

DEVELOPMENT OF AN INSTRUCTIONAL DESIGN MODEL FOR BLENDED COACHING AND ACTION LEARNING FOR SUPERVISORS TO ENHANCE SECONDARY SCHOOL TEACHERS' ICT UTILIZATION

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Abstract: Supervisors are responsible for guiding teaching and learning management and exchanging academic learning with teachers and school administrator in order to enhance ICT utilization among secondary school teachers. Applied guiding process had been allowing supervisors to meet and discuss with teachers in the school. Further to the advancement of ICT technology nowadays, supervisors are able to provide guidance through blended coaching in order to enhance secondary school teaching and apply action learning principle for better ability of secondary school teachers in utilizing ICT. This research aimed to develop a blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization. Researchers had applied research process and developed a model and tested with sample group including a supervisor and 18 secondary school teachers for a month.

Keywords: Blended Coaching, Action Learning, Teachers' ICT Utilization.

Introduction

Thailand's second decade national education reform policy (2552-2561 B.E.) emphasized on a mechanism that influence education development and systematic learning. The policy consisted of teachers as major factors to provide learning among learners. In order to move the policy, different organization related with teachers, therefore, highly emphasize on improving teachers' quality as the first priority because teachers were very important in educational reform process who would improve learners' quality. Educational quality, therefore, depends on the quality of teachers. (Office of Educational Council, 2533 B.E.)

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UNESCO has specified a guideline of ICT competency standard for teachers in order to enhance teachers' different competencies in applying ICT innovation and skill for develop curriculum and teaching and learning process along with class, learning group and community management. In addition, the standard also focused on enable teachers to apply their skill and ICT resources with their teaching, generate cooperation among teachers and related staff as leading innovative schools. The standard has determined three levels of proficiencies including technology literacy aiming to add ICT knowledge for students, citizens and laborers by developing curriculums that would enhance basic ICT literacy and skill as knowledge deepening level. The objective of creating new knowledge was to enhance students, citizens and laborers proficiency of creating innovation and new knowledge that are useful for the society. (UNESCO, 2011)

At present, most teacher developments are in term of lecture, group discussion or forum and the training cannot satisfy teachers' needs. They more focus on principle or theory than practice so teachers cannot apply training knowledge and they lack of constant monitoring. After training, it has found that teachers do not apply or extend results of training (Surasak Pahay, 2556 B.E.). Researchers had studied different development methods and models proposed by different educators and we concluded that vocational development method will educate attendants with different workshops, coaching and monitoring and assistance by knowledgeable people like experts, mentors, peers, on the job-embedded, collaborative teachers and reflective model (Glickman, Carl D., Stephen P.Gordon, and Jovita M. Ross-Gordon, 2010) In order to have efficient teachers' development process, related parties with teacher development particularly supervisors, therefore, have to coordinate and exchange academic knowledge with teachers and school administrators to promote and support educational management that meet objective of the curriculum. It is necessary to have proper development of coaching process in term of actual practice, technique and method, coaching material and coaching support mechanism for a systematic development of teaching and learning, and academic managements.

Regarding adjustment of teacher development for an effective problem solving, Joyce and Showers (1982) proposed that coaching was a cyclical training process that focused on assistance, facilitation and providing further knowledge continuously during training monitoring process. The application of coaching method with supervision, therefore, was the way to develop teachers' proficiency focusing on working upon its goal and mentoring teachers to apply existing knowledge and understanding derived from training with their working effectively. Three objectives of this idea were the ability to solve problems with working, knowledge and skill development or ability to work and the application of working skill and knowledge based on co-construction principle. Research by Gottesman had pointed out that when person was supervised or coached, he or she would be able to understand and remember 90% of all knowledge and he or she could remember and apply 9% of that knowledge with work. (Gottesman, 2000 cited by Kosak, Kimbra R., 2013) In addition, it had been found that coaching was a method of educational supervision that could develop teachers' proficiency by focusing on continuous self-development and profession. Coaching also encouraged teachers' self-awareness of the ability to

manage teaching and learning management and reconsider or review their teaching. (Brockbank, A. & McGill, I., 2006)

Coaching was a cooperative process among coach and coachees by applying different methods during continuous teaching and learning activities that focused on encouraging and motivating thought management process of the trainees so they could apply existing or obtained knowledge and understanding with their work in order to meet their work objectives. It also included the development of effective working and enhancing of self-proficiency among teachers that would improve their thinking process, self-leading development, self-confidence and self-development in managing their class. (Mink, Owen, and Mink, 1993; Thorpe and Clifford, 2003)

Coaching model has been developed based on the advancement of ICT as the bounded application of computer technology and normal teaching method to come up with more advance, effective and efficient learning. This model was called blended coaching as an educational innovation blended distance learning through online network with fact to face learning for more effective learning than regular lecture in the class. This model focused on utilizing proper material that could meet different learning objectives for enhancing learning proficiency. (Kee, Anderson, Dearing, Harris, & Schuster, 2010)

Based the idea of action and learning happened parallel; action learning has been accepted widely as a tool to develop personnel, teamwork and organization. It was a continuous learning and empirical educational administration innovation. Action learning derived from actual practice or working until the person could repeat required learning and be skillful. During the workshop or training, learners were trained, mentored, learnt by doing the job and had a better working performance. Action learning could be applied for learning development in the organization effectively because learner did not learn only new idea or theory but they could include the actual problem or situation with their thinking, analysis and problem-solving processes. Its direct advantage included allowing learners to have deeper knowledge and understanding about the idea than learning from textbook or a single instructor. Learners also learnt from actual circumstances complied with the idea of learning by doing that was learning from actual practice and obtained more learning achievement. (Sofa, F., R. K. Yeo, et al., 2010)

Objectives

The objective of this study were to develop blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

Methodology

Procedure

This research and development was mixed method research collecting both quantitative and qualitative data developed by the researchers based on ADDIE Model of teaching and learning development. The research consisted of 5 steps including 1) Need analysis and evaluation 2) model design 3) model development 4) model assessment, and 5) model analysis and conclusion. Research progress consisted of 3 phases as below;

Phase 1: The study of idea about blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

We reviewed literature related with blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization and synthesized the result as framework of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization. We surveyed veteran's opinions towards blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

Phase 2: The development of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

Result from stage 1 was applied to develop blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization and certified by veterans.

Phase 3: The experiment of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

Participants

Samples were recruited with specific sampling method during the process of need and circumstance analysis from 46 schools in ICT project and dream schools applying ICT promoting policy. In order to verify the model, we had recruited a supervisor specialized in teacher coaching for 21st century, 16 teachers from all departments in Sa-Nguan Ying School belonged to 9 Secondary Educational Service Area.

Results

The results from Phase 1, 2 and 3 assume that the instructional design model to develop blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization.

The application of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization had shown that it consisted of 3 elements as detailed below.

1. Preparation of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization consisted of 10 steps as the following.

- 1.1 Objective Determination
- 1.2 Curriculum Design
- 1.3 Characteristic of Activity
- 1.4 Qualification of the Coach
- 1.5 Role and Duty of the Coach
- 1.6 Qualification of the Coach
- 1.7 Blended Coaching Materials
- 1.8 Creating Good Relationship during Coaching
- 1.9 Evaluation
- 1.10 Monitoring

2. Progress of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization consisted of 3 steps as ;

2.1 Orientation of blended coaching and action learning of supervisors to enhance secondary school teachers' ICT utilization. Introducing blended coaching/group discussion activity/group training of ICT and Internet usage skill

2.2 In progress blended coaching and action learning

- Proposing content and knowledge through website
- Practice using computer

2.3 Evaluation of blended coaching and action learning

- Individual and group action learning
- Evaluating blended coaching and action learning through computer network

Activity of blended coaching and action learning consisted of coaching through computer networks: website, e-mail, chat, web board, search engines, upload-download file, FTP.

Coaching activity in the class consisted of orientation, problem discussion, practice using computer network and internet, training evaluation.

3. Blended coaching and action learning monitoring, monitoring practice result through internet network.

Further to the above mentioned elements, we could apply blended coaching and action learning with teaching development for supervisors to encourage elementary school teachers' ICT utilization as the following;

Blended Coaching

Coach was subject to do the following tasks.

1. Register to participate with the activity
2. Coordinate with staff
3. Meeting with staff to prepare blended coaching through computer network, then
 - Analyze coaches
 - Analyze content
 - Develop coaching outline
 - Prepare web media or material
 - Prepare computer laboratory upon coaching
4. Orientation in the computer laboratory consisted of the followings.
 - Introduction of coaching model through computer network, group discussion/group division
 - Practice computer network usage during the coaching by using e-mail, chat, search, web board, FTP and web browser

(If there was a doubt, coach was subject to answer question or doubt. If there was no doubt, the coach would go on the next task.)
5. Provide content/knowledge
 - Introduction – provide content items/knowledge
 - Practice using computer network
 - 1) Provide content/knowledge through the network (World wide web)
 - 2) Submit attachment, e-books, download, individual/group assignment (e-mail, chat, web board, download)

(If the coach did not get any receive data and attachment, the coach would answer the question first. If the coach received data and attachment, the coach would do the next task.)

6. Answering individually or by group using email
7. Individual or group assignment check
8. Providing feedback through computer network
 - Individual or group score using e-mail, coaching website
 - Provide the correct answer
 - Giving further information
9. Computer laboratory
 - Problem/barrier discussion through computer network
 - Practice using coaching website
(If there was doubt, the coach would answer the question first. If there was no doubt, the coach would go on the next task.)
10. Submit and review content/knowledge the activity.
11. Assessment through computer network. The coach would inform the assessment result. Repeat task 5 (practice using computer network) in case of failure of assessment, or go on the final task.
12. Receiving assessment and monitoring (questionnaire, proficiency evaluation inventory, interview)

Coachee was subject to do the following tasks.

1. Register to participate with the activity
2. Orientation in the training class
 - Introduction of blended coaching and action learning
 - Group discussion/group process
 - Practice basic skills in using computer, email, chat, search, web board, FTP, web browser
3. Progress or management
 - Introduction
 - 1) Introduction of learning topic, content and knowledge
 - Progress or management
 - 1) Study learning content/knowledge through network (www.)
 - 2) Search additional ICT data (website, e-book, download files)
 - 3) Individual/group activity using email, chat, web board, download files
(If there was doubt, coachee was subject to consult the coach. If there was no doubt, coachee would do the next task.)
4. Individual or group report submission
(If the report failed the review, coachee would repeat task 3, 2nd bullet again. If the report was reviewed pass, the coachee would do the next task.)
5. Feedback
 - Individual or group score by email
 - Provide correct answers
 - Giving some advice
6. Giving additional data

(If there was doubt, task 6 would be repeated again. If there was no doubt, the coachee would do the next task.)

7. Study content and knowledge
8. Evaluate network.

(If the evaluated result through computer network did not pass the evaluation, task 3, 2nd bullet would be repeated. If the evaluated result through computer network passed the evaluation, the coachee would do the last task.)

9. Receiving evaluation result (questionnaire, proficiency evaluation inventory, interview)

The experiment of blended coaching and action learning for supervisors to encourage elementary teachers' ICT utilization had shown that proficiency evaluations of the coach were high for both self-evaluation and evaluation by trainee. Further to individual aspect, we had found that coach evaluated oneself high and the most for the discussion about how to determine coaching prior to learning management between the coach and coachee and they could prepare learning management survey tools suitable for learning management technique suggested by the coach and could do the coaching complied with determined coaching plan. Further to the evaluation of teachers (with self-evaluation) had shown that they could improve their ability in writing ICT assisted teaching and learning plan very well. Teachers evaluated themselves highly and had got highest mean average for managing learning management that complied with their plan by using ICT and their learning objectives.

Conclusion

Finding had shown that the developed blended coaching and action learning for supervisor to encourage elementary school teachers' ICT utilization was effective to encourage ICT assisted learning management and communication of teachers. They could develop their learning plan with ICT assistance effectively and efficiently which derived from their need and circumstance analysis and learning management process complied with their actual needs. Prior to the application, users should, therefore, emphasize on the study of circumstance, problem and need for learning development because different organizations have got different circumstances.

Finding showed that blended coaching and action learning for supervisor to encourage elementary school teachers' ICT utilization could improve teachers' learning management from fair to high and they could develop better learning plan (good to very good). However, teachers had limited time to take training of blended coaching and action learning and give feedback. Training in the future, therefore, must more concern about teachers' availability.

Discussion

Blended coaching and action learning process was the process to develop teachers by integrating or blending knowledge with lecture and providing a chance to practice by doing with assistance and encouragement by the coach that would create ICT assisted self-learning among teachers. The process influenced the coach and teachers to improve themselves precisely and it complied with the study by Joyce and Shower (Joyce and Showers 1988 cited by Costa and Garmston 2002:38) which pointed out

that theory training using lecture alone provided low knowledge, fair skill and very low knowledge application to the coachees. In contrast, the application of blended coaching with lecture, workshop, feedback and coaching or mentoring will make teachers learn the knowledge highly and have high skill and knowledge application.

Learning management self-evaluation was high because all teachers had participated with learning management selection, had co-understanding prior to the application and finally facilitated teachers to manage their learning complied with their plans. This complied with Knowles' concept (Knowles 1980 cited by Young et al. 2005: 5) which pointed out that adults would learn the most if they were part of consideration, planning, learning and assessment by themselves. They would be ready for more learning if the learning subject could satisfy their needs, be motivated and be able to apply the knowledge with their work.

The evaluation of satisfaction towards blended coaching and action learning for supervisors to encourage elementary school teachers' ICT utilization had shown that teachers and supervisor were satisfied with blended coaching and action learning model the most because the model had begun with need and circumstance to develop teacher. We had found that teachers want to improve their learning management skill by using ICT and they wanted mentoring or assistance from expert outside the training room. Using this model to develop teachers' proficiency in learning management, therefore, satisfied their needs the most and complied with Glatthorn's adult learning management concept (Glatthorn 1990:143) stating that any learning satisfying with learner's need could be applied with problem solving and work. Furthermore, learning with blended coaching and action learning provided a chance for teachers to participate with the selection of learning management technique, planning learning and blended coaching, and self-evaluation that would make teachers ready to learn and improve their proficiency (Knowles 1980 cited by Young et al. 2005: 5)

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