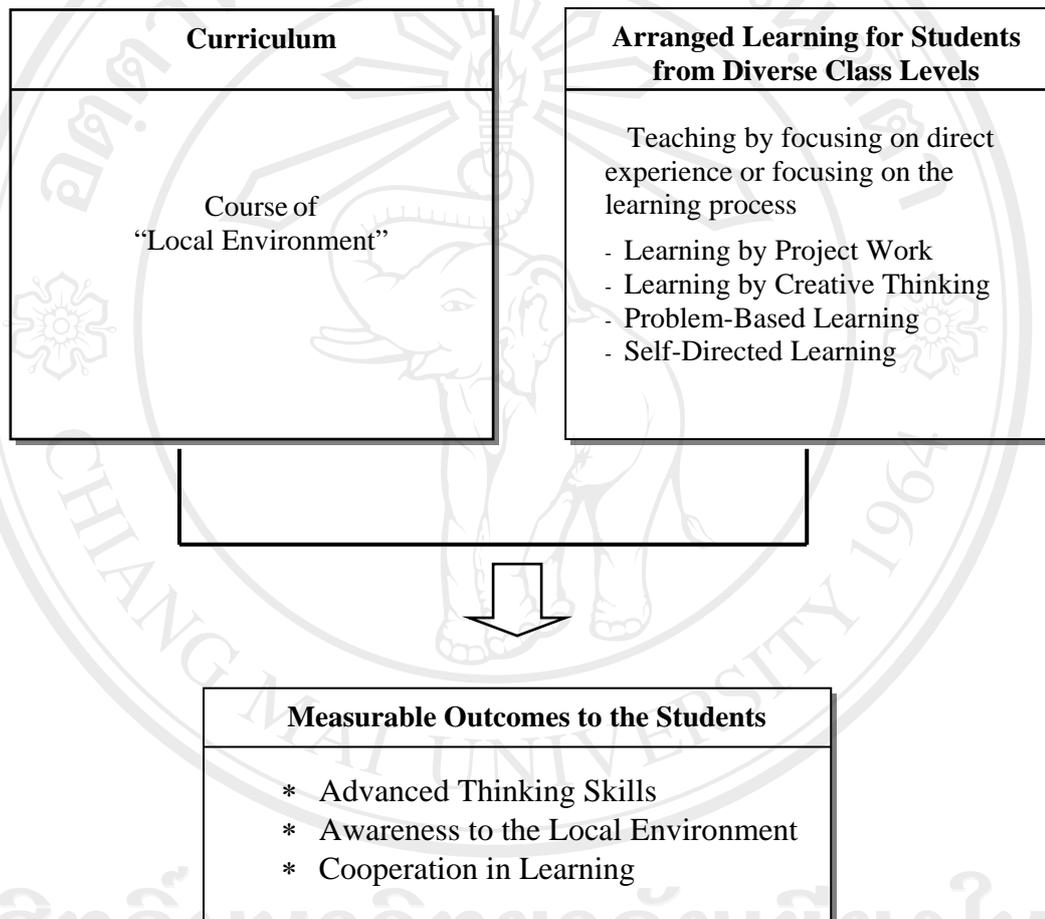


Figure 1 Research Framework