

## DEVELOPMENT OF MULTI-LATERAL COOPERATION FOR EDUCATIONAL QUALITY IMPROVEMENT OF SMALL-SIZE SCHOOLS IN NAKHON PATHOM PROVINCE

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### ABSTRACT

The research objectives are 1) to develop multi-lateral cooperation between educational institution, schools, communities, temples, local government, public agencies and private sectors to improve the education quality of the small-sized schools, 2) to compare the two development formats of the multi-lateral cooperation and our results show no significant differences between the two formats. The multi-lateral cooperation formed during the processes includes within-school network, near-by-school network, parent and community network, networks with local government, public agencies and private sectors, and network with scholars in the university. These networks should be encouraged and mobilized by further research to produce concrete results.

**Keywords:** *Multi-lateral cooperation development and small-sized schools*

### 1. INTRODUCTION

In the age of capitalism, many people had moved into the city, leaving their country-lifestyle behind. The rich families often send their children to attend big and popular schools in the city. They believe that those big schools are better in education quality for their children. As a result, the number of students' remains in local schools decreases every year and these local schools have shrunk into small-size schools. In Thailand, small school is defined to be a school with less than 120 students. Most of them are elementary schools founded by the temples or the local communities. The main goal of these schools is to serve their own children by reducing transportation cost and time. These small schools are parts of their communities. Most small schools are in the rural area across Thailand.

Because of the national school-management policy that limits the teacher to student ratio to all public schools; small schools are pushed into a dire situation. With 80 students, a small school can have only 4 teachers. To cover all eight learning areas from K1 to 6 with 4 teachers, it is very difficult to keep the teaching quality high. As a result, most of these small schools barely pass the national education standard.

In the past, the Ministry of Education planned to merge or disband these small schools, but the plan was swiftly opposed by many people, especially those in the communities whose children were in the small schools. They believed that home, temple and school are the foundation of their community. Calling for social equality and better living quality, they could not let these small schools to be disbanded.

To improve the education quality in these small schools, the multi-lateral cooperation from local government, local community, religion agency, public and private agencies was organized. Normally, the local governments take care of its people economically, socially, and culturally. The local community usually supports through school events such as improving school day and by taking care of their children to behave according to good cultural norm. Religion agency, public and private agencies rarely take part in school except on special event such as on children day (Office of the Education Council, 2010). To improve small school education quality in a long run, all agencies must be part of the solution. Chongsathityu et al. (2012) found that organizing and strengthening multi-lateral cooperation with help from university scholars can be achieved in many ways. 1) Students were motivated to learn and could achieved higher learning outcome. The learning management that incorporated activities into each subjects could improve many learning skills. 2) Teachers changed their role to be facilitating students in hand-on activities. Their new lessons were integrated across subjects and local wisdom to create learning environment with new learning innovation. Teacher network within and between schools were created during the process. 3) Schools shared their resources, knowledge, and personal between schools within the network. 4) The university scholars also changed their role from organizing training workshop to directly coaching and facilitating the schools for their actual needs for student learning. 5) This multi-lateral network made all partners realize their potential and duty in improving the education system and solving the

11

education problems within their communities. Chongsathityu also suggested that the government could enhance this multi-lateral cooperation with help from university scholars model by distributing its power to the local government and local agencies.

This action research will use this multi-lateral cooperation model to improve the education quality in small schools around Kasetsart University, Kumpaengsaen campus, Nakhon Pathom Province. The research team will lead the multi-lateral cooperation between university, schools, communities, temples, local government, public and private agencies. There are many approaches to organizing the multi-lateral cooperation. The first approach, expanding cooperation model, starts from small group meeting of only the main stakeholders (school director, teachers, school board and parents) to find problems in their schools and expands the meeting to include other agencies later to find solutions and external supports. The second approach, all-in model, starts with a meeting of all stakeholders and all agencies to find the problems in their schools and, later, the solutions and external supports. In this research, two approaches in organizing this multi-lateral cooperation (Expanding cooperation model VS All-in model) for will be compared. Please define the two approaches.

### 1.1. Objectives of the Study

The objectives of the study were as follows:

- To organize multi-lateral cooperation between the university, small schools, communities, temples, local government, public and private agency to improve the education quality in these small schools.
- To compare the two approaches in organizing this multi-lateral cooperation.

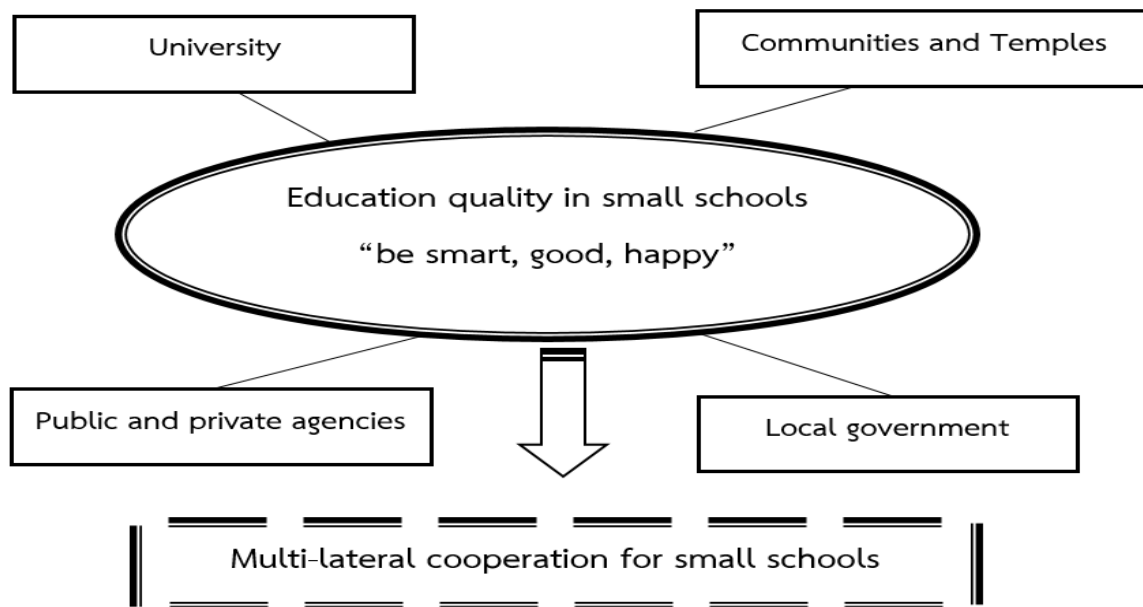


Figure 1. Research Framework.

### 1.2. Research Methods

#### Target Group and Working Location

The target groups for this research are small school administrators, teachers, students, parents, school boards, community leaders, monks, the head of the public and private agencies. Working with six small schools in Kumpaengsaen, Nakhon Pathom province, the research team separated them into two groups, one for each approach model.

1. Expanding cooperation model
  - a. Wat-Raitangthong Elementary School
  - b. Wat-Nhongjig Elementary School
  - c. Ban-Orgratung Elementary School
  - d. Wat-Hauypugchee Elementary School

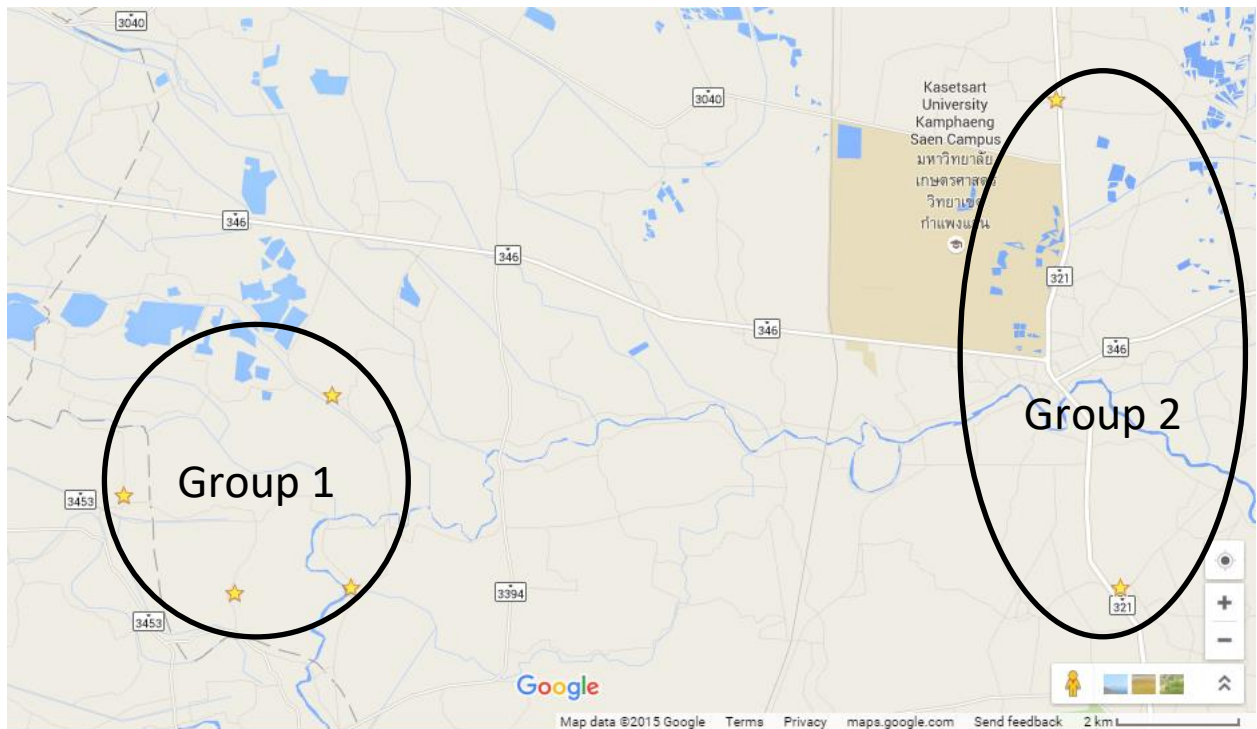


Figure 2. Map showing the location of the small school in both groups.

- All-in model
  - a. Wat-Tungkrapunghom Elementary School.
  - b. Ban-Donsark Elementary School.

### 1.3. Research Procedure

This participation action research (PAR) has following steps:

1. Reviewing literature related to organizing cooperation to improve education quality in small school setting
2. Implementing the multi-lateral cooperation model using two different approaches
  - a. Expanding cooperation model proceeds as follow:
    - 1) Meeting with the school director, teachers, school board and parents at each small school to listen to their problems and needs on improving the education quality
    - 2) Meeting with the representatives from all small schools in the network to set the common goal and plan on improving the education quality
    - 3) Observing the example small schools that succeeded in improving education outcome or in improving job skills
    - 4) Meeting within the school network to determine their potential and their next step to improve their education quality
    - 5) Introducing the multi-lateral network such as the schools, community leaders, monks, local government, public and private agencies to the school network. Within the meeting, the schools specified their needs to support their next step such as new learning resources, experts on various fields, and budget
    - 6) Training Workshop for the school staffs to promote academic strength in English, Thai, math and science
    - 7) Meeting with the multi-lateral network to conclude the multi-lateral cooperation processes and listen to the feedbacks from all agencies
  - b. All-in model proceeds as follow:
    - 1) Meeting with all agencies in the multi-lateral network such as the schools, community leaders, monks, local government, public and private agencies to analyze for the problems causing the education problems in their schools
    - 2) Meeting with the multi-lateral network to set the goal and plan to improve the education quality in these small schools
    - 3) Observing the example small schools that succeeded in improving education outcome

- 4) Meeting within the multi-lateral network to determine their potential and their next step to improve their education quality
- 5) Meeting with the multi-lateral network to specified the schools' needs to support their next step such as new learning resources, experts on various fields, and budget
- 6) Training Workshop for the school staffs to promote academic strength in English, Thai, math and science
- 7) Meeting with the multi-lateral network to conclude the multi-lateral cooperation processes and listen to the feedbacks from all agencies.

#### 1.4. Data Collection

The data collection processes in both groups consisted of interviews, small group discussions, seminars and field observation with all relevant agencies such as the school directors, teachers, students, parents, school boards, educational supervisors, community leaders, monks, public and private agencies. This qualitative data was analyzed using the content analysis to describe the processes of organizing the multi-lateral cooperation from both approaches. The comparison between the two approaches consisted of the processes to organizing the multi-lateral cooperation and the effect from the multi-lateral cooperation during the research processes.

## 2. RESULT

In this research, the two approaches for organizing the multi-lateral cooperation yield similar results. The multi-lateral cooperation formed during the processes includes within-school network, near-by-school network, parent and community network, networks with local government, public agencies and private sectors, and network with scholars in the university.

However, during the process to form the multi-lateral cooperation, the needs and the problems causing the low education outcome were discussed and summarized as follows: 1) There are too few teachers in the school, so they have to teach many subjects that they were not trained for. 2) Some schools get help with a few temporary teachers, but these teachers get very low salary. 3) Students in these schools are poor and not ready to learn. They usually come from low-educated family. 4) Hence, their families did not take good care for their children education. 5) The school administrations relocate very frequently creating disconnected school policies. 6) Furthermore, the curriculum changes very often and usually add more content unrelated to everyday life. 7) Inadequate learning resources. 8) Not enough school budget. 9) Unsuccessful communication with parents. 10) Their school board rarely come to the school meeting. 11) Inadequate support from their overseer organization, the Office of the Basic Education Commission. 12) There are laws preventing the local government to help these small schools. 13) The schools and the classrooms are inconvenient.

The network in each condition set the goal and planned to improve the education quality summarized in 4 categories as follows:

- 1) Academics: For the goals, 1) 100% reading literacy 2) Improving English language skill 3) Improving in science subject 4) Improving teachers who are untrained in the subjects 5) Inviting volunteer teachers 6) Higher O-NET scores in Thai language and in mathematics. For the plan, 1) Attending a workshop on teaching Thai language 2) Attending a workshop for math, science and English 3) Recruiting volunteer teachers to help in math, science and English 4) Requesting transportation support from the local government 5) Combining students or cycling the teachers between schools 6) Getting learning resources 7) Pay more attention to the homework, reading book and vocabulary 8) Creating English book for kids 9) Organizing science, math and English camp 10) Free tutor.
- 2) Human resources: For the goals, 1) Getting more teachers with needed majors 2) Giving the temporary teachers the permanent positions 3) Increasing the salary of the temporary teachers. For the plans, sending request to the authority.
- 3) Administration: For the goals, 1) Improving the trust with the community, so that they let their children study at the schools. 2) Increasing the number of children 3) All children have breakfast 4) Taking care of the student health 5) Enough computers and printers 6) Stable internet with wifi 7) School lunch 8) Visible crossroad in front of the schools. For the plan, 1) Improving communication with the parents 2) Talking positively within the school 3) School brand creation with free clothes and scholarship 4) Letting parents take part in school activities 5) Having breakfast available at school 6) School milk and exercise 7) Having activities with volunteer sport teachers 8) Accepting donation 9) Sending request to the authority 10) Getting help from the specialists 11) Community internet 12) Gardening for school lunch project 13) getting help from the local government to set up the crossroad and school sign warning.
- 4) Budget: For the goals, 1) Getting scholarship and learning resources 2) Getting more budget. For the plans, 1) Sending out the donation requests to the big companies who are willing to help the society 2) Producing

and selling school-made products 3) Setting up donation for schools 4) creating the network through social-media.

During the multi-lateral cooperation development process, the teachers, school administrators, school boards, parents, local educational officials and the researchers went to observe two small-sized schools with success in different aspects in order to learn from their successes. The first school is Watthanpood Elementary School, Tumbol Bansong, Panomsarakam, in Chachoengsao province. This school is excellent in their education outcome. Their scores in the Ordinary National Educational Test (O-NET) are very high, especially in mathematics. It was locally known that their teachers are all working hard. They arrive the school very early in the morning. They also developed their own curriculum with special program that excels smart students. Their students usually get national award each year as a result. The second school is Ban nongphue Elementary School, Tumbol Lao Khwan, Lao Khwan, in Kanchanaburi province. This school is excellent in using Sufficiency Economy in administrating the school. Their students were taught how to raise chicken, to cultivate rice and mushroom and to produce their own fertilizer and pesticide from local materials. Students in each level were assigned to take care of these shores to teach them responsibility. For their classes, they rely mostly on Distance Learning Television broadcasting from Wang Klai Kung Won School because they don't have enough teachers. They also have to combine two levels in one classroom. Their principal sometimes has to fill in the gap. Also, extra lessons to catch up some materials during lunch time or after class is commonly observed. The school were sincerely supported by the community in many ways such as school activities, school meeting and school raising funds. Because of the whole school effort, their O-NET scores in most subjects are above the average, despite the lack of the basics, teachers.

At the end of the organizing the multi-lateral cooperation processes, the research team accommodated these small schools to accomplish their plan on improving their education quality as follows:

1. The workshop to train teachers teaching outside-their-major subjects were organized in Thai language, English language, math and science. Its goal was to strengthen the academic foundation for 34 teachers. The speakers were experts in the fields. In the workshop, they showed/trained their teaching techniques to the 34 teachers.
2. Books and other learning resources were offered at discounted price for the 6 small-sized schools by AmarinBooks publisher, one of our private agents in the multi-lateral cooperation.
3. New learning resources were given or introduced to improve the learning environment of the schools following the Brain Base Learning (BBL).
4. Science Camp were organized by the pre-service teachers in Science Education, Kasetsart University.
5. English Camp were organized by instructor Foythong, ex-teacher in English Department, Kasetsart University.
6. AEC Camp were organized by AmarinBooks publisher to encourage reading and learning and to be ready for AEC in 2015.
7. The school internet was fixed and consulted by the teacher from Computer Engineering Department, Kasetsart University.
8. A donation for education was raised for Wat-Raitangthong Elementary School.

At the end of the research processes, all parties from the multi-lateral cooperation came to the final meeting to share their opinion and feedback of the research. The meeting was held at the Faculty of Education and Development Sciences, Kasetsart University. There were 16 representatives from all six small-sized schools, 3 representatives from three local government districts, 1 representative from the educational service area office, and 6 representatives from departments in Kasetsart University and 3 researchers. They all agreed that this research was beneficial for these small schools in improving teachers' skill and creating new learning resources. It also created connection between schools and between schools and the parents. Examples scripted feedbacks are as follows:

"... [The research] is a good project. It helped identified the problems with small schools which were hidden from the outsiders such as the lack of school teachers or lack of teachers trained for some subjects, the lack of budget, and too much non-teaching-related workload. ..."

"... [The research] helped stimulating the school improvement and strengthening the moral or the teachers. The training in the workshop could be applied in class. Plus, the students were excited by the learning camp which brought in students from these small schools. ..."

"... This research helped starting the development plan for the schools. It helped bringing parents to participate in the school meeting. From the cooperation of all parties, [we believe that] the parents will enroll their children to our schools. ..."



“... The scholars from Kasetsart University are here to help using their knowledge and skills to suggest and recommend solutions to improve the education quality of the schools. With the new cooperation, the schools got more help from other agencies. This research certainly helps bringing new idea and more budgets, organizing extra school activities, and supporting the small schools.

To summarize, even though the two groups were approached differently (Expanding cooperation model VS All-in model) during the organizing the multi-lateral cooperation, the outcome from both approaches were similar. Similar school problems were discussed openly in both group, the external helps from external agencies were requested and given, and similar academic supports from the university were also provided. For the main goal, the multi-lateral cooperation was formed during the processes includes within-school network, near-by-school network, parent and community network, networks with local government, public agencies and private sectors, and network with scholars in the university.

The lack of differences between the two approaches might stem from the willingness to help from all agencies. The schools, communities, parents and the local government were open enough to discuss their problems, their needs, their limitation and the solutions each of them can bring to the table. With this level of willingness and openness, the two approaches yield the similar results.

### 3. DISCUSSION

The multi-lateral cooperation for improving education quality in small schools started from the administrators, teachers, parents, school boards, community leaders, local government, public and private agencies gathering together to discuss the problems and needs in order to improve their education quality. Together, they set the goals and the action plans to achieve those goals. The problems for their small schools were similar to the findings in many previous researches such as Office of the Education Council (2010); Chaiheng, Sumettikoon, and Siribanpitak (2013); Puenthong (2005); Thnikrathoek (2006) and Pangya (2007). They didn't have enough teachers, budgets, and learning resources. Plus, the school buildings required repairs.

In the first year, this research might not be able to measure any education quality improvement. It was just the beginning the network organization between schools, communities, public and private agencies with the scholars from the university as the organizer. The early achievement would be to excite and energize the teachers in these small schools. If the processes were supported by the school administrators, teachers were willing to improve themselves and their teaching methods, this can also be extended other teachers in nearby schools. Exchanging teachers between schools can be observed as a solution to the lack of teacher problem. The multiple networks between all relevant parties were created such as within school network, between small school network, parent and community network, local government network, public and private agency network, and the network with the university scholars as suggested by Chongsathityu et al. (2012).

There were two approaches in creating the multi-lateral cooperation in this research. The first approach, expanding cooperation model, started with within school network and then expanding it to inter school network and other multi-lateral cooperation. The second approach, all-in model, started with all relevant parties. From the research process, both approaches did not show significant differences. However, for this kind of research, the sustainability is crucial. Walaisathian (2003) suggested that participation of the community and all relevant parties through activities, discussions, and active participation are the key in organizing sustainable movement. To improve and achieve the education quality standard in small schools required a long period of time. Wannagatesiri, Nugultham, Kruea-in, and Thongperm (2013) suggested that number of potential teachers, leadership, vision of the administrators and the participation of the parents are the important factors for improving the education quality and the schools need to create trust with the parents by planning together to improve the education quality for their children. Phimthong (2011) said that the emphasis on moral and ethics might be the advantages for small schools. The researcher agreed with both suggestions that the school administrators and teachers need to be a role-model to create trust with the parents and the communities to take care of their children. Besides, the administrators and teachers need to be good at teaching, diligent and hard working. We also notice that small schools with good headmaster tend to get more incoming students. However, if the school headmaster is missing or the teachers are not trustworthy by the community, that schools tend to loose incoming students. As a result, the administration and teachers are the key factors to improve the education quality in the small schools. Additionally, parents, communities, local government, educational service area offices, private agencies and the university can help to improve the education standard.

However, to get participation from parents, communities and other networks to improve the education quality is difficult. Many people believe that this is the duty of the government through the Ministry of Education, the schools and teachers. Parents in the countryside sometimes lack of understanding and time for taking care of their children education. For private sectors, tax incentives might be part of the solution.

### 3.1. Suggestion

#### 3.1.1. Suggestion from the Result

1. Organizing multi-lateral cooperation requires unity and sacrifice from all parties to endorse the believe that education for our children is all of our duty. This requires a long period of time and continuing activities.
2. The approach for organizing the multi-lateral cooperation should start with realizing the education problem and finding solutions together with the administrators, teachers, parents, school boards, communities and local government.
3. Parents and community should take part in their children education by checking their children homework or reading, participating the school meeting and activities.
4. University and its faculties should have policies to serve the society and communities especially on case of the small schools.

#### 3.1.2. Suggestion on Policy

1. The merging or closing down small school policy should be reconsidered.
2. The school should get enough teachers with all major subjects.
3. Teachers should be local persons so that they will not transfer back to their hometown as soon as they can.
4. Temporary teacher position is a temporary fix but this is not the answer in a long run.
5. The administrators should be judged by their capability to solve problems, e.g. falling apart schools, or improving the schools, not by the ability to maintain the current stage of any big schools.
6. Budget for small schools should not be calculated by the head-count system like other big schools.
7. The O-NET result should be used to indicate schools that need help rather than punishment.
8. The retirement system for teachers should be schedule to coincide with the school year.
9. The law that limits the help from local government should be reconsidered.

#### 3.1.3. Suggestion for Further Investigation

The research need to continue for sometimes to make the multi-lateral cooperation more sustainable with solid evidence of success.

1. More studies should focus on family, community, and birth rate in the community to guide the school policy for the future generation.
2. The importance of the school in the community need to be studied.

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### CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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### REFERENCES

- Chaiheng, S., Sumettikoon, P., & Siribanpitak, P. (2013). Development of strategies for educational resource management of small schools in Urban and rural areas. *Journal of Education Studies*, 41(3), 19-37.
- Chongsathityu, C., Yooyativong, T., Phongtiyaphaibun, S., Chansirisira, P., Ongsaku, S., Ruenwongsa, P., & Suriyagan, K. (2012). *Synthesis performance integrated research and development area to reinforce the quality of learning of children and youth*. Bangkok: The Thailand Research Fund.
- Office of the Education Council. (2010). Research report decentralized administration and education management to districts and schools. Retrieved from: [http://www.onec.go.th/onec\\_administrator/uploads/Book/221-file.pdf](http://www.onec.go.th/onec_administrator/uploads/Book/221-file.pdf).
- Pangya, T. (2007). *A study on problems and solutions for the administration of small schools under the office of Srisaket*. Master's Thesis, Surindra Rajabhat University, Thailand.
- Phimthong, N. (2011). Summarizing the discussion "Collapse smaller schools who have not broken?". Retrieved from: <http://www.lek-prapai.org/watch.php?id=205>.
- Puenthong, P. (2005). *Policy proposals to develop small schools in the Northeast*. Doctoral Dissertation, KhonKaen University, Thailand.

- Thnikrathoek, S. (2006). *Problems and solutions of the administration in small schools under NongKhai Educational Service Area (District 1)*. Master's Thesis, Maha Sarakham Rajabhat University, Thailand.
- Walaisathian, P. (2003). *Process and technique of the work of developers* (2nd ed.). Bangkok: Aurora Printing.
- Wannagatesiri, T., Nugultham, K., Kruea-in, N., & Thongperm, A. (2013). *The lessons from the experience of the small schools in the central region in the West*. Bangkok: Thailand Research Fund.