

# The Need for Developing Teachers' Learning Management for Encouraging the Students' Critical Thinking in Primary School, under Office of The Private Education Commission

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## Abstract

The objectives of this research were: 1) to study current situation and desirable situation of teachers' learning management for encouraging the students' critical thinking, 2) to evaluate the teachers' need for learning management for encouraging the students' critical thinking, and 3) to search for guidelines of teachers' learning management for encouraging the students' critical thinking in Primary School, under Office of The Private Education Commission. The samples were 364 school administrators and teachers being responsible in learning management, obtained by Krejcie and Morgan' Table. The target group in interviewing were from 3 best practice schools. The research instruments using for data collection were the questionnaire with reliability=0.94 and the semi-structured interview. The statistic using in data analysis included the percentage, mean, standard deviation, and Modified Priority Needs Index (PNI<sub>modified</sub>). The research findings found that: 1) The teachers' overall current situation was in "High" level. Considering each aspect, found that most of them were in "High" level except the curriculum analysis which was in "Moderate" level. For teachers' overall desirable situation, found that it was in "High" level except the student analysis was in "The Highest" level. 2) The teachers' need assessment in learning management for encouraging students' critical thinking, ranked in order from high to low as follows: the learning activity management, curriculum management, measurement and evaluation, and student analysis. 3) The guidelines for teachers' learning management in all of 4 aspects included: the workshop, self-study from real work practice, and following up by coaching and mentoring techniques.

**Keywords:** Learning management, critical thinking, primary school

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## Introduction

The twelfth issue of National Economic and Social Development Plan (2017-2021) specified guidelines for developing people to obtain knowledge and competency in valuable livelihood by focusing on children's systematic thinking skill and creativity by adjusting the learning process promoting children to learn through their practicing which was suitable with their brain development in each age. The basic skill development in science, technology, engineering, mathematics, art, and foreign languages was emphasized on. (Office of the National Economic and Social Development Board, 2016) It was supported by National Education Plan (2017-2036) aimed at students by focusing on every student to have learning characteristic and skill during the 21<sup>st</sup> century, 8 Cs including: the critical thinking and problem solving skill, creativity and innovation skill, skill in understanding different cultures and paradigms, collaborative skill, team working and leadership, information communication and technology skill, and media literacy.

Furthermore, guidelines for providing learning skill management during the 21<sup>st</sup> century emphasized on students' skill in learning and innovation for determining the students' readiness into more complex working world in the present time including: creative thinking and innovation, critical thinking and problem solving, and communication as well as collaboration.

(Office of the Basic Education Commission, 2015)

Recently, it could be viewed that the educational institute put more emphasis on students' thinking development and promotion. The thinking competency development was an integral intention and objective of basic educational management especially, the critical thinking. Since it was reasoning ability and reflecting focused on decision making to believe or act further or not. It could be stated that the problem was used for careful considering, reasoning for information or problem situation by deliberation before making decision or practice, using the attitude in searching for knowledge as well as conclusions reasonably. (Ni-ti-bo-de Suk-cha-roen and Wai-wut Yoo-nai-seel, 2016) It was very necessary to provide learning management for encouraging students' critical thinking. The important persons playing role in moving the students sustainably, were teachers who provided learning process had to obtain their skill in thinking process, management, situation facing, and provided the real life experience learning for students. The teachers had to have their critical thinking before. Cave (1993) indicated that the teachers with high level of critical thinking would provide various kinds of teaching methods, change many instructional activities, teach higher order of thinking, and provide activity for promoting the application skill. For the teachers with evaluative



findings with low creative thinking, would teach by teacher-centered technique. They spent most of the time in teaching how to use computer, assigned each student's activity to be participated in. Teachers set rule and regulation in class and emphasized on textbook. Therefore, teachers being responsible in experience management for students to learn based on educational objective, played an important role in developing their students' critical thinking especially the role for being students' major role model (Washington, 1987 ; Gonzales Rubio, 1988). It was supported by Wachara Lao-rean-de's (2013) statement that teaching students to think, teachers had to have thinking competency, thinking skill, and thinks before being able to teach students to be competent in thinking. Moreover, learning during the 21<sup>st</sup> century, students had to practice learning by doing and searching for knowledge by themselves. Teachers played their role as coaches for learning design, helping students to accomplish goal. They should not play their role as experts. But, they had to search for knowledge the same time as their students.

According to overall educational management findings of educational management in an important indicator, was the ONET of National Institute of Educational Testing Service (Public Organization) (NIETS) 2017 academic year. The second important indicator according to the knowledge and skill evaluation from 15 year old students in

reading, mathematics, and science based on research conclusions in PISA 2015 in the student evaluation project and various countries, (Institute of the Promotion for Teaching Science and Technology, 2013) found that the students in private school, in overall, most of them had lower score than average score. It reflected educational performance of Thailand which needed to be improved in learning goal especially the critical thinking process to be used in real life, and applied in every subject. Besides, the former teacher development in private school was not obviously systematic. Most of training came from teacher development project from central division as the regional group training including a lot of trainees during the end of semester. Sometimes, there was teacher development training with Office of the Educational Service Area. As a result, private school teachers lacked of knowledge and competency development in efficient instructional management. In addition, one part of teacher training was influenced by direction of human power development from public sector, based on basic educational strategy and standard related to teacher development. Furthermore, recent teachers' learning management situation also found that there were not sufficient activities and not be continuous, without stable objective. It might be related to both of media and technology using in learning management, was not suitable and was limited in number. Besides, the present learning management was



emphasized on academic excellence for students to be compete with other people which was the standard indicator for educational management only. The teachers were not able to add or train the students' thinking skill fully. Consequently, the students had more inappropriate behavior. Teachers lack of knowledge and understanding, skill and confidence in learning management for students' problem solving. Moreover, the media using for learning activity management was very limited although it was very important n educational management for students to gain desirable characteristic and high quality. (Tad-sa-ne Bun-rang, 2017) So, Primary School Teachers should be developed to be critical thinkers to be able to apply in learning management for encouraging students to be able to think and to act based on students' quality according to basic level of educational reform.

According to the above reasons and significance of teachers' learning management development for encouraging students' critical thinking in Primary School, under Office of the Private Education Commission which would lead to sustainable educational development further. It was necessary to study the need for teachers' learning management development in encouraging students' critical thinking in Primary School, under Office of the Private Education Commission which would obtain complete information as foundation for correcting as well as developing the teachers' teaching efficiency development,

and providing good effect on quality of students and educational institute in the future.

## Objectives

1. To study current situation and desirable situation of teachers' learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission.

2. To evaluate the teachers' need for learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission.

3. To study guidelines for teachers' learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission.

## Methodology

The study of need for developing the teachers' learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission, was implemented based on steps by the researcher as follows:

Step 1: current situation and desirable situation of teachers' learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission, were studied.



Step 2: the need index was analyzed by using Modified Priority Needs Index (PNI<sub>modified</sub>). In addition, the significance of need was ranked in order.

Step 3: the guidelines for developing the teachers' learning management for encouraging the students' critical thinking, in Primary School, under Office of The Private Education Commission, were studied from Best practice Schools. as implemented based on steps by the researcher as follows

### Population and Samples

1. The population using in this study included 4,826 school administrators and teachers being responsible in 8 learning substances of Primary School, under Office of The Private Education Commission, from 437 schools in North Eastern Region.

2. The samples included 364 school administrators and teachers being responsible in 8 learning substances. The sample size was determined by using sample size formula by calculating from Krejcie and Morgan' Table.

3. The target group in in-depth interview and field trip study from 3 best practiceschools by Purposive Sampling including: 1) Don Bosco Wit-ta-ya School, Muang District, Chol-bu-ri Province, 2) Mari Memorial School, Muang District, Buriram Province, and 3) Nog-ying Kindergarten School, Tra-kan Peuch-pon District, Ubon Rachatani Province.

### Research Instruments

1. The questionnaire asking teachers' current situation and desirable situation in the learning management for encouraging critical thinking in Primary School, under Office of The Private Education Commission. There were 3 parts of questionnaire.

Part 1: the respondents' demographic data, was the Checklist.

Part 2: the questions asking teachers' current situation and desirable situation in the learning management for encouraging critical thinking in Primary School, under Office of The Private Education Commission. It was the 5 Level Rating Scale.

Part 3: the open-ended questionnaire.

2. The instruments using for studying the guidelines for developing teachers' current situation and desirable situation in learning management for encouraging critical thinking in Primary School, were the semi-structured interview, and the observation form.

#### 3. Data Collection

3.1 Step 1: the official document from the Faculty of Education, Mahasarakham University, in asking for being supported in sending the questionnaire to 364 school administrators and teachers being responsible for learning management in 8 learning substances, was requested. The duration for data collection was during 2-3 January 2019.



3.2 Step 2: the official document from the Faculty of Education, Maharakham University, in asking for being supported for providing information and cooperation by telephone in appointing the date and time for interviewing the stakeholders by oneself, using interview form by recording, using audio tape recorder and digital camera during 14-16 March 2019.

### Data Analysis

1. The current situation and desirable situation of teachers' learning management for encouraging the students' critical thinking in Primary School, under Office of the Private Education Commission, were analyzed as follows:

1.1 Part 1: the respondents' demographic data were analyzed by using the descriptive statistic in Frequency and Percentage.

1.2 Part 2: the respondents' demographic data were analyzed by using the mean ( $\bar{X}$ ) and standard deviation (S.D.).

1.3 Part 3: the open-ended questionnaire data were analyzed by concluding into Content Analysis.

1.4 Data of opinion level on current situation and desirable situation of teachers' learning management for encouraging students' critical thinking in Primary School, under Office of the Private Education Commission, were analyzed by using Modified Priority Needs Index (PNI<sub>modified</sub>) Technique (Su-wi-mol Wong-wa-

nich, 2015) for ranking the need for program development further.

1.5 Data were analyzed and by developing the conclusions from interview content, and organizing the content from data in order to be basic information for program development further.

## Results

Conclusions of research findings and development of need in developing the program enhancing teachers' learning management for encouraging their students' critical thinking in Primary School, under The Office of Private Education Commission, were as follows:

1. The findings of current situation and desirable situation of teachers' learning management for encouraging their students' critical thinking in Primary School, under The Office of Private Education Commission, found that most of the respondents' demographic data were females, their ages ranged between 36-45 years old, they graduated Bachelor's Degree, their status in school were the head of 8 learning substance teachers. Their work experiences in current status were 5-10 years. For training experience in learning management for encouraging critical thinking, they experienced training. The training topic included creative thinking. The size of working school, was large sized school. The number of students were 1,000-1,499 students. Besides, the mean, standard



deviation, current situation, desirable situation in teachers' learning management for encouraging students' critical thinking

in Primary School, the details were shown in Table 1.

**Table 1** The mean, standard deviation, current situation, and desirable situation of teachers' learning management for encouraging the Primary School Students' Critical Thinking, under The Office of Private Education Commission.

Aspect	Teacher's Learning Management for Encouraging Student's Critical Thinking	Current Situation			Desirable Situation		
		$\bar{X}$	S.D.	Interpretation	$\bar{X}$	S.D.	Interpretation
1	Student Analysis	3.52	0.65	High	4.47	0.48	Highest
2	Current Analysis	3.07	0.27	Moderate	4.42	0.44	High
3	Learning Activity Management	2.95	0.34	High	4.45	0.39	High
4	Measurement and Evaluation	3.21	0.39	High	4.42	0.42	High
Total		3.19	0.41	High	4.44	0.43	High

According to Table 1, found that the teacher's overall current situation in learning management, was in "High" level. Considering each aspect, found that most of them were in "High" level except the curriculum analysis which was in "Moderate" level. For the teacher's desirable situation of learning management, found that in overall

it was in "High" level except the student's analysis which was in "The Highest" level.

2. The evaluative findings of teacher's need for learning management in encouraging the student's critical thinking, under The Office of Private Education Commission as shown in Table 2.



**Table 2** PNI<sub>modified</sub> value and ranking of teacher's learning management for encouraging student's critical thinking in Primary School, under the Office of Private Education Commission.

Evaluation List	Current Situation	Desirable Situation	PNI <sub>modified</sub>	Need Ranking
1. Student Analysis	3.52	4.47	0.27	4
2. Curriculum Analysis	3.07	4.42	0.44	2
3. Learning Activity Management	2.95	4.45	0.51	1
4. Measurement and Evaluation	3.21	4.42	0.38	3
<b>Total</b>	<b>3.19</b>	<b>3.77</b>	<b>0.40</b>	

According to Table 2, found that the evaluation of teacher's need for learning management for encouraging student's critical thinking in Primary School, under The Office of Private Education Commission, ranking in order from high to low as follows: The overall 4 aspects of need assessment, found that the first order of need for learning management (PNI<sub>modified</sub> =0.51). The second order was the curriculum analysis (PNI<sub>modified</sub> =0.44). The third order included the measurement and evaluation (PNI<sub>modified</sub> =0.38), and student' analysis (PNI<sub>modified</sub> =0.27)

3. The findings in guidelines of teacher's learning management for encouraging the student's critical thinking in Primary School, under The Office of Private Education Commission, by studying from 3 best practice schools through documentary study and focus group discussion the school administrators, and teachers teaching

8 learning substances who were leading teachers in providing critical thinking regarding to student's analysis, curriculum analysis, learning activity management, and measurement and evaluation, found that the teacher's development technique in each aspect of learning management for encouraging student's critical thinking in Primary School, under The Office of Private Education Commission, the appropriate techniques were as follows: 1) the workshop training for teacher to obtain knowledge and understanding in learning management for encouraging critical thinking, 2) self-studying through real practice, and 3) following up through coaching and mentoring. Providing knowledge and comprehension learning management emphasizing on critical thinking for teachers, the teacher had to apply knowledge from training in learning management for student's critical thinking through real practice as well as coaching





and mentoring. In addition, there were 5 techniques to be developed in major activity including: Self-Learning, Workshop, Brainstorming, Knowledge Sharing, and Knowledge Formation.

## Discussion

1. The study of current situation in teacher's learning management for encouraging Students' critical thinking, in Primary School, under the Office of Private Education Commission, in overall, was in "Moderate" level except student analysis which was in "High" level both in overall and each aspect. Since learning management for encouraging student's critical thinking, there were important condition and supportive aspect in providing students' development to accomplish goal including both of basic experience and readiness especially their critical thinking, reasoning and negotiating in explanation for understanding related information and news before concluding one's opinion and belief in incidence. Therefore, if teacher wanted to develop potentiality and readiness in thinking or intelligence to be appeared in school, the student should be emphasized in priority. Furthermore, the condition of measurement and evaluation, curriculum analysis, and learning activity management were in the second order respectively, would affect students' quality critical thinking. It was congruent with Tid-sa-na Kam-ma-ne's (2011) viewpoint that the process promoting

one's critical thinking including to enhance students in observing, guessing, wanting to know and search for answer by hypothesis testing. Moreover, Cha-na-tip Pon-kul (2011) concluded his approach in critical thinking process that one's thinking was important and complex which should not be mistaken including 5 learning steps of thinking: 1) to specify the problem in thinking, 2) to collect related data from thinking extensively, delicately, far vision, correct way of thinking, and divergent thinking, 3) to analyze data, 4) to consider alternative through data considering, and 5) to express opinion and predict the future by evaluating the alternative and reasoning the value. The principle of learning management focusing on students' learning by their brain so that they would construct knowledge through thinking process by themselves based on reliable and explainable steps. Ennis (1999) process or critical thinking ability consisted of 12 skills including: 1) the issue or problem determination or specification, 2) the analytical thinking in negotiation, 3) the clear question asking and answering, 4) the considering in data reliability, 5) the observation and judgment in self-observation findings, 6) the deduction and deduction finding judgment, 7) the induction and induction finding judgment, 8) the value judging, 9) the word defining and meaning judgment, 10) the specification of hypothesis, 11) the decision making for practice, and 12) the interaction with the others. The researcher synthesized integral



material in body of knowledge in the educators' theoretical approach through explanation that the critical thinking consisted of students' Abilities and Disposition. For critical thinking development, the students should be developed their good attitude towards thinking, knowledge and understanding as well as related skill. Consequently, thinking was a process caused by the persons' knowledge application in doing useful behavior or to accomplish specified goal. According to the condition, it could cause the context and current situation of teachers' learning management for encouraging students' critical thinking in Primary School, under the office of Private Education Promotion Commission, the overall practice was in rather High level ranking in order as follows: the student analysis, the measurement and evaluation, the curriculum analysis, and the learning activity management.

2. The evaluation of teacher's learning management for encouraging students' critical thinking in Primary School, under The Office of Private Education Promotion Commission, the needs were ranked in order from high to low as follows: the overall need assessment from all of 4 aspects ranking in order from high to low including: the learning activity management, the curriculum analysis, the measurement and evaluation, and the student development. It might be due to the learning management was a process in using resource related to

learning as learning management so that the students would have experience or training through efficient reinforcement continuously and coordinately in order to be effective in changing students' permanent behavior based on potentiality. It was supported by Ko-wat Ted-sa-but's (2017) conclusions in guidelines for developing Primary School Teachers' critical thinking including: 1) the awareness development and inspiration stimulation, 2) the knowledge provision in critical thinking, 3) the application of critical thinking approach in learning management, and 4) the following up and evaluation. A-nan Na-tong-ton (2010) stated that when the administrators used technique and method, media, technology, resource, and other material and equipment in supporting teachers and stakeholders to obtain details in one topic or many topics through activity management, encouragement, support, or collaboration in various forms so that the teachers would be energetic in searching for new technique to be implemented, and able to provide learning management for their students. As a result, the students would accomplish in learning as well as learn happily. They would gain better knowledge and competency quickly with each person's full potential. Wi-rota San-rat-ta-na (2005) stated that the development model caused by teachers' need could be believed that the teachers were persons who determined their need for self-development best. What to be developed was related to direct learning experience.



Therefore, the teachers' development step based on this model would be started by specifying the need in establishing work plan based on performance evaluative plan.

3. The study of guidelines for teachers' learning management in encouraging the students' critical thinking in Primary School, under The Office of Private Education Promotion Commission, by studying from 3 best practice schools, found that the appropriate techniques for teacher development in each aspect of learning management in encouraging the students' critical thinking in Primary School, under The Office of Private Education Commission, including: 1) the workshop training for teachers to obtain knowledge and comprehension in learning management in encouraging the students' critical thinking, 2) the self-study through real practice, and 3) the following up through coaching and mentoring, provision for teachers' knowledge and comprehension in learning management focusing on critical thinking, the teachers had to apply knowledge from workshop training in learning management for their students by real practice, following up for coaching and mentoring. There were 5 techniques of important activity should be developed including: Self-Learning, Workshop, Brainstorming, Knowledge Sharing, and Knowledge Formation. It might be because to the researcher's field trip and interviewing the administrators and teachers in Primary School, under The Office of Private Education

Commission, documentary study from best practice school through the study in school action plan, various school projects, strategic plan for school development, educational administration structure, minutes, the third round external quality audit, and SAR. Moreover, the experts investigated congruence, propriety, and feasibility of developmental guidelines for teachers' learning management for encouraging students' critical thinking in Primary School. After teacher development from workshop, self-study through real work practice, and coaching and mentoring were benefit for teachers in obtaining knowledge, and teaching process practicing for critical thinking. Teaching the students to understand the critical thinking, it was necessary for teachers to have both of knowledge and comprehension in critical thinking very well. Consequently, the instructional process would be efficient. It was supported by research findings of announced policy by the Ministry of Education that "2006, the year of instructional management reform," (The Ministry of Education, 2010) specifying the students' critical thinking development as the major goal of development to be used as practice guidelines by students under The Office of Basic Education Commission. As a result, the educational quality and standard would be implemented by emphasizing on students ; thinking process development. It could be stated that the teaching process for teachers' critical thinking was congruent implementation with policy of the Ministry



of Education and The Office of Basic Education Commission so that the teachers would be able to provide learning management for students' critical thinking in school efficiently further.

## Recommendations

### 1. Recommendations for application

1.1 The school administrators should emphasize on strategic determination for teachers' learning management in encouraging the students' critical thinking in Primary School, under The Office of Private Education Commission, since it was the first priority need for teaches to have potentiality in learning management.

1.2 The Primary School Students might not be able to occur by short period of learning and practice. Therefore, the school should stimulate, encourage, and support students to develop their critical thinking competency and habit continuously.

1.3 Both of schools and Office of Primary Education Service Area should bring document in guidelines for developing critical

thinking in Primary School in order to develop students in each school for obtaining critical thinking competency and habit so that they would develop critical thinking.

### 2. Recommendations for future research

2.1 The Primary School and Office of Primary Education Service Area should promote or conduct research in developing teaches' critical innovation.

2.2 The causal factor analysis should be included in need assessment leading to solving the cause of problem and the need.

2.3 The research study in developing the development system for students' critical thinking in order to be used for student development in their educational institute or school, by each educational institute or school continuously.

2.4 After need assessment and development, the following up study in development of teachers' learning management in encouraging the students' critical thinking in Primary School, under The Office of Private Education Commission, should be conducted.

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