

## Multicultural Education

Research Article

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## DEVELOPMENT OF SUPERVISION INNOVATIONS BY APPLYING CLINICAL SUPERVISION TO RAISE THE QUALITY OF EDUCATIONAL INSTITUTIONS AND SCHOOLS UNDER THE OFFICE 26 AREA

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### ABSTRACT

This innovative learning supervision research has the following objectives: 1) to develop and set goals for success in school learning enhancement innovation development; 2) to develop the potential of teachers and educational personnel in enhancing school learning through clinical application of educational supervision in coaching and mentoring, 3) to develop excellent supervision work, 4) to develop education in advanced thinking, current and desirable conditions, 5) to create and develop a professional learning community trainer and 6) ) Classroom quality improvement The results showed that 1) components of Thai learning management were at the highest level, 2) current conditions were at the high level and desirable conditions were at the highest level, 3) teacher development consisted of 1) reasons and guidelines, 2) objectives 3) goals 4) content and activities. There are 4 development stages: 1) Pre-Development Assessment 2) Development 3) Integration between work and 4) Post-Development Assessment. The sample group consisted of 36 teacher development projects. Tools were developed supervision innovations. Manual for the use of innovative supervision kits quality assessment Achievement test The results showed that utility possibility 4) The effectiveness of found that 1) Process efficiency 88.19/ 83.47 2) Effectiveness after learning 0.5641 56.41 percent increase in knowledge 3) Compared with the average after using supervision innovation. was significantly higher at the .01 level when evaluating teachers' satisfaction with supervising innovations for developing advanced thinking. at a high level And when considering each aspect, it was found that most teachers were satisfied with the supervision innovation for developing higher thinking clearly in line with the objectives. and innovative supervision to develop advanced thinking It consists of the development of supervising innovations to develop advanced thinking. In terms of activities, teachers were satisfied at the highest level.

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### 1. INTRODUCTION

Knowledge is changeable due to the new explorer or it can be said that it is a dynamic. Learning in the 21st century also requires the learners change their mindset from learning by memorizing to learn by using critical and

creative thinking. Moreover, the learners should have the necessary skills such as learning and innovative skills, information learning literacy and communication skills, and interpersonal skill. So, learning should give the opportunity for the learners to form experience by exploring knowledge through the processes of analyzing, synthesizing, making decision, solving problem, and creating knowledge from integrating what have been found from both inside and outside classroom. The instruction should also be considered to be flipped from learning only in classroom to be allow learners for the self-study at home or outside classroom and the knowledge gained outside will be brought to the classroom for discussing and practicing with teacher.

Role of teachers in the learning in the 21st century must be changed (Brahmawong C.,1994). The new teaching should be without knowledge provider, but the knowledge will occur from the activities of students such as using creative thinking in learning and learning cooperatively. The research and working scheme for the efficiency will not be considered only for changing, but they should be the changer for produce efficient leader of changing on action learning leading to the inside change which is more powerful. This will help improve the leader skill as the leader of changes who always be professional, learn for life long, and find the better teaching methods which is suitable for their own context.

Flipped classroom is the new teaching approach proposed by Jonathan and Aaron, Chemistry teachers of Woodland Park High School in the United States. This approach corresponds the learning in the 21st century focusing on teach less learn more principles which is opposite the current situation of classroom. The flipped classroom also stimulates the use of online learning, social media, information technology, multimedia, and activities at home to be performed in classroom which help increase the practice and interaction between teacher and students. This also focuses on self- knowledge acquiring based on their skills, knowledge, ability, and individual competency regarding their self-pace of learning through the experience of provided by the teacher via information technology and multimedia. This also be the learning from outside classroom with the independence of both thinking and practicing which is different from traditional learning called teachers-centered learning that teacher always provides knowledge and experience. For the 21st century learning, teachers and staff have to learn from doing, giving feedback, enlighten, being the leader of changes, self-learning, self-evaluating and improving, and team working.

The analysis of current context and desirable situations together with the need of critical thinking of students in secondary schools from the study of Suriya Senawong and Chalard Chantarasombat (2018) showed that there were 6 elements and 23 indicators of learning Thai management for enhancing the critical thinking (Chantarasombat & Sombatsakulkit. 2021), Chantarasombat (2022), Boonkear, Chantarasombat, Chusorn. (2022) and Sunet, Chantarasombat, & Prasertphorn (2022). Moreover, the results also revealed that there were the needs of the development of learning innovation including learning modules, online learning, and action learning. This corresponds with the 2nd announcement of the Office of the National Digital Economy and Society Commission in 2020 stating that there is the need of digital economy and society funds in 7 aspects. However, the researchers are interested in the 1 aspect which is Education Technology (EdTech) which focuses on applying digital technology in education for improving the efficiency and effectiveness in terms of developing the potential of educational staff on flipped classroom with the integration of Cloud.

Consequently, the integration of Google Classroom is the change of teachers' role from tutor to be coach who will initiate and create the amusement in learning as facilitator. There should be the improvement of teachers' potential of applying online learning in class through the use of G Suite for Education and Microsoft teams. The Google Classroom was, finally, selected for implementing in the Educational Administration for Borabue Teacher in The Secondary Education Service Area Office 26 for organizing the new approach of teaching through the development of leader teacher development. This process was simultaneously done together with the learning and researching for improving the efficiency and effectiveness of innovation with the integration of teaching though the use of digital technology for improving the wisdom on living together happily.

### 2. LITERATURE REVIEW

Flipped classroom is the new techniques of learning management by Jonathan and Aaron, the chemistry teachers at Woodland Park High School in USA focuses on teach less learn more. Flipped classroom comprises online learning, online media, information technology, various communication, and doing activities in classroom. These support learners to practices in class. Moreover, they can have interaction with peer and teachers for creating self-knowledge and individualized competency through self-paced. In 21st century, teachers, lecturers, and educational personnel must learn by doing, thinking, leading themselves to be leaders of changing, directing self-learning, assessing and improving how to learn, and learning in team. Regarding to the study of developing teaching capacity in the project of increasing the learning achievement in the Northeastern of Thailand, Office of the Basic Education Commission by Chalard chantarasombat, Nothai Udombunyanupab, and Norachai Kenchaiyawong (2018, p. 54-69), they divided their research into 3 levels: 1) developing , creating, defining objectives, and creating instruments, 2) studying theories 24 hours and training by doing 66 hours, and 3) increasing the learning achievement of the target groups since the pretest, during the process, and the posttest.

The conditions, problems, requirements and plans for learning management of in the project of reformation on learning to learners which focusing of innovation for achieving learning until the project of achieving learning of 9 educational institutes was occurred. Therefore, it was agreement between developers, schools' directors, supervisors, and education administrators which made the Memorandum of Understanding or MOU from 3 teachers/school in the main subjects by Chantarasombat's (2020) using the development program in advising and instructing. Three teachers from the main subjects were assigned to advice and instruct each other which lead to have the Professional Learning Community (PLC) from the supports of schools' directors, supervisors, and the guarantee from the education administrators. This shown the continuous processes till the beginning to the end of the project as follow: there were 4 steps for every school in developing innovation for achieving learning of educational institutes with applying of the Educational Supervision Clinique (ESC) in advising and instructing; studying lesson plans, defining objectives, teaching, and observing. This made the participation between the institutes' staff and the outsider and there was a revision for achieving the knowledge of lesson plans in order to use in the same level which affected to the leader teachers to gain more confident in making the connection, creating open classroom, working in group, and having the Professional Learning Community (PLC); the schools studied the results of using the Educational Supervision Clinique by learning through the institutes focusing on learning in 21st century which teachers learnt from students, teachers learnt from teachers, administrators, and the outsider, such supervisors who observed at Northeast Navel Campus School 5 under the Office of Maha Sarakham secondary education Service. The result shown that after observation, the leading teachers, developers, administrators had achieved the knowledge for their schools in order to be the Professional Learning Community (PLC); the schools had been developed the system of advising and instructing. The leaders developed students in the revolution project focusing on the innovation for achieving students' learning which teachers learnt from students, teachers learnt from teachers, sample groups. Sai administrators from 5 main subjects, grades 1-6 of all sample groups.

The analysis of current context and desirable situations together with the need of critical thinking of students in secondary schools from the study of Senawong and Chantarasombat's (2019) showed that there were 6 elements and 23 indicators of learning Thai management for enhancing the critical thinking. Moreover, the results also revealed that there were the needs of the development of learning innovation including learning modules, online learning, and action learning. This corresponds with the 2nd announcement of the Office of the National Digital Economy and Society Commission in 2020 stating that there is the need of digital economy and society funds in 7 aspects. However, the researchers are interested in the 1 aspect which is Education Technology (EDTech) which focuses on applying digital technology in education for improving the efficiency and effectiveness in terms of developing the potential of educational staff on flipped classroom with the integration of Cloud. Consequently, the integration of Google Classroom is the change of teachers' role from tutor to be coach who will initiate and create the amusement in learning as facilitator. There should be the improvement of teachers' potential of applying online learning in class through the use of G Suite for Education and Microsoft teams. The Google Classroom was, finally, selected for implementing in the Educational

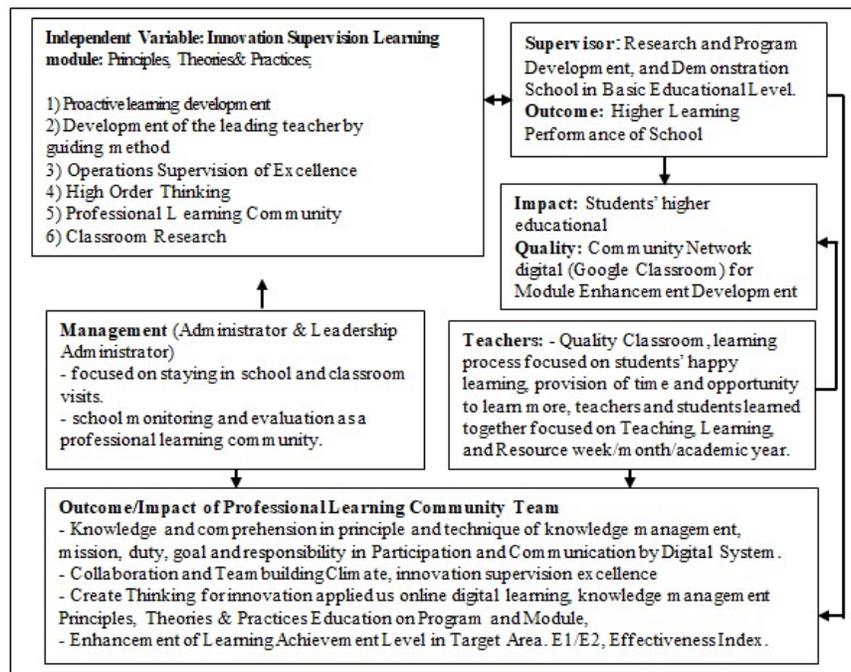
Administration Seminar course (ED8013302) for organizing the new approach of teaching through the development of leader teacher development by Chantarasombat & Rooyuneyong (2020) and the same the Google Classroom was, finally, selected for implementing in the Educational Administration and Leadership course (ED41212) for organizing the new approach of teaching through the development of leader teacher development for students by Chantarasombat & Sombatsakulkit (2021). This process was simultaneously done together with the learning and researching for improving the efficiency and effectiveness of innovation with the integration of teaching through the use of digital technology for improving the wisdom on living together happily.

The conceptual framework for developing supervision innovations for schools in the Secondary Educational Service Area Office 26 The management of enhancing high thinking of students in secondary schools for teachers under the Sahawatte Isan Campus is as follows:

1. The researcher jointly developed strategies, developed plans, and formulated the supervision developed for inter-campus teachers, Saue Isaan, in the Office of Secondary Educational Service Area 26, Maha Sarakham, Thailand.

2. The researchers studied the concepts, theories, related principles, policies, strategic and strategies of education administration, and the educational reform in the 21st century for specifying the content and innovation to improve the learning achievement of schools. Moreover, the survey of learning resources for excellence was done based on the theory of educational quality development in 21st century. The development of leader by supervising and teaching, creation and development of professional learning community (PLC), supervision for excellence (Educational Supervision Clinique the Route to Excellence: ESC, Wales Deanery) concepts and theory of supervision for excellence of Chalard Chantarasombat Wales and Nothai Udombunyanupab, school is professional learning community of Blue, and opened-classroom of Dudley cited in Chantarasombat (2021), Chantarasombat (2022), Boonkear, Chantarasombat, Chusorn. (2022) and Sunet, Chantarasombat, & Prasertphorn (2022).

**Figure 1.** The conceptual framework of the leader teacher development program in learning i management for enhancing critical thinking of students in secondary schools  
(Chantarasombat. 2022: 239)



The researchers created and developed the program for students including Unit 1 on Proactive learning development learning goals, knowledge, theory, and principles of administration and development, Unit 2 on Development of the leading teacher by guiding method, classroom administration in the 21st Century, Unit 3 on Operations Supervision of Excellence educational reform skill and academic leadership of educational institutes, Unit 4 on Higher Order Thinking, Unit 5 on Professional Learning Community, leading applying clinical supervision to raise the quality Schools and administrators and instruction, Unit 6 on Classroom Research the creation of innovation, knowledge management, rubric score, best practice, satisfaction, evaluation.

### 3. RESEARCH METHODOLOGY

Participants were 36 teachers from all departments of learning who were primary and secondary school teachers. and want to find a solution to solve the problem of student achievement After that, apply for the innovation project to improve academic achievement of the Sahaviya Affiliated Educational Institutions, Navel Isan District, under the Office of the Basic Education Commission 26. The data collection was divided into 4 phases as follows. Phase 1: Curriculum development, creating and setting goals and tools for the development of Instructor Prachanban The preparations are as follows: (1) jointly defining development issues; (2) studying concepts, theories, and principles related to innovation to enhance educational achievements of schools and exploring learning centers for best practice; Create and develop innovations to enhance educational achievements of educational institutions (4) Development of innovative supervision or google Classroom modules :1) setting learning goals 2) considering student readiness 3) content determination 4) Teaching 5) Evaluation 6) Feedback and School Community Effective seminars or workshops and research Followed by the second stage, which is an operation to develop the potential of regular teachers. Organizing workshops for full-time teachers and post-testing. Phase 3 refers to operations to develop the potential of full-time teachers. Phase 2: practical (68 hours) is a study of current problems and determining issues for developing teaching design for development.

The researchers submitted the developed learning program on leader teacher development program in learning supervision excellence for enhancing high order thinking of leading teachers in secondary schools for raise the quality teacher with all six units for evaluating the congruence of content and modules to 5 experts including 1) Prof. Dr. Chaiyong Brahmawong 2) Assoc. Prof. Dr. Samrej Yurachai 3) Assoc. Prof. Dr. Tharinthorn Namwan 4) Asst. Prof. Dr. Yannapat Seehamongkon and 5) Asst. Prof. Dr. Prasert Ruannakarn. The results of evaluation in terms of appropriateness, possibility, and utilization were in the highest level.

The developed Five sets of developed supervision innovations were tested with 5 non-sample students in this study in the experimental group and 9 teachers in the experimental group. who are studying in quality elevated schools in the second semester of the academic year 2020. The experimental results showed that the efficiency of the developed modules was 82.67/83.89. It has been revised in terms of the Supervision Innovation Manual. Publish innovation supervision Revised version of all 5 learning units to operate with a sample of 36 multi-campus groups, Village No. 6 (Esan Navel), consisting of 5 schools, 234 teachers, 36 volunteer teachers participating in the core teacher project and upgrading. quality in the Secondary Educational Service Area Office, Region 26, Maha Sarakham, Thailand Learning achievement test was developed and tried out as follow:

The researchers studied theories, principles, and concepts of learning achievement test construction of Boonchom Srisa-ard as a guideline for the development. (Sri-saard B, 2002)

The researchers conducted 40 items of 4 alternatives multiple choice learning achievement test for the selection of 30 items for the implementation phase.

The developed test was submitted to the same experts for the evaluation for the congruence of behavioral objectives with the following criteria:

+1 refers to the test is surely congruent with the behavioral objectives,

0 refers to the test is not surely congruent with the behavioral objectives, and

-1 refers to the test is not congruent with the behavioral objectives.

The test was assessed on the Index of Concordance (IOC) (Somnuek Pattiyathani) by selecting 30 items with an IOC between 0.50-1.00, indicating that the qualifying exam was appropriate for its content. (Tanee S., 1998). The test was developed with a sample group of educational institute administrators who graduated with a master's degree in educational administration, teachers and educational supervisors under the Maha Sarakham Secondary Education Service Area Office in 5 locations to study the reaction in taking the test. Exam time and understanding of the question Revise the test until all aspects of the test are completed.

The scores received were analyzed to find out the difficulty value (P), and discrimination power (R) of each item. The results revealed that the difficulty value of each item was arranged from 0.40 to 0.80, while the discrimination power of each item was ordered from 0.20 to 0.60. Moreover, the test was analyzed to find out the reliability through the use of Kuder Richardson – 20 (KR-20) and the results revealed that the overall reliability of the was 0.84. The test was, finally, printed out for the next phase of study.

A satisfaction questionnaire for teachers studying as a sample group in the supervision innovation trial, 45 items, was prepared by following the following steps:

- The researcher studied the concept and theory of satisfaction from the book Administrative Reform, Theory, Research and Operations in Education by Thon Suntrayut (Suntrayut, 2008).

- The researcher studied the satisfaction questionnaire development technique from the book Fundamentals of Research by Boonchom Srisa ard.

- The researcher studied the construction of a questionnaire with a scale of 5 points to the satisfaction of Likit Boonchom srisa-ard (Srisa-ard Khor. 2002).

- The researcher developed a 5-point estimation scale questionnaire due to the objectives.

- The developed questionnaire was sent to the same expert to assess the correspondence between the questions and the behavioral objectives according to the following criteria:

+1 means the test definitely aligns with the behavioral objectives.

0 means the test is definitely not aligned with the behavioral objectives.

-1 means the test is inconsistent with the behavioral objectives.

The questionnaire was analyzed to find the Index of Congruence (IOC) (Somnuek Pattiyathani) found that the IOC was between 0.80 - 1.00. A questionnaire developed with a sample of 30 educational institute administrators who graduated with a master's degree in educational administration, teachers and educational supervisors under the Mahasarakham Secondary Educational Service Area Office was used to determine the power of each item. The results of the research showed that the item classification power was between 0.32-0.83. The questionnaire was analyzed to find the Cronbach coefficient. Boonchom Srisa-ard (Sisa-ard Khor, 2002) found that the questionnaire had a reliability value of 0.96. It's printed out for the implementation process.

#### 4. DATA COLLECTION

\* Theoretical information is collected through pre- and post-test through the achievement test.

\* Learning retention data were collected by re-tapping an achievement test 2 weeks after completion of learning through a developed program. Data were collected using an AAR process.

Data on learning satisfaction were collected through teachers' teaching questionnaires, teaching materials, and lessons of supervision innovations developed.

## 5. DATA ANALYSIS

The efficiency and effectiveness of the learning program on leader teacher development program in learning Thai management for enhancing critical thinking of students in secondary schools for teacher was analyzed by finding out the mean score through the formula of Chaoyong Brahmawong as follow: (Brahmawong C, 1994)

The efficiency was calculated via the below E1/E2 formula:

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

$$E_2 \frac{\Sigma X/N}{B} \times 100$$

The analysis of learning achievement on of the developed program was done through the dependent sample t-test with the scores of pre-tests, post-test, and learning achievement test received after two weeks of the completion of learning program Boonchom Srisa-ard. (Sri-saard B, 2002)

The analysis of effectiveness of the developed program was analyzed through the Effectiveness Index (E.I.) formula of Chaoyong Brahmawong as follow:

$$\text{Effectiveness Index (E.I.)} = \frac{\text{mean score of post - test} - \text{mean score of pre - test}}{(\text{Number of teachers} \times \text{total score}) - \text{mean score of pre - test}}$$

The analysis of the learning retention of the developed was analyzed through the comparison of mean score of the pre-test and post-test received after two weeks of the completion of learning through the developed program by using dependent sample t-test of Boonchom Srisa-ard. (Sri-saard B, 2002)

The analysis of the satisfaction on the developed was done by finding out the mean score and S.D. through the satisfaction evaluation of Likert Boonchom Srisa-ard.

The comparison of the record of before and after working to find out the results of the qualitative learning activity project was analyzed to find out the percentage of the focused aspects of Boonchom Srisa-ard. (Sri-saard B, 2002).

## 6. RESEARCH RESULT

**Table 1.** Process efficiency versus effectiveness of supervision innovation development results by applying clinical supervision to improve quality.

Number	Score after 2 weeks (60)	Pre-test (60)	Practical Score for program							Post-test (60)
			Proactive Learning )40(	Leading teachers )20(	Supervision Excellence )20(	High order Thinking (20)	Professional Learning community (20)	Classroom Quality )20(	Total practical (140)	
1	51	40	38	18	18	18	18	18	128	49
2	49	38	38	18	18	18	18	19	129	56
3	53	41	37	18	18	17	17	18	125	52
4	53	39	37	18	17	18	18	18	126	54
5	54	34	37	18	18	18	18	17	126	50
6	58	30	37	18	18	18	18	18	127	50
7	59	34	37	18	18	18	18	18	127	52

8	58	28	37	18	17	18	17	18	126	50
9	58	28	37	18	17	17	18	18	125	51
10	56	26	38	17	18	18	17	18	126	50
11	58	29	38	18	18	18	17	18	127	48
12	58	29	38	17	17	18	18	17	125	47
13	58	42	37	18	18	18	18	18	127	50
14	57	42	38	17	18	18	18	18	127	45
15	56	42	38	17	17	18	18	18	126	49
16	54	45	38	18	18	18	18	18	128	53
17	55	41	36	17	16	17	17	17	120	52
18	56	40	35	16	16	17	17	17	120	50
19	52	42	35	18	16	17	17	18	119	50
20	54	41	34	16	16	17	18	17	117	51
21	56	41	35	18	17	18	18	17	123	49
22	56	38	38	17	16	18	18	18	126	50
23	55	37	36	16	15	17	16	16	115	49
24	54	36	37	15	16	17	17	16	118	48
25	53	35	37	17	17	18	17	17	123	51
26	54	34	36	17	18	18	17	17	123	49
27	55	36	37	17	18	18	18	17	125	52
28	56	37	38	17	18	18	18	16	125	52
29	54	38	37	16	17	17	16	15	118	51
30	52	39	36	17	18	17	16	17	120	50
31	54	38	36	18	17	17	17	15	120	48
32	53	39	37	17	18	18	18	16	124	49
33	56	42	35	16	17	18	16	16	118	51
34	54	43	36	16	16	17	17	17	119	50
35	49	36	37	16	17	17	18	17	121	46
36	52	41	38	17	17	17	18	17	125	49
<b>Total</b>	<b>1,970</b>	<b>1,341</b>	<b>1,326</b>	<b>618</b>	<b>619</b>	<b>634</b>	<b>628</b>	<b>620</b>	<b>4,445</b>	<b>1,803</b>
$\bar{X}$	54.72	37.25	36.83	17.17	17.19	17.61	17.44	17.22	123.47	50.08
<b>S.D.</b>	<b>2.49</b>	<b>4.87</b>	<b>0.51</b>	<b>0.85</b>	<b>0.86</b>	<b>0.49</b>	<b>0.69</b>	<b>0.93</b>	<b>3.55</b>	<b>2.10</b>
$\bar{X}$ %	91.21	62.08	92.08	85.85	85.95	89.50	88.05	86.10	88.19	83.47

For academic achievement with innovative supervision by applying clinical supervision. Comparison between the pre-test and post-test in the innovation leadership course as shown in Table 2.

**Table 2:** Comparison of learning achievement on online learning program using Google classroom

Test	Amounts of Teachers	( $\bar{X}$ ) (Total 60 scores)	Standard Deviation (SD)	t	Sig
Pretest	36	37.25	4.87	18.925	0.01**
Posttest	36	50.08	2.10		

Sig, 0.01, df-36-1=35,  $\alpha = 2.4377$

From Table 2, it was found that after learning through the supervision innovation by applying the clinical supervision The post-learning score was significantly higher than the before-learning score at 0.01 level.

for effective academic achievement The second posttest was compared with the first posttest as shown in Table 3.

**Table 3:** Comparison of learning achievement on online learning program using Google classroom,

Test	Amounts of Teachers	( $\bar{X}$ ) (Total 60 Scores)	Standard Deviation (SD)	t	Sig
Test1 (Having a posttest after learning)	36	50.08	2.10	7.062	0.01**
Test2 (Having a second posttest after the first posttest for 2 weeks)	36	54.72	2.49		

Sig, 0.01, df-36-1=35,  $\alpha = 2.4377$

From Table 3, the results of the 2nd post-test after passing the course the use of supervision innovations Higher than after the 1st time with statistical significance at the 0.01 level, which indicates the resilience of the school director's learning and the tendency of learning development.

After taking consideration into each aspect, the school directors' satisfaction towards Lecturer and support Learning indicators cover 1) content 2) teaching skills theory 3) school director's skills of practical teachers 4) teacher characteristics 5) teacher-director relationship 6) 7) measurement and evaluation, and 8) in summary, the satisfaction with the school director's performance in teaching and learning. In conclusion, it shows important indicators by showing the satisfaction results School administrators were satisfied with the teaching quality and teachers' support in using supervision innovations. The internal supervision in the first semester of the academic year 2020 was satisfactory overall at the highest level ( $\bar{X} = 4.92$ , S.D.=0.14). New knowledge for local application In addition, the effectiveness of innovation supervision

The results of the study of learning retention of the student supervision innovation development project curriculum in secondary schools for teachers were as follows:

1.The results of the study of the elements and factors of learning program for enhancing development of supervision innovation by applying clinical supervision to raise the high order thinking of teachers in secondary schools under the Office of Basic Education Commission:

Component 1: Goal setting has the following indicators: 1) Teacher training on goal setting for learning management. To raise the quality of learning of learners. 2) Teacher training on curriculum analysis for students' suitability to raise the quality of learning for learners. 3) Teacher participation in setting goals 4) Coordinating with experts in supervision and recommending learning goal setting. to raise the quality of education and self-improvement The second component, considering students' readiness, were the following indicators: 1) Training teachers to be able to develop tools to assess students' basic knowledge; Analyzing student readiness. D. Systematic development of student data to enhance the learning quality of learners suitable for students. 3) Supervising teachers on the use of student data to enhance the quality learner's learning suitable for students Component 3 Contents have the following indicators: 1) Organizing Field study on learning resources that support the formulation of learning content to improve the learning quality of students. 2) Organizing workshops for teachers to increase their ability to identify learning content know

Improve the quality of learners 3) Work with experts to consult with teachers in identifying learning content. to raise the quality of students The fourth component of learning activities consists of the following indicators: 1) Problem presentation. The analytical stage means that the teacher can identify the problem, argument, and unclear information needed. analytical thinking means Encourage students to define, analyze and understand problems. Encourage students to practice gathering information and resources for each student to practice thinking about the given situation. Identify the nature of the data. manage information system and propose a hypothesis by setting alternatives to solve problems using logic principles for students to think and solve problems by themselves Similarity 4) Presentation and Discussion: Teachers give opportunities for students to share ideas from small groups to large groups in order to see differences and similarities together. and exchange ideas between students and teachers in order to expand and connect knowledge in solving problems. 5) Process Assessment Stage means teachers present problems or limitations of the lesson content for consideration and summarize the results for

students to evaluate their thinking methods and processes. To see if it is in line with the goals of development or not. The 5th component of the evaluation has the following indicators: 1) The teacher coaches the evaluation and evaluation according to the core curriculum of the Office of Basic Education in the management of Thai language learning for students. 2) supervising, following up and evaluating teachers' results in the program provided, and 3) working with experts to consult with teachers in defining Thai language learning content to strengthen students' critical thinking. Component 6: Feedback consists of the following indicators: 1) Training for teachers to share 2) Organize workshops to encourage teachers to update information or make it easier to find. 3) Collaborate with experts to raise the quality of education for learners

The context and the desirable current situation of learning management to improve the quality of education of students in secondary schools under the Office of the Basic Education Commission revealed that the current learning situation is at a high level, which can be ranked from highest to highest. Rarely, namely assessment of arrangements learning activities setting learning goals feedback consideration of student readiness and sequential content assignment For the analysis of desirable learning contexts, the research findings were at the highest level, sorted in descending order, including providing feedback. consideration of student readiness, assessment, setting learning goals learning activities and sequential content assignment

2. Creation and development of the innovative clinical supervision teacher development project to improve the quality of education in the Office of Secondary Education Service Area 26 by applying clinical supervision.

The supervision innovations developed consisted of the following components: 1) Principle of the system, 2) Objectives, 3) Goals, 4) Form and method of development, 5) Structure, 6) and content, comprising 6 sets: Set 1 Unit 1 Learning Development. proactive Learning goals, knowledge, theory and principles of administration and development Unit 2 Core teacher development by approaches to classroom administration in the 21st century Unit 3 Supervision practice towards excellence in educational reform skills and academic leadership of educational institutions Unit 4: Advanced Thinking Unit 5: Professional Learning Communities The use of supervision clinics to improve the quality of schools and teaching and learning administrators Unit 6 Research in the classroom to create innovation Knowledge Management Rubric Score Good Practice Satisfaction Assessment

Setting learning goals, Set 2, considering student readiness, Set 3, Determining content, Set 4, Organizing learning activities, Excavating 5, Assessment, and Set 6, Giving suggestions through 118 hours of development. Using a variety of development methods to create deep and sustainable understanding and learning skills for participants to use in curriculum development, including 1) training 2) self-improvement through self-study, development and The development process consists of 4 steps: 1) pre-development evaluation, 2) development, 3) integration between operations, and 4) evaluation. The results of the project evaluation from experts found that The utility, suitability and feasibility of the program are at the highest level.

The Supervision innovation development project results of teachers under the Maha Sarakham Secondary Educational Service Area Office Under the Office of the Basic Education Commission can be summarized as follows

The program on the leader teacher development program in learning supervision innovation by applying clinical supervision to raise the quality for enhancing high order thinking for leading teachers in secondary schools for Raise the quality Teachers in The Secondary Education Service Area Office 26 had the efficiency of 88.19 (E1) /83.47 (E2) which were higher than the committed 80/80 standard.

Innovative Supervision Teacher Development Project for Learning Supervision by Applying Clinical Supervision to Raise Quality Secondary School Curriculum Educational Administration for Teachers It was evaluated by the experts at the highest level ( $\bar{x} = 4.99$ ,  $SD = 0.02$ ).

The effectiveness index of innovation developed by applying clinical supervision was 0.5641, meaning that for teachers, knowledge gained was increased by 56.41%.

Teachers who learn through the use of innovation developed by applying clinical supervision. Achieve higher learning than before through the use of innovation developed by applying clinical supervision. developed at a statistically significant level of 0.01

Teachers who learn through the use of innovation developed by applying clinical supervision. There was no statistically significant difference in learning achievement after the study and the two weeks after the study. It can be said that there is a persistence of learning from learning using the developed innovations by applying the developed clinical supervision.

• Teachers who learn through the use of innovation developed by applying clinical supervision were satisfied with learning at the highest level ( $\bar{x} = 4.62$ ,  $SD = 0.42$ ). All 8 aspects, the results can be ordered in descending

order as follows: 1) Teacher qualifications ( $\bar{x} = 4.76, SD=0.50$ ) 2) Teachers have efficiency and effectiveness in teaching ( $\bar{x} = 4.69, SD=0.50$ ) = 0.51) 3) Content ( $\bar{x} = 4.59, SD=0.50$ ) 4) Teacher-Teacher relationship ( $\bar{x} = 4.57, SD=0.54$ ) 5) Practice and theory teaching ( $\bar{x} = 4.52, SD = 0.53$ ) 6) Measurement and Evaluation ( $\bar{x} = 4.59, SD=0.59$ ) 7) Practice Teaching Skills ( $\bar{x} = 4.65, SD=0.57$ ) and 8) Learning Media ( $\bar{x} = 4.55, SD = 0.60$ ), respectively.

## 7. DISCUSSION AND CONCLUSION

### DISCUSSION

The results of the study of the development of supervision innovations to raise the student's learning achievement by applying the clinical supervision. Discussions can be made as follows:

1. Innovative learning supervision by applying clinical supervision has 6 components and 23 indicators to enhance the quality of learners. 2) teacher readiness considerations, 3) content determination, 4) learning activities arrangements, 5) measurements, and 6) feedback, where all elements were assessed at the highest level. This may be due to the researcher's study of concepts, theories, and research related to elements and indicators of Thai language learning management to enhance the critical thinking of secondary school students. development of those elements and indicators It can be concluded that the researcher uses theoretical secondary sources that can be easily explained, reasoned and validated. This is in line with the curriculum with principles, reasons, goals, basic knowledge, basic assessment, pre-learning assessment activities, and a remedial curriculum. for expanding educational opportunities through 7 steps: 1) Objective setting 2) Learner characteristics study 3) Learning goal setting 4) Content determination 5) Learning activities management 6) Evaluation 7) providing feedback that is suitable for use in teacher development management of learning instead of test scores and 2) teachers were able to manage learning and had awareness and understanding of the teacher development program in learning management for expansion. Educational Opportunities Schools There are 5 components of learning activities: 1) problem presentation, 2) individual thinking practice, 3) small group thinking practice, 4) presentation and discussion of thinking results, and 5) evaluative thinking process. result

2. A study of the current context and desirable situation of learning supervision innovation using clinical supervision to improve the educational quality of students under the Secondary Educational Service Area Office under the Office of the Basic Education Commission found that that the current learning management context is moderate The desirable situation was at the highest level. The results of the research also found that the method for developing innovative supervision of learning management to enhance the quality of learners by applying clinical supervision. The frequencies, in descending order, included training and self-learning, which were in line with the Ministry of Education's mention of student-centered learning management. Based on the belief that every person can learn and develop themselves according to their full potential. The Thai language is considered the national identity and cultural repository of Thainess. It is also used as a communication tool to create understanding and good relationships between people, doing business, working and living together in society happily. In addition, it was supported by a study by Tikamporn Bunmakorn who researched teacher development in learning management for schools to expand educational opportunities. There were reports of development at the low level, the need for teacher development was at a high level, and the need for teacher development guidelines was at the highest level, which could be ranked from descending, including training, study visits, internal supervision, Teacher Teamwork Development, Workshops, Mentoring, Research and Self Development, Seminars, Direct Support, Further Education

3. The development of the Innovative Supervision Teacher Development Project by using clinical supervision to improve the quality of secondary school students under the Royal Thai Police 26 has the following components: 1) Principles 2) Objectives 3) Goals 4) Contents and activities, and 5) Innovation Assessment As for the content structure and curriculum development activities, it is divided into 3 phases: Phase 1) Pre-Development Evaluation Phase 2) Development, which consists of 6 sets, namely: Set 1) Setting learning goals Set 2) Learning Considering the readiness of the learners. Set 3) Content determination Set 4) Learning management through 118 hours to develop Development phases: training and self-development Phase 3) Integration between operations Phase 4) Post-development evaluation The results of the development of the Supervision Innovation Development Project manual for improving the quality of secondary school students under the National Secondary School Office 26 included 4 parts: 1) introduction, 2) innovation development projects, 3) utilization of teacher development projects, and 4) evaluation. They were consistent. with the study of Yod-anong Chomhongpipat (2010: 175-183) on the development of teachers, leaders of learning management, basic education reform that creates and develops teachers, leaders of learning management according to the basic education reform. It consists of seven areas: 1) vision), 2) principles, 3) objectives, 4) content, 5) processes, 6) structure, and 7) measuring and evaluating the

program's processes.

1. Evaluation of both the efficiency and effectiveness of developing innovative learning supervision with the application of clinical supervision to improve the quality of learners as follows:

Development of supervision innovations to raise the quality of education of students. By applying clinical supervision, the efficiency was 88.19 (E1) / 83.47 (E2), probably due to 1.1) The researcher studied the curriculum and documents related to the development of learning modules and sent them to experts for revision. It turned out that the learning modules developed in policy, strategy and strategic plans for teacher education were assessed at the highest level by peers. suitability part possibility and utilization in descending order, and 1.2) an experimental learning package developed in 2 digs with 2 groups, conducted by the researcher at all stages. There were 9 students who graduated with a master's degree in educational administration working for the Office of Educational Service Area 26. The results showed that the efficiency was 84.67/83.89 as a result of the completion of the improvement. of the developed modules obtained during the experiment to achieve the intended performance. which is consistent with the study results of Suchitra Inruangsing To develop learning modules on Thai life and culture. for vocational students at the Automotive Industry Technical College, it was found that 1) the module consisted of principles, reasons, goals, basic knowledge Basic Assessment learning activities before evaluating learning outcomes and remedial courses Efficiency 83.88/85.96. Therefore, learning management in terms of policies, strategies and educational strategic plans by using learning modules is suitable for students who are developing appropriately by applying appropriate principles and theories to make learning management. Knowledge is more efficient, resulting in students being able to develop their full potential. This is in line with the development of teachers with creative Thai language programs for secondary school students to suit both teachers and students by Chantarasombat, C.& Meekhamthong, P. (2563:10-20). The program has principles, reasons, goals, basic knowledge, Basic assessment , learning activities , pre-assessment learning , and remedial courses Efficiency 85.67/84.00 and Chantarasombat C. and Sombatsakulkit, E. (2021: 138-149) programs with principles, reasons, goals, basic knowledge. baseline assessment learning activities before learning assessment and remedial courses Efficient 86.53/83.00 It is said that the performance is higher than the set criteria as well.

2. Supervised teachers with supervision packages to improve the quality of learners by applying clinical supervision techniques. The Secondary Educational Service Area Office, Region 26 had higher learning achievement than before, at a statistically significant level of 0.01, possibly due to:

2.1) there was the learning management focusing on learning by doing and student-centered, and the learning activities were based on the knowledge and interest of students for self-development which help improves students' skills. Learning activities are, consequently, necessary to be focused on real practice in terms of individual, small group and whole class which will help improve students' skills, knowledge, systematic thinking, and critical thinking.

2.2) there was consistent with the concept of Phimphan Dechakhoopstating that student-centered is the learning management stimulating students to acquire new knowledge and innovations through the use of thinking process and social process to use the relationship and participation in learning and applying knowledge. Moreover, the results from the study also revealed that the use of the developed modules evaluated by the experts in the highest level made all modules had the efficiency regarded the committed standard. The students could learn from the modules according to their interests. With the appropriate content, language usage, exercises, and answer keys, this made students had knowledge, expertise, precision, and learning retention. The results of this study also found that the teachers had no differences between learning achievement on policies, strategic, and educational strategy plan after the completion and learning achievement of the learning completion after two weeks.

2.3) the learning modules were the motivation in learning management which the students could learn what they want and what they like. The developed modules also helped improve the critical thinking and analytic thinking from learning through each module. This was corresponded with Watthana Ra-Ngabthookwho stated that teachers who teach students have to design the teaching process to develop students to be qualified with the committed standard. Choosing of appropriate learning activities for developing the quality of students, the teachers have to know about basic of learning management and the learning goals specification for encouraging students behave in the desirable behaviors which is the simulation of students' attention in learning and assistance for the better learning which can be utilized in the daily life.

2.4) A learning atmosphere that supports learning is relaxed and based on individual differences. Teachers are satisfied with being supervised with a supervision package to improve the quality of learners by applying clinical supervision. This may be because the learning modules developed are attractive because the

learning activities are diverse, able to attract the attention of teachers appropriately. In addition, the teachers had the opportunity to practice learning activities that were appropriate to their abilities, which were in line with the concepts, theories and principles of learning unit development of Chomphan Kunchorn Na Ayudthaya, who had proposed suggestions for developing the learning program as follows: 1) developer have to concern with the general goals of the curriculum and consider carefully to check whether the developed learning goals can improve the graduates' competency as stated in the general goals of curriculum and to check whether the congruence of learning activities with the learning philosophy of the curriculum, 2) in there should be the targeted competencies for students, 3) after the learning goals were specified, , 4) for the development of basic evaluation, 5) for developing learning activities, 6) if the developer think that the developed leaning activities should be arranged, 7) all activities provided for the students to chooses should be equally provided to them for practicing, 8) for the evaluation after learning, 9) the developer might specify the remedial activities according to the appropriateness although the program was carefully design and develop, 10) the description of the modules should be short and clear, 11) the developer should allow team members and students to criticize for the improvement of the developed modules, 12 after the completion of the modules development, and 13) finally, the developer should be aware that the developed modules can be always changes which might stimulate the teachers to be satisfied on the developed modules. This was corresponded with the study of Rueangsaeng Hasakoon who studied the development of model of short course curriculum development through the use of modules for teaching and learning for the educational institutes under the Office of Vocational Education and found that the students had the satisfaction on the developed modules in the highest level. As mentioned earlier, this made the students had the satisfaction on the developed modules in the highest level.

### **CONCLUSION**

From what has been presented above Researchers have developed communication innovations. to raise the quality of learners using clinical supervision Raising the quality of teachers under the supervision of faith That will be useful, possible and suitable for implementation in real situations. Improving the learning achievement of teachers in the Secondary Educational Service Area Office 26 Maha Sarakham by applying educational supervision. path to excellence to supervision and coaching is appropriate by using school personnel as well as within supervision of school administrators, core teachers and co-development teachers and outsiders including continuous supervision both individual and group supervision and online supervision It also provides a detailed look at development using Pre-Action Review (BAR), During Action Review (DAR) and Post-Action Review (AAR) through hands-on learning. The project has practical classroom agreements. The school must prepare an implementation plan for teacher-teacher learning activities. Collaborative learning between teachers and students and joint learning between teachers and school administrators

This research was carried out to enhance the quality of educational institutions by using participatory action research, including teachers, key leaders, school administrators, supervisors, and teachers from higher education institutions to follow up, and upgrading the quality of education according to the planned work seriously and continuously. It is an innovation in the application of clinical supervision.

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