The Development of Coaching and Mentoring Skills Through the GROW Technique for Student Teachers

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Received: June 24, 2019	Accepted: July 15, 2019	Online Published: September 20, 2019
doi:10.5539/jel.v8n5p168	URL: https://doi.org/10.	5539/jel.v8n5p168

Abstract

The purposes of this research were to develop coaching and mentoring skills through the GROW technique for the student teachers studying at the Faculty of Education, Ubon Ratchathani Rajabhat University, to study the students' coaching and mentoring behaviors, to compare the students' coaching and mentoring concepts before and after the study, and to compare the students' learning achievement on the course of learning organization before and after the study. The sample consisted of 26 juniors studying in the first semester of academic year 2013, gained by cluster sampling. The instruments included a performance test, a behavior observation form of check-list type, a test of coaching and mentoring concepts, and an achievement test. The collected data were analyzed by using percentage, mean, standard deviation, and t-test. The findings revealed that the students' coaching and mentoring skills were positive at the percentage of 65.00, the students' coaching and mentoring behaviors were significantly higher than those before the study at the .01 level, and the students' achievement after the study was significantly higher than that before the study at the .01 level.

Keywords: coaching and mentoring, GROW technique, student teachers

1. Introduction

Since Thailand set its policy for national education guidelines in 1999 known as National Education Act of B.E. 2542 (1999), as mainly mentioned in section 22 that education shall be based on the principle that all learners are capable of learning and self-development, and the learning process shall aim at enabling them to develop themselves at their own pace and their potentiality. For learning organization, it is described on section 24 that shall organize activities for learners to draw from authentic experience, drill in practical work, think critically, and acquire continuous knowledge. (Office of the National Education Commission, 1999)

Since then the Thai teachers and lecturers under the jurisdiction of the Ministry of Education, teaching at the basic education, and higher education institutes, have been expected to organize their instructions based on the student-centered learning activities. However, some studies found Thai teachers still managed their classes in the traditional styles of lecture, or teacher-centered, as Baurapha, Singh, and Roadrangka (2006) found that Thai teachers had long been familiar with the lecture-based tradition where the teachers were information deliverers and the students were passive learners. Harn-asa (2004) had found similar results in the central region of the country that there were many teachers having neither clear knowledge nor experience about how to initiate the policy of changing teaching styles from lecture-based to be active learning, and how to cope with problems of implementing different approaches to teaching. In addition, Vallin and Akesson (2013) had also found similar results from their case study at a school in the south of the country that the teachers were in different stages in the development of applying student-centered teaching methods.

To solve such serious and prolonged period of problems, the procedures of teacher development must be considered and set new strategies, beginning from the preparation of pre-service teachers because it has been believed that the quality of teacher development depended on teacher training. Coaching and mentoring strategies were accepted to be appropriate for enhancing pre-service teachers' practical skills for contemporary classroom teaching, as The Chartered Institute of Management Accountants (2008) stated that coaching and mentoring, formal or informal, were excellent ways for the students and members to achieve. In addition, some research findings confirmed the effectiveness of coaching and mentoring such as, Sempowicz and Hudson (2012)

conducted a research concerning mentoring pre-service teachers' reflective practices towards producing teaching outcomes, and found that the mentors, who were experienced teachers articulated expectations for teaching, modeled reflective practices, and facilitated time and opportunities for advancing teaching practices which influenced reflective practices and pedagogical development of the mentees, who were pre-service teachers. Moreover, Stahl, Sharplin, and Kehrwald (2016) conducted a research to develop pre-service teachers' confidence through real-time coaching in teacher education, and found that a real-time coaching model improved the pre-service teachers' sense of confidence and ownership of learning by developing practical skills, affective attributes, and disposition toward continual improvement.

Based on Deans, Oakley, James, and Wrigley (2006), coaching and mentoring are two personal development methods to nurture a person's abilities to improve behaviors and performances. Their processes are similar in that they are a series of conversations between two individuals. Coaching is a short-term intervention aimed at performance improvement, while mentoring is to help and support people to manage their own learning in order to maximize their potential, develop skills, improve performance, and become what they want to be. The emphasis is quite different as coaching concerns with task, focuses on performance, agenda set by coach, addresses a short-term need, and gives feedback through discussion, but mentoring concerns with implications, focuses on capability, agenda set by learner, addresses a longer relationship, feedback given by the learner, and discusses about intuitive issues and behaviors.

The GROW Model of coaching and mentoring (Whitmore, 2014) is a very common but effective technique for a person development since it includes the four elements of G, as goal setting; which teachers need to help students understand the goal they want to cover by asking important questions like, "What do you like to get? Where do you like to have got to after spending a half an hour for this? What would be the most useful things you want to take from this?" R, as reality checking; which teachers need to help students explore the facts and feelings around the topic to raise awareness and self-awareness to perceive things as they really are, by asking some questions like, "How do you feel about this? What do you think you are afraid of? What is your level of confidence in your ability to do this? What action have you taken on this so far? What were the effects of the action? What are the factors that prevented you from doing this? O, as options; which teachers need to help students think about actions, solutions and ideas to resolve problems or move the situation forward. The students may face with negativity comes from their beliefs, then the teachers can help them unlock the negativity by asking some questions of "What if", like, "What if you knew the answer, what would it be? What if the obstacle didn't exist, what would you do then? What if you have enough time? W, as what to be done; which teachers need to help students fully bring the chosen option into action which covers the what, when, who, and the will to do it, some questions like, "What are you going to do? When are you going to do it? Who needs to know? What support do you need?" may help the students find the solution. Hendricks (2018) stated that the GROW coaching model also helped teams work from their current reality to their desired goal since they kept their focus, led on the path from setting a goal to figure out where they wanted to be. In addition, Brown and Grant (2010) conducted a research on "From GROW to GROUP: theoretical issues and a practical model for group coaching in organizations", through the adaption and integration of the GROW coaching model, the findings revealed that the group coaching was more goal directed than group facilitation and important for creating changes in organizational contexts. Moreover, Othman (2015) conducted a research on "Empowering teaching, learning, and supervision through coaching in action research", and found that the adapted GROW coaching strategies were successful in improving the subjects' understanding and skills pertaining to action research implementation.

According to the mentioned problems, theoretical frameworks, and supporting research findings, I am interested in conducting this research to find out whether the GROW technique of coaching and mentoring can improve the student teachers' learning outcomes as identified in the objectives.

2. Method and Material

2.1 Research Questions

The study aimed to answer 4 questions. 1) How well can the GROW technique develop coaching and mentoring skills of the subjects? 2) How well do the subjects behave their coaching and mentoring reflections? 3) How well do the subjects gain the coaching and mentoring concepts after the study? 4) How well do the subjects gain their learning achievement on the course of learning organization after the study?

2.2 Research Objectives

The objectives correspond to the questions were to 1) develop coaching and mentoring skills of the subjects through the GROW technique, 2) study the subjects' coaching and mentoring behaviors, 3) compare the subjects'

coaching and mentoring concepts before and after the study, and 4) compare the subjects' learning achievement on the course of learning organization before and after the study.

2.3 Research Design

The study conducted through the "single group, pretest-posttest design" which included 26 juniors enrolling in the course of learning organization in the first semester, academic year 2013. The study consumed 24 periods within 6 weeks after the pretest, and the posttest was administered after the experiment. The activities assigned for practicing coaching and mentoring skills set for four small groups, and each group member needed to do the assignments within 6 weeks through peer teaching demonstration based on the selected topics concerning learning theories, teaching model application, learning integration, lesson plans, learning materials, and learning evaluation strategies. The group members were assigned to take turns for practicing or performing the skills of being coaches and mentors, one after another, at the end of the demonstration. The coaching and mentoring behaviors of the peer teachers, voluntarily for each group were observed while they were teaching.

2.4 Population and Sampling Procedures

The sample was 26 juniors studying at the Facuty of Education, Ubon Ratchathani Rajabhat University, selected by the technique of cluster sampling from a section of 480 students, enrolling in the course of learning organization in the first semester of academic year 2013.

2.5 Instruments

1) A 15-item performance test, and behavior observation form of check-list type based on the conceptual frameworks of the GROW technique, and basic concepts of coaching and mentoring was used for evaluating the coaching and mentoring skills, and behaviors. Items 1–5 set for the basic concepts, 6–7 for the G's, 8–9 for the R's, 10–13 for the O's, and 14–15 for the W's. The scoring of the performances and behaviors was done through a system based on Borich (1994), and the interpretation of those scores done by using percentage, as the scores of 80 percent up mean the subjects had the skills at an extremely positive level, the scores of 50–79.99 percent mean positive, and the scores of 1–49.99 percent mean negative.

2) A 15-item test of coaching and mentoring concepts of check-list type based on the conceptual frameworks of the GROW technique to test the comprehensive concepts of the subjects before and after the experimental procedures. The mean scores of the pretest and the posttest were compared by using t-test.

3) A 40-item multiple choice test of learning achievement on the course of learning organization was administered for the subjects' learning achievement. The test had difficulty indices ranged .10–.97, the discrimination indices ranged .22–.70, and the reliability value was .90. The mean scores of the pretest and the posttest were compared by using t-test.

3. Results

The research findings were described based on the objectives as follows;

1) The subjects had the coaching and mentoring skills through the GROW technique at a positive level, with the average score of .65, which was 65.00 percent, as illustrated in Table 1.

Table 1. The scores of coaching and mentoring skills

Skills of coaching and mentoring	Mean scores of skills on 6 topics of 4 groups (G.1-4)					
	Learning theories	Teaching models	Learning	Lesson	Learning materials	Learning evaluation
			integration	plans		
1. Use both coaching and mentoring	G.1	G.1	G.1	G.1	G.1	G.1
2. Coach immediately as being asked	.33	.60	.73	.73	.73	.73
3. Use mentoring if a learner can independently make a						
decision						
4. Set time for a task after coaching	G.2	G.2	G.2	G.2	G.2	G.2
5. No time set for a task after mentoring	.33	.33	.73	.73	.73	.73
6. Ask the learner to set goals for a task						
7. Coach the learner what the goals are	G.3	G.3	G.3	G.3	G.3	G.3
8. Ask the learner to prioritize activities	.86	.46	.73	.73	.73	.73
9. Coach the learner to prioritize activities						
10. Ask the learner to have alternatives for an activity	G.4	G.4	G.4	G.4	G.4	G.4
11. Coach the learner to do an activity in another way	.86	.46	.60	.73	.73	.73
12. Ask the learner to identify disadvantages of not completing a task						
13. Inform the learner disadvantages of not completing a task						
14. Encourage the learner to complete a task through questions						
15. Coach the learner to complete a task						
Average scores of each group on each topic	.59	.46	.69	.73	.73	.73
Average score, and its percentage	.65			65.00 pe	rcent	

2) The subjects had the coaching and mentoring behaviors at a positive level, with the average score of .53, which was 53.00 percent, as illustrated in Table 2.

Table 2. The scores	of coaching	and mentoring	behaviors
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Behaviors of coaching and mentoring	Mean scores of behaviors of peer teachers of 4 groups (G.1-4) on 6 topics					
	Learning	Teaching	Learning	Lesson	Learning	Learning
	theories	models	integration	pans	materials	evaluation
1. Use both coaching and mentoring	G.1	G.1	G.1	G.1	G.1	G.1
2. Coach immediately as being asked	.60	.60	.60	.46	.46	.46
3. Use mentoring if a learner can independently make a						
decision						
4. Set time for a task after coaching	G.2	G.2	G.2	G.2	G.2	G.2
5. No time set for a task after mentoring	.60	.60	.60	.46	.46	.46
6. Ask the learner to set goals for a task						
7. Coach the learner what the goals are	G.3	G.3	G.3	G.3	G.3	G.3
8. Ask the learner to prioritize activities	.60	.60	.60	.46	.46	.46
9. Coach the learner to prioritize activities						
10. Ask the learner to have alternatives for an activity	G.4	G.4	G.4	G.4	G.4	G.4
11. Coach the learner to do an activity in another way	.60	.60	.60	.46	.46	.46
12. Ask the learner to identify disadvantages of not completing a task						
13. Inform the learner disadvantages of not completing						
a task						
14. Encourage the learner to complete a task through						
questions						
15. Coach the learner to complete a task						
Average scores of peer teachers' behaviors of each	.60	.60	.60	.46	.46	.69
group						
Average score and its percentage	.53			53.00 per	cent	

3) The subjects had significantly higher coaching and mentoring concepts since they gained higher score of the posttest than that of the pretest at the .01 level, based on the mean scores of the pretest at 8.23, the posttest at 11.42, and the t value at 5.69, as illustrated in Table 3.

Table 3. The comparison of pretest and posttest scores of the coaching and mentoring concepts

Concepts	\bar{x}	SD.	t-values
Pretest	8.23	1.83	5.69**
Posttest	11.42	1.55	

Note. ** $p \le .01$.

4) The subjects had significantly higher learning achievement in the course of learning organization since they gained higher score of the posttest than that of the pretest at the .01 level, based on the mean scores of the pretest at 15.07, the posttest at 18.76, and the t value at 4.44, as illustrated in Table 4.

Table 4. The comparison of pretest and posttest scores of learning achievement

Achievement	\bar{x}	SD.	t-values
Pretest	15.07	2.81	4.44**
Posttest	18.76	3.68	

Note. ** $p \le .01$.

4. Discussion

According to the first and second research objectives, the results indicated that the students had the coaching and mentoring skills at a positive level, at 65 percent, and they also had the coaching and mentoring behaviors at a positive level, at 53 percent, these might have been because of their comprehension of the GROW technique which considered as a very common but effective technique for a person development since it includes the four elements of G, as goal setting; R, as reality checking; O, as options; and W, as what to be done, or will (Whitmore, 2014). The results were congruent to research findings indicated that goal setting affected learning outcomes and performances, such as Moeller, Theiler, and Wu (2012) conducted their five-year longitudinal study about goal setting and student achievement, and found that the goal setting significantly affected the high school student language proficiency. A similar research result from Abe, Ilogu, and Madueke (2014) on the effects of goal setting on students' academic performance in English language in Nigeria indicated that those senior secondary students displayed better academic performance in the English language. A result from Dotson (2016) also confirmed that goal setting affected academic performance since he found that 69 percent of 328 fourth and fifth graders participating in the study performed growth in reading performance. Another interesting result was from Courville (2015) who studied the effect of teacher and student-set performance goals on academic achievement in a middle school science classroom, and found that the teacher-set performance goals produced greater growth in content knowledge for the seven graders.

In addition, the students might have recognized that they needed to perform or demonstrate their instruction actively based on the policy of the ministry of Education in that the instructional processes, according to the National Education Act, shall aim to enable the learners to develop themselves at their own pace and to the best of their potentiality (Office of the National Education Commission, 1999). The identified instruction is exactly same as that of student-centered learning organization, which aimed to develop student potentiality, generally called active learning, as Prince (2014) identified it as any instructional method that engaged students in the learning process, required them to do meaningful learning activities, and thought about what they were doing. This kind of learning procedures affected behaviors, as Taraban, Box, Myers, Pollard, and Bowen (2007) confirmed by their research result that teachers who used active learning through the lab-based, perceived changing their behaviors as intended by the student-centered principles.

According to the third and fourth objectives, the findings revealed that the students gained better concepts of coaching and mentoring, and also gained higher achievement in the course of learning organization, these might have been because the learning activities done through goal-oriented and cooperative procedures which said to be effective since Brown and Grant (2010) confirmed that group coaching was more goal directed than group facilitation and important for creating changes in organizational contexts. More importantly, Othman (2015) confirmed that the GROW coaching strategies were successful in improving the subjects' understanding and skills. There were other research findings indicating that cooperative learning on achievement of students in general science at secondary level, Altun (2015), studied the effect of cooperative learning on students' achievement and views on science and technology course, and Parveen, Yousuf, Mustafa (2017), studied the effect of cooperative learning on students' academic achievement and students' perceptions towards cooperative

learning, which found similar findings that cooperative learning showed better results for student scholastic accomplishment.

5. Conclusion

The GROW technique of coaching and mentoring developed the student teachers' performance and behaviors on coaching and mentoring, since the findings revealed that their skills were positive at the percentage of 65, and the behaviors were also positive at the percentage of 53. The technique also increased the subjects' coaching and mentoring concepts, and learning achievement, since they gained significantly higher concepts, and achievement after the study at the .01 level. These were because of goal setting, as mentioned, effectively affected the subjects' academic performance and greater growth in content concepts. Another key point believed to support the positive findings was cooperative learning strategy because the subjects were assigned to work in four small groups, so they planned, discussed, worked together, took turns for peer teaching, and performed coaching and mentoring based on the group decisions, therefore they performed better skills and achievement. The findings were good signs for Thai teacher preparation to effectively initiate another strategy of active learning, or student-centered pedagogy in the pre-service periods, expected to bring great benefits for those pre-service teachers' classroom application.

Acknowledgement

I would like to sincerely thank Ubon Ratchathani Rajabhat University for supporting research budget, the subjects, and those for trying out the instruments.

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