EVALUATION OF THE COACHING TEAMS PROJECT TO ENHANCE THE QUALITY OF EDUCATION

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Abstract

The purpose of this research was to the assessment of the "Coaching Teams" for increasing evaluation quality. The assessment model of the AMET project developed consists of 4 assessment points, which are appropriate assessment, monitoring assessment, efficiency assessment, and transfer of knowledge assessment. Find content validity by experts assess the consistency between each assessment and the objectives to be evaluated. The expert's evaluation found that the consistency index is between 0.60-1.00. When evaluating the Coaching Teams project to improve the quality of education, the budget year 2019 of 11 schools, it is found that the appropriate assessment, monitoring assessment, efficiency assessment, and transfer of knowledge assessment

were accordance with the objectives of the project. The average consistency of the evaluation results is 4.60–4.80 and the standard deviation is 0.45–0.55.

Keywords

Project Evaluation, Education Quality Development, Coaching Teams Project

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1. Introduction

In-country development, all sections need to work collaboratively for enhancing educational quality. The learning reform is one aspect of educational reform that contributes to the achievement and also improvement of educational quality (Office of the National Education Commission. 2000: A). Likewise, the educational quality or achievement was depended on many aspects including subsistence such as building, supplies appliance, and budget, then process such as management, learning and teaching, and supervisory. The most important point is gaining experience from sustainable learning to use in a real-life situation. (Office of Education Council,2017). Quality learning is conducted at all levels of learners. Thus, the government provide basic education to the citizen, and also provide opportunities to all social sections for managing, educating, teaching, assessment, and evaluating learners. Constitution of the kingdom of Thailand, Constitution of the Kingdom of Thailand B.E.1997 section 43 specified that institutions must provide instruction depended on learners' interests and proficiency. So that, personal differentiation, thinking process practice, situational confrontation, and knowledge application are considered for managing instruction. That produces as a result that learners can realize, perform, read, and continually study. (Office of the National Education Commission. 2000: 21)

According to quality evaluation and test results, all level of educational quality needs to improve urgently. For solving the problem, instructors have to develop their pedagogy and also develop students' quality at the same time. Education quality assurance is the way for developing and enhancing the institution which standardizes learners' quality. (Ministry of Education. 2007: 46 - 48) and Educational institutions have a diversity of evaluation approaches such as external inspection conducted by an authorized agent who perform a quality assessment based on expected standards (Office for National Education Standards and Quality Assessment, 2018: 55). Nonetheless, the quality of most schools in Kanchanaburi province has not met the standards. A previous study shows that only 39.2% of 17,562 schools nationwide (49.10% of Thai schools in total) were student-centered. Only 13.5% focused on students' analytic skills, creativity, problem-

solving skills, and decision-making skills. 21.6% used teacher evaluations to develop their instructions.

In terms of academic achievement, students achieved a low level of academic performance in all areas. Only 11.1% of students had excellent performance in analysis, synthesis, decision making, and creativity, and there was only 26.5% of Thai schools that adequately equipped their students with knowledge-seeking skills, passion in education, and prolonged self-development. With regard to the instructors, the study found that teachers still taught their students in a conventional manner with a lack of knowledge and teaching skills, especially in rural schools. This kind of school had difficulties in self-development due to the lack of instruction evaluation and inconsistent follow-up process. This could be one of the reasons why education development cannot be smoothly achieved. Apart from that, each school may use different forms of evaluation, resulting in different strategic plans or projects which depend on their contexts.

From such a problem Educational innovation is continuously developing. An approach is to organize an education quality development project with the mentorship from higher educational institutions. This kind of project shall give importance to all stakeholders such as the community, management team, teachers, students, higher educational institutions, and the educational zones. There is an on-going educational quality development project which has been established since 2017 (Kanchanaburi Provincial Education Office, 2017). It is a project that focuses on the cooperation from all stakeholders to develop education altogether towards instructional planning, supervision, observation, evaluation, and adaptation. With regards to the evaluation aspect, if the evaluation procedures are clear, the data collection process which includes inputs, process, outputs, outcomes, and impacts will be accordingly systematic (Parsons et al., 2013). This will further lead to effective evaluation results which can contribute to the improvement of education quality. Therefore, in this study, the researchers aim to develop an evaluation model for education quality development and local development projects with mentorship from higher educational institutions, in order to more effectively apply the evaluation results for developing education in the future.

2. Research Objective

The principal objectives of the study were as follows.

To evaluate the "Coaching Teams" project for increasing education quality.

1. To evaluate the context of the project in which needed for the preparation of the project: human resources, premises, budget, and appropriateness of objectives with project activities.

2. To evaluate the supervision process regarding supervision and coordination of the projects by the Office of Education, Kanchanaburi.

3. To evaluate the teachers' effectiveness in the instructional design and the application for learner development.

4. To evaluate the ability of teachers to impart knowledge for substantial purposes.

3. Literature Review

This part consists of Evaluation Model: CIPP Model (Stufflebeam, 1967) Responsive Evaluation (Stake, 1967), and Goal-Based Evaluation Model (Tyler, 1943).

3.1 Evaluation Model

The assessment model is an important framework or concept that demonstrates different processes or evaluations, depending on the preliminary agreement, which the assessment scholars have proposed to the assessor in a variety of ways. The researcher selected a model for assessing the Coaching Teams project to enhance the quality of education as follows:

3.1.1 CIPP Model (Stufflebeam, 1967)

Daniel L. Stufflebeam (1967) introduced the concept Regarding the evaluation model as the CIPP model. It is a continuous process that can be used with project management in gathering information to support decisions. The assessment objectives are to provide information for decision making. Therefore, it is imperative to have some useful details to make a decision (Faculty of Education at Chulalongkorn University, 2020). CIPP is a shortened form of Context, Input, Process, and Product. Stufflebeam et. Al (1967) defined the model as the evaluation process of data interpretation, data collection, and data analysis to use the information to make informed choices about the right choice. The assessment is aimed at assessing four aspects: context evaluation, input evaluation, process evaluation, and product evaluation.

There are 4 common criteria for the CIPP model, which are:

1. Context evaluation (C) serves to provide a rational action to identify the program's objectives, the possibility of the project implementation, and to answer some questions such as: Does the project meet the necessity or needs? Are the projects' objectives clear,

appropriate, and consistent with the organization's policies? Is it a feasible project in terms of opportunities to be supported by the organization?

2. Input evaluation (I) is used to give information for making a decision about the resource whether they are consistent with the project's objectives or not. The important questions would be: Are the factors specified in the project appropriate or not? Selected activities, designs, and choices are possible and appropriate at what levels?

3. Process evaluation (P) is an assessment during the implementation of the project to determine the advantages and disadvantages of the project. This is examined to answer such important questions as: Does the performance follow the plan? What activities can or cannot be done? Are there any problems, obstacles, inconsistencies, or not? How are the problems resolved?

4. Product evaluation (P) is an assessment to see whether the results that occur at the end of the project are in line with the objectives or as expected or not. This process uses data from the results obtained from the previous context evaluation, input evaluation, and process evaluation. This is examined to answer such important questions as: Are results consistent with the project's objectives? How is the quality of the results? Are there any other effects?

3.1.2 Responsive Evaluation (Stake, 1967)

Robert E .Stake (1967) has developed an assessment model based on Cronbach and Scriven's concept. It can be considered one of the forms that assessors can apply widely in project assessment. Stake's evaluation refers to a narrative process that judging the value of the project. The process involves collecting information and data analysis to lead to decision-making. There are two purposes of the assessment: to obtain information about the project's description and to obtain information that can be used to judge the value of a project (Faculty of Education Chulalongkorn University, 2020)

3.1.2.1 Evaluation Method

Stake proposes a structure of the *Countenance Model*, which classified the evaluation data into two parts, the *Description Matrix* and the *Judgment Matrix*. He suggested that before judging the value of any project, the assessor should conduct an analysis of principles and rationale. Stake's concepts of project evaluation address the importance of data collection from various sources to assess the real possibility of the project. According to this evaluation model, there are 3 considerations:

1) Antecedents refer to conditions or factors in the implementation of a project.

2) Transaction means an activity, performance, or interpersonal behavior such as teacher-student interaction, and students-students interactions, and etc.

3) The outcome means the product obtained from a project.

In order to collect data, a user must record these three types of information:

1) Intents mean what is expected, classified as an expectation about input, and expectation about output.

2) Observations refer to the actual conditions that occurred, classified as actual conditions regarding the input, process, and output.

3) Standards mean operating guidelines about a feature that should have, should have been made or should have had in the input, process, and output.

4) Judgment means the outcome of a decision about the input, process, and output.

Stake proposed two evaluation methods in 2 metrics, which are descriptive matrix and decision matrix as the following details.

1) The narrative matrix is divided into 6 channels:

Box 1 refers to the projected conditions that must exist before the implementation of the project. It is considered conducive to produce the expected results.

Box 2 refers to the processes that take place in the expected implementation of the efficient process. It is to produce the intended results.

Box 3 refers to the results expected to be obtained after the implementation.

Box 4 refers to the factors that exist before starting a project.

Box 5 refers to the operating process as observed from the project.

Box 6 means the actual product after the project is over

From boxes 1 to 6, the assessor must consider data in two directions: 1) vertically, that are channels 1 - 2 - 3 and 4 - 5 – 6, should be related. This is to see if the initial factors are favorable to the process or not. 2) horizontally, that is 1 - 4, 2 - 5 and 3 – 6, must be consistent. Thus, information obtained from actual practice in each vertical section should be consistent with what is expected or with what areas need to be improved. When considered both vertically and horizontally, they should be related and coherent. This shows that the project is a project that has achieved the expected results.

2) The decision matrix

In the judgment matrix, it is necessary to use a benchmark to determine the information obtained from the descriptive matrix. This benchmark may already exist or set up by a committee or project responsible person. As for the source of the decision, the assessor should also play a role, namely, he/ she must be concluded that how effective is the education program? It needs to improve and change at any point? What factors are supporting? What is an obstacle to the project? The concept of this model is different from that of others.

3.1.3 Goal-Based Evaluation Model (Tyler, 1943)

Tyler (1943) is a key leader in project evaluation. The goal-based evaluation model is defined that it is the evaluation process to compare the behaviors that take place with the behavioral objectives. It is believed that clear, concise, and specific objectives will be a good guideline for assessment

(Faculty of Education Chulalongkorn University, 2020)

He proposed the concept of the evaluation model in 1943, focusing on defining project objectives as behavioral objectives, and assess the achievement of those objectives.

In 1986, Tyler introduced the new Tyler's framework of the evaluation program which can be listed in 6 elements which are:

1. Appraising Objectives

2. Evaluating the learning Plan

3. Evaluation to Guild Program Development

4. Evaluation Program Implement.

5. Evaluating the Outcome of an Educational Program

6. Follow up and Impact Evaluation
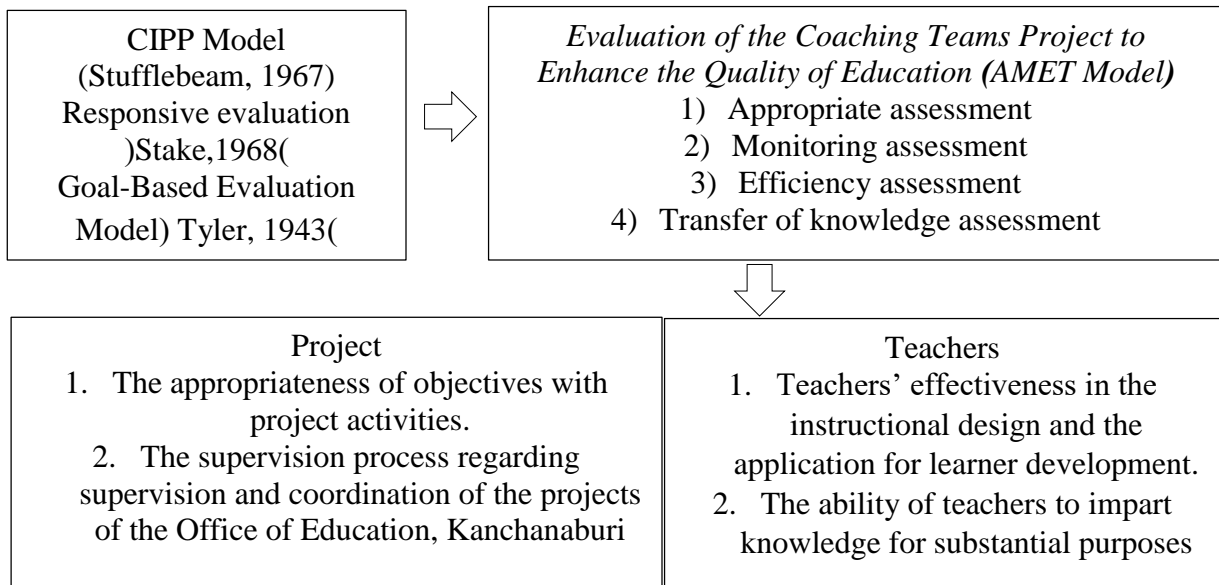
The Conceptual Framework can be shown in Figure 1

| CIPP Model (Stufflebeam, 1967) Responsive evaluation)Stake,1968(Goal-Based Evaluation Model) Tyler, 1943(| ⇨ | *Evaluation of the Coaching Teams Project to Enhance the Quality of Education (AMET Model)* 1) Appropriate assessment 2) Monitoring assessment 3) Efficiency assessment 4) Transfer of knowledge assessment |

| Project 1. The appropriateness of objectives with project activities. 2. The supervision process regarding supervision and coordination of the projects of the Office of Education, Kanchanaburi | Teachers 1. Teachers' effectiveness in the instructional design and the application for learner development. 2. The ability of teachers to impart knowledge for substantial purposes |

Figure 1: *Conceptual Framework Evaluation of the Coaching Teams Project to Enhance the Quality of Education (AMET Model)*

4. Research Tools and Research Tools Development

1. The evaluation model for the development of education quality and the local community with the mentorship from higher educational institutions in the Lower Central Region University Network

2. The Appropriateness Evaluation form, the Monitoring Evaluation form, the Efficiency Evaluation form, and the Transfer of Knowledge Evaluation form

3. The aptitude test regarding the Coaching Teams-based instructional activities for teachers

4. The evaluation form for the Coaching Teams-based instructional management

5. The evaluation form for the Coaching Teams-based instructional design

6. Questionnaire on the evaluation results

5. Research Methodology

This research uses a Mixed-methods research model that focuses on collecting both qualitative and quantitative data at the same time (The convergent parallel design) to study the true state without controlling variables or situations (Creswell & Plano, 2011).

5.1 Population and Sample

5.1.1 Population

The study population was 209 teachers from 11 schools under Kanchanaburi primary educational service area office 1-4, and Kanchanaburi secondary educational service area office 8, under Kanchanaburi provincial administrative organization, and under the Border Patrol Inspection Division 13.

5.1.2 Samples

The samples used for this study were:

1. 39 teachers from the 11 schools, via purposive selection.

2. The *Coaching Teams* Supervision Committee consists of 7 supervisors from Kanchanaburi Rajabhat University, and 18 supervisors and academic officers.

5.2 Research Process

This research aims to evaluate the "Coaching Teams" project for increasing the education quality of the Office of Education, Kanchanaburi. The researchers used mixed methods by combining both quantitative and qualitative types of research. The research processes can be explained as followed:

Step 1 Study and review project evaluation approaches as well as the "Coaching Teams" project with regards to the improvement of the education quality.

Step 2 Draft the AMET evaluation model with 4 main criteria, which include appropriateness, monitoring, efficiency, and transfer of knowledge, and then identify the suitable indicators for the project.

Step 3 Test the AMET evaluation model with the content validity conducted by 5 experts to evaluate the consistency between the evaluation criteria and the objective of the evaluation. The acceptable consistency test results from the experts should provide the consistency value between 0.60-1.00, the appropriateness value between 4.40-4.80, and the S.D. value between 0.45-0.55.

Step 4 Develop the Appropriateness Evaluation form, the Monitoring Evaluation form, the Efficiency Evaluation form, and the Transfer of Knowledge Evaluation form by reviewing previous. Study the indicators and then draft the evaluation forms with a 4-level rating scale. Next, test the content validity conducted by 5 experts, and then evaluate the consistency

between the evaluation criteria and the objective of the evaluation. The acceptable results provided by experts should show that the consistency value between 0.60-1.00.

Step 5 Apply the adjusted AMET evaluation form to the Coaching Teams project in order to improve the education quality in the fiscal year 2019.

Step 6 Conclude the project evaluation results and then review the results by two project managers.

Table 1: *Time Period, Evaluation Criteria, and Indicators of the AMET Evaluation Model*

Time Period	Evaluation Criteria	Indicators	Principles
Prior to the Project	A: Appropriateness (The appropriateness and the consistency of the project/plan according to the needs of the community and the institution)	1. Have procedures to arrange the plan and the project. 2. Have a project plan that is consistent with the needs of the community and the institution.	1. Systematic data study 2. Inside-out blasting' 3. Minor problems solving 4. Hierarchical operation
During the Project	M: Monitoring and Follow-uu (Application of the project plan to setting up activities, monitoring and follow-up)	1. Appoint the observer/evaluator. 2. Arrange the activity plan and monitoring and follow-up plan together. 3. Organize the activities, and then monitor and follow up as planned. 4. Collect the activity results for further development.	5. Geosocial 6. Overall perspective 7. Freedom from textbooks 8. Being economical, simple, and efficient 9. Simplification 10. Participation 11. Common interests 12. One-stop service
End of the Project	E: Efficiency (Knowing and understanding roles and	1. Understand the assigned roles. 2. Have the knowledge of the assigned roles.	13. Natural approach to natural conservation 14. Using unjust to

| tasks, economical innovation design, and practical application for students, teachers, the institution, and the community) | 3. Design the innovation economically and efficiently.
4. The results (outputs, outcomes, and impacts) can influence the students, teachers, the institution, and the community. | fight unjust
15. Planting trees in people's mind
16. "Loss is profit"
17. Self-dependency
18. Having enough to live |
| After the End of the Project | T: Transfer of Knowledge (Distribution of the knowledge that can be maintained for sustainable development) | 1. Transfer the knowledge from an organization, a team or a person to another organization, another team or another person.
2. Sustain the knowledge in order to allow people and society further use it sustainably. | 19. Sufficiency economy
20. Being honest with each other
21. Happy working
22. Perseverance
23. Unity |

6. Data Analysis

The statistics used in this research are percentage, mean, and standard deviation for the quantitative data, and content analysis for the qualitative data.

7. Findings

The results of the application of the AMET evaluation form to the Coaching Teams project in order to improve the education quality in the fiscal year 2019 are divided into 4 sections: 1) appropriateness, 2) monitoring, 3) efficiency, and 4) the transfer of knowledge.

Section 1 Appropriateness

Appropriateness means the schools had procedures to plan activities and projects in accordance with the needs of the community and the institution. It was found that the schools had procedures to plan activities and projects in accordance with the needs of the community and the

institution. There are three main stages which are 1) appointing the provincial-level supervisor team, 2) arranging the operational committee meeting to plan, draft the monitoring guideline, and evaluate the outcomes of the fundamental education services, and 3) creating the supervision, observation, and evaluation prototype model for the fundamental education services with regards to the contexts of different areas (this also includes the coaching technique based on the developed prototype). The prototype for supervision, monitoring, and evaluation model consists of 7 manuals. The first one is the manual for supervision, monitoring, and evaluation of the provincial fundamental education services that are both compatible and suitable for each area's contexts according to the Coaching Teams project in order to improve the education quality. The second one is the participatory supervision, monitoring, and evaluation manual using the coaching technique to create learning activities in order to improve the education quality, implemented by Kanchanaburi Primary Educational Service Area Office, District 1. The third manual is the supervision, monitoring, and evaluation manual with the guideline and advice integrated with King Rama IX's working principles; this encourages the teachers to educate the students towards active learning. The fourth manual is the supervision, monitoring, and evaluation manual with the coaching technique regarding the active learning model in order to improve student achievement in Kanchanaburi Primary Educational Service Area Office, District 3. The fifth one is the participatory supervision, monitoring and evaluation manual using the coaching techniques to improve creativity toward learning activities in order to improve the education quality in Kanchanaburi Primary Educational Service Area Office, District 4. The sixth manual is the supervision, monitoring, and evaluation manual using the coaching techniques for the teachers in order to create innovative classes and improve the education quality among junior high school students in Kanchanaburi Provincial Administrative Organization School (Baan-Kaow-Vittiya). The last manual is the supervision, monitoring, and evaluation manual with the use of coaching techniques and PLC process in order to improve the education quality among Thepmongkol Rangsee School's Grade 9 students in Primary Educational Service Area Office, District 8.

According to the analysis of the academic achievement, the needs of each area, and the opinions from the management teams and teachers of the 10 sample schools, there is the need of the Coaching Teams in order to improve the education quality. Moreover, the activities from the Coaching Teams project can contribute to the development plan for enhancing the education quality that could be applied to all 10 sample schools (100% of the total population). Therefore, it can be

implied that this project can be customized according to the needs of each community and comply with the regulations of each institution.

Section 2 Monitoring

At this stage, the schools had appointed supervisors, created the activity plan, set up the evaluation procedures, performed the evaluation accordingly, and collected the results of the activities in order to further develop the activities. In detail, the procedures consist of: 1) arranging the 2-day operational meetings with all target schools, including conducting the data analysis of the O-NET test results at a provincial level, problems, and the needs of the schools in order to improve the academic achievement with regards to each school, management team, teachers and students; 2) appointing the inspectors for each school, by which teachers from each school shall be supervised by the supervisor team composed of a professor from the Faculty of Education, Kanchanaburi Rajabhat University and 3-4 educational supervisors from the Educational Service Area Office and Kanchanaburi Provincial Education Office; 3) creating the activity plan and procedures with the supervisors, in which there were two supervision training sessions for each school in May and September 2019; 4) according to the activity plans and procedures, supervisees and supervisors of each school conducted two supervision training sessions altogether in May and September 2019 with a 100% participation rate alongside the online sessions. Furthermore, there were also data collections that supported the development of educational innovation by using the local learning centers to enable improvement in all schools. This progress shows that the observer/evaluator from all 10 schools performs according to the coaching team's advices which represents a 100% rate.

Section 3 Effectiveness

The project is expected to increase role realization and understanding, effectiveness in innovation design, and positive effects on students, teachers, schools, and communities. This stage is consisted of:

7.1 Role Realization

The Coaching Teams project's committee to supervision, monitoring, and evaluation for the provincial fundamental education was established to improve the education quality which conforms to the contexts of local communities participating in the project. Their major role is to implement the guideline to supervision, monitoring, and evaluation for provincial primary education management. Then, they shall supervise, observe, and evaluate the guideline in order to enhance the

education quality for the target schools as well as analyzing the results of the supervision, monitoring, and evaluation of the provincial primary education top management and teachers of the participating schools. Another role is to create an understanding of provincial primary education management to ensure the consistency between contexts of each area in the Coaching Teams project in order to improve the education quality. The research results showed that the committee to supervision, monitoring, and evaluation for the provincial fundamental education, school administrators, and teachers from the participating schools all realized the roles of each party at a significant level.

7.2 Role Understanding

The role understanding among the research participants was assessed by a 25-question aptitude test on the Coaching-based instructional activity management for teachers, which is a true/false test (by which (✓) shall be marked the statement is right while (×) shall be marked if the statement is wrong). The researchers found out that, according to the test results of the teachers who participated in the 2-day provincial O-NET operational meeting for solving problems and fulfilling the needs of the schools to develop the academic achievement, the participants achieved the average score of 20.83 with the standard deviation of 1.44 (83.3% of the full score). This means the teachers who participated in the project had adequate knowledge and understanding of the Coaching-based instructional activity management since the beginning of the project.

7.3 Economical and Practical Innovation Design

7.3.1 This stage focuses on the innovative design of each school's instructors in the Coaching Teams project with the goal of education quality improvement. The process is described as follows.

7.3.1.1 Ban Ong Lu School, under the Kanchanaburi Primary Educational Service Area Office, District 1, conducted a mathematic achievement enhancement project for Grade 6 students by using the "Combination of Three" principle (administrators, teachers, and students). First of all, the school administrators accepted the policy, then set up a plan with the teachers. After that, the teachers were sent to participate in the operational meeting with the follow-up supervision. Second, teachers learned to improve themselves, adjust their instructions, and encourage their students. Third, students were encouraged to develop and acquire learning skills to gain academic achievement. From the observation, the researchers discovered that most of the teachers had applied 'active learning', which focuses on participation and practice, to their instructions. As a result,

students were more interested in games and activities, encouraging them to practice towards the direct learning approach and obtain more understanding.

7.3.1.2 The study on instructional problems in Wat Nong Takhrong School, under the Kanchanaburi Primary Educational Service Area Office, District 1, shows that their students were struggling with reading and writing. According to the problem analysis, the school managed to improve the education quality by arranging the active learning activity with 7 steps as follows: 1) a pre-class exercise was provided, 2) teachers and students discussed fraction in a mathematic class by writing it down on the board as the introduction to the lesson, 3) teachers explained the common fraction by writing it on the board and letting the students brainstorm to find the answer, 4) teachers let the students form a group of 4 before teaching about comparison and fraction sorting of fraction, 5) teachers asked each group of students to create a question regarding the topic, 6) students presented their questions, and 7) teachers asked the students to complete a handout regarding the topic. The result of the study revealed that most of the students understood fractions at a good level. Moreover, the students were encouraged to raise their hands to ask questions when needed, and they also performed well in the post-test exercise. After class, the students were able to apply fractions to daily life as well. However, there were some students who still did not fully understand. This shows that students needed to be more enthusiastic about learning and study harder after class. Also, the instructional media needed to be improved in accordance with the active learning approach. During the project, there was no improvement in this aspect which led to ineffective student enhancement. The researchers also found out that the teachers should acquire more knowledge to increase accuracy in teaching as well as realizing the individual capacity of each student to support their learning. Furthermore, students seemed to prefer practice to memorization. In the following supervision session, supervisors were expected to suggest or bring in innovation that could help the school to gain the better academic achievement.

7.3.1.3 Ban Kao Wittaya School, under the Kanchanaburi Provincial Administrative Organization, had a plan to improve their education quality as follows: 1) educational standards and indicators of each course were analyzed to plan the instruction, 2) department heads doublechecked the instructional plan, 3) the department heads evaluated the instructional plan before the application process started (the instruction plan consisted of indicators/learning outcomes, contents, learning process, instructional media, evaluations, and recommendations/application), and 4) class activities

were conducted with regards to active learning and all teachers were asked to report the results on a monthly basis.

7.3.1.4 Thepmongkol Rangsee School, under the Secondary Educational Service Area Office, District 8, conducted a project to improve its students' academic performance by applying the MS2TP model to their instructional management as explained below.

M: Management

S: Students

T_1: Teachers

T_2: Teaching

P: Parents

Figure 2: *MS2TP Model*

First, in terms of the management aspect, there was an MOU signed in order to improve the education equality between the director of Secondary Educational Service Area Office, District 8, the director of Thepmongkol Rangsee School, and other related organizations. This also includes the MOU on education development of the eight groups of core subjects signed between the department heads and the director of Thepmongkol Rangsee School. Second, regarding the students, student town hall meetings were organized to develop an understanding of the project. Third, for the teachers, they were encouraged to engage in the self-development process conducted in seminars. Fourth, concerning the teaching or instruction, workshops were arranged in order to support teachers in terms of instructional design, self-development, and effective teaching techniques. Lastly, another key stakeholder, parents, were encouraged to participate in school conferences in order to promote cooperative problem-solving.

The active learning process composes of course analysis, educational standard analysis, lesson plan development, student differentiation, lesson plan-based activity arrangement, lesson plan-based student practice, student-centered instruction, group study, real practice, and integration of the King's Philosophy. In terms of students, during a class presentation, students tended to focus on their own achievement, leading to less attention to other groups' presentations. In order to increase student participation, it is necessary to make them interested ins practical activities. Concerning the application of innovative media, students could use their products from each assignment to contribute to tourism advertising. Moreover, with regards to learning outcomes,

students learned in groups, which allowed them to brainstorm, develop unity, embrace their local community, and integrate reading, writing, listening, and analyzing skills. All of the above helped the students to understand the lesson better. In accordance with the teacher development's results, students could apply the King's Philosophy into their study. They became happier and more eager to learn and realize the importance of the Thai language. Due to the participatory instructional management, students comprehended the principle of democracy, how to share knowledge and apply their talents, and how to perform well in class. Regarding the local community aspect, students could learn from their local community effectively.

7.3.1.5 Ban Sa Long Ruea School, under the Kanchanaburi Primary Educational Service Area Office, District 2, implemented a 2-step guideline to academic achievement development. The first step is the analysis of the NT results of Grade 3 students, ONET results of Grade 6 students, national standard test results of Grade 9 students, and their school performance in order to improve the instruction for the students. The second step is the analysis of the school environment in general such as core subject analysis, administration, teachers, instructional management, students, classrooms, average scores of each course, course-by-course analysis, analysis of below-average students, individual analysis of each student, and the PLC analysis of students' individual problems.

7.3.1.6 Ban-Non-Ga-Nag school, under the Kanchanaburi Primary Educational Service Area Office, District 4, implemented a strategic plan which consists of the following stages. First, the community-based curriculum and educational standards were developed by the cooperation between school administrators, parents, and the local community. Second, student-centered classes were conducted. Third, the community was encouraged to participate in the study network, by which educational activities could be organized both inside and outside the school. This also included the online classes via the DLTV system which was integrated into the learning program from the primary graders up to the 6th grade. These online classes were operated in the following steps: 1) designing the mind map, course standards, and lesson expectations, 2) creating the lesson objectives, 3) creating the contents that encourage student learning, 4) using the instructional media both inside and outside school, and 5) evaluating the outcomes before, during, and after the lesson. The school also evaluated their supervision in 4 stages: 1) collective planning between the supervisors, supervisees and the supervision supporters, 2) enhancing understanding about the whole supervision process, 3) implementing the plan systematically, and 4) evaluating the results such as the appropriateness of the process, activities, the interaction between the supervisors and the

supervisees, and the working environment. The results from the evaluation showed that students learned from the school-based learning center towards study trips and real experiences outside the school. They also acquired the skills to ask questions, find answers, and link them towards the integrated activities of the eight-core subjects and the learning center.

7.3.1.7 Wat Pa Tham Phu Toei School, under the Kanchanaburi Primary Educational Service Area Office, District 3, developed the 5Q guideline for student enhancement. The guideline consists of the following principles. First, Q–Goal refers to inspiration from colleagues. Second, Q–PLC/LS refers to encouraging participation from stakeholders and the community in accordance with the targeted quality. Third, Q–Coach refers to teacher community enhancement. Fourth, Q–Info refers to data reporting to the school administrators. Lastly, Q–Network refers to a knowledge-sharing network across schools. There were also 5 steps of the education improvement process, including 1) meeting, planning, and analyzing the academic achievement for O-NET, 2) analyzing the problems regarding academic achievement as well as their solutions, 3) designing the lesson plan with regards to the problems, 4) conducting classroom activities according to the plan, and 5) improving the instruction based on the supervisors' recommendations.

7.3.1.8 Ban Huai Kob School, under the Kanchanaburi Primary Educational Service Area Office, District 3, implemented the education quality improvement process consisting of the following steps. First, teachers' knowledge of designing innovation was enhanced. Second, the student enhancement process was developed with a focus on the active learning concept. Third, there were five operational activities at this stage, including the analysis of school problems, strategic planning to improve student achievement, lesson plan, and instructional media development, plan-based operation, and performance review. Fourth, supervision, follow up, and evaluation from the Supervisor Teams were conducted. Finally, the whole process results were concluded.

7.3.1.9 Wat Tri Rat Ta Na Ram School, under the Office of the Private Education Commission, organized the cooperative development supervision program which focused on the supervision of teachers regarding problem-solving, systematic education quality improvement, and student enhancement. This helped the teachers to improve their teaching skills. In term of the progress of academic achievement development, the school had discussed with the stakeholders and implemented the following six-stage procedures: 1) analyzing the current situation and problems, 2) preparing the supervision, 3) planning the supervision, 4) operating the supervision, 5) evaluating

the supervision, and 6) improving the supervision. The school also implemented a guideline to student-oriented education quality improvement, which includes the evaluation of the real situation, class observation, project-based teaching, and process evaluation according to the educational standards and indicators. Modern technology was also applied to improve teaching, critical thinking, learning center, and local wisdom studies.

7.3.1.10 Luang-Pra-Kob-Nitisarn and Than-Pu-Ying-Tawin School, Border Patrol Police School implemented a guideline to academic achievement development consisting of four main steps as follows. First, the current state of academic achievement in this school was examined and analyzed. Second, goals for the academic year 2019 were set up in order to increase the academic achievement of the five core subjects by 5% and to raise students' average scores of the O-NET tests by 4%. Third, the operational plan was developed based on the ideology of quality classroom. This means the teachers shall pay attention to student enhancement, classroom reform management, and systematic instructional management according to the core subject standards. Lastly, data collection and analysis were conducted, including documents and evidence showing the advancement toward the goal. The school had enhanced the student performance in accordance with the educational standards and the self-sufficiency philosophy. This also includes the development of teachers and staff as lifelong learners and professionals in class management. Stakeholder participation was encouraged in order to promote the school as a learning center for the community.

7.3.2 Teacher Evaluation on Instructional Management

The evaluation of the teachers regarding their instructional management based on the Coaching Teams project's policy consists of 6 indicators, which are: 1) class preparation, 2) class introduction, 3) activity management, 4) class closure, 5) selection of instructional media for active learning and 6) lesson evaluation. The results showed that the teachers who managed their instruction according to the Coaching Teams project's policy had achieved all of the six indicators and completed the twenty-two activities with a 100% participation rate. Detailed as shown in the table below.

Table 3: *Time Period of Teacher Evaluation on Instructional Management. (N=39)*

Indicators	Execution results (percentage)
1. Class preparation	100.00
2. Class introduction	100.00
3. Activity management	100.00

4. Class closure	100.00
5. Selection of instructional media for active learning	100.00
6. Lesson evaluation	100.00

7.3.3 Teacher Evaluation on Instructional Design

The evaluation of the teachers in terms of their instructional design based on the Coaching Teams project's policy consists of 6 indicators, including 1) the components of each module, 2) the analysis of curriculum maps, 3) the analysis of the subject contents, 4) the design of the activities based on the active learning concept, 5) the choice of instructional media, and 6) the evaluation of the instructional activity management based on the Coaching Teams project's policy. The results showed that the teachers who designed their courses according to the Coaching Teams project's policy had achieved all of the six indicators and completed the twenty-two activities with a 100% participation rate. Detailed as shown in the table below.

Table 4: *Time Period of Teacher Evaluation on Instructional Design. (N=39)*

Indicators	Execution results (percentage)
1. the components of each module	100.00
2. the analysis of curriculum maps	100.00
3. the analysis of the subject contents	100.00
4. the design of the activities based on the active learning concept	100.00
5. the choice of instructional media	100.00
6. the evaluation of the instructional activity management based on the Coaching Teams project's policy.	100.00

7.4 Outputs/Outcomes/Impacts

In regard to the outputs, outcomes, or impacts on students, teachers, schools, and local communities, the researchers discovered the following results. First, students' learning process in English, Thai, math, and science classes conformed to the analytic results of the school achievement in accordance with each area's contexts. Second, teachers were well-equipped with the ability to create instruction innovation, for instance, an instructional media and integrated learning plan on addition, subtraction, multiplication, division, fraction, measurement, algebra, and probability. Third, students were satisfied with the learning process, and teachers were also satisfied with the Coaching Teams' activities and realized the importance of innovative activity development from the

educational achievement analysis of the needs of each district. These are important to both teachers and students. Fourth, teachers gained direct experience and recommendations from the Coaching Teams to develop innovation based on the analysis of the educational achievement according to the needs of each district and their colleagues. This encouraged the development of education quality. Finally, administrators, teachers, and students were satisfied with the learning environment that conformed to the contexts of each participating school in the local communities.

Section 4 Transfer of Knowledge

This stage emphasizes the transfer of knowledge from one organization/team/person to another organization/team/person with the expectation of maintaining and developing substantial knowledge. In this process, a group of teachers shared their knowledge and experiences with each other both within a school and between schools via online seminars. This also includes the improvement of courses by applying the knowledge from one school to another as well as the presentations of knowledge transfer results at provincial and regional levels.

Figure 3: *A Group of Teachers Shared their Knowledge and Experiences with each other both within a School*

8. Discussion

1. The AMET evaluation model consists of 4 criteria, including appropriateness, monitoring, efficiency, and transfer of knowledge. Due to the needs for the consistency between the policy and practice of the project, there must be the appropriate assignment of roles, collective planning, and cooperation from the very beginning to the end in an effective way, not just only focusing on the results (United Nations, 2017). In order to sustain the results of the project and be able to be a role model for other organizations, the project evaluation must focus on the concrete indicators (Team,

2011). Furthermore, there must be clear and regular procedures such as pre-project evaluation, ongoing–project evaluation, and post-project evaluation (Landua, 2018). The evaluation results of this kind of projects are expected to provide significant information for improving similar projects in future research.

2. The AMET evaluation model is developed by integrating the King Rama IX's working principles. Due to the fact that his majesty the king's principles are based on the Middle Path philosophy which conforms to the actual circumstances, they are practical and could maximize benefits in the Thai society (Mahidol University, 2017). This kind of project should be categorized by each area's contexts either to effectively solve problems or develop the area. Accordingly, project managers should be assigned to draft the project and its operational draft before conducting the project and then evaluating the impacts of the project. After the project is conducted, the result of the project shall be concluded as a lesson for the next projects (Kanchanaburi Rajabhat University, 2017). This is to foster the learning process of the community which can strengthen the community itself and promotes the community as a role model for other communities.

RECOMMENDATIONS

1. The AMET evaluation model is applicable for any project involving the cooperation with many stakeholders in order to systematically improve the education quality in a sustainable manner. In order to apply the AMET evaluation model, it requires adaptation to the contexts of each area and the key points of the project.

2. Future study should focus on the balance between top-down theory policy which focuses on the "systematic study" or "hierarchical operation" and the bottom-up practical policy which focuses on diverse aspects such as "geosocial", "freedom from textbooks", "self-dependency", "inside-out blasting" or "happy working", in order to create an evaluation model that can represent how to achieve shared benefits economically, simply, and most efficiently according to the self-sufficiency economic model in different contexts.

3. Future study should review the evaluation approaches that can specify the level of outputs, outcomes and impacts in order to achieve practical effectiveness evaluation and reliable value assessment of a project.

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