

DEVELOPMENT OF EFFECTIVE LESSON PLAN THROUGH LESSON STUDY APPROACH: A THAI EXPERIENCE

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INTRODUCTION

One of the main focuses of educational reform movement in Thailand call for the development of good or effective lesson plan aligned with the new 2001 curriculum. In order to respond to this, the study of the lesson plan development using Lesson Study Approach according to the Education Reform Act has been conducted by the cooperation of the Faculty of Education, Khon Kaen University, Plan Organization of Thailand and the Education Area 5 (Jurisdiction of Supervisory Area 5). The study has the objectives of developing the ability of the leading teachers in Khon Kaen province to develop good lesson plan according to the Education Reform Act 1999 which emphasizes the reform of student's learning processes (ONEC, 2001, Sintoovongse, 2002). The leading teachers are expected to have the understanding and skills in the development of lesson plans by using the Lesson Study Approach. In addition, they are required to implement the plans in the actual classrooms, to follow up on the results, to expand their practice to the other teachers in the education areas to which they belong. The project evaluation was carried out through project exhibitions and presentations.

Based on the positive outcomes, the project has proved to be valuable in teacher development. All leading teachers were interested in participating in the activities in order to fully enhance their capacity. The continuous effort in expanding the knowledge to the network teachers in the other education areas was one of the evidence showing the success of this study.

This report is a summary of the study in the lesson plan development based on the Education Reform Act 1999. Since the operation of the study has been a great impact on the northeastern region of Thailand in educational reform movement, it also includes some suggestions that would be useful for the education improvement of the other regions and organizations in the future.

WHAT IS A DESCRIPTION OF GOOD PRACTICE?

What should be called good practice in educational reform movement in Thailand has to satisfy some of the following criteria: aligned with the 1999 Education Act and the new 2001 curriculum, supporting teacher as a researcher trend, creating teacher networking in the region, in particular among schools and higher education institutions like university, teachers colleges, or vocational colleges, if it is the work of graduate school, needed to pull the theory from the shelf. This project at least satisfies most of the criteria just mentioned.

In this project, the participants are the leading teachers in the Education Area 5 of Khon Kaen province. Among 48 participants, there are 30 women and 18 men, 28 of whom teach in the primary school level and 20 of whom teach in the secondary school level.

The project aims to develop the teachers to be researchers at the same time to improve their teaching practice. It is believed that research leads to positive changes and continuous development by the aid from fellow teachers. The content of the curriculum comprises the following process of the Lesson Study Approach (Stigler and Hiebert, 1999):

1) Defining the problem

The Lesson Study Approach concentrates on the process of solving problem. To define the problem is the way to the motivation in working and building framework of the group of teachers. Problems defined may be general problems (such as how to generate students' interest in mathematics) or in-depth problem (such as how to develop the understanding in adding the unequal fraction). Normally, the most common problems teachers encounter are those caused by the teaching experience that affects students' learning or those related to the national policies.

2) Planning the lesson

After the learning goals are set by the group of teachers, they start the meeting to plan the lessons. The goal of lesson plan is not only to come up with effective lessons, but also to improve the understanding with students. The initial plan is presented to the teachers' meeting of the whole school to get feedback to improve the plan. This step may take up to a month or several months before it is ready to be used in the classroom.

3) Teaching the lesson

This is the step of bringing the lesson plan into the class. The class schedule and the instructors are set by the teacher group. The teacher who is responsible for the class must be involved in every single step of lesson planning. As the teaching starts, the rest of the participants are observing the class, taking detailed notes so that sufficient information is available for reflection of the lesson in the next step.

4) Evaluating the lesson and reflecting on its effect

After the class is over, the teachers evaluate and reflect on the lesson. The first who gives the opinions or reflects on the lesson is the teacher who teaches the class. The teacher focuses on how successful the plan is and what the problem are. Next, the other participants show their reflections only on the lesson that they planned together but not on the instructor's performance. Everyone takes responsibility of the results from the lesson. The opinions on the lesson will lead to the lesson improvement.

5) Revising the lesson

The teachers revise the lesson by using the information gained from classroom observation and the lesson reflection. The revision might involve the development of education technology, the class activities, the problems coming up in the class and the questions emerging along the process. Often, the lesson revision emerged from the students' misunderstanding of the lesson during class activities.

6) Teaching the revised lesson

The revised lesson is used in the classroom by either the same teacher or the new one. At this stage, all teachers in the school participate in the classroom observation.

7) Evaluating and Reflecting

As it comes to this stage, not only the teachers in the school but also the specialists from outside of the school are involved. Like in step four, the teacher taking control of the class is the first who evaluates the lesson. How the students learn from the lesson is the main point to be considered as the lesson reflection proceeds. Some other points to be mentioned include the lesson design by considering theories and principles underlying the design. The reflection also includes the discussion of knowledge gained from planning the lesson and bringing it to the real classroom.

8) Sharing the results

Although the Lesson Study Approach is based on a case study, the results are generalizable because Japan uses the same basic curriculum. Therefore, it is encouraged that the results be published and presented in the annual regional and national conferences.

The premises of the lesson plan development using the Lesson Study Approach are summarized below:

- 1) Develop continuously
- 2) Maintain students' effective learning as the ultimate goal
- 3) Focus on developing teaching practice in the real classroom
- 4) Focus on the process of the teachers' mutual learning
- 5) Perceive the teachers' roles as contributors to the development of body of knowledge and practice in the teaching profession

HOW IT IS DEVELOPED?

The procedure of operating this project has been designed based on the framework of Lesson Study Approach mentioned earlier. It comprises of 5 phases as follows:

Phase I: Developing the network of the co-operation

To develop the co-operation in the development of the lesson plan in Mathematics project due to the 1999 act of education between the Faculty of Education at Khon Kaen University , Plan Organization of Thailand and The academic area of Khon Kaen.

Phase II: Setting the workshop for improving the leading teachers

The workshop, held on April 19-23, 2004 at the Faculty of Education, Khon Kaen University, had the objectives of creating the understanding in improving the skill of making the lesson plan using Lesson Study Approach.

Phase III: Training in the class

On May 17 to Sept 24, 2004, the leading teachers brought the improved learning plan to the class. The steps of this stage are presented as follows.

1) The Follow –up

1. Lesson plan check up: The Mathematics teachers participated the workshop of designing the lesson plan using the Open Approach sent the plan back to the committee to be checked up for the suggestions and improvement.
2. Suggestions for the improvement of lesson plans: The committee gave the suggestion for improvement of the lesson plans.
3. The appointments for observation and supervision: The organizing committee directly made appointments with the teachers in the key learning area group for the follow-up of the usage of the lesson plan. The table showing the appointment for observation and supervision is shown the next.

2) The reflection of using the lesson plan

The group of teacher used the following procedure:

1. Group discussion on the implementation of the learning plans at each basic education level
2. Summary of the discussions for presentation
3. Presentation within the group
4. Analysis and group discussion

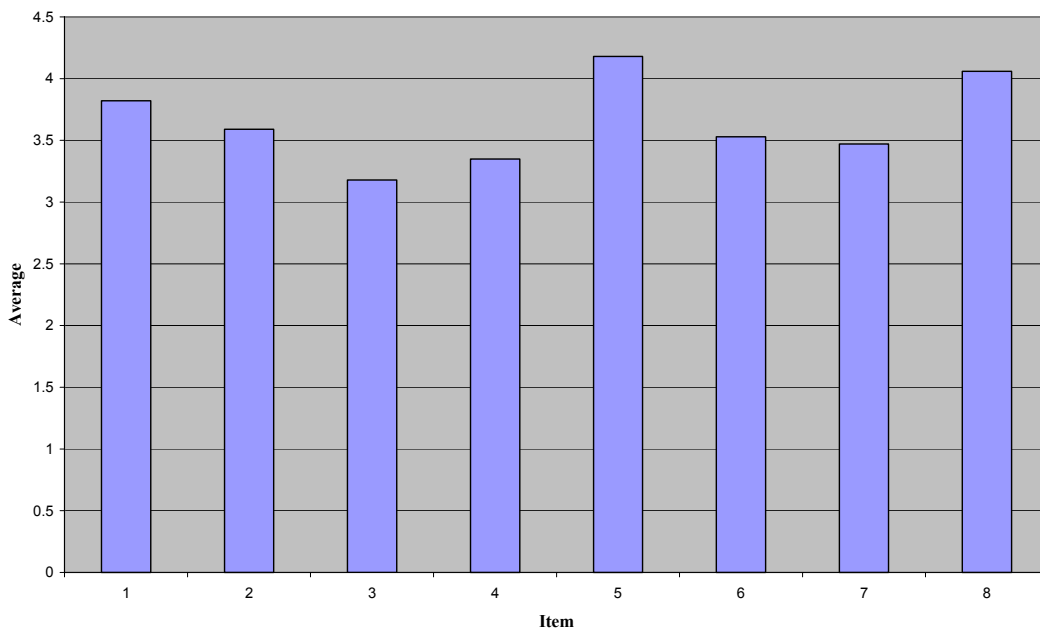
Phase IV: Expanding the results to the teachers in the jurisdiction of supervisory area

The Jurisdiction of supervisory area 5 had the responsibility to operate on expanding the teacher network in the area.

Phase V: Evaluating

It is the last stage of the project of developing the lesson plans using the Lesson Study Approach. The seminar was held on the process of this stage for the summary of the operation. The implementations were presented in the form of exhibition and seminar on the stage, which was held on February 26, 2005 at the Faculty of Education, Khon Kaen University.

Table I: Showing the opinions towards the success of the workshop (April 19-23, 2004).



Note: the average scores are calculated from 1-5 Likert scale style (showing 1: strongly disagree, 2: disagree, 3: indifference, 4: agree, 5: strongly agree

Items

1. The clarity in objectives of the project
2. The co-operation of the Faculty of Education, Khon Kaen University, Plan Organization and the jurisdiction of supervisory of Khon Kaen.
3. The confidence in putting theory into practice
4. The confidence in giving knowledge to others
5. The belief in developing the quality of teachers with the improvement of lesson plans
6. The belief in developing the quality of teachers with this approach being enhanced
7. The belief in developing the quality of teachers with this approach bringing long lasting results.
8. The belief in developing the quality of teachers with this approach influencing the quality of children in the future.

CONCLUSION AND REFLECTION

Problems and limitation

1. Problems of implementation

- 1.1 The teacher lacked of confidence specifically in linking the students' concepts to the teacher's expectation. This made the teacher feel frustrated with their role of teaching.
- 1.2 There are times when the teacher interfered too much with the students' thinking, causing the teacher's leading circumstances. The students therefore had no freedom to think as they should.
- 1.3 The students had no chance to discuss with other groups. They had no opportunity to learn to solve other students' problems.
- 1.4 The Open Approach is a time-consuming innovation. The Mathematics class usually takes only one hour. This caused the discontinuity of the activities resulting in the students' problem-solving.
- 1.5 The teacher prepared all he materials for the students but the students were not responsible for them.
- 1.6 It was difficult to group the students. There were forty-three students and the classroom was very small.
- 1.7 There was the difference in the group of student. Some cannot read.
- 1.8 There was a controversy among the teachers on "the accordance between lesson plans using Open Approach and the national test". Some teachers thought they were in accordance, other did not think so. The implementation of the plans, therefore, was not successful as it should be.
- 1.9 The network teachers, who came to observe the Open Approach teaching-learning, did not understand the model and the methodology of the approach. Unnecessarily, they interfered with the students' thinking process during the activities.
- 1.10 The teachers who used the Open Approach in their teaching were eyed and criticized by the authorities and colleagues in the school. This made them feels unconfident, pressured and uncomfortable to keep on using the approach.

2. Problems and restrictions of the follow-up

- 2.1 In case that there was a change of appointment time due to some urgent and unexpected work, contacting with the teachers was difficult. Some teachers gave the telephone number that cannot be contacted.
- 2.2 The teachers did not receive the returned plans sent by post from the committee, due to the ineffectiveness of the administration staff in the Faculty of Education or

the post office. Additionally, the difficulty in communicating by phone made it inconvenient for the committee to give advice.

2.3 The cancellation of the follow-up appointment due to urgent work or other activities of the school or education regional area, such as the external evaluation of the office of national standards and quality assurance, mathematics Camp, or special events etc. This directly affected the timetable of the committee.

2.4 There was a misunderstanding of the coordinator, who was in charge of the school maps and the permission form to work outside for the supervisors, which delayed the follow-up.

2.5 The location of the school on the map did not match with the actual one. The journey was in the wrong direction and was delayed.

2.6 The supervisors were not free on the same day as they have lots of work to do. The transportation was hired too many times. Each follow-up could cover only a few classes.

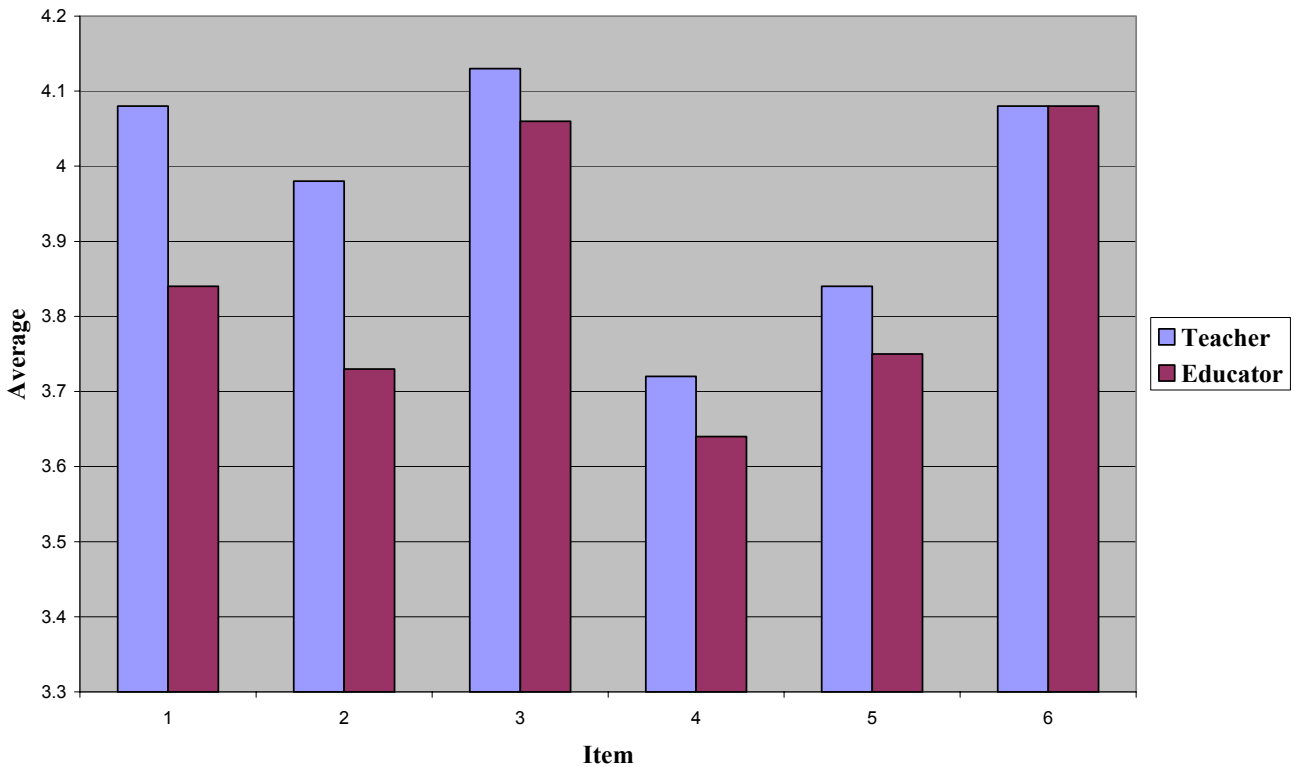
2.7 Some schools were located quite far away from others, in bad condition roads, making the committee unable to go to all schools in the project. The follow-up to the remote schools was costly.

Reflections from the teachers

1. The teachers did not have enough time to prepare and write the lesson plans using Open Approach due to too much work other than teaching.
2. Writing this kind of lesson plans needs brainstorming to acquire diverse aspects. There must always be reflective thinking to achieve good lesson plans. Practically, it was almost out of question to get the teachers together because of such restrictions as the long distance among the schools, the high expense of traveling, the free time of the teachers and the teachers' other missions.
3. The teachers still did not understand their role in using Open Approach in their teaching. They did not know what exactly they had to do so they lacked confidence in teaching. For example, how to begin the lesson, how to sum up, how to write the evaluation form, what they were doing was right or wrong etc.
4. There was a doubt whether each unit of mathematics content could be written in Open Approach lesson plans or not, and how?
5. The staff from the regional education area did not at all take part in either the follow-up, or the project support after the workshop.
6. The results of the implementation of the plan shown that the students could think more, and sometimes the students could think more than the teachers.
7. The teacher had worried about being observed but after the observation was done, they felt that this is very supportive.

8. The teachers had more confidence in using the lesson plans in the class. They felt like having the supervisors with them.
9. This was the first project with the follow-up and gave the teacher assistance closely. The workshop was worth the time and it was the great activity.

Table III: Showing the average of the level of satisfaction with the objectives of the project.



Note: the average scores are calculated from 1-5 Likert scale style (showing 1: strongly disagree, 2: disagree, 3: indifference, 4: agree, 5: strongly agree)

Item

1. The distribution of the teaching innovation
2. The understanding in the development of learning due to the education reform 1999
3. The teachers’ capacity promoting due to the education reform 1999
4. The sharing of the learning development of the teachers living in the North-Eastern region
5. Forming the group for creating the education development in the community
6. Improving students’ ability in studying by the learning innovation created.

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