

Multicultural Education

Research Article

Homepage: www.MC-caddogap.com

USING LESSON STUDY TO DEVELOP AND STRENGTHEN THE SYSTEM OF INTERNAL SUPERVISION OF THE PROFESSIONAL LEARNING COMMUNITY

Chalard Chantarasombat*

Associate Professor Dr., The Doctor of Ph.D. The program, Educational Administration and leadership, Faculty of Education, Northeastern University, Thailand.

**Correspondence; Associate Professor Dr. Chalard Chantarasombat*

ABSTRACT

The purpose of the research was to study and strengthen the supervision through Lesson Study in the schools. The objective of the research was to study the results of supervision using innovations “Classroom Quality” in strengthening the supervision system within the school by using participatory action research methods during the supervision study school administrator, school academic teachers, mentors, academic at higher education institutions and teachers. The sample groups were the university experts, directors, teachers from the academic department, mentors, and other teachers total of 40 people in the Mukdahan Primary Education Service area Office. It took 6-8 months of research time. Field research was obtained from volunteers. The research found that 1) the directors could share their leadership positions, and other teachers could create the network could create a network of learning and sharing, 2) the teachers could learn from their teaching experiences, 3) the supervisors could change their supervision behavior from telling, explanation and order to share their knowledge, the classroom’s atmosphere was relaxed, the teachers could have chances to work together, and directors could use the supervision’s techniques to encourage the other teachers at schools, and 4) there were ways to develop the supervision’s techniques, teachers could design and prepare their course carefully and continuously, and the teaching system was changed from working separately to working together. The development model for participatory action research 5 steps, Plan (P), Proacting (D), Examination (C), Improvement (A), and exchange of Knowledge (S). 5) the efficiency and effectiveness of the program were: 1) the efficiency of 89.00 (E1) /84.00 (E2) was higher than the committed 80/80 standard, 2) the congruence of utility, possibility, and appropriateness were at the highest level ($\bar{x} = 4.89$, $SD = 0.12$), 3) the effectiveness index was 0.6734 which meant students gained more knowledge of 67.34%, 4) the students had significantly higher learning achievement after learning at the level of 0.01, 5) the expert and teacher had satisfaction on the development program in the highest level ($\bar{x} = 4.75$, $SD = 0.29$), 6) the teacher had satisfaction on the lesson study of enhancing schools in the highest level ($\bar{x} = 4.98$, $SD = 0.00$), They have higher skills as follows: 1) online learning by Google Classroom, 2) presentation by PowerPoint, 3) criticism and sharing of knowledge.

ARTICLE INFO

Keywords:
Critical process, argumentation, a prospective teacher

Article History:

Received: 4th Jun 2022

Accepted: 20th Jul 2022

Published: 13th Aug 2022

1. INTRODUCTION

In the 21st century, knowledge can be changed as the dynamic of learning. There are some necessary factors: learning and innovation, communication and technology, cooperation, and creating creative innovation. Consequently, learners should have chances to gain knowledge from various sources outside the classroom to practice analyzing, criticizing, deciding, solving problems, and creating new knowledge which occurring the integration outside classroom activities and inside the classroom. Vicharn Panich (2013: 1-6)

Lesson Study has been the concept from the Japanese teacher which used to develop the career for a very long time. Nowadays, this concept has been prosperous widely especially in the United State of America because this concept has been accepted could change students' learning development (Inprasit, 2011). At first, the researcher had not been known and familiar with Lesson Study. Even though in 2001, Asst. Prof. Dr. Mitree Inprasit, the lecturer from the Faculty of Education, Khon Kaen University was a beginner at using it with Math teachers from some schools in Khon Kaen province, the researcher has just leant how to use it since the end of 2013. Hence, it was a necessity or by accidence or at that time the Center for Research in Mathematics Education Khon Kaen University this Lesson Study to 22 schools in the Northeastern of Thailand by using the Open Approach under the Project of Developing High Cognitive Process on Mathematics of Students in the Northeastern of Thailand. Besides that, there was a coincidental condition from the first seminar since the organizer would like to invite the director and the vice-director of the Educational Service Area to join the seminar. However, the vice director could not come therefore, the researcher had the chance to join the seminar. Since then, the researcher has learned this learning material officially and contiguously.

Since the earlier time attending that seminar with the organizer, the Faculty of Education, Khon Kaen University, the Faculty of Education at Maha Sarakham University, and Northeastern University, the researcher felt impressed with the process and management of the seminar because the activities were presented in the way of practicing by doing; especially, there were using the Lesson Study and Open Approach to develop the teaching profession and learning management. Consequently, the Faculty of Education, Khon Kaen University had used these materials for developing Mathematics and Applied to the teaching profession in Thailand which included 3 steps; step 1) planning, step 2) doing, and 3) seeing. The researcher has learned those 3 steps from the Open Class which effecting to understand of the learning results obviously. Moreover, there was always this activity in the seminar at the Faculty of Education, Khon Kaen University that occurred the condition of teaching observation and actual teaching. This was not a teaching demonstration or demonstrating teaching results but there were designed actual teaching and teaching observation. Consequently, the learning was potential rapidly sustain.

Background

Lesson Study: A new innovation for the sustained teaching profession. The teachers at Woodland Park High School in the USA focus on teaching less to learn more. In the flipped classroom, from the main duties of supervision, the researcher as the supervisor had accepted that the most actively used for supervision was the teachers' training from the center who designed the short project with limited expenditure. This limitation of the project was not able to develop teachers officially and completely. Furthermore, there were training courses or seminars that teachers could attend or even inviting experts to train them at schools but these methods could help them the first time and also for many teachers at the same time (Joice and Showers, 1987; Spark and Hirsh, 1997; cited Mitree Inprasit, 2002).

However, these techniques were not able to sustain teachers 'knowledge because some of them firstly used training techniques in classes. Then they forgot the techniques and used the former techniques which were used before attending the training courses.

After the training the course for directors and vice directors of Educational Service Area and supervisors by the project of developing high cognitive process on Mathematics by the Faculty of Education at Khon Kaen University on June 11-12, 2014, and from the special lecture on the topic "Lesson Study & Open Approach" by Asst. Pro. Dr. Mitree Inprasit, the director of the Center for Research in Mathematics Education, the Faculty of Education, Khon Kaen University on July 30, 2014, at the conference room "Saisuree Chutikul", the researcher could understand the "Lesson Study" increasingly.

Consequently, it is clear that "Lesson Study" could be beneficial for developing teaching and learning in the classes of primary schools and secondary schools. In Japan, the Lesson study has been the way to study the teaching profession which could support teachers in teaching sustainably (Lewis and Berry, 2006; cited in Mitree Inprasit, 2014). Developing self-teaching has been the way to improve their teaching which focusing on being

child-centered without using external experts. In another word, “Lesson Study” could be counted that it is “internal supervision” or “Kounaikenshuu in Japanese which meant that the “Lesson Study” means doing internal supervision through classroom research (Mitree Inprasit, 2014).

However, Lesson Study in Thai content is the innovation in terms of “a Method” or “an Approach” in developing teaching profession or learning profession which was from Japan. Moreover, it is beneficial for education that can make achievement for learners and instructors. It is clear that this method should be applied to Thai learners in the era of education epidemic like nowadays.

Research Objectives

1. To the objective of this research was to study the results of supervising by using innovative classroom education to strengthen the supervision within the school.

2. To use a participatory action research method that emphasizes the professional learning community among academics in higher education institutions, supervisions, school administrators, school academic teachers, mentors, and teachers.

2. METHODOLOGY

Using the Supervision “Lesson Study” in the classroom: From training at the Faculty of Education, Khon Kaen University, the Faculty of Education at Maha Sarakham University, and Northeastern University, the researcher could criticize and found that Lesson Study is the technique for supervision to develop teaching profession through the participatory teaching from every part by planning the lessons, teaching observing, and teaching evaluation. This technique was aimed to develop effective self-learning management continuously which could be affected students’ potential. Furthermore, this technique also supporting for supervision; external supervision from the Educational Service Area and internal supervision from their own schools.

Besides that, the researcher found that the Lesson Study should be applied in the supervision in order to improve teaching potentials from every skill, not only Mathematics. Consequently, the researcher designed the supervision activities through this technique with Mukdahan Primary Educational Service Area Office. At first, the researcher examined the Lesson Study with 26 teachers (13 pairs) from 3 schools by preparing the participatory supervision between the campus supervisors, directors, vice-directors, teachers from the Academic Departments, and the heads of the Department, mentors, and instructors. There were 3 steps from the supervision activities “Lesson Study”; 1) Plan, 2 Do and 3) See with learning management of teachers from each department of primary level to grade 9 since the end of 2013.

Moreover, the researcher supported the schools to set the system for internal supervision through the Lesson Study and Coaching and Mentoring. Then, the researcher summarized the results from the first supervision and found that directors, instructors, and supervisors had agreed that supervising through the Lesson Study could create better teaching habits, and the instructors who were supervised were satisfied with the technique of using the Lesson Study. Hence, there was some confidence in using the Lesson Study to develop the teaching profession on students’ potential.

Therefore, Mukdahan Primary Educational Service Area Office had expanded the model results to 29 schools (14 networks) and also invited Assoc. Pro. Dr. Siripan Suwanmaka et al. from the Faculty of Education, Chulalongkorn University been the supporter of setting the system of supervision for developing the teaching potential through Coaching and Mentoring and the Lesson Study for developing the teaching profession extremely since the beginning of 2014.

After that, the results from semester 1 in 2014 were improved and applied in classes again in semester 2 with the purposive samples by using the Whole School Approach: 38 teachers (19 pairs) from Mukdahan Primary Educational Service Area Office. The participants were divided into 3 groups, the group of directors, the group of vice-directors who were the heads of internal supervisors, and the group of teachers from the Academic Departments, the heads of the Department, mentors, and instructors. Each team would be supervised through studying the Lesson Study and the researcher was the external supervisor the researcher could join with

every team that they have different schedules. The effectiveness of teaching could make teaching feedback all together in order to have the community of knowledge sharing from 3.30 pm each day. The researcher supervised with the internal supervision by following the internal schedule of 20 work days. The researcher embedded with the internal supervisors by using the Lesson Study.

Moreover, the researcher had a chance to use the circle of development in the Lesson study “Plan Do See” with some pairs which used 2-3 rounds per pair. This could give chances to the researcher to study the depth information about classes which leads to collecting qualitative data on curriculum management by using innovative, technology and assessment with depth dynamics. The results could affect the teaching and improve schools’ curriculum management which matched with the present condition, problem, causes, and requirement for developing teachers’ potential and this could have various aspects of the Lesson Study as follow;

Lesson Study

After using the Lesson Study in supervision to develop teaching’s profession found that the Lesson Study brought changes for classes in terms of instructor and stakeholders as follows;

1. Changes

1.1 Directors and stakeholders have learned the process of internal supervision with the Lesson Study which began with practical supervision which not began with principles, attitudes, and theories but occurs from Practice by Doing. The researcher had thought that the external supervision strengthened the internal supervision in the schools in order to have confidence enough to continue the process themselves.

1.2 School administrators have shown leadership in teaching (Leaders of Learning) from not being confident in observing teaching and reflecting on teaching results related to the curriculum, learning, teaching, teaching materials, measurement, and evaluation, etc., to have more confidence.

1.3 School administrators pay attention to and focus on the development of teachers' teaching profession and encourage and support the improvement of teachers' teaching and learning to the student more continuously.

1.4 School administrators are confident in their supervisory processes through the innovative application. The class education that will affect the change transforms teacher teaching efficiency to student quality continually.

1.5 School academic teachers or most of the teachers who participated in educational activities in the classroom were confident in the teaching professional development guidelines by using the Lesson Study. As a result, teachers are more enthusiastic about developing teaching and learning continually.

1.6 Most school administrators and teachers that the methods and approaches for supervision using innovative classroom education help to have a true friendship in learning together.

1.7 Create a network and supervision system within the school. Every time there is a teaching and learning management where fellow teachers with the same free time attended to observe and reflect on teaching results together which is an exchange atmosphere Change collaborative learning that doesn't come easily in the traditional school system.

1.8 Teachers have the opportunity to create lesson plans, observe teaching, and reflect on the results together after every lesson and every week. Although some weeks may not be as full as they should be. Because teachers have other tasks assigned outside in addition to teaching much of each person but it can clearly help the teaching and learning management develop.

1.9 As a result of teaching and learning management developed from the classroom learning process, it was found that teachers had to create networks to exchange learning together. With more discussion about lesson plans, activities, roles of teachers learning behaviors, and concepts of each student This is a new culture in the changing teaching profession in schools.

1.10 Teachers are alert and prepared to teach. Excellent teaching design in advance, as a result, students learn with quality, happy from learning, knowledgeable, skilled, and desirable characteristics according to the curriculum clearly improved.

2. Causes and Factors of Changes

Changes that occurred after supervision using innovative classroom education to develop teaching professions of teachers to the quality of such students caused by the following causes and factors.

2.1 There are guidelines/steps in the classroom study process that are short, concise, clear, and easy to understand in practice.

2.2 It is stated in the guidelines for external supervision and supervision within the school. In the manual for raising academic achievement "Chaturawithi" of NEDA, Mukdahan clearly states that emphasis on supervising through education, classrooms with a joint approach to teaching planning together observe the teaching and together reflect the teaching results.

2.3 There was a meeting to clarify the stakeholders at each level to have a clear understanding of the supervision approach by using innovations in classroom education.

2.4 There was a joint supervision plan in each educational quality development network. The supervisors in each network are responsible for coordinating the supervision plan together.

2.5 School districts are encouraged the budget for the cost of operating supervision together for all networks.

2.6 The results of the supervision according to the supervision plan are applied to reflect on the performance together periodically, to bring information, and to continuously improve the development of supervision.

2.7 There was participatory supervision for both the personnel in the district office and the school having opportunities to learn and work on improving the quality of education and study together. This resulted in more positive interactions than in the past when command-line verticals tend to have little cooperation.

2.8 There was a meeting to explain the operational guidelines in advance and assigned to the school administrators to go to a meeting to clarify understanding with all teachers in the school that will cause cooperation working together to improve the quality of education.

3. Advantages from the Lesson Study

3.1 Most teachers and school administrators are ready for change if the guidelines and methods are so. This can ensure that it is an innovation that will really affect the quality of students.

3.2 It is a method that allows people involved to empirically know that teachers are good, teach well, and have an ideology toward the teaching profession. They are ready to open a challenging class to learn together to jointly develop the teaching profession to be more effective continuously.

3.3 There are quite a few teachers who have changed the concept, open your mind to accept innovation in classroom education. That's a good way suitable for sustainable development of teaching professions. If every school can implement supervision within the school systematically and continuously.

3.4 Teachers and school administrators are quite confident that approaches and methods of classroom education innovation are effective approach and method for the reform of teaching and learning that is relevant and will directly affect the quality of students.

3.5 All involved parties agree that supervision using innovative classroom education with activities together to plan (Plan) together to observe the teaching of teachers in the classroom (Do) together to give feedback to teachers by sharing the teaching results (See) Organizing a system to have teachers/mentors (Coaching and Mentoring) and let teachers learn together from real teaching experiences. All these teacher development activities are guidelines for developing the teaching profession of teachers while working under

normal conditions (On the job-training), emphasizing the use of the classroom as a base for professional development in teaching teachers (Classroom-based Training), which can be done in schools. "Without bringing teachers out of the school" therefore improving the quality of education "It has to start with bringing teachers back to class" and "assisting teachers teaching" so that teachers can develop their own teaching methods to be effective continuously. This will directly affect the quality of learners at the end (Taweesak Chaimayo, 2015).

3.6 Innovative classroom education is an approach that uses lesson plans as a key strategy to drive the upgrading of educational quality so that teachers have to prepare to teach to be current and continuous. This will directly affect the efficiency of teaching and learning management of teachers to continue to the quality of student learning.

3.7 School administrators and school teachers started to create a new culture in the organization that changed into a learning society of teachers for students by exchanging knowledge together to continually improve teaching and learning.

3.8 Teachers study and research lesson plans from writing lesson plans and using lesson plans with the mentors have jointly prepared and applied reflections from peers in the profession to systematically and continually improve instructional design.

3.9 All relevant parties have come together to help teachers from the field by sharing the classroom studies that are current information in the context of the actual teaching and learning from both teachers and students.

3.10 The supervision system within the school and the external supervision system of the educational area have been strengthened by learning from practice, and participatory at the same time.

Criticizing of Changes

1. Self-Changes (Supervisors)

1.1 Changing from command supervision to learning with teachers and school administrators.

1.2 Changing from the original idea that supervisors must be very knowledgeable to become a learning coordinators and learn together with teachers and school administrators.

1.3 Changing from methodical supervision or a ready-made formula from an educational area to a teacher to do a comprehensive model in advance. They come down to study the class together with those involved from the job site in a real teaching situation and listen to the opinions of teachers and school administrators to help improve and develop participatory teaching.

2. Changes in Classroom

2.1 Teachers are preparing to teach (Prepare instructional design Methods of teaching, teaching materials, assessment tools, etc.) before having a very good class together.

2.2 Teachers have studied lessons by writing lesson plans and implementing lesson plans.

2.3 Teachers are alert and enthusiastic and more focused on teaching and learning activities

2.4 Students are more active, happy, and interested in teaching activities.

3. Changes in Relations with Friends and Instructors

3.1 Teachers have a relationship to participate in both formal and informal exchanges of learning.

3.2 Mentors have shared their knowledge and abilities to give advice to their peers on teaching from the actual teaching experience of the individual.

3.3 Teachers have changed the working culture in schools from single teachers (Different people do it / do it alone) and becoming a teacher together and working as a team in order to exchange knowledge together to develop more teaching profession.

3.4 Teachers are more open-minded and accept the opinions of fellow professional teachers.

4. School Changes

4.1 The school has changed the working culture from different people doing different things, teaching different people, and having no learning exchange activities within the school to become a more collaborative learning culture.

4.2 Most teachers and school administrators are ready for change if the guidelines and methods are well, it can ensure that it is an innovation that will have a real impact on raising the quality of students.

4.3 Class education activities enable school administrators and teachers to recognize the strengths of the point should be. To improve the teaching and learning of each teacher in the school, school administrators can help, promote and support teachers to meet the problems, causes, and needs of real development.

4.4 Class education activities allow teachers to share their learning from experiences and to teach real-world situations in the classroom. Each has its own strengths. The points should develop differently. Teachers can fill and build on fellow teachers, such as Kalyanamitta and myself, and can bring strengths and development points of fellow teachers as lessons to improve their own teaching to be effective continuously.

4.5 Class education activities is no impact on the teacher's teaching practice because it is "teacher development using the classroom as a base". Teachers do not need to leave the classroom to develop outside the school.

4.6 School administrators have shown leaders of learning from being not confident in observing teaching and reflection on teaching results, giving school administrators more confidence.

4.7 School administrators have turned their attention and focus on teacher development. And encourage teachers to improve and improve their teaching and learning.

4.8 Executives are confident in the supervision process with the application of classroom education that will affect the change of teachers and students in a better way.

4.9 Most school administrators and teachers saw that the methods and approaches to classroom education were truly friendly with each other.

4.10 All involved parties have come together to help teachers from the front of the event by joining together to study the class. This is information in the current state of the real both from teachers and students.

4.11 There is an internal supervision system developed in schools and external supervision from school districts to be strong, and participative by learning from practice at the same time.

New knowledge from the participatory work: lesson and advantages

1. New Lesson (New Knowledge, Principals, Perceptions, or New Concepts)

1.1 This is a way to encourage school administrators to take an interest in the organization process. Teachers were ready to promote and support media, materials, and teaching materials that are more in line with the needs of teachers.

1.2 It is a way to encourage teachers to prepare more effective teaching.

1.3 The relationship between school administrators and teachers, teachers and teachers, and the supervisory school had more positive interactions because they are more open to listening to each other's opinions and have more friendliness.

1.4 Teacher society and school administrators have changed the culture of exchanging learning together. In the teaching profession development work is different from before with very few activities of this nature.

1.5 It is a method that encourages teachers to think about how to design new instructional management, and new media production to be effective for their own teaching continuously.

2. Advantages

2.1 Advantages for Developing Ourselves (Supervisors)

2.1.1 Performance in accordance with the standards of supervisory education in performing duties related to academic work and supervision work study to improve teaching and learning to meet educational standards through academic research and analysis, research, monitoring, auditing, and evaluation to develop teaching and learning management to be more effective.

2.1.2 Bringing knowledge and experience can be used to exchange learning with teachers and school administrators in raising the teaching efficiency of teachers to student quality.

2.1.3 Acknowledge the real condition that arises from participating in the study of the class together with teachers and school administrators that can be brought to the rescue support teachers have inserted consistent with current conditions, problems, and needs the real need of a teacher.

2.2 Advantages for Developing Our Duties and Our Coworkers

2.2.1 Bringing back what was found from the study of the classroom as information back together to reflect the results of supervision to colleagues to come together to find a way to help improve the process of developing supervision work from time to time to be more efficient.

2.2.2 Taking the results of studying the class used for the development of professional supervision education systematically and continuously has a positive effect on professional development to be sustainable and always progress.

2.3 Advantages for Developing Students' Knowledge

2.3.1 Roles and duties of education Supervisors are responsible for the development of educational supervision processes to meet standards. And used for development, promotion, and support through the teacher development process to help teachers manage to teach and learn effectively. This will directly affect the development of student quality further.

2.3.2 Classroom education helps teachers with instructional design. Teaching preparation carefully and concisely before every teaching with continuous preparation before teaching. As a result, learners have quality learning with the teacher's teaching every time.

2.3.3 Teachers are constantly improving and improving their teaching to be interesting and effective, seeking and researching new teaching methods used with students on a regular basis as a result, learners' learning is carried out with quality.

2.4 Advantages for Developing School Management

2.4.1 It is the development of teaching professions of teachers aiming to raise the quality of students that directly benefit the development of the quality of school education.

2.4.2 The school has changed the working culture from different people to come as collaborative work exchange learning together They are friends in teaching and working together.

2.4.3 Teacher awakening more enthusiastic especially the teaching design and teaching preparation to be effective After the classroom education process is implemented in schools

3. DATA COLLECTION AND ANALYSIS

3.1 Data Collection

3.1.1 Theoretical knowledge was collected from pre-test and post-test scores of the learning achievement test.

3.1.2 The learning retention was collected after the completion of the developed program within 2 weeks.

The satisfaction was collected from the satisfaction questionnaire.

3.2 Data Analysis

3.2.1 The efficiency and effectiveness of the learning module “The Development Module of Leader Teacher in Creative Thinking for Enhancement of Doctor of Philosophy in Educational Administration and Development and Leadership program” were analyzed by using the Mean and Percentage from Chaiyong Brahmawong)1994 (as follows :

The efficiency of the learning module was searched for using E_1 / E_2 Formula as follows :

$$E_1 = \frac{\sum X/N}{A} \times 100$$

$$E_2 = \frac{\sum F/N}{B} \times 100$$

3.2.2 The effectiveness index of the learning module was analyzed by using the following E.I. formula and was analyzed by using the Mean and Percentage of Chaiyong Brahmawong)1994 (as follows :

$$\text{Effectiveness Index) E.I} = \left(\frac{\text{The sum of the post-test score} - \text{the sum of the pre-test score}}{\text{Student Number X Full Score} - (\text{The sum of the pre-test score})} \right)$$

3.2.3 The comparison of the learning achievement of the learning module was analyzed through the (dependent sample) t-test by comparing mean values between pre-test and post-test Boonchom Srisa-ard (2003).

3.2. 4 The learning retention was analyzed and compared using the t-test)dependent sample(to compare the post-test score and score of the test after 2 weeks of program completion by comparing mean values between pre-test and post-test Boonchom Srisa-ard (2003).

3.2.5 The satisfaction in the learning module was analyzed using the Mean value) \bar{X} (and Standard Deviation) SD (, by comparing mean values between pre-test and post-test Boonchom Srisa-ard (2003).

4. RESEARCH RESULTS

The results of the implementation of the leader teacher development program in learning for critical thinking to activity management of students for enhancement of the doctor of philosophy program were as follow

3.1 The program had the efficiency of the learning outcome (E_1 / E_2) at 89.00/ 84.00 higher than the criteria at 80/80.

3.2 The evaluation from the experts on the teacher of the program found the benefits, possibilities, correcting, and suitability were found at the highest level ($\bar{x} = 4.85$, $SD = 0.28$).

3.3 The effectiveness index was at 0.6734 explaining that students gain a higher knowledge of 67.34%.

3.4 The students who learned through the program gained significantly higher results at the level of .01.

3.5 After the completion of the developed program, the students gained similar scores on both the post-test and the test after 2 weeks of program completion. It showed that students had learning retention after learning through the developed program.

3.6 The students' satisfaction with the developed program was at the highest level ($\bar{x} = 4.75$, $SD = 0.29$). The highest level of Mean values ranking from the descending order was: 1) lecturing and providing the learning Activity Management by lecturer and students and 2) the enhancement for a student support system, satisfaction was in "the highest" level ($\bar{x} = 4.90$, $SD = 0.13$).

New Knowledge from the Participatory Work: Lesson and Advantages

1. New Lesson (New Knowledge, Principals, Perceptions, or New Concepts)

1.1 This is a way to encourage school administrators to take an interest in the organization process. Teachers were ready to promote and support media, materials, teaching materials that are more in line with the needs of teachers.

1.2 It is a way to encourage teachers to prepare more effective teaching.

1.3 The relationship between school administrators and teachers, teachers and teachers, and the supervisory school had more positive interactions because they are more open to listening to each other's opinions have more friendliness.

1.4 Teacher society and school administrators have changed the culture of exchanging learning together. In the teaching profession development work is different from before with very few activities of this nature.

1.5 It is a method that encourages teachers to think about how to design new instructional management, new media production to be effective for their own teaching continuously.

2. Advantages

2.1 Advantages for Developing Ourselves (Supervisors)

2.1.1 Performance in accordance with the standards of supervisory education in performing duties related to academic work and supervision work study to improve teaching and learning to meet educational standards through academic research and analysis, research, monitoring, auditing, and evaluation to develop teaching and learning management to be more effective.

2.1.2 Bringing knowledge and experience can be used to exchange learning with teachers and school administrators in raising the teaching efficiency of teachers to student quality.

2.1.3 Acknowledge the real condition that arises from participating in the study of the class together with teachers and school administrators that can be brought to the rescue support teachers have inserted consistent with current conditions, problems, and needs the real need of a teacher.

2.2 Advantages for Developing Our Duties and Our Coworkers

2.2.1 Bringing back what was found from the study of the classroom as information back together to reflect the results of supervision to colleagues to come together to find a way to help improve the process of developing supervision work from time to time to be more efficient.

2.2.2 Taking the results of studying the class used for the development of professional supervision education systematically and continuously has a positive effect on professional development to be sustainable and always progress.

2.3 Advantages for Developing Students' Knowledge

2.3.1 Roles and duties of education Supervisors are responsible for the development of educational supervision processes to meet standards. and used for development, promotion, and support through the teacher development process to help teachers manage to teach and learn effectively. This will directly affect the development of student quality further.

2.3.2 Classroom education helps teachers with instructional design. Teaching preparation carefully and concisely before every teaching with continuous preparation before teaching. As a result, learners have quality learning with the teacher's teaching every time.

2.3.3 Teachers are constantly improving and improving their teaching to be interesting and effective, seeking and researching new teaching methods used with students on a regular basis as a result, learners' learning is carried out with quality.

2.4 Advantages for Developing School Management

2.4.1 It is the development of teaching professions of teachers aiming to raise the quality of students that directly benefit the development of the quality of school education.

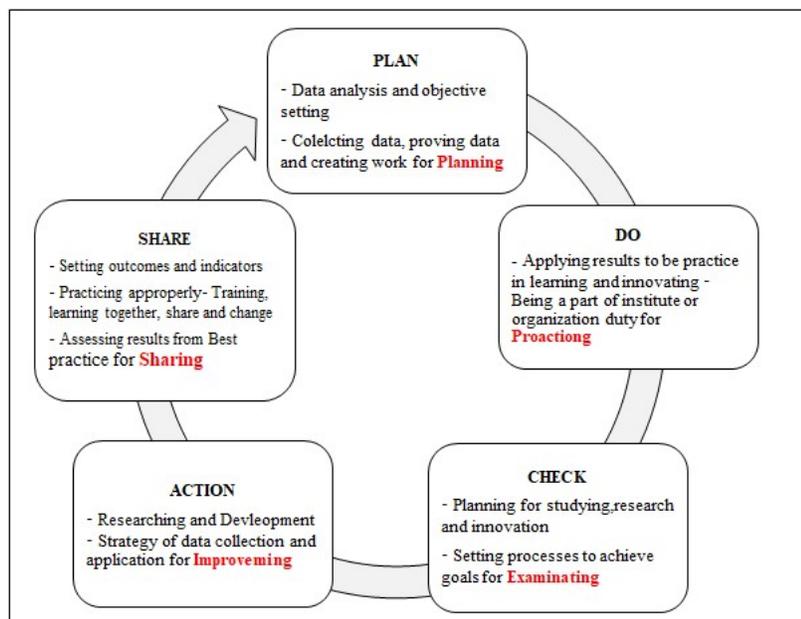
2.4.2 The school has changed the working culture from different people to come as collaborative work exchange learning together They are friends in teaching and working together.

2.4.3 Teacher awakening more enthusiastic especially the teaching design and teaching preparation to be effective After the classroom education process is implemented in schools

3. Guidelines.

There was the effective management for enhancement of the lesson study using a participatory action research method that emphasizes the professional learning community among academics in higher education institutions, supervisions, school administrators, school academic teachers, mentors, and teachers emphasizing learning through the practice of developing the quality of life at the area in program Mukdahan Province since 2019 and consistent with Wise's research Chalard Chantarasombat, Theenida Bunthornwon, and Yutthasat Kongpet(2022), follows figure 1:

Figure 1 There was effective management for enhancement of the lesson study using a participatory action research method



5. DISCUSSION

1. Things needed for increasing the quality of educational institutes to allow the other schools in the area have the participatory Lesson Study continuously:

1.1 Require to have affiliated schools Educational Quality Improvement Network and educational area. There is an innovative supervision action plan. Continuous, participatory classroom education.

1.2 In order to have continuous and feasible supervision according to the joint supervision action plan, Education district offices should integrate work assignments into the network to comply with district policies. No duplication of time and work assignments. And prioritizing new assignments because of the main problems and causes Failure to comply with the participatory supervision plan is due to the network president the committee and the network secretary are on a mission to be a committee or working group of several educational areas at the same time. Therefore, unable to perform supervision according to the specified plan causes a lack of continuity in supervision.

2. Things that school should be expanded and the purposive group of expansion:

2.1 If any school is ready and confident in the process of studying in the classroom by creating a mentoring and guiding system. That can affect many changes that will result in upgrading the quality of students. Such a system should be expanded to a Whole School Approach in the next semester because it will help create a community atmosphere for learning teachers for students. Professional Learning Communities: PLC is increasing in schools and teaching and learning management is a normal condition of every school that must be practiced just add innovation to use as an aid to improve the quality of education for schools. Related to Chalard Chantarasombat (2017), using innovations to enhance the educational achievement of educational institutions by applying supervision clinics to mentoring and teaching. of the Office of the Nakhon Phanom Primary Education Area, District 2, and the model schools that volunteers participated in the development of 9 schools with a focus on building a professional learning community starting from 1) the integration of teacher power, school administrators, education administrator, educational supervisors and academics people from higher education institutions participated in decision making, 2) studying, data analysis, studying of problems desirable condition, 3) setting goals and indicators to enhance learning achievement, 4) planning and building a school-based network at the school level of the network groups, 5) presenting the initial learning design together, 6) experimenting with core innovations based on subject groups and using classroom studies. and supervision for excellence Open classrooms and learn by practice (Action Learning), 7) exchanging knowledge at the school level and network both directly and online.

2.2 If most schools are still lacking readiness, school districts should select schools that are ready to participate in the program first which considering the qualifications of school directors who have leadership in teaching (Leaders of Learning) who are committed, serious, sincere, caring and serious in the development of teaching and learning. School education is the main factor in the selection process for further participation in the program.

3. Factors for Achieving the Expansion

3.1 Educational Service Area Offices should develop Leaders of learning, including more earnestness, attention, and leadership of school administrators in order to make school administrators confident in using classroom education, drive a strong supervision system within the school, and be effective together seriously and continuously.

3.2 Educational and school district offices There should be ways and means to reduce activities, projects, assessments, contests, competitions, etc., that are assigned tasks to teachers in addition to teaching activities. causing teachers to leave the classroom to prepare for such matters until there is no time to prepare for teaching. This greatly hinders the use of innovative classroom education that emphasizes lesson plans as a key strategy to drive efficiency. Teacher teaching pictures to student quality.

3.3 Schools must be managed the Teaching Professional Development of Teachers to the quality of students as a whole school (Whole School Approach).

3.4 Teachers can tailor their own workload to match the learning process by allowing students to truly build their own body of knowledge until they feel that you can actually do it.

3.5 School will bring innovation “Lesson Study: Plan Do See to develop teachers’ teaching profession, and to the student, quality be used effectively. It is only when everyone has to equally learn and develop with practice (Practice by Doing) continuously.

Suggestions for Further Study

The Educational Service Area should be ways and means to reduce activities, projects, assessments, contests, competitions, etc., that are assigned tasks to teachers in addition to teaching activities which causes teachers to leave the classroom to prepare for such matters until there is no time to prepare for teaching. This is a major obstacle to the use of innovative classroom education that emphasizes lesson plans as a key strategy to drive efficiency. teacher teaching pictures to student quality.

Suggestions for the Study

Educational innovations are being used in classroom education (Lesson Study) to strengthen the supervision system within the school by using professional learning community culture both in the primary education area office and Office of the Secondary Education Area, such as the Roi Kaen Sarasin Operation Area.

6. ACKNOWLEDGMENT

Deeply thank the Dean of the Faculty of Education and the President of Northeastern University for supporting lecturers in both undergraduate, Graduate, and Post Graduate Curriculums, Administration, and Leadership in Education programs to develop potential with learners and staff. And both thank you to Mahasarakham University and Khon Kaen University for sharing active learning supervision excellence.

References

1. Faculty of Education, Chulalongkorn University. (2013). Documents for Teacher Development (Executive and supervising education) using the process of creating a system of mentoring and mentoring (Coaching and Mentoring). Cooperation project between OBEC and the Faculty of Education, Chulalongkorn University, (Document copy)
2. Brahmawong, C. (1994). Teaching Set Measurement: Teaching Material for Technology and Educational Communication unit 1-5. Bangkok: Sukhothaimathirath University.
3. Boone, E. (1992). Developing Program in Adult Education. New Jersey: Prentice Hall.
4. Chantarasombat, C. and Udombunyanupap, N. (2017). Learning Series 3 Clinical Supervision Practice for Excellence. Mahasarakham: Disk Copy (Copy Document).
5. Chantarasombat, C. (2018). Coaching Teams with Achieving the Education Quality. Office of the Permanent Secretary Ministry of Education in Khon Kaen and Pitchayabundit College.
6. Chantarasombat, C. (2020). Development of Modules on Policy, and Strategies for Education (EDA6201) for Master Degree Students in the Major of Education Administration. Education Journal, Maha Sarakham University. Vol.14 No.1, January-March, 2020 pp. 31-50.
7. Chantarasombat, C. and Udombunyanupab, N. (2017). Set of Learning 6: Supervising for Excellence. Maha Sarakham: The Institute of Research and Development of the community and learning management, Faculty of Education, Mahasarakham University.
8. Chantarasombat, C., Udombunyanupab, N., and Kenchaiyawong, N. (2018). “The Development Program of Teachers by increasing the learning achievement of Northeastern University, Office of the Basic Education Commission”. Journal of Education. Mahasarakham University. Vol.12 No.2, April-June, pp. 54-69.
9. Chantarasombat, C., Udombunyanupab, N., and Songsri, C. (2018). “The Development Program of Teachers by increasing the learning achievement of Educational Places, Nakhon Phanom Office of the Basic Education Commission”. Journal of Educational. Mahasarakham University. Vol.12 No.2, July-September, pp. 18-35.
10. Chantarasombat, C. and Meekhamtong, P. (2020). “The Development Program of Leader Teachers in Learning Thai Management for Enhance of Students’ Critical Thinking in Secondary Schools Through Course Seminar of Master degree Students in Education Administration” Educational Research. Vol.11 No.1, July 2020, pp. 10-20.

11. Chantarasombat, C. & Sombatsakulkit, E. (2021). "Doctoral Program Learning Module on Developing Leading Secondary School Teachers in Creative Thinking for Enhancement of Students' Learning Activities in Thailand". *International Journal of Higher Education*. Vol.10, No. 3, 7 January 2021. pp. 138-149.
12. Chantarasombat, C., and Sirisuthi, C. (2022). "Using the development Module of Leader Teacher in Creative Thinking for Enhancement the Doctor of Philosophy in Educational Administration and Leadership Program" *Multicultural Education*. Vol.08. No. 02. pp. 35-54.
13. Chantarasombat, C., Kongpet, Y. & Buntornwon, T. (2022). "Developing Innovation for Achieving Learning of Educational Institutes with Applying of Educational Supervision Clinique in Advising and Coaching". *International Journal of Special Education*. Vol 37. No.3. pp. 17065-17080.
14. Chantarasombat, C., Kongpet, Y. and Buntornwon, T. (2022). "The Monitoring of Integrated Enhancement of Health Program and Development of Health Mechanism at Area Level: A Cased Study Dansai District, Loei Province in Thailand". *London Journal of Research in Humanities and Social Sciences*. Vol.22. No. 2, pp. 55-78.
15. Chaimayo, T. (2016). Lesson Plans of Supervision by Using Classroom Innovation to Enhance Environment of Supervision at School. *Journal of Supervision and Educational Development, Mahasarakham University*. Vol.1 No.1, January-April 2016, pp. 124-137.
16. Chaimayo, T. (2014). "Learning Development of Network Supervisory Education to increase quality learning from administrators and teachers to studying the class lesson study: Lesson from Mukdahan Kindergarten and Khamsaithong Wittaya" Pages 1-29. Documents for the organization of academic meeting of the supervision group Monitor and evaluate education management outcomes. Mukdahan Primary Education Service Area Office. (Copy document)
17. Chaimayo, T. (2015). Guidebook for effective sharing of learning together titled "Using Innovation in Class Education (Lesson Study) to Develop Teaching Professionals of Teachers to the quality of students" Kindergarten and Khamsaithong Wittaya" Pages 1-4. Documents for the organization of academic meeting of the supervision group Monitor and evaluate education management outcomes. Mukdahan Primary Education Service Area Office. (Copy document)
18. Dechakup, P. (2011). *Teaching and Learning on Child Center: Teaching Concepts and Techniques*. Bangkok: Academic Quality Development Institute.
19. Desara, W. (1997). *Curriculum and Teaching Development*. Bangkok: Suriwiyasas.
20. Knowles, M. (1980). *Modern Practice of Adult Education*. New York: Cambridge, The Adult Education Company.
21. Inprasit, N. (2007). Class Education (Lesson Study): Innovations for Professional Development of Thai Teachers. *Journal of Education*. Vol.30 No. 2-3 April-September 2007. Khon Kaen. Klang Nana Publishing House.
22. Inprasit, M., and team. (2009). Context preparation for professional development of Japanese teachers called "Lesson Study" is used in Thailand. Documents of the 1st Japanese Studies Network National Academic Conference in Thailand, pages 152-163.
23. Inprasit, M. (2011). "Lesson Study and Open Approach and Supervision within School" National Conference Papers Developing a new approach to education to accelerate the development of the quality of education. Center for Supervision and Acceleration of Basic Education Quality Office of the Basic Education Commission. Page 1-29.
24. Sikabundit, S. and Sikabundit, S. (2001). *Module*. Bangkok: Srinakharinwirot University.
25. Srisa-ard, B. (2003). *Teaching Development*. Bangkok: Foundation of Kids Loving.
26. Srisa-ard, B. (2005). *Basic of Research*. Bangkok: Suriyasas.