

*Full Length Research Paper*

# **Development model of competencies for teachers of Early Childhood Development Center under the local administrative organization with application of empowerment evaluation**

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**This research focuses on synthesizing concepts and needs for the development of teachers' competencies and studying the performance in accordance with the development model of competencies for teachers of the Early Childhood Development Center with application of empowerment evaluation. The research was divided into 3 stages. In the first stage, the needs for the developments of teachers' competencies were investigated. The informants were 274 teachers and 10 educators and directors of Division of Education Religious and Culture. The research instruments were questionnaire and interview form. In the second stage, the development model which was verified by 5 experts. In the third stage, the evaluation of performance in accordance with the development model of 30 teachers and 5 supporters and researchers was conducted. The research instruments were test, observation form, questionnaire, and interview form. The quantitative research used statistics to analyze for mean, standard deviation, t-test, and Modified Priority Need Index while the qualitative research used content analysis approach. The research findings revealed that teachers' needs for functional competency development showing its priority need index from 0.336 to 0.416. In addition, the educators and the directors of Division of Education Religious and Culture showed their needs to develop teachers' functional competencies. Moreover, the development model of competencies for teachers consisted of 6 components: Basic concepts and principles, objectives, expected outcomes, training activity content, training activity process, and evaluation. The teachers' mean scores of post-training were higher than pre-training at statistical significance level of 0.01.**

**Key words:** Early Childhood Development Center, local administrative organization, competencies, empowerment.

## **INTRODUCTION**

Early Childhood Development Center is an educational institution according to the Section 4 of National

Education Act B.E. 2542 (1999) and Amendments (Second National Education Act B.E. 2545 (2002) and

Third National Education Act B.E. 2553 (2010) section 18 (1) prescribing that early childhood education should be provided in child care center, child development center, Early Childhood Development Center, or other names. The local administrative organization has to be in charge in performing educational mission as the first standard and qualified educational institution responding thoroughly to community in terms of childhood education administration of 2 to 5-year-old children according to the authority and intention of the government (Department of Local Administration, 2017). In developing quality, efficiency, and effectiveness of educational management, teacher is very important as an administrative resource in achieving the success of organizational activity operation. Therefore, a successful organization has to rely on personnel with competencies according to vision, mission, and goal of the organization. In other words, personnel have to possess knowledge, skills, abilities, and characteristics that are important to their operation, and they have to have cooperation and teamwork to get efficiency of work (Smithikrai, 2015).

Empowerment evaluation is a concept proposed by Fetterman (1998), and it is initially from action research. The empowerment evaluation applies concepts, techniques, and findings of evaluation to stimulation of development and improvement of self-regulation using both quantitative and qualitative approaches. It is also considered as a process supporting people in self-development employing self-evaluation and reflection. The stakeholders normally consist of internal personnel taking responsibility for self-evaluation and external personnel taking responsibility for being counselor and facilitator; however, it depends on the potential of internal personnel in what level of support they need (Wongwanich, 2015). Empowerment evaluation relies on teamwork; in other words, one cannot empower others, but one has to empower oneself. Thus, this evaluation is not ended up with perceiving the value of evaluation compared to the traditional one, but it is a process carried out continuously for development, improvement, and lifelong learning. The product obtained from empowerment evaluation is learning organization, so external personnel play a role in developing personnel in the context of empowerment evaluation in many activities (Fetterman, 1996; Wongwanich, 2015). (1) Training is a development process for internal personnel to be able to conduct self-evaluation with the provided knowledge about evaluation method. The training can enhance the internal personnel to get insight in all steps of work and have more understanding of the method compared to passing on knowledge directly. (2) Facilitation is provided by evaluators who are responsible for introducing a guideline on how to evaluate, operational management,

handling with problems, and giving advice to increase reliability in the success of evaluation process. (3) Advocacy is a process of implementing evaluation results. The results are proposed to the stakeholders especially administrators to ask for supportive operational resources. (4) Illumination is motivated by the results of empowerment evaluation that can provide experiences through self-learning community and become a learning community. (5) Liberation is provided for individuals to be able to develop and learn by themselves to be in accordance with their predicted future. This can promote individuals to think independently based on the prior conceptual frameworks in order to build and specify their own guidelines.

According to a survey on teachers' competency concept, most of them have understanding of competencies at moderate level. As a result, teachers have confusion and misunderstanding in processes or methods of performance evaluation based on their own competencies that lead to the lack of integration. Therefore, empowerment for teachers is required particularly in competency evaluation. Performance appraisal training is important to teachers because they play a great role in developing educational management to achieve higher efficiency and quality. The process in considering self-esteem consists of competency evaluation to examine ability and performance towards operation and responsibilities so that teachers can be enhanced in learning management for students. Teachers' competencies can indicate their knowledge, skills, and essential characteristics that facilitate them to achieve the goals at work that influence the quality and success of school. According to the study of Nonhuaro (2014), an empowerment evaluation model was developed to enhance the educational assessment competency of in-service teachers in Prachinburi Primary Educational Service Area Office 2. Investigating the current situation, teachers possessed the concept of learning measurement and assessment at moderate level. Chariyamakarn (2014) carried out a case study on building evaluation capacity for teachers using empowerment evaluation and assessment-based instruction approaches to develop Thai language communication skills of students. Teachers in 2 schools were asked to complete the concept test of measurement and assessment. The result demonstrated that teachers in School A scored 12 points (or got moderate level of measurement and assessment concept) while teachers in School B scored 9 points (or got poor level of measurement and assessment concept). Consistent with interviewing teachers about the concept in assessment, teachers in School A showed their misunderstanding about measurement and assessment, but they could use

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various types of assessment tools. On the other hand, teachers in School B showed their misunderstanding about measurement and assessment, and some of them still lacked knowledge of assessment.

According to the concept of empowerment evaluation, it supports continual and sustainable development and provides opportunities for stakeholders in the organization to get involved in conducting self-evaluation and reflection for self-determination. Investigating the concept of functional competencies, teachers of Early Childhood Development Center showed their moderate level of understanding in the competencies. From this result, teachers still misunderstand the process or method of performance evaluation according to their own competency, and they also lack integration and cannot apply the concepts for empowerment evaluation to functional competencies. For this reason, the researcher highlights creating the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation so that it can be used as a guideline for competency development which is appropriate with organizational vision, mission, and goal for developing the quality of learners.

### Research questions

- (1) What are the needs for the development of teachers' competencies of the Early Childhood Development Center under the local administrative organization?
- (2) How should the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation be?
- (3) How is the quality of development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of created empowerment evaluation?

### Objectives

- (1) To synthesize concepts and needs for the development of teachers' competencies of the Early Childhood Development Center under the local administrative organization.
- (2) To create the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation.
- (3) To study the performance in accordance with the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation.

### METHODOLOGY

#### Stage 1: Synthesizing concepts and needs for development of teachers' competencies of the Early Childhood Development Center under the local administrative organization

- (1) Related concepts and theories were reviewed: (a) theory on empowerment of Block (1987), (b) empowerment mode of Fetterman (2001), and (c) functional competencies e.g. learning design, learner development, and classroom management.
- (2) Current situation and needs for self-development were investigated in terms of functional competencies for teachers of the Early Childhood Development Center, educators, and directors of Division of Education Religious and Culture under the local administrative organization.
  - (a) Creating and developing questionnaire and interview questions based on related concepts, theories, and studies.
  - (b) Investigating current situation and needs for self-development in terms of functional competencies for teachers of the Early Childhood Development Center by using questionnaire.

#### Population and sample

Population and sample were divided into 2 groups. (1) The population consisted of 874 teachers of the Early Childhood Development Center under the local administrative organization. The sample consisted of 274 teachers of the Early Childhood Development Center under the local administrative organization determined by using the Yamane's formula (Yamane, 1967). (2) The population was 425 people comprising educators, and directors of Division of Education Religious and Culture, Khon Kaen Province. The sample consisted of 6 directors of Division of Education Religious and Culture, Khon Kaen Province and 4 educators, Khon Kaen Province. Purposive sampling was used for selecting the sample.

#### Research instruments

- (1) Questionnaire,
- (2) Structured interview

#### Data analysis

- (1) Mean, standard deviation, t-test, standard error of mean, degree of freedom, statistical significance, and modified priority need index.
- (2) Content analysis.
- (3) The quality of questionnaire was analyzed for its validity and reliability, and it was tried out with 30 teachers of the Early Childhood Development Center under the local administrative organization who were not the sample of the study. The result of try-out using Cronbach's alpha coefficient (Tayraukham, 2018) showed the reliability of 0.874 for the whole questionnaire.

#### Stage 2: Creating the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation

- (1) Drawing up the development model of competencies, 6 components were found: (a) basic concepts and principles, (b) objectives, (c) expected outcomes, (d) training activity content, (e) training activity process, and (f) evaluation.
- (2) Then the development model of competencies were evaluated by experts and brought to create a manual for training on

empowerment evaluation according to teachers' functional competencies.

### **Research instruments**

- (1) Training manual,
- (2) Test of functional competencies,
- (3) Empowerment evaluation, and
- (4) Survey form of satisfaction with the model

The training manual was divided into 3 main parts. (1) Introduction was composed of background and significance, related concepts and theories, principles of activity management, empowerment evaluation, and steps of activity management. (2) Method was composed of training guidelines, training methods, and training topics. (3) Training plan was composed of 4 units; unit 1: self-esteem, unit 2: self-empowerment in working, unit 3: development of functional competencies, and unit 4: evaluation of functional competencies.

### **Data analysis**

Data were examined for suitability. The result of evaluation was calculated for mean and standard deviation and then interpreted based on the five-scale criteria (Srisa-ard, 2015). The result of evaluation was at between high and highest level of suitability; mean of 3.51 and over, so it did not have to be improved or rectified. However, if it was between moderate and lowest level of suitability; mean of below 3.51, it should be improved or rectified according to the experts' suggestions.

The development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation was obtained.

### **Stage 3: Studying the performance in accordance with the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation**

#### **Population and sample**

The population consisted of 874 teachers of the Early Childhood Development Center under the local administrative organization, Khon Kaen Province. The sample consisted of 30 teachers of the Early Childhood Development Center under the local administrative organization, Phon District, Khon Kaen Province. The selection was conducted based on inclusion and exclusion criteria as follows:

- (1) Inclusion criteria (All teachers of the Early Childhood Development Center, and evaluators and supervisors participated as a group of supporters).
- (2) Exclusion criteria (There were no evaluators and supervisors as a group of supporters).

A group of supporters consisted of 4 persons that were the directors of Division of Education Religious and Culture and the educators and 1 person that was researcher. In purposive sampling, the selection was based on 2 characteristics: (1) those who were evaluator of the sample that was teachers of the Early Childhood Development Center who were, and (2) those who were supervisor of that sample that was teachers of the Early Childhood Development Center.

### **Research instruments**

- (1) Evaluation form of teachers' functional competencies, (2) forms of self-evaluation and empowerment, and (3) questionnaire

### **Data analysis**

- (1) Scores of empowerment were compared. Satisfaction with evaluation model of empowerment was examined. Quality of model was evaluated according to evaluation standards.
- (2) Teachers were asked while evaluation model of empowerment was being used, and behaviors during the training were observed.

## **RESULTS**

### **Stage 1**

(1) The first stage shows the result of concept and theory synthesis from documents, texts, and studies related to empowerment in working and empowerment evaluation in order to gain background information for creating an initial development model of competencies with application of empowerment evaluation. The result can be concluded as follows:

(a) Self-empowerment refers to a process of change, development, and involvement in promoting individuals to discover their own performance through different methods that can be useful for self-development such as ability improvement in working with creativity and raising awareness of self-esteem. These increase potential of individuals and support them to get successful in working by themselves without being controlled by others. The self-empowerment consists of 3 main principles. (i) „Sharing“ is learning information, ideas, and knowledge from each other to get more clearly understandable on objectives and goals at work as well as criteria for performance evaluation in order to build a sense of success ownership together. (ii) „Collaboration“ is working together in a team. (iii) „Mutuality“ is building trust and respecting to each other. The process of self-empowerment comprises 8 steps: formulation of work standards and strategies, assignment, development and training by educating or passing on knowledge, feedback, appreciation or acceptance of mistakes, evaluation, improvement, and conclusion.

(b) Empowerment evaluation refers to the use of concepts, techniques, and findings obtained from evaluation to improve operation and self-determination. The stakeholders' abilities and skills are increased in terms of planning, operation, and self-evaluation for better improvement with 5 principles. (i) „Training“ can lead to scope definition, creation of related activities, and evaluation of organizational general circumstances. Also, the training can create needs in setting goals and strategies to become successful as well as documentation to demonstrate the progress of any project. (ii) „Facilitation“ gives empowerment evaluators

opportunities to act as facilitators at work. The facilitators are responsible for dealing with problem as well as clarifying misunderstandings with discussion and giving advice so that success can be guaranteed. (iii) „Advocacy“ can give administrators or financial supporters opportunities to set goals and strategies and design how to get successful in evaluation. It can also link performers“ self-evaluation to the performance at group or project level in the future. (iv) „Illumination“ can be used in developing valuation and improving projects. It additionally plays a role in connecting the prior experiences to the new ones or making understating clearer. (v) „Liberation“ is an activity allowing one can understand restrictions, and it is related to transferring a concept from one place to another one. The empowerment evaluation consists of 3 steps. (i) „Mission determination“ is a process reinforcing personnel under a project to get involved in. The empowerment evaluators have to facilitate in introducing topics to the project participants as many as possible. In the meantime, the participants have to be reinforced with questions that give all of them opportunities to present about mission of the project. (ii) „Taking stock“ provides opportunities to have a conversation that leads to a wider discussion. This is a way to consider and receive accurate data relying on 2 processes. First, activity definition is facilitated by empowerment evaluators introducing the topics for project members and participants to express their ideas about the most important activities or activities that are associated with the project. Second, definition of activity significance provides everyone opportunities to get involved in prioritizing the activities selected from the previous process. (iii) „Planning for the future“ allows members and participants under the project to work together in setting goals corresponding to mission and standpoint depending on cooperative brainstorming, analysis, and conclusion.

(c) Competency evaluation means a systematic process of interpreting, recording, and gathering information based on a defined goal. Then things“ value judgment is conducted based on 4 principles of standardized criteria. (i) „Measurement“ has to be done according to the objectives. Competency evaluation is performed to examine how much success of the performance based on the objectives. Therefore, when conducting a competency evaluation, goal and agreement have to be fixed certainly. (ii) „Tools with high quality“ have to be used. Although the objectives of measurement are clear and the tools are selected according to the objectives, the measurement probably lacks the quality when using tools with low quality. In other words, when low-quality measurement results were implemented, errors can possibly happen. Thus, to receive reliable results of measurement, tools with high quality should be used. (iii) „Justice“ has to be taken into consideration. The justice is an important moral principle that has to be held by evaluators at all time of evaluation. In other words,

measurement and evaluation have to be performed without bias. (iv) „Interpretation“ has to be done correctly. Evaluation aims at implementing the results to describe and compare them in each characteristic. Therefore, interpretation has to be done carefully according to principle and methodology of interpretation as well as logic, reasonability, and consistency with evaluation principles. The competency evaluation is performed under 7 steps: setting goals of evaluation, analysis of evaluation results, developing evaluation tools, data collection, data analysis, value judgment of evaluation results, and reporting and implementing for development. (d) Performance evaluation is defined as a process of collecting, analyzing, interpreting, and recording data from both formal and informal evaluation. These can be conducted all the time of the evaluation using various tools that are suitable and consistent with behaviors to be measured. The obtained results are then interpreted and compared with 4 principles of criteria. (i) „Placement assessment“ is carried on before the beginning in order to search for data showing readiness, interest, level of knowledge, and essential skills. (ii) „Diagnostic assessment“ is a way to find out what kinds of development the teachers achieve and how much accuracy for what they have previously known to inquire into the problems of individual development. (iii) „Formative assessment“ is continuously used for learning development so that learning can be progressive. (iv) „Summative assessment“ is performed to examine learning achievement, and it is used as data to compare with pre-learning assessment using diverse method and tools in order to perceive teacher“s development. The performance evaluation consists of 6 steps. (i) Teachers are informed about goal that they have to achieve. (ii) Brainstorming is cooperatively conducted to define the criteria to indicate goal achievement publicly. (iii) Examples of prioritized duties are provided for teachers to understand their difference, and they can be used by teachers for comparing their duties and knowing how to develop them. (iv) Learners are given feedbacks by stakeholders based on criteria through reinforcing words for self-development. (v) Teachers are allowed to assess themselves for getting improved. (vi) Teachers do their own self-evaluation and reflection, and stakeholders evaluate teachers.

(2) According to teachers“ opinion survey, they need functional competency development; Modified Priority Needs Index from 0.336 to 0.416. Asking opinions of educators and directors of Division of Education Religious and Culture, teachers are required to have some techniques for developing and promoting learners on physical, emotional, mental, social, and intellectual aspects to achieve desirable characteristics. In addition, teachers should perform according to the organization’s policies on child development, self-development, and organization development and evaluate these

**Table 1.** Experts' opinions on components of development model of competencies for teachers with application of empowerment evaluation.

Components	Suitability		Result	Possibility		Result
	$\bar{x}$	S.D.		$\bar{x}$	S.D.	
Basic concepts and principles	4.80	0.44	Highest	4.80	0.44	Highest
Objectives	4.60	0.54	Highest	5.00	0.00	Highest
Expected outcomes	5.00	0.00	Highest	4.80	0.44	Highest
Training activity content	5.00	0.00	Highest	5.00	0.00	Highest
Training activity process	4.80	0.44	Highest	5.00	0.00	Highest
Evaluation	4.60	0.54	Highest	4.80	0.44	Highest
Average	4.80	0.33	Highest	4.90	0.22	Highest

quantitatively, qualitatively, and advantageously. Both evaluators and evaluatees make an agreement in advance. For activities or projects that are successful according to the agreement, their results have to be publicized. Importantly, teaching is a behavior that can be learned, and learning is improvement of behaviors. Supervisors can help teachers change their behaviors to improve their experience provision; in other words, teachers are supervised and monitored about learning management in order to improve some parts according to the supervisors' suggestions. The following examples are the words from interviewing educators and directors of Division of Education Religious and Culture.

*"Teachers have techniques for developing and promoting childhood on physical, emotional, mental, social, and intellectual aspects to achieve desirable characteristics."*

(A Directors of Division of Education Religious and Culture)

*"Teachers' performance should accord with organizational policy on childhood and organization development, and it is then evaluated quantitatively, qualitatively, and advantageously."*

(A Directors of Division of Education Religious and Culture)

*"Evaluators and evaluatees make a pre-arrangement, and activities or projects that get successful according to the arrangement will be exhibited to the public."*

(A Directors of Division of Education Religious and Culture)

*"Teaching is a behavior that can be learned while learning can change behaviors into a better way."*

(An educator)

*"Supervisors can change teachers' behavior of experience management so that it can be improved and developed."*

(An educator)

*"Teachers are supervised and monitored about learning*

*management in order to develop in what the supervisors suggest."*

(An educator)

## Stage 2

(1) The development model of competencies for teachers of the Early Childhood Development Center with application of empowerment evaluation consists of 6 components: basic concepts and principles, objectives, expected outcomes, training activity content, training activity process, and evaluation.

(2) The result of examining the development model of competencies with application of empowerment evaluation is presented in Table 1.

The suitability of the development model of competencies for teachers with application of empowerment evaluation is at the highest level ( $\bar{x} = 4.80$ , S.D. = 0.33) and the possibility of it is also at the highest level ( $\bar{x} = 4.90$ , S.D. = 0.22).

## Stage 3

(1) Teachers' scores of self-evaluation are calculated for mean ( $\bar{x}$ ) and standard deviation (S.D.). Then they are compared using t-test. The result is shown in Table 2. Teachers' mean of competency scores of post-training is higher than pre-training with statistical significance level of 0.01.

(2) Competency scores of self-empowerment in working as perceived by the teachers before and after training are compared. The result is shown in Table 3. Teachers' mean of competency scores of self-empowerment in working of post-training is higher than pre-training with statistical significance level of 0.01. The result is shown in Table 4. Teachers' satisfaction with the training of functional competency development is at the highest level in both suitability ( $\bar{x} = 4.77$ , S.D. = 0.42) and

**Table 2.** Mean of competency scores compared between cognition, skill, and satisfaction aspects of teachers participating in training (N = 30).

Functional competency	$\bar{x}$	S.D.	t	p
<b>Cognition</b>				
Pre-training	5.23	0.68	15.52**	0.00
Post-training	8.33	0.84		
<b>Skills</b>				
Pre-training	5.13	0.81	15.52**	0.00
Post-training	8.23	0.72		
<b>Satisfaction</b>				
Pre-training	5.50	0.90	16.20**	0.00
Post-training	8.13	0.68		

\*\*Statistical significance level of 0.01.

**Table 3.** Competency scores of self-empowerment in working as perceived by teachers compared between pre and post training (N = 30).

Self-empowerment in working	$\bar{x}$	S.D.	t	p
Pre-training	13.67	2.38		
Post-training	18.57	0.77	13.86**	0.00

\*\*Statistical significance level of 0.01.

**Table 4.** Mean and standard deviation of model evaluation scores of teachers participating in training towards development model of competencies (N = 30).

List	$\bar{x}$	S.D.	Level
<b>Possibility</b>			
The training gives clear objectives and goal.	4.73	0.44	Highest
The training is flexible in using diverse techniques of data collection for obtaining the right evaluation result	4.73	0.44	Highest
The training provides systematic process of evaluation for obtaining the right evaluation result	4.70	0.46	Highest
Information obtained from training is enough for summary process	4.70	0.46	Highest
The training is consistent with the context of Early Childhood Development Center	4.73	0.44	Highest
Average	4.72	0.45	Highest
<b>Suitability</b>			
The training is suitable for competency evaluation of teachers	4.70	0.46	Highest
Steps of the training are suitable	4.80	0.40	Highest
The training is consistent and responds to performance evaluation of teachers	4.80	0.40	Highest
The training identifies what should be evaluated clearly	4.80	0.40	Highest
The training based on evaluation model can be integrated with experience provision	4.73	0.44	Highest
Average	4.77	0.42	Highest

possibility ( $\bar{x}$  = 4.72, S.D. = 0.45). Teachers' satisfaction with empowerment evaluation, their roles, and researcher's role is at the highest level.

(3) From interviewing teachers who are trained about

empowerment evaluation as well as educators and directors of Division of Education Religious and Culture as supporters and facilitators, they are satisfied with the model and believed that the model is useful for

experience provision, and it can be applied to activity management for the Early Childhood Development Center.

(a) Cognition aspect of empowerment evaluation training can lead to understanding of developing tools used for evaluation and how to create the tools with various ways as the following some examples of words from the interview:

*“Being a part of the training, I have got knowledge about guidelines for applying various ways of competency evaluation.”*

(Teacher Samai)

*“The training teaches us about the process of planning and doing. This is a very useful activity.”*

(Teacher Chanida)

*“This is a great training because it allows all teachers to know how to perform the same way, so they can have knowledge about competency evaluation and have continuous process of monitoring.”*

(Tiemchan, an educator)

(b) Benefits and application aspect can lead to useful experience provision. The training should be additionally extended for all Early Childhood Development Centers so that teachers can have a proper guideline for competency evaluation as the following some examples of words from the interview:

*“The training is very helpful for competency development in terms of implementation.”*

(Teacher Orathai)

*“This is a great training because everyone joins together in group working, and the obtained concepts can be used for experience provision.”*

(Teacher Jurisa)

*“The training gives us additional knowledge. I feel impressed with friendliness of the guest speaker and all participants that can encourage all of us to be with all parts of the training activities.”*

(Teacher Yenruedee)

## DISCUSSION

### **Concept and need synthesis for development of teachers' competencies of the Early Childhood Development Center under the local administrative organization**

(1) Synthesis of related studies and documents to gain background information for empowerment evaluation is a major concept that can help develop teachers' knowledge and understanding of functional competencies in providing experiences for childhood with high quality. The

empowerment evaluation is conducted to expand opportunity and possibility for the project to achieve goal. The stakeholders are empowered in making operational plans and self-evaluation in any project. Said by Fetterman and Wandersman (2005), empowerment evaluation does not have ambiguity in terms of evaluation value. In other words, the empowerment evaluation can give clear value, or it is evidently designed with the purpose of helping individuals carry out self-evaluation so that their performance can be continuously improved. Based on Ampansirirat (2017), empowerment evaluation aims to provide possibility for project and plan or program to get successful by developing the stakeholders' potential to be able to plan and evaluate the project themselves to improve their quality of performance. Previously, the empowerment evaluation concept has not been applied to functional competency development for teachers of the Early Childhood Development Center. To have a guideline for developing teachers' behavior, knowledge, and skill to get efficient performance, the empowerment evaluation concept should be used in order that teachers can conduct self-evaluation correctly.

(2) In terms of teachers' needs of functional competency development, educators and directors of Division of Education Religious and Culture support that teachers should develop their functional competencies. The Priority Needs Index of each order is not much different arranged the following in descending order. (a) Early childhood curriculum should be developed in accordance with core and local curriculum. (b) Learning activities should be designed to meet ages and requirements of learners and community. (c) Learning management should be developed through ICT. (d) Teachers should study research related to their own context so that experience provision can be efficiently developed. (e) Teachers should have proficiency in providing learning experience for different types of learners e.g. gifted learners, learners with moderate level of learning ability, and learners with special needs. (f) The use of curriculum should be evaluated, and the evaluation results should be implemented for curriculum development. (g) Teachers should be able to pass on knowledge based on the curriculum and integrate knowledge systematically. (h) Methods of measurement and evaluation should be variously designed appropriate with content, learning activities, and learners. (i) Learners should be developed in terms of physical and emotional condition as well as social co-existence with happiness. (j) Classroom management should be evaluated and the evaluation results should be implemented for better improvement. (k) Learners' guardians should be given opportunities to get involved in designing learning activities and evaluations. (l) Experience provision design should be evaluated for better development and improvement. (m) Teachers should provide various techniques of experience provision in order that learners can extremely develop their own potential. (n) Moral and ethics should



be simultaneously added during experience provision for learners in the class. (o) Information should be applied to learner development as much as possible. (p) Appropriate environment of both inside and outside of the classroom should be provided. (q) Learners' information should be individually created, and classroom documents should be correctly made and updated. (r) Connection between evaluation objective and result from experience provision plan should be understood.

The Priority Needs Index of teachers' functional competencies is related to some issues of the research result e.g. creating and developing early childhood curriculum that is consistent with the core and local curriculum, evaluating the use of curriculum and implementing the result to improve the curriculum, and learning as well as developing the experience through ICT. As seen in the study of Luenam (2018), model development is regarded as creation of new knowledge. Investigating problems and needs is very important in terms of connecting with prior concepts and theories in order that the model becomes accurate and reliable. In case of designing a diversity of learning activities that can respond learner and community needs, development of teachers' functional competencies can help for this. As mentioned in the study of Smithikrai (2015), teachers play important role in improving and standardizing educational quality. In other words, teachers have to perform the organizational activities to become successful, and they also have to possess knowledge, abilities, and skills which are required in their performance. Moreover, they have to rely on great cooperation and teamwork.

#### **Development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation**

The development model of competencies comprises 6 components: basic concepts and principles, objectives, expected outcomes, training activity content, training activity process, and evaluation. Similarly, the previous studies of Nonhuaro (2014) and Nopphakhun et al. (2018) indicate that the development model of competencies for teachers in schools under the Nakhonratchasima Primary Educational Service Area Office consists of 6 components: principles, objectives, curriculum structure, curriculum content, training process, and measurement and evaluation. According to Khammani (2016), a model is objectivity of an abstract thought expressed by individuals in different forms such as diagram and chart for helping oneself and others have more understanding. Nevertheless, the model components, proposed by Asawapoom (2016), depend mostly on the phenomenal characteristics that those interested create a model without fixed rules. Generally, it begins with knowledge acquisition. Then hypothesis and

principles of the model are investigated. Next, the model is developed according the principles, and the developed model is checked or its quality. The development model, said by Wiboonsri (2016), is a way that individuals show ideas, understanding, and imagination towards phenomena or situations through different ways of communication to become easier to understand. Also, stories or issues can be concisely and systematically presented under the principles.

Both suitability and possibility are at the highest level. This is because the developed model provides an operational guideline with descriptions and charts that can help others clearly understand the guideline. Thus, this research has used the model as a cognitive tool for teachers of the Early Childhood Development Center in developing competencies for evaluating their functional competencies with correctness and efficiency. As found in the study of Luenam (2018), an evaluation model for learning using empowerment evaluation for teachers shows its accuracy, suitability, and consensus. In the study of Thammathikul (2015), a model of elderly empowerment for community development has been developed. Examined and verified by the experts, evaluation and improvement of the model of elderly empowerment show highest level for suitability and possibility of application.

#### **Performance in accordance with the development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation**

(1) The teachers' competency score in cognition, skill, and satisfaction aspects of post-training is higher than pre-training with statistical significance level of 0.01. This result reflects that evaluation model of empowerment is efficient for functional competency development of the trained teachers because the training provides activities for them to learn how to solve problems at work. The problems encountered while working will become an indicator helping decide which process should be learned while workplace will be a learning simulation. Moreover, the content used in training has been developed according to the needs of the trained teachers. The needs of self-development have been measured by the researcher to obtain data for training preparation. Based on Iriarte (2009), to provide efficient adult education, need analysis is very important. Learning is a major activity for efficient management of knowledge. Organizational education is different from formal education because it is learning from workplace environment. The study of Nonhuaro (2014) indicates that teachers' competency scores in educational measurement and assessment of post-training are greater than pre-training with statistical significance level of 0.01. In addition, a program for developing techniques

of self-esteem and self-empowerment for social development officers developed by Kongwijit (2017) can lead to better understanding of self-esteem and self-empowerment with statistical significance level of 0.05.

(2) The competency score of self-empowerment in working as perceived by the teachers of post-training is higher than pre-training with statistical significance level of 0.01. This result reflects that evaluation model of competency is efficient for ability to empower teachers who participated in the training. Because the provided training activities raise self-esteem within teachers, they get self-confident in their ability. Self-confidence can lead to efficient performance. Likewise, the study of Nonhuaro (2014) indicates that the competency score of self-empowerment in working as perceived by the teachers of post-training is higher than pre-training with statistical significance level of 0.01. The study of Kongwijit (2017) developing a program for developing techniques of self-esteem and self-empowerment for social development officers presents that the social development officers are promoted in terms of applying knowledge to a target group who receives services. The result reveals that the level of empowerment and self-esteem of the target group after receiving services is higher than before receiving services. Referring to the study of Yaemsang et al. (2015), an effect of empowerment program on exercise and eating behavior modification of students with obesity is studied. The result demonstrates that the mean score of exercise and eating behavior of the students with obesity after participating in the program is higher than before participating in the program with statistical significance level of 0.01.

(3) Teachers participating in the training are satisfied with operation according to the development model of competencies for teachers applying empowerment evaluation in terms of suitability and possibility at highest level. This result reflects that the development model is efficient and standardized in both suitability and possibility. The teachers are satisfied with the suitability due to its clear objectives and goals. The training has been integrated between empowerment evaluation and self-empowerment in working to create learning organization. The learning organization comes with the purposes of creating knowledge about relationships between action and outcome and putting it into routine duties or implanting it into the organization. Apart from this, the learning organization tries to adjust behaviors of learners and performers in the organization to achieve the sustainability. The trained teachers are given opportunities for self-determination, self-determination of learning goals, self-evaluation, and evaluating others with willingness or without being forced or controlled by others. In addition, a group of mentors or supporters, e.g. educators, directors of Division of Education Religious and Culture, researcher, and guest speaker, facilitate teachers in terms of providing knowledge with friendliness as a following example of positive feedback

given by a trained teacher:

*“The training gives us additional knowledge. I feel impressed with friendliness of the guest speaker and all participants that can encourage all of us to be with all parts of the training activities.”*

(Teacher Yenruedee)

This indicates that the developed evaluation model of empowerment becomes valuable for organizing the training in order that teachers can have fun and cannot get bored with it. Teachers have been provided with learning activities step by step, and they perform as facilitators, counselors, and leaders to make changes. Additionally, the learning organization can promote efficient and effective procedure within organization and members by connecting teamwork methods to create learning process and understanding so that any changes can be handled. Furthermore, the team is given chances to work and use power for making decision in order to build the atmosphere of creativity as well as innovation that can bring about to stronger organization. This is consistent with the study of Nachit (2015) finding that the model has suitability and possibility that can be implemented in a school at highest level.

(4) The result is shown in Table 5, Teachers participating in the training are satisfied with empowerment evaluation, their roles, and the researcher's role at highest level. This result reflects that evaluation model of empowerment is efficient towards the role of teachers whose empowerment is evaluated. For the role of researcher, educators, and directors of Division of Education Religious and Culture, a group of supporters and facilitators in empowering teachers, the teachers are most satisfied with the supportive reinforcement from the mentioned supporters because the training activities have been designed to give all parties opportunities to get involved in empowering to each other. Also, teachers have received supportive and positive words that motivate and encourage them to express opinions, give advice about training management, and share ideas with other teachers in order that they can be completely successful in self-evaluation of functional competencies. According to the study of Nonhuaro (2014) on trained teachers' satisfaction with empowerment evaluation for their role and researcher's role, the result demonstrates that the teachers are satisfied with the model at high level e.g. advocacy ( $\bar{x} = 4.10$ , S.D. = 0.44), freedom of thought ( $\bar{x} = 4.07$ , S.D. = 0.65), and illumination ( $\bar{x} = 4.03$ , S.D. = 0.43), by descending order.

In consequence, the trained teachers as well as educators and directors of Division of Education Religious and Culture are satisfied with the model because they believe that it can be useful for experience provision and integration in the Early Childhood Development Center. Also, it can help reflect the concept

**Table 5.** Mean and standard deviation of teachers' scores of satisfaction with development model of competencies for teachers of Early Childhood Development Center under local administrative organization with application of empowerment evaluation (N = 30).

List	$\bar{x}$	S.D.	Level
<b>Facilitation</b>			
You are introduced about how to do competency evaluation.	4.70	0.46	Highest
You are facilitated in solving problems and provided with advice in competency evaluation.	4.60	0.49	Highest
Average	4.65	0.48	Highest
<b>Advocacy</b>			
You are reinforced by administrators in terms of operation.	4.96	0.18	Highest
You are supported in terms of resources for competency evaluation.	4.63	0.49	Highest
Average	4.80	0.34	Highest
<b>Illumination</b>			
You are clarified about corresponding evaluation.	4.50	0.50	High
You have learned about competency evaluation through self-directed learning.	4.60	0.49	Highest
Average	4.55	0.50	Highest
<b>Liberation</b>			
You feel confident in competency evaluation.	4.46	0.50	High
You can design the competency evaluation.	4.53	0.50	Highest
You can do by yourself without any help from others.	4.70	0.46	Highest
Being criticized by colleagues can improve your self-development.	4.43	0.50	High
You dare express your true feeling although you know you might be unsatisfied with the outcome.	4.73	0.44	Highest
You do not mind participating in discussing about serious issues with your colleague.	4.66	0.47	Highest
You introduce others to know your status and theirs.	4.56	0.50	Highest
The center of the most important power is within you.	4.40	0.49	High
You believe in your own perception and sense although they are different from others".	4.36	0.49	High
Average	4.54	0.48	Highest
Overall Average	4.64	0.45	Highest

and self-evaluation that leads to quality development of learners.

## Conclusion

(1) Teachers needs all particulars for development of functional competencies; the Priority Needs Index from 0.336 to 0.416. Educators and directors of Division of Education Religious and Culture want teachers to develop themselves in terms of functional competencies.

(2) The development model of competencies for teachers of the Early Childhood Development Center under the local administrative organization with application of empowerment evaluation is composed of 6 components, that is, basic concepts and principles, objectives, expected outcomes, training activity content, training activity process, and evaluation.

(3) Mean of teachers' functional competency scores of post-training is higher than pre-training with statistical significance level of 0.01. Mean of competency scores of self-empowerment in working as perceived by the

teachers of post-training is higher than pre-training with statistical significance level of .01. The development model of competencies shows its suitability and possibility. Teachers, educators, and directors of Division of Education Religious and Culture are satisfied with the model at highest level.

## Suggestions

(1) This field of study should be conducted with teachers in private schools and teachers under the Educational Service Area Offices in order to gain broader image of the result.

(2) Qualitative data should be studied to monitor and evaluate the behavioral continuance of teachers who were trained about empowerment in working.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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