

## The Development of Coaching and Mentoring Model of Instructor and Support Staff\*

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#### Abstract

The purposes of this study were to 1) analyze the current states of coaching and mentoring in a university, 2) develop a coaching and mentoring model of instructors and support staff, 3) examine the quality of coaching and mentoring model of instructors and support staff, and 4) evaluate the satisfaction of the model. The sample consists of 38 instructors and support staff, 12 mentors, and 11 experts for focus group who were selected by means of a purposive sampling technique. Research tools include 1) an attitude questionnaire related to the current states of coaching and mentoring of instructors and support staff, 2) a model evaluation form for a focus group, 3) an evaluation form of desirable characteristics of instructors and support staff, and 4) a satisfaction evaluation form. Data analysis involved percentage, mean, standard deviation, and content analysis.

The research findings were as follows: 1) for the current states of coaching and mentoring of instructors and support staff, the qualifications of coaches focusing on outcomes-oriented skills, acquired learning skills, being good companionship by the concept of “give heart, united heart, attentive mind, open mind” were rated at a highest level. Received feedbacks from job performance as good companionship; participation in job

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performance self-assessment; perceived organizational changing situation, problems and constraints, current and future missions to be done by the organization; and having coaches and mentors helping with increased confidence at work were at a high level. 2) the coaching and mentoring model of instructors and support staff contains (1) principles of a model, (2) objectives of a model, (3) coaching and mentoring processes, (4) monitoring and evaluation, and (5) success conditions of a model. 3) for model quality, the model processes suggested highest level of mean, followed by success conditions of a model, objectives of a model, principles of a model, monitoring and evaluation with high level of mean. 4) the satisfaction of instructors and support staff on the model was at a high level in overall.

**Keywords:** 1. Coaching and mentoring model 2. Instructors 3. Support staff

### บทคัดย่อ

การวิจัยมีวัตถุประสงค์เพื่อ 1) วิเคราะห์สภาพปัจจุบันในการสอนงานและการเป็นพี่เลี้ยง 2) พัฒนารูปแบบการสอนงานและการเป็นพี่เลี้ยง 3) หาคุณภาพของรูปแบบ 4) ศึกษาความพึงพอใจที่มีต่อรูปแบบกลุ่มตัวอย่าง ได้แก่ อาจารย์และบุคลากรสายสนับสนุน จำนวน 38 คน และพี่เลี้ยงจำนวน 12 คน ผู้เขียนรายงานสำหรับการสอนทนาแบบกลุ่ม จำนวน 11 คน ได้มาจากการเลือกแบบเจาะจง เครื่องมือที่ใช้ ประกอบด้วย 1) แบบสอบถามความคิดเห็นเกี่ยวกับสภาพการสอนงานและการเป็นพี่เลี้ยง 2) แบบประเมินรูปแบบในการการสอนทนาแบบกลุ่ม 3) แบบประเมินคุณลักษณะที่พึงประสงค์ของอาจารย์และบุคลากรสายสนับสนุน และ 4) แบบประเมินความพึงพอใจ วิเคราะห์ข้อมูลโดยการคำนวณค่าสถิติ ค่าร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ค่าดัชนีความสอดคล้อง การวิเคราะห์เนื้อหา

ผลการวิจัย พบร่วม 1) สภาพปัจจุบันในการสอนงานและการเป็นพี่เลี้ยง ประเด็นการมีทักษะในการมุ่งเน้นที่ผลลัพธ์ มีทักษะในการเรียนรู้ การมีความเป็นก้าวไถมิตรตามแนวคิด “ให้ใจ ร่วมใจ ตั้งใจ และเปิดใจ” อยู่ในระดับมากที่สุด การได้รับข้อมูลย้อนกลับจากการปฏิบัติงานอย่างก้าวไถมิตร การมีส่วนร่วมในการประเมินการปฏิบัติงานของตนเอง การได้รับรู้ถึงสถานการณ์การเปลี่ยนแปลง ปัญหาและอุปสรรคขององค์กร ภารกิจที่องค์กรจะทำในปัจจุบันและอนาคต และการมีพี่เลี้ยง/ผู้ให้คำปรึกษาช่วยให้มีความมั่นใจในการปฏิบัติงานมากขึ้น อยู่ในระดับมาก 2) รูปแบบ ประกอบด้วย (1) หลักการ (2) วัตถุประสงค์ (3) กระบวนการของรูปแบบ (4) การวัดและประเมินผล และ (5) เนื้อหาความสำเร็จของรูปแบบ 3) คุณภาพของรูปแบบ พบร่วม ด้านกระบวนการของรูปแบบ มีค่าเฉลี่ยระดับมากที่สุด รองลงมา คือ ด้านเนื้อหาความสำเร็จของรูปแบบ ด้านวัตถุประสงค์ของรูปแบบ ด้านหลักการของรูปแบบ และด้านการวัดและประเมินผล 4) ความพึงพอใจของอาจารย์และบุคลากรสายสนับสนุนที่มีต่อรูปแบบฯ ภาพรวมอยู่ในระดับมาก

**คำสำคัญ:** รูปแบบการสอนงานและการเป็นพี่เลี้ยง อาจารย์ บุคลากรสายสนับสนุน

## Introduction

The Rajamangala University of Technology Thanyaburi (RMUTT) has been developing for being a “Professional University” towards “*the University of Hands-on Professionals in science, technology, and innovation.*” The university was focusing on producing manpower in science, technology, and innovation with high professional, know-how, and capability of “*thinking, doing, creating, solving problem, and communicating*” so as to enter business and industrial sectors in response to national development. One among the driving strategies is to achieve professional teachers; developing professional instructors to acquire teaching competencies. Each year the university opens for the applications of both the academic and support staff in large number. The new recruited staff vary in their level of experience and hence are provided with academic and professional trainings by the university, as well as mentors to give them advice and counseling, as well as assistance. New staffs are required to learn their job and adapt to colleagues, organization, and organizational culture, with the help of mentors. This mentoring aims to promote, support, provide advice and counseling, and also develop staff for increased competencies. Accordingly, staff experience appreciation and happiness at work that affect their attention at work and readiness for continuous self-development for the organization.

Developing educational institution as a learning organization requires constant and continuous learning of its staff. Coaching supervision is a key technique to facilitate the learning of teachers as the main mechanism to bring about success. It emphasizes on teachers’ competency and better performance, and the institution’s readiness to transform (Thammavithikul, 2009). In brief, as stated by Parsloe (2009), coaching is a process that enables learning and development to occur and thus performance to improve. To be successful, a coach requires knowledge and understanding of process as well as the variety of styles, skills, and techniques that are appropriate to the context in which the coaching takes place. Furthermore, MacLennan (2017) describes that coaching and mentoring can assist both individuals and teams to improve their performance because it can empower performers to have self-motivation.

Coaching is teaching as a process that enables learning and development to improve performance. Coach must have a deep understanding of the diverse workflow of the model, as well as the coach also have proper skills and techniques for a particular job (Parsloe, 2009). Furthermore, coaching technique is to train a teacher by the school administrators and expert

teachers in the same school. In this case the purpose of a supervision is to improve teachers' individual performance and development.

According to the National Science and Technology Development Agency of Thailand (2011), mentoring stems from an interpersonal relationship between more experienced staff and less experienced staff. More experienced mentors act in providing less experienced staff counselling, advice, coaching, and encouragement to improve competencies at work. Mentoring is used as a tool for knowledge management in terms of knowledge transfer between more experienced staff and less experienced colleagues. This is to ensure that the knowledge exists at all time within the organization and also to entrap it before it loses or escapes to competitors. As conversation between people is the best way to transfer knowledge, conversation in mentoring is thus in fact the communication among colleagues, i.e. more experienced to less experienced staff, and that the transfer of large amount of knowledge is going on. It is important for the current organization to have learning exchange among staff to allow the flow of knowledge through the entire organization. Effective coaching and mentoring depend not only on instructors' skill and capacity of the one being coached but also on coaching environmental factors such as clear success criteria and efficient feedbacks. Effective coaching helps with better work environment. Dialogues during coaching allows for constant feedbacks and considering standards and criteria for success at work. Effective coaching relates with learning atmosphere and both complements one another.

### Objectives

1. To analyze the current states of coaching and mentoring of instructors and support staff.
2. To develop a coaching and mentoring model of instructors and support staff.
3. To examine the quality of coaching and mentoring of instructors and support staff.
4. To evaluate the satisfaction on coaching and mentoring model of instructors and support staff.

## Methods

The following quantitative method and qualitative method (mixed model) was used in this study:

### 1. Population and sample

The population includes the university instructors and support staff.

The sample consists of the university instructors and support staff who were purposively selected to obtain 3 groups of 1) 38 instructors and support staff working within 1 year, 2) 12 instructors and support staff who act as coach and mentor for new instructors and support staff, and 3) 11 experts for a focus group.

### 2. Research instruments

The research instruments comprise 1) an attitude questionnaire on the current states of coaching and mentoring (for mentor/counselor, new instructors and support staff), 2) an evaluation form on coaching and mentoring model of instructors and support staff for a focus group, 3) an evaluation form on desirable characteristics of instructors and support staff following the coaching and mentoring model, and 4) a model satisfaction evaluation form for instructors and support staff.

### 3. Data collection

1. The following research instruments were administered to the sample to collect data in the first semester of academic year 2017

1.1 An attitude questionnaire on coaching and mentoring (for mentor / counselor)

1.2 An attitude questionnaire on coaching and mentoring of instructors and support staff (for new instructors and support staff).

1.3 An evaluation form on coaching and mentoring model of instructors and support staff (for experts)

1.4 An evaluation form on desirable characteristics of instructors and support staff following the coaching and mentoring model.

1.5 A model satisfaction evaluation form for instructors and support staff.

2. The data were recorded in a package program for statistical analysis.

### 4. Data analysis

The data analysis involved percentage, mean, standard deviation, content analysis, and descriptive writing.

## Results

### Part 1: Current states of coaching and mentoring of instructors and support staff

The current condition of coaching and mentoring of instructors and support staff suggested that among new instructors, 6–12 months of work duration was mostly reported (64.29%), followed by less than 6 months (21.43 %), 1-2 years and more than 2 years (equally 7.14 %). Their highest level of education was master's degree and doctoral degree (equally 50%). The number of training/seminar attendance for self-development was mostly less than 3 times (57.14%), followed by 3 – 5 times (35.72 %), and more than 5 times (7.14 %).

Among new staff, 6–12 months of work duration were mostly reported (58.33 %), followed by less than 6 months (33.33 %), and 1 -2 years (8.34 %). Their highest level of education was bachelor's degree (75.00 %), and master's degree (25.00 %). The number of training/seminar attendance for self-development was mostly less than 3 times (58.33 %), followed by 3 – 5 times (25.00 %), and more than 5 times (16.67 %).

**Table 1** Analysis result of opinion on coaching and mentoring, in overall

Items	$\bar{X}$	S.D.	Interpretation
Qualification of coaches	4.57	0.54	Highest
Coaching and mentoring system	3.76	0.63	High
Benefits of coaching and mentoring	4.14	0.47	High
<b>Mean</b>	<b>4.19</b>	<b>0.58</b>	<b>High</b>

As in Table 1, new instructors' opinion on coaching and mentoring was at a high level in overall ( $\bar{X} = 4.19$  S.D. = 0.58). For individual aspects, the qualification of coaches were rated with highest mean ( $\bar{X} = 4.57$  S.D. = 0.54), followed by the benefits of coaching and mentoring with high mean ( $\bar{X} = 4.14$  S.D. = 0.47), while the coaching and mentoring process though rated with lowest mean ( $\bar{X} = 3.76$  S.D. = 0.63), however at a high level.

### Part 2 Coaching and mentoring model of instructors and support staff

The researchers applied some ideas from several educators, researchers, and experts for conducting the focus group. For example seven steps of Stringer (2004, p.78) as follows: 1) set group rules, 2) provide clear guidance, 3) designate a facilitator for each group, 4) record each group discussion, 5) feedback and clarification, 6) analyzes combined information, and 7) what next: A plan for action. Moreover, Marshall and Rossman (2011, p. 149) state that the participants are not necessarily familiar with one another, and are selected because “they share certain characteristics relevant to the study's questions. The interviewers created a

supportive environment, asking focused questions to encourage discussion and the expression of differing opinions and points of view”

The result of the focus group study found that the coaching and mentoring model of instructors and support staff contains five components, namely: 1) principles of a model, 2) objectives of a model, 3) coaching and mentoring processes, 4) monitoring and evaluation, and 5) success conditions of a model.

### **1. Principles of a model**

1.1 Developing learning, skills, mastery, and team work process of staff to become a learning group that will lead to enhance increase learning organization.

1.2 Establishing networks among people with diverse knowledge, experiences, and ideas to work together that hence results in professional learning community.

1.3 Promoting organizational work toward achievement that reflects involvement, cooperation, shared effort, shared spirit, and motivation of staff for strengthened organization.

1.4 Self-development for career advancement and growth through shared learning and working at full potential under the supervision and consultation of well-versed and experienced people.

1.5 Applying the principle of good companionship to pass on the knowledge and experience at work.

### **2. Objectives of a model**

2.1 To promote and develop the knowledge, practical skills, personality, and potential at work.

2.2 To promote and support for effective performance by experienced coaches in providing counseling, advice, and assistance.

2.3 To encourage self-analysis of performance for its quality in different environments; solving problems and constraints at work.

2.4 To encourage self-reflection of performance for the quality of organization.

2.5 To establish good relationship between coaches and staff being coached.

### **3. Coaching and mentoring processes**

#### **3.1 Preparation stage**

3.1.1 Examine and analyze the knowledge prior to actually performing work

3.1.2 Establish knowledge and understanding related to coaching and mentoring

### 3.2 Coaching planning stage

3.2.1 Formulating together an action plan (monthly or semester)

3.2.2 Designing together an instrument to evaluate the characteristics of staff being coached

3.2.3 Identifying together a time frame for coaching, monitoring, and evaluation

### 3.3 Practical stage using various supporting techniques

3.3.1 Learning stimulation technique

3.3.2 Descriptive technique

3.3.3 Hands-on training technique

3.3.4 Confidence building technique

### 3.4 Formative evaluation stage

3.4.1 Planning for monitoring and evaluation

3.4.2 Implementing or carrying out the plan

3.4.3 Analyzing data

3.4.4 Reporting the results

### 3.5 Improvement stage

3.5.1 Choosing an approach to improve performance

3.5.2 Reflecting on the lessons learned and giving feedbacks

3.5.3 Improving performance on a regular basis

## 4. Monitoring and evaluation

4.1 Identifying clear evaluation objectives

4.2 Using diverse methods

4.3 Collaboration of all concerned people

4.4 Using appropriate evaluation criteria

## 5. The success conditions of a model

5.1 Support systems

5.2 Characteristics and skills of coaches

5.3 Follow-up, supervision, and facilitation

5.4 Principle of participation

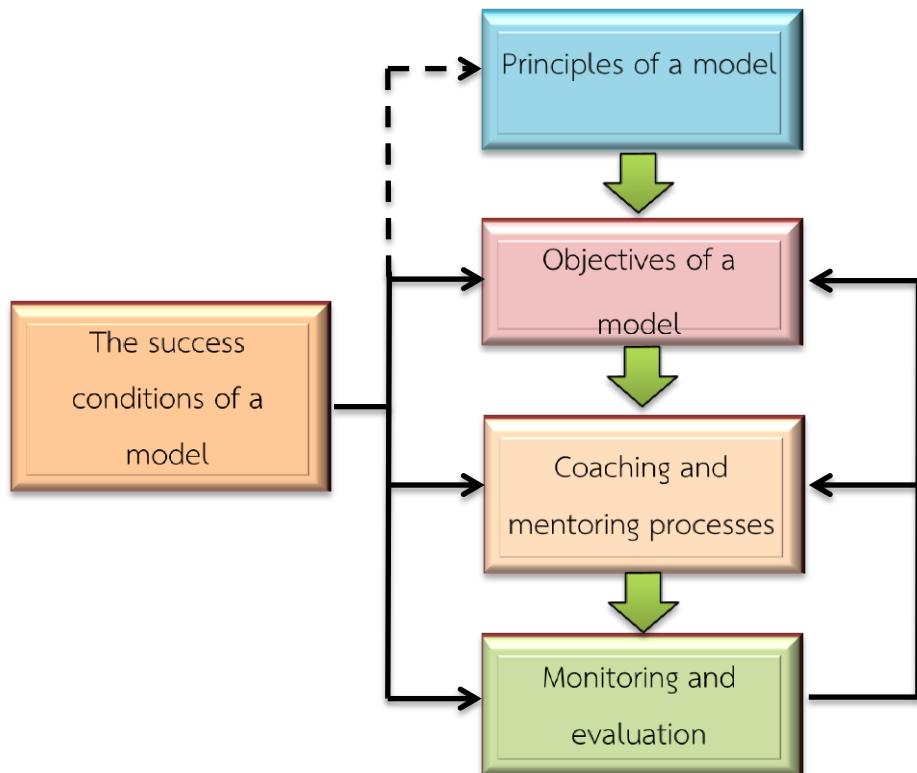


Figure 1 Coaching and Mentoring Model

Figure 1 shows Coaching and Mentoring Model which consists of five components as followings:

- 1) Principles of a model: It demonstrates the importance and originality including benefits to the organization when applying this format.
- 2) Objectives of a model: It defines in accordance with the principles and indicates the target that the user needs to achieve. In this case the user has to gain knowledge, skills, and desirable characteristics of personnel in the organization.
- 3) Coaching and mentoring processes: It consists of five sub-steps: (1) preparation stage: it is to analyze knowledge and skills of coachee as well as to understand the coaching and mentoring, (2) coaching planning stage: to collaborate between coachee and coachee for planning the task, designing the evaluation tools, and designing tracking time, (3) practical stage using various supporting techniques: It is to process coaching and mentoring systematically by applying several techniques such as to stimulate learning, to describe, to practice, and to build confidence in learning a new job, (4) formative evaluation stage: to follow up and evaluate periodically in order to take the results and feedbacks to improve the efficiency of job performance, and (5) improvement stage: to review job performance and to improve it.

4) Monitoring and evaluation: This evaluation step can predict if all coaching and mentoring activities reach the objectives and goals. Moreover, measurement and evaluation results provide information that shows success, strengths, weaknesses, and solutions to improvement job performance. This is because evaluation is the process of data collection and data analysis systematically. More importantly, it can use the result of the evaluation step to increase the quality and effectiveness of the project or activity which valuation step should take place at every stage.

5) The success conditions of the model: This step includes several issues to take into account such as good environment, provide adequate equipment, spend appropriate budget, and good corporate culture.

### Part 3: Quality of coaching and mentoring model of instructors and support staff

**Table 2** Examination results on quality of coaching and mentoring model of instructors and support staff

Evaluation Lists	( $\bar{X}$ )	S.D.	Propriety
1. Model principles	4.18	0.35	High
2. Model objectives	4.20	0.45	High
3. Coaching and mentoring processes	4.52	0.56	Highest
4. Monitoring and evaluation	4.00	0.40	High
5. Success conditions of the model	4.25	0.47	High
<b>Overall</b>	<b>4.38</b>	<b>0.57</b>	<b>High</b>

Table 2 shows that the quality of coaching and mentoring model of instructors and support staff was at a high level in overall ( $\bar{X} = 4.38$  S.D. = 0.57). Examination of individual aspects suggested the model processes with highest mean ( $\bar{X} = 4.52$  S.D. = 0.56), followed by success conditions of the model ( $\bar{X} = 4.25$  S.D. = 0.47), model objectives ( $\bar{X} = 4.20$  S.D. = 0.45), model principles ( $\bar{X} = 4.18$  S.D. = 0.35), and monitoring and evaluation though with lowest mean ( $\bar{X} = 4.00$  S.D. = 0.40), however at a high level.

**Part 4: Satisfaction of instructors and support staff on coaching and mentoring model**

**Table 3** Satisfaction of instructors and support staff on coaching and mentoring model

Items	( $\bar{X}$ )	S.D.	Interpretation
1. Easy for self-study and understand the model	4.27	0.47	High
2. Be able to plan a task in advance	4.09	0.30	High
3. Be familiar with mentor/counselor	4.45	0.52	High
4. Easy to follow the model	4.18	0.40	High
5. Convenient to link a task with related sections in organization	4.09	0.30	High
6. Take feedbacks to improve performance	4.27	0.46	High
7. Be systematic at work	4.91	0.30	Highest
8. Promote a collaborative learning	4.09	0.30	High
9. Promote work environment with good companionship	4.27	0.46	High
10. Promote co-operative in organizational development	4.36	0.50	High
11. Promote highest level outcomes	4.27	0.46	High
12. Envision ways for professional development	4.36	0.50	High
Overall	4.30	0.22	High

As Table 3 shows, instructors and staff indicated their satisfaction on coaching and mentoring model at a high level in overall ( $\bar{X} = 4.30$  S.D. = 0.22). For each item, be systematic at work presents highest mean ( $\bar{X} = 4.91$  S.D. = 0.30), followed by be familiar with mentor/counselor ( $\bar{X} = 4.45$  S.D.=0.52), promote co-operative for organizational development and envision ways for professional development (equally with  $\bar{X} = 4.36$  S.D. = 0.50), and the lowest mean but at a high level was for be able to plan a task in advance, convenient to link a task with related sections in organization, and promote a collaborative learning (equally with  $\bar{X} = 4.09$  S.D. = 0.30).

## Discussion

Discussion from the results of the research, the development of coaching and mentoring model of instructor and support staff as follows:

1. Current states of coaching and mentoring. Instructors and support staff viewed that the qualifications of coaches regarding outcomes-oriented skills, acquired learning skills, being good companionship following the concept of “give heart, united heart, attentive mind, open mind” were at a highest level. Received feedbacks from job performance as good

companionship; participation in job performance self-assessment; perceived organizational changing situation, problems and constraints, and current and future missions to be done by the organization; and having mentors/counselors to help for increasing confidence at work were at a high level. The findings were consistent with Senge (1990) describing about coaching and mentoring that in group mentoring, mentor will take leader role to lead to learning (Learning Leader). The group will exchange knowledge and ideas, identify development issues, along with counseling in group. In this way, team working skills is also developed. Mentoring group then becomes learning group. This is similar to learning team in learning organization of Senge suggesting that when teams learn together, not only can there be good results, members will grow more rapidly. According to Unaromlert (2014), most of the administrators, supervisors and teachers participated in the project for developing the teacher quality by using the process of coaching and mentoring system. They state that the project was very useful because the teachers will have new knowledge about teaching techniques and the teachers have developed more potential themselves.

Learning group will allow mentees as its members to learn from each other and from mentor. The concept of learning group identifies the responsibility to lead the learning that distributes among all members including mentor. This learning group regards mentor as learning leader as part of the group rather than outsider. With more experience and knowledge to share, mentor is thus act as leader of learning group by enabling the group's insight about the organization and guiding them in analyzing their own experiences, and also helping them with identifying the direction for development. This process allows mentees to learn about the experience and knowledge from mentor who possess different paradigm. Mentor will facilitate group success. Also consistent with Stonebridge College (2016) in which they were purposed that coaching and mentoring is to develop employees and help raise an organization to greater heights. While there may be some similarities, coaching and mentoring people are two different styles. The goal of both revolves around supporting the development of an individual in the workplace in order to build a stronger team.

2. Coaching and mentoring model. The model being developed contains 1) principles of a model, 2) objectives of a model, 3) coaching and mentoring processes, 4) monitoring and evaluation, and 5) the success conditions of the model. It agrees to the research by Wichitputcharaporn and Niyamapa (2016) on in-school supervision model of school principals using coaching and mentoring processes. This in-school supervision model consisted of three parts: 1) basic concepts; principles, principal competencies, and development goals; 2) school-

based supervision using coaching and mentoring processes; and 3) conditions of success. The model was most appropriate and feasible.

The findings also accord with Theppadungporn and Suwannabon (2015) in their study on appropriate mentoring culture model in organization development in Thailand aiming at 1) investigating the mentoring process in industrial business that has been practiced and become mentoring culture, and 2) developing the appropriate mentoring culture model that can be practically used in food manufacturing industry. This qualitative research used in-depth interviews with key informants of 22 experts who have used mentoring program for at least five years. The focus group was conducted among experts and specialists and/or top executives of organizations who have used mentoring in organizations in Thailand. The appropriate model of mentoring was applied in the real work practices for three months. The evaluation was done both in terms of the mentoring culture audit and CIPP model (Context, Input, Process, and Product) to evaluate the feasibility. The results showed that when the appropriate mentoring culture model has been practically applied in organization, the effectiveness of mentoring program has vastly improved, and it is highly feasible that the mentoring assimilates as part of the permanent organizational culture. It was concluded that the appropriate mentoring culture model consists of: 1) human resource development policy focusing on mentoring approach, 2) technical skill training by using mentoring process, 3) effective performance appraisal policy, 4) appropriate performance reward system, 5) established relationship and trust, 6) opportunity for employee to be trained on other working skills, 7) advancement opportunity for talents, and 8) promotion of a learning society.

Serrat (2017) summaries coaching and mentoring process for six basic stages. First, the mentor coach and the client get to know one another to establish clarity and rapport, engage, and agree what the goal is; second, they discuss the current reality, to which the mentor coach will adapt the coaching and mentoring style; third, they explore available options; fourth, they identify and commit to a course of action; fifth, the client implements the agreed actions with the support of and clear feedback from coach; sixth, the mentor coach and the client consider what has been learned and how they might build on that knowledge, possibly by initiating a new coaching and mentoring cycle.

3. Quality of coaching and mentoring model. The model process was rated with highest mean, followed by success conditions, objectives, and principles with high mean, and measurement and evaluation with lowest mean but at a high level. This conforms to Nillapun (2014) in a study on evaluation on teacher development project by coaching and mentoring:

Kanchanaburi Primary Educational Service Area Office 3. The results showed that the trainees had high level of opinion on the project, with highest mean for the curriculum, handbook, and media and document for training. Related to opinion about the teacher development process by coaching and mentoring process was at a high level of propriety. The training content was rated very high as it enhanced teachers' cognition, research skills, self-development, and the knowledge can be applied for practical instruction process development. The result of this study is also consistent with a study by Sangthong (2014) on education supervision to develop learning activities by STEM Education of science teachers of primary schools using coaching and counseling supervision technique. The study found that the science teachers of Primary school grade 1 – 6 were highly satisfied with this supervision technique, while students were satisfied most with learning activities by STEM Education approach. The quality of coaching and mentoring model of this study is consistent with the GROW model of Whitmore (2017) which each letter represents a stage in the process as follows: "G" stands for the established goal. "R" refers to identify the current reality. While, "O" stands for the coach and coachee work through the options that are available. Finally, "W" is coachees commit to achieve their goals.

4. Satisfaction of instructors and support staff on coaching and mentoring model. In overall they reported high level of satisfaction on the model which agrees to Asanok and Chookhampaeng (2016) state that the teachers had good attitude towards the construction for professional learning community (PLC), and were able to make plan in applying the coaching and mentoring (C&M) system in the classroom. In addition, they were train on how to use the program. The teachers shared their teaching experience as well as showed group leadership skills and shared value and vision in developing their teaching competency. Phase 4 found that there was propriety in teachers' teaching competency in all of 4 dimensions including the classroom management, the knowledge, the teaching method, and the diagnosis. Furthermore, the result of this study also consistent with the research conducted by Intharith (2013) on coaching and mentoring supervision to develop mathematics learning management of teachers in the project to enhance the potential-based teacher quality of entire system by coaching and mentoring process. The effects of coaching and mentoring supervision on teachers included the followings. 1) Knowledge and understanding, media/innovation, and instructional process. Teachers have knowledge and understanding on how to design the learning plan, media, innovation, instruction process, measurement and evaluation, including instruction adjustment, analysis of strengths and weaknesses, and identifying by themselves how to develop and improve their work. 2) Attitude/satisfaction. Teachers adjusted their thought and

placed more importance on instruction development, were satisfied with coaching and mentoring supervision, and desired for the continuation and expansion to other school teachers.

### **Recommendations from research**

#### **General recommendations**

1. The coaching and mentoring model of instructors and support staff should be applied to all of the faculties and organizations.
2. Other agencies or organizations can apply this coaching and mentoring model instructors and support staff to suit their contexts.

#### **Recommendations for further research**

There should be a monitoring and evaluation on the application of coaching and mentoring model instructors and support staff to all of the faculties and organizations.

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