



A teacher development model based on coaching and Professional Learning Community (PLC) to enhance foreign teachers' effective teaching ability in Thailand

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Abstract

The research aims were to: develop and assess the quality, implement and compare teachers' effective teaching ability with a criterion of 80 percent, investigate teachers' satisfaction and perception towards a teacher development model based on coaching and PLC to enhance foreign teachers' effective teaching ability and follow up teachers' classroom performance after the model implementation. The sample consisted of 45 foreign teachers from Matthayom Taksin Rayong School purposefully selected. The research instruments included: an effective teaching ability assessment test, model, model manual, model and model manual evaluation form and satisfaction questionnaire and semi-structured interview guide. Data were analyzed using percentages, descriptive statistics and content analysis. The results revealed that: (1) The developed model consisted of 5 components: principle, objective, learning content, learning instruction and evaluation. The teacher development model was at the highest level of appropriateness ($\bar{x} = 4.58$, $SD = 0.06$). A pilot study revealed that the model was suitable for teacher development. (2) Generally, teachers' effective teaching ability after model implementation was at 85.44 percent, which is higher than the stated criteria of 80 percent. (3) Teachers' satisfaction and perceptions towards the model were positive and at the highest level ($\bar{x} = 4.57$, $SD = 0.19$). A follow up revealed high satisfaction from students and the school administrators as there was great improvement on the teachers' performance after model implementation.

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Introduction

Teaching is composite and requires skilled and qualified personnel who are knowledgeable enough to

significantly impact learners and are ready to improve learning outcomes of all learners regardless of their background, learning style, weaknesses and differences that exist among them. Therefore, teacher development, which according to O'Sullivan, Jones and Reid (1988) refers to trying to enhance teachers' teaching ability and competence, becomes a necessity. Teacher development programs enable teachers to acquire the necessary

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knowledge, skills and experiences needed to perform their duties effectively and to function as part of the team of professionals as well as become more professional (Dean, 1991; Jones et al., 1989). According to Dean (1991), professional development requires theoretical explanations and practice for comprehensive understanding and effective practice in order to add professional skills. This can be done through the creation of learning environments and situations where teachers can be coached and can interact to learn from each other.

Different educational programs are operated in Thailand including programs where English language is used as the language of instruction (EP, MEP, IEP). These English programs require the employment of many foreigners a majority whom have never taken any teacher training course, which makes them unqualified teachers. They lack comprehensive knowledge and practical skills on teaching theories, approaches, methods and strategies. They also lack knowledge on lesson planning, instructional organization and classroom management. This has made them unable to teach effectively. As such, some schools have embarked on organizing teacher development programs in order to enhance teachers' effectiveness and Matthayom Taksin Rayong School is one of them. The results of an interview and observation of teachers' classroom performance revealed that there was a need to enhance teachers' theoretical knowledge on teaching concepts, lesson planning, and classroom management. The researcher intended to develop a model based on coaching and professional learning community to enhance foreign teachers' teaching ability, where teachers gain knowledge on teaching theories, approaches, methods, lesson planning, instructional design and management, and classroom management through coaching and interaction with experts and colleagues sharing and learning from each other in a professional learning community.

Coaching is a professional development approach that supports teachers' development and enables them to improve their capacity to understand concepts, reflect and apply what is learned to their work with students and other teachers. It also enables teachers to have a full knowledge, skills and to improve their professional performance. PLCs enable teachers to gain new knowledge related to emerging technologies, improving teaching and learning and give teachers the opportunity to learn from each other through collaborative interaction and idea sharing. A teachers' development model based on coaching and PLC will enable teachers to gain new knowledge and skills related to teaching and learning theories through explanations from experts, approaches, methods through coaching as well as develop acceptable

and good professional practices through collaborative interaction and idea sharing thereby leading to the development and enhancement of teachers' ability/skills. Equally, this model gives teachers the opportunity to get feedback from experts and colleagues to improve their performance.

Literature review

Teachers need to survive the demands, threats and challenges associated with teaching by being persistent, flexible, and innovative on new teaching approaches and be prepared to adapt to continuous changes (Gibbs, 2002). According to Stronge, Tucker, and Hindman (2004), effective teaching plays an important role in students' learning. As such, teachers must have a full understanding of teaching learning theories and approaches, understand learners' differences, plan lessons and effectively manage the classroom to create a good teaching and learning climate. Teachers' effective teaching ability can be enhanced through coaching and professional learning communities. Coaching refers to a professional partnership between a qualified coach and an individual or team that supports the achievement of extraordinary results, based on stated goals and has the power to transform teachers' professional learning (International Coach Federation [ICF], 2005, p. 1; Department for Education and Skills [DfES], 2003). According to Hamlin, Ellinger, and Beattie (2008, p. 291), Raney and Robbins (1989), and Wesley and Buysse (2006), coaching is the explicit and implicit intention of helping individuals to improve their performance in various domains, and to enhance their personal effectiveness, development, and growth. Coaching can benefit educators by promoting active reflection on practices, teaching them how to apply new concepts to their unique work environments, building generative communities of practice and fostering professionalism among colleagues (Garmston, Linder, & Whitaker, 1993; Joyce & Showers, 1982; Stein & D'Amico, 2002). Coaching is helping an individual or a group of teachers in addressing challenges faced during the teaching learning process (Creasy & Paterson, 2005; Michael, 2008; Nieuwerburgh 2012; Sherris, 2010; Wilkins, 2000). It is a strategy for improving teaching and learning across overall systems (Metz, 2015; Sugai & Horner, 2006). Coaching has as objectives to improve teaching practices with emphasis on increasing the use of practices shown to be highly effective, including evidence-based practices (Cornett & Knight, 2009; Kretlow & Bartholomew, 2010; Neufeld & Roper, 2003; Snyder, Hemmeter, & Fox,

2015) and also to improve learners' academic achievement through improving teachers' instructional practices (Joyce & Showers, 2002; Kretlow & Bartholomew, 2010; Snyder, Hemmeter, & Fox 2015). Kraft, Blazar, and Hogan (2016) investigated the effect of teaching coaching on instruction and achievement and found that coaching effects in large-scale teachers' effectiveness and performance. Also, Yirci, Karakose, and Kocabas (2016), conducted a study to examine current literature and have insight about coaching as a performance improvement tool at school, and findings show that if coaching techniques can be used effectively by the school principal, it becomes an effective motivation resource and performance booster not only for the teachers but also for the other staff and students. According to Joyce and Showers (1982), effective coaching practices typically occur after teachers participate in didactic instruction, workshops, and trainings as a way to ensure content is applied to the learning environment. Professional development that addresses the specific, daily needs of teachers and their students is more likely to produce changes in teachers' practice (Joyce & Showers, 1982). Teachers benefit most "when their learning is reinforced over time through repeated and varied exposure to ideas and through interactions with colleagues, who can act as a resource for each other's learning" (as cited in Knapp, 2003, p. 121, based on Cohen & Hill, 2001; Desimone, Porter, Garet, Yoon, & Birman, 2002). Coaching has the potential to accomplish this, if orchestrated over the long-term, and focused on ongoing collaboration between professionals around a common problem of practice that they deem important. Coaching utilizes a variety of pathways to help teachers, school leaders, and district leaders build school capacity for sustained change and improvement (Neufeld & Roper, 2003). When skillfully applied, coaching can provide productive learning environments for educators, particularly when it relates to a larger reform agenda and is embedded in actual work settings (Showers & Joyce, 1996).

PLCs are school-based professional development platforms that provide the structural support to develop teachers through collaborative interaction and idea sharing (Leithwood & Louis, 1998; Louis et al., 1996; McLaughlin & Talbert, 2001). PLCs play a great role in professional development as they are aimed at constant creation of new knowledge and development of skills within an institution through collaborative reflection in order to put it into practice (Hord, 2004; Liebermann, 1998; Stoll & Louis, 2007) PLCs have been greatly accepted as an important concept in professional development (Hargreaves, 2007). Senge (2000) believed

people learn from each other, and the collaboration of their thoughts and efforts create opportunities for continuous growth and reflection, which are accompanied with meaningful professional development. PLCs have a positive impact on teachers' professional learning, performance and morale and also a positive impact on students' achievement (Bolam, McMahon, Stoll, Thomas, Wallace, Greenwood, Hawkey, Ingram, Atkinson, & Smith, 2005; Hord & Sommers, 2008; Vescio, Ross, & Adams, 2007; Wengling, 2000; Blank, De las Alas, & Smith, 2007; Darling-Hammond & Richardson, 2009). Hord (2004) identifies reflective conversation as an important aspect in a PLC with collective responsibility, shared learning, shared leadership and cared relationship as important dimensions in a PLC. Parry (2007) conducted a study on improving teacher effectiveness through structured collaboration using the case study of a professional learning community and the results revealed that PLCs had the potential to achieve significant improvements in teaching effectiveness. Coaching is effective if it is done through a PLC where the coach has the opportunity to move through the cycle of the PLC, initiating and explaining related concepts, having members give input, and then embedding professional development, and participants are given the opportunity to interact with each team in the school in their role.

Research Objectives

The research objectives were:

1. To develop and assess the quality of a teacher development model based on coaching and PLC to enhance teachers' effective teaching ability
2. To compare teachers' effective teaching ability with a criterion of 80 percent after the implementation of a teacher development model based on coaching and PLC to enhance teachers' effective teaching ability
3. To investigate teachers' satisfaction and perception towards the model based on coaching and PLC to enhance foreign teachers' effective teaching ability.
4. To follow up teachers' classroom performance after the model implementation.

Methodology

Model Design, Development, Implementation and Evaluation

The research was conducted using the following research and development steps:

Step 1: Development and quality assessment of a model was done as follows:

1. After the identification of problems related to teachers teaching ability such as lack of knowledge on theoretical concepts, teaching approaches and methods, lesson planning and classroom management and instructional organization through observations and interview, the researcher critically analyzed and synthesized related concepts and theories for model development. Deductive methods were used to get the best information from related theories while the inductive methods were utilized to assess the quality of the developed model.

2. After drafting the model, validity check was done by 5 experts using a 5-level rating scale (with 1 as the lowest and 5 as the highest scale) and a pilot study was conducted with 15 foreign teachers from Phitsanulok Pittayakom School to assess the suitability of the model.

Step 2: The implementation of a model consisted of 3 steps as follows:

1. The model was implemented with 45 foreign teachers from Mathayom Taksin Rayong School who were contracted to teach in the 2020 academic year. A one group post-test design was used. The model was implemented for 5 days with 6 hours per day giving a total of 30 hours. During the model implementation process, teachers were given theoretical explanations, teachers worked in groups of 5 teachers from same subject area. A total of 9 groups was used during the implementation process. Coaching was done by the researcher and experts. Teaching theories, approaches, methods, differentiated instruction, effective teacher and effective teaching, lesson planning and classroom management were the modules used during the model implementation process.

3. An effective teaching ability assessment test checked and validated by 5 experts was administered to all participants after the model implementation process.

Step 3: An investigation of teachers' satisfaction and perception towards the model and implementation process was done using a questionnaire and a semi-structured interview. The questionnaire consisted of 15 items while the semi-structured interview consisted of 7 items. Both the questionnaire and the semi-structured interview focused on investigating the model's inputs, processes and outputs. For the questionnaire, participants were asked to rate their satisfaction level using a 1–5 level Likert scale ranging from strongly disagree to strongly agree while the semi-structured interview consisted of open-ended questions for participants to give detailed information related to the model and the implementation process and how the model affected them.

Step 4: A follow-up was done by observing teachers' classroom performance after implementation.

Participants

The model was implemented with 45 foreign teachers from Mathayom Taksin Rayong School who were contracted to teach in the 2020 academic year. The sample was selected purposively. The sample consisted of teachers from all subject areas who had never received any training nor taken any certificate course in curriculum and instruction. Three experts with doctorate degrees in Curriculum and Instruction were involved in training the teachers consisting of an expert in instructional design and teaching (researcher), an expert in PLC and coaching.

Research Instruments

The research tools consisted of: a teacher development model, model and model manual evaluation form, an effective teaching ability assessment test consisting of 40 multiple choice questions (knowledge assessment test), classroom management ability evaluation form, instructional management evaluation form and lesson plan evaluation form, model manual with learning activities, and teachers' satisfaction questionnaire, a perception semi-structured interview and an effective teaching follow-up form. All research instruments were developed from related content and checked by 5 experts.

Data Analysis

An effective teaching ability assessment test was analyzed using percentages whereas mean and standard deviation were used to analyze data from experts' model and manual evaluation and teachers' satisfaction towards model. A comparison of teachers' effective teaching ability was done after model implementation with 80 percent as the stated criterion. Content analysis was used to analyze data from, teachers' perception semi-structured interview and effective teaching follow-up form.

Results and Discussion

Results of Model Development

Results of model development and quality assessment revealed that the model was developed with 5 components namely: principle, objective, learning content, learning instruction and evaluation as represented in figure 1. The model was at the highest level of appropriateness

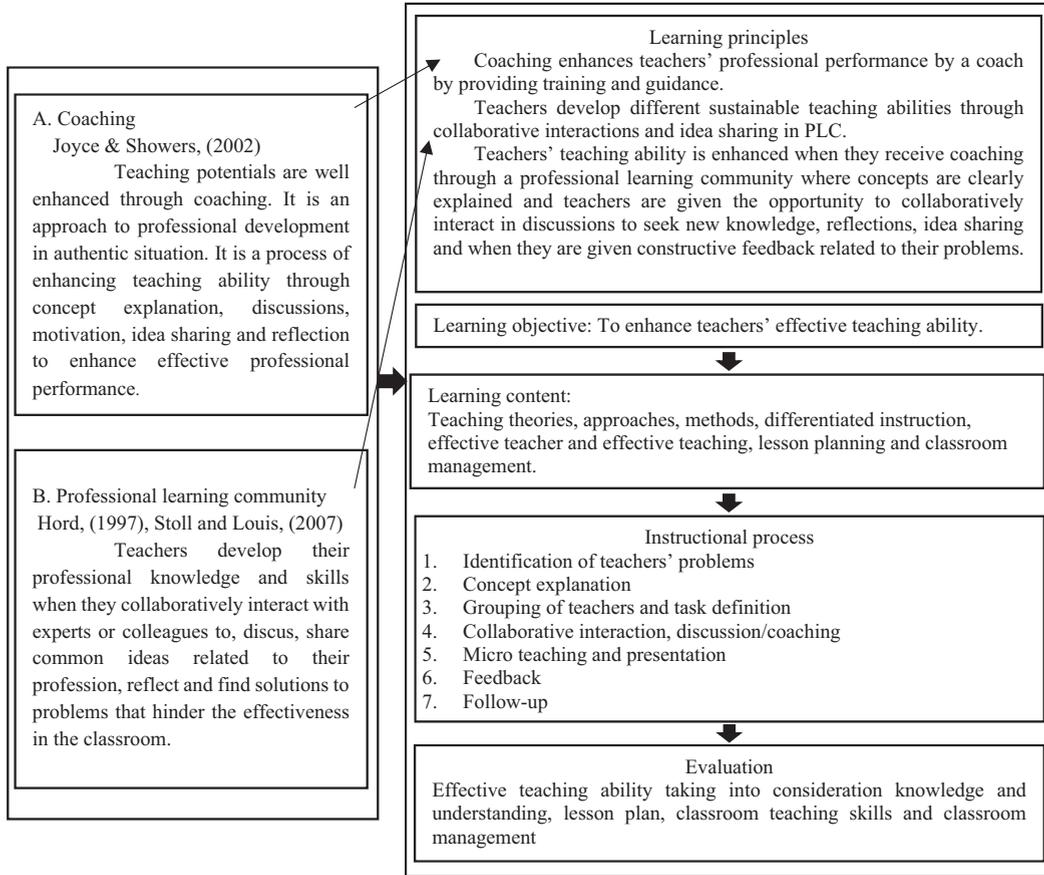


Figure 1 A model based on coaching and PLC to enhance teachers' teaching ability

($\bar{x} = 4.58, SD = 0.06$) and the results of conducting a pilot study revealed that the model was suitable for teacher development. This is an indication that all model components were consistent with the potential criteria of model development and effective in developing teachers' teaching ability. The appropriateness was due to the fact that before the development of the model, teachers' problems were identified through classroom observations. The model was systematically designed based on theoretical premises, checked and corrected by experts. The results were consistent with Thana and Chowwalit (2019), who developed a coaching model to enhance 21st century learning management skills for in-service teachers, and the results of model evaluation was at a high level ($\bar{x} = 4.34, SD = 0.13$) of appropriateness.

The Results of the Teacher Development Model Implementation

The table 1 reveals teachers' effective teaching ability after the implementation of the model at 85.44 percent,

which is higher than the criteria of 80 percent, with statistical significance at .05 level. The results were consistent with the principles of coaching in a professional learning community which states that coaching and teacher interaction with others will improve their knowledge, professionalism, and new concepts especially if there is an expert to be a good model. The results revealed that teachers effective teaching ability is at 85.44 percent, which is higher than the gain of 80 percent. The improvement of teachers' ability was due to some factors. The instructional process started with an explanation of important teaching theories, approaches, teaching methods, instructional design, lesson planning and classroom management which were unknown to the teachers. The process was characterised by coaching and interactive activities where teachers could gain new knowledge and skills from each other. Teachers were also given the opportunity to do micro-teaching where they were observed, corrections and feedback given. Continuous coaching was done by experts and professional learning groups were formed, which enabled teachers to

Table 1 Comparison of teachers' effective teaching ability after model implementation

Effective teaching ability components	Full score	\bar{x}	SD	Percentage	<i>t</i>	<i>n</i> = 45
						<i>p</i>
1. Theoretical understanding	40	35.07	1.68	87.67	12.21*	.000
2. Instructional management ability	30	25.44	1.10	84.81	8.82*	.000
3. Classroom management ability	15	12.44	0.81	82.96	3.67*	.000
4. Lesson plan	15	12.49	0.66	83.26	4.96*	.000
Total	100	85.44	1.94	85.44	18.85*	.000

Note: ***p* < .05.

work in small groups of 4 members, collaboratively interact with each other as well as share ideas as they learned from each other. The results were in line with Garmston, Linder, and Whitaker, (1993); Joyce and Showers, (1982); Stein and D'Amico, (2002), who suggest coaching can benefit educators by promoting active reflection on practices, teaching them how to apply new concepts to their unique work environments, building generative communities of practice and fostering professionalism among colleagues. The results were consistent with Parry (2007), who conducted a research on "improving teacher effectiveness through structured collaboration" with the case study of a professional learning community, and Kraft, Blazar, and Hogan (2016), who investigated the effect of teacher coaching on instruction and achievement. The results revealed that both coaching and PLCs had the potential to achieve significant improvements in teaching effectiveness. The results were also consistent with Yirci, Karakose, and Kocabas (2016), who conducted a study to examine the current literature and have insight into coaching as a performance improvement tool at school. The findings revealed that if coaching techniques can be used effectively by the school principal, it becomes an effective motivation resource and performance booster not only for the teachers but also for the other staff and students.

The Results of Investigating Teachers' Satisfaction towards the Model

An investigation of teachers' satisfaction and perception towards the model kept track of stated objectives. The results revealed that teachers' satisfaction towards a teacher development model and implementation process was at the highest level (\bar{x} = 4.57, *SD* = 0.19). This was because the model was chronologically developed. Effective teaching concepts, theories, approaches, classroom management concepts, instructional strategies and lesson plans were well explained. The instructional process was characterised by

continuous coaching activities, collaborative group interactions, identification of instructional problems, development of solutions and idea sharing, micro teaching activities where teachers were corrected and feedback given to teachers. The learning instruction and steps were explicitly clear, connected to enhancing teachers' effective teaching ability. All coaching activities were all motivating and interesting. The findings were consistent with the results by Harper (2015), who conducted a study to determine the teachers' perceptions and opinions regarding the effectiveness of instructional coaching. The results revealed that all responses provided statistically significant positive support of instructional coaching. The results from the semi-structured interview based on studying teachers' perception towards the model and implementation process were positive. The interview gave teachers the opportunity to share their perception related to the model, and the results revealed that the model was effective in enhancing teachers' teaching ability as it gave a clear explanation of concepts with effective coaching steps. Some comments provided by teachers revealed that they learned many useful concepts from the coaching activities and collaborative interaction and idea sharing in their respective groups. The results were in line with David (2017), who studied teacher perceptions of professional learning communities on the instructional climate at Flintville Elementary School in Lincoln County, TN, and found that teacher had positive perception towards PLCs as they helped them in developing skills in the school-based PLC meetings that would allow them to conduct professional development activities.

The Follow-up Results

A follow-up was conducted by observing teachers in class after the model implementation. The results revealed high satisfaction as teachers could design instruction effectively, select approaches based on learners' ability, plan lessons well, manage the classroom effectively and

were more confident. The teachers testified that they could perform better after the model implementation.

Conclusion

An appropriate teacher development model was effective in enhancing teachers' teaching ability. For teachers to teach effectively, a stage should be created where teachers can interact in PLCs with experts to coach, provide feedback as well as giving teachers the opportunity to have discussions, information sharing and also searching for solutions to teaching problems. Explanation of concepts and coaching by experts, idea sharing, reflective dialogue in professional learning communities will lead to the development of teachers' teaching competencies. This is in line with Senge (2000) and Hord (2009) who believed people learn through collaborative interaction to create opportunities for continuous growth and reflection, which can occur in PLCs through coaching. School administrators have a great role to play in developing teachers. A development of teachers' teaching ability and motivation leads to effective teaching and high academic achievement.

Policy Implication for Educator

The findings demonstrated that the implementation of a teacher development model affected teachers positively. Based on this aspect, educational authorities should organize training programs especially for newly employed teachers as they will enable them to comprehensive understand how to teach effectively. All educational institutions should create at least an hour per week for teachers in various subject areas to share ideas and also discuss problems faced as well as solutions

Implications for Further Research

This study demonstrated the enhancement of teachers' teaching ability using a teacher development model based on coaching and professional learning community. Affirmation is vital to display the need to improve teacher quality. As such, further research should investigate other approaches that can be used in developing teachers. Moreover, this research was conducted with a small sample (45 foreign teachers), and as such, the results cannot be generalized. It is recommended that this model should be implemented to different samples both foreign and Thai teachers under different conditions in order to study the effectiveness of the model as well as generalize the results.

Conflict of Interest

There is no conflict of interest.

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