

Study of competency level of students, teachers and mentors based on the integrated approaches of contemplative education, coaching system, and research

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Abstract: The production of competency-based teachers according to the Bachelor of Education program can apply the concept of contemplative education, coaching and research as the bases in guiding the teaching student production process by integrating with learning management in courses and training in educational institutes for students. The objective of this research is to study the competency level of students, teachers and mentors according to the integrated approaches of contemplative education, coaching system, and research. The sample groups used in this research were 1) 9 early childhood education teachers, 2) 30 second year students of early childhood education program in the academic year 2020, 3) 7 kindergarten mentors in the early childhood development center. The specific method of selection was employed. The research instruments consisted of 1) the CCR comprehension assessment, 2) the teacher qualification evaluation form, 3) the CCR coaching competency evaluation form and, 4) the learning management competency evaluation form. The statistics used for data analysis were mean and standard deviation. The findings were; 1) the capacity of teaching qualifications of the supervisors, mentors, and students was at the highest level, 2) the capacity of knowledge in learning management based on the CCR approaches of the supervisors, mentors, and students was at the highest level, 3) the CCR coaching capacity of the supervisors and mentors was at the highest level, 4) the student's CCR learning management was at the highest level.

Keywords: Production of competency-based teachers, contemplative education, coaching system, research-based

1. Introduction

The current teacher production in Thailand has been modified into a four-year curriculum, known as a "competency-based curriculum", which is one of the ways to raise the quality of national education in order to drive the country beyond the middle income trap to produce graduates with the ability to meet the needs of the manufacturing and service sectors. The emphasis is on learning outcome to meet the needs of the labor market. Therefore, the teaching and learning management of educational institutes must be linked to the labor market through the development of curriculum, teaching and learning, measurement and evaluation through cooperation between educational institutes and enterprises. Thus, the competency-based curriculum was used to produce teacher students with the 5-year transition of teacher production into 4-year teacher production. This was a competency-based curriculum. The aforementioned change raises the question of how one can be confident that the production of 4-year graduates will provide the graduates with the qualifications, skills and knowledge equivalent to the 5-year graduates. However, Suan Sunandha Rajabhat University has prepared a 4-year teacher course which is a competency base course. The teaching and learning start in the 1st semester of the academic year 2019 with a focus on developing students to meet the required curriculum competencies. The emphasis is put on the development of teacher students by focusing on the professional experience training as a base for developing teacher students. The teacher students must practice teaching in educational institutes from the first year to the fourth year by using the school as a source of learning experience through the teaching profession and in each major. This includes learning about teachers in educational institutes, application of knowledge to develop learners on a case-by-case basis, and taking of lessons from learning in schools to perform the teacher assistant work in collaboration with the mentors and parents in the development of learners (Faculty of Education, Suan Sunandha Rajabhat University, 2019). The educational institutes that provide experience training play a very important role in enhancing the teacher student's competency in the curriculum. The educational institutes must be willing to jointly develop students and teachers with the university. Meanwhile, the mentors have to be willing to develop teacher students by giving advice to help students learn, possess the characteristics suitable for being a teacher, have skills in organizing learning activities, and have good attitude towards the teaching profession.

This research has applied the integrated approaches of contemplative education, coaching system, and research as the base for thinking to be used in this teacher student production process. At present, the contemplative education is essential to all levels of education. It should be understood on the value to promote learning in this way as much as possible in order to help human development to achieve higher intelligence (Prawet Wasi, 2007). The knowledge can be achieved from 3 processes; deeply listening, over thinking, and realizing the actuality (Wicharn Panich, 2007). Moreover, the organization of learning activities based on the concept of contemplative education can be performed in a variety of formats, including movement activities, creative activities, and

activities related to calming rituals which are learner-centered activities. Learners will develop both mentally and intellectually by using the same experience that the students have had with new experiences taking into account the self-learning with participation. Regarding coaching, Anongsiri Wichalai (2007) said that it is to tell the subjects of knowledge to be understood, show, and tell the method or show as an example. Most people therefore understand that teaching is to transfer knowledge by telling, explaining, and expanding for understanding. The teachers were the gurus who have more experience than students. The scholars have explained the meaning of teaching that it is an interaction process between teachers and learners to cause behavior change as expected from ignorance to be knowledgeable, understand, and do many things by themselves. Coaching is a learning activity where teachers are helping students learn by themselves (learn how to learn) and exchange knowledge or things, that teachers and learners are based on learning objectives. In this teaching method, teachers and learners learn altogether (Wong and Nicotera, 2003). In addition, Thitsana Khaemmanee (2005: 4) has given the meaning of research-based learning management that is to provide the students to learn and use the scientific process in seeking new knowledge or reliable answers by relying on the examination process in the science related to the subject being studied in conducting research, verifying, testing, collecting and analyzing data. Therefore, the Research - Base Learning is an activity that strives for learners to build their own knowledge by giving importance to the learning process of the learners by focusing on the students to apply knowledge in to solve a problem or be used in a realistic situation. In this development of teacher student production, teachers who teach the teacher students have to integrate these ideas into learning activities and supervise students and teachers. At the same time, mentors have to integrate the concept of contemplative education and coaching to supervise students and teachers. The organization of learning activities by integrating the concept of Contemplative education, coaching, and research based learning, also known as CCR, is a process of organizing learning activities that focus on the change from within the learner to understand the outside. The aim is to enable the learners to create knowledge by themselves. The teachers play a role in guiding, helping and inspiring learners to achieve their desired goals by themselves. The instructors must be trained in listening, asking skills, watching and reflecting on the process. These will help the teacher student production process meet the competencies required by the curriculum, which will affect the quality of teachers in the future. In this research, the conceptual framework can be as shown in Figure 1.

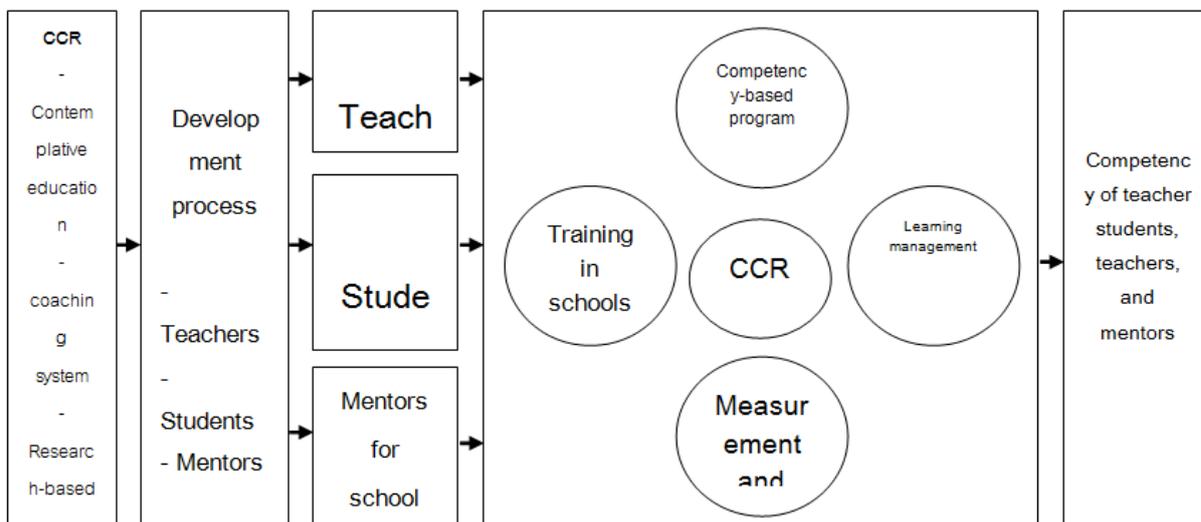


Figure 1 Research's conceptual framework

Therefore, the researchers, as teachers of the Faculty of Education, are interested in studying the competency level of students, teachers and mentors based on the integrated approaches of contemplative education, coaching system, and research. The teachers from early childhood education who studied in competency-based courses (4 years) and mentors in schools were selected as target group by applying the CCR concept to integrate learning management in courses and practice in educational institutes. This is to develop competencies for students according to the objectives of the curriculum and as a model for the production of competency-based teachers for other programs.

2. Research objectives

To study the competency level of students, teachers and mentors based on the integrated approaches of contemplative education, coaching system, and research.

3. Research methodology

3.1 Population and sample group

3.1.1 The population

The population used in this research was 1) lecturers of early childhood education, Faculty of Education, Suan Sunandha Rajabhat University, 2) students of Suan Sunandha Rajabhat University who are studying in the first year of the academic year 2019 divided into 7 programs including early childhood education, mathematics, digital technology for education, Thai language, science, social studies, and English, 3) mentors in Pitaksa preschool development center.

3.1.2 The sample group

The sample group used in this research consisted of 1) 9 lecturers in early childhood education at Suan Sunandha Rajabhat University, 2) 30 students of Suan Sunandha Rajabhat University who are studying in the first year of the academic year 2019. The sample size was specified from 30 students in early childhood education program, 3) 7 mentors in Pitaksa preschool development center. The specific sampling was applied. This study aims to develop the competency of early childhood education students studying in the competency-based teacher course (4 years).

3.2 Research instruments

The instruments used in studying the competency level of students, teachers and mentors based on the integrated approaches of contemplative education, coaching system, and research were divided into 4 sets; 1) the CCR comprehension assessment on the learning management according to the CCR approaches of the participants of research and development project on competency-based integration following the CCR approaches, 2) the teacher qualification evaluation form of the participants of research and development project on competency-based integration following the CCR approaches, 3) the CCR coaching competency evaluation form and, 4) the learning management competency evaluation form.

The process in creating research instruments were 1) to study the concepts, theories, documents and related researches used as a guideline in forming the assessment form, 2) to define the operational terms about competency-based teacher student production process, competency-based learning management of teachers, competency of teacher students, and competency of mentors, 3) to create individual assessments with 4-level rating scale to assess teacher qualifications, CCR coaching competency and learning management competency, 4) to give the created assessment forms to 5 experts to check the content validity to select and improve the text in accordance with the defined terminology. All statements must have Index of Item Objective Congruence (IOC) from 0.80-1.00. 5) To take the assessment in item 4 to try out with 30 non-sample target groups. The reply from the assessment form was taken to score the Reliability of the assessment form using Cronbach's alpha coefficient formula. The Reliability of the understanding assessment form was 0.737. The Reliability of the teacher qualification form was 0.780. The Reliability of the CCR coaching competency assessment form was 0.756 and the Reliability of the learning management competency assessment form was 0.748, respectively. 6) Publish the assessment forms for further use in collecting research data on the sample group.

3.3 Data collection

The researchers divided the data collection into 3 following phases:

3.3.1 The 1st Phase: Teaching and learning management

(1) The lecturers of Early Childhood Education, Suan Sunandha Rajabhat University, prepared the National Qualifications Framework for Higher Education (MorKhorAor. of the courses that take the concept of Contemplative Education, coaching system, and research-based to be integrated into 2 courses; 1) the Early Childhood Art Activities Program (ECC2302) and 2) the Physical Readiness Promotion Program for Early Childhood (ECC2301).

(2) The lecturers conducted teaching and learning according to MorKhorAor. 3 in the first semester of the academic year 2020 during July - September 2020.

(3) The lecturers inserted the CCR process into the teaching and learning management including the use of wisdom, education, coaching and research as a base.

(4) The students created the innovation (draft) to organize the activities for enhancing the experience for kindergarten students.

(5) The lecturers assessed the CCR concept cognition to evaluate the characteristics of teachers, evaluate the CCR coaching competency, and evaluate the performance of both self and student learning management.

(6) The students assessed CCR cognition concepts to evaluate the characteristics of teachers, evaluate the CCR coaching competency, and evaluate the performance of their learning management.

3.3.2 The 2nd Phase: Coaching of mentors

(1) The students brought the innovation (draft) to organize activities to enhance the experience for kindergarten students including art activities at the early childhood education level and activities promoting physical readiness for early childhood to be evaluated by the mentors.

(2) The mentors coached the activities that enhance the student experience to help students understanding the innovation and the context in which they could be used to organize activities for students.

(3) The students took the mentor’s suggestion points to improve the experience-enhancing activities to be the innovation (complete version).

(4) The mentors assessed their own CCR coaching competency.

(5) The students assessed the coaching competency according to the mentor’s CCR model.

3.3.3 The 3rd Phase: Learning management of students

(1) The lecturers in Early Childhood Education and the students brought the experience-enhancing activities including art activities at the early childhood education level and activities promoting physical readiness for early childhood to organize the activities for students in kindergarten 1-3 level of Pitaksa preschool development center.

(2) The students conducted the activities as planned.

(3) The students took part in taking lessons off to organize the activities with the lecturers and mentors.

(4) The lecturers and mentors assessed the student learning management competency.

3.4 Data analysis

The researchers analyzed the data using descriptive statistics such as mean and standard deviation with the following competency assessment criteria:

The mean from 3.51 - 4.00 had the highest level of competency.

The mean from 2.51 - 3.50 had the high level of competency.

The mean from 1.51 - 2.50 had the low level of competency.

The mean from 1.00 - 1.50 had the lowest level of competency.

4. Research results

4.1. Competency of teacher’s characteristics of students

Table 1 Mean and standard deviation of the overall competence of teacher’s characteristics of students

Assessment details	\bar{X}	S.D.	Interpretation
1. Teacher spirit	3.85	0.20	Highest
2. Problem Solving and Innovative Thinking	3.82	0.28	Highest
3. Working with others	3.93	0.14	Highest
4. Use of media and technology	3.94	0.16	Highest
5. Living in the world	3.79	0.23	Highest
Total	3.87	0.15	Highest

From Table 1, it was found that the students who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall teacher competency at the highest level (= 3.87, S.D. = 0.15). When considering each aspect, it was found that the students had the highest level of competency in all aspects of teacher’s qualifications.

4.2 Competency of the students’ understanding of CCR concepts

Table 2 Mean and standard deviation of the competency of understanding in learning management according to the CCR guidelines of the students as a whole

Assessment details	\bar{X}	S.D.	Interpretation
1. Contemplative education	3.55	0.34	Highest
2. Coaching	3.54	0.36	Highest
3. Research-based	3.51	0.34	Highest
4. CCR integrated learning management	3.58	0.33	Highest
Total	3.54	0.25	Highest

From Table 2, it was found that the students who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall competency of understanding the learning management following the CCR approach at the highest level ($\bar{X} = 3.54$, S.D. = 0.25). When considering each aspect, it was found that the students had the highest level of competency of understanding the learning management as teachers in all aspects at the highest level.

4.3 Competency of student’s learning management (assessed by supervisors and mentors)

Table 3 Mean and standard deviation of the learning management competency of students classified as assessed by the supervisors

Assessment details	\bar{X}	S.D.	Interpretation
1. Understanding the learners	3.44	0.52	High
2. Designing and drawing up a learning management plan	3.89	0.33	Highest
3. Learning management	3.89	0.33	Highest
4. Setting up the environment and the use of materials to support learning	3.78	0.44	Highest
5. Measurement and evaluation of learning to develop learners	3.67	0.50	Highest
Total	3.73	0.24	Highest

From Table 3, it was found that the supervisors assessed the competency of student’s learning management entirely at the highest level ($\bar{X} = 3.73$, S.D. = 0.24). When considering each aspect, it was found that the students had the learning management competency in all aspects at the highest level except for the 1st aspect that the student’s understanding competency was at the high level.

Table 4 Mean and standard deviation of the learning management competency of students classified as assessed by the mentors

Assessment details	\bar{X}	S.D.	Interpretation
1. Understanding the learners	3.29	0.46	High
2. Designing and drawing up a learning management plan	3.86	0.36	Highest
3. Learning management	3.86	0.36	Highest
4. Setting up the environment and the use of materials to support learning	3.86	0.36	Highest
5. Measurement and evaluation of learning to develop learners	3.71	0.46	Highest
Total	3.71	0.21	Highest

From Table 4, it was found that the mentors assessed the competency of student’s learning management entirely at the highest level ($\bar{X} = 3.71$, S.D. = 0.21). When considering each aspect, it was found that the students had the learning management competency in all aspects at the highest level except for the 1st aspect that the student’s understanding competency was at the high level.

4.4. Competency of teacher’s qualifications of supervisors (self-assessment)

Table 5 Mean and standard deviation of the competency of teacher’s qualifications of supervisors entirely

Assessment details	\bar{X}	S.D.	Interpretation
1. Teacher's spirit	3.98	0.05	Highest
2. Problem solving and innovative thinking	3.88	0.22	Highest
3. Working with others	4.00	0.00	Highest
4. Use of media and technology	3.96	0.11	Highest
5. Living in the world	3.96	0.11	Highest
Total	3.95	0.05	Highest

From Table 5, it was found that the lecturers who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall competency of teacher's qualifications at the highest level ($\bar{X} = 3.95$, S.D. = 0.05). When considering each aspect, it was found that the lecturers had the competency of teacher's qualifications in all aspects at the highest level.

4.5. Competency of comprehension in the CCR approach of the lecturers (self-assessment)

Table 6 Mean and standard deviation of the competency of comprehension in the learning management following the CCR approach of the lecturers entirely

Assessment details	\bar{X}	S.D.	Interpretation
1. Contemplative education	3.88	0.16	Highest
2. Coaching	4.00	0.00	Highest
3. Research-based	3.88	0.16	Highest
4. CCR integrated learning management	3.88	0.23	Highest
Total	3.89	0.07	Highest

From Table 6, it was found that the lecturers who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall competency of comprehension in the learning management following the CCR approach at the highest level ($\bar{X} = 3.89$, S.D. = 0.07). When considering each aspect, it was found that the lecturers had the competency of comprehension in the learning management of teachers in all aspects at the highest level.

4.6 Competency of CCR coaching of supervisors (assessed by the students)

Table 7 Mean and standard deviation of the competency of CCR coaching of supervisors

Assessment details	\bar{X}	S.D.	Interpretation
1. Counseling	4.00	0.00	Highest
2. Communication	3.78	0.44	Highest
3. Listening to opinions	4.00	0.00	Highest
4. Empowerment	4.00	0.00	Highest
5. Coordination	4.00	0.00	Highest
6. New knowledge	3.78	0.44	Highest
7. Appreciation	4.00	0.00	Highest
Total	3.93	0.12	Highest

From Table 7, it was found that the students assessed the supervisors to have the competency of CCR coaching entirely at the highest level ($\bar{X} = 3.93$, S.D. = 0.12). When considering each aspect, it was found that the supervisors had the coaching competency in all aspects at the highest level.

4.7 Competency of teacher's qualifications of the mentors (self-assessment)

Table 8 Mean and standard deviation of the competency of teacher's qualifications of the mentors entirely

Assessment details	\bar{X}	S.D.	Interpretation
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1. Teacher's spirit	3.92	0.08	Highest
2. Problem solving and innovative thinking	3.71	0.39	Highest
3. Working with others	3.90	0.16	Highest
4. Use of media and technology	3.90	0.16	Highest
5. Living in the world	3.85	0.20	Highest
Total	3.86	0.12	Highest

From Table 8, it was found that the mentors who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall competency of teacher's qualifications at the highest level ($\bar{X} = 3.86$, S.D. = 0.12). When considering each aspect, it was found that the mentors had the competency of teacher's qualifications in all aspects at the highest level.

4.8 Competency of comprehension in the CCR approach of the mentors (self-assessment)

Table 9 Mean and standard deviation of the competency of comprehension in the learning management following the CCR approach of the mentors entirely

Assessment details	\bar{X}	S.D.	Interpretation
1. Contemplative education	3.80	0.32	Highest
2. Coaching	3.85	0.26	Highest
3. Research-based	3.80	0.26	Highest
4. CCR integrated learning management	3.71	0.23	Highest
Total	3.79	0.19	Highest

From Table 9, it was found that the mentors who participated in the research and development project of competency-based teacher production process by integrating the concept of contemplative education, coaching system, and research-based had the overall competency of comprehension in the learning management following the CCR approach at the highest level ($\bar{X} = 3.79$, S.D. = 0.19). When considering each aspect, it was found that the mentors had the competency of comprehension in the learning management of teachers in all aspects at the highest level.

4.9 Competency of CCR coaching of the mentors (assessed by the students)

Table 10 Mean and standard deviation of the competency of CCR coaching of the mentors

Assessment details	\bar{X}	S.D.	Interpretation
1. Counseling	4.00	0.00	Highest
2. Communication	3.57	0.53	Highest
3. Listening to opinions	3.86	0.37	Highest
4. Empowerment	4.00	0.00	Highest
5. Coordination	3.86	0.37	Highest
6. New knowledge	4.00	0.00	Highest
7. Appreciation	4.00	0.00	Highest
Total	3.89	0.15	Highest

From Table 10, it was found that the students assessed the mentors to have the competency of CCR coaching entirely at the highest level ($\bar{X} = 3.89$, S.D. = 0.15). When considering each aspect, it was found that the mentors had the coaching competency in all aspects at the highest level.

5. Discussion

From the study results of competency levels of students, teachers and mentors based on the integrated approaches of contemplative education, coaching system, and research, the researchers would like to discuss the research results as follows.

1. The results of analysis on the competency of teacher's qualifications of the supervisors, mentors, and students who participated in the research and development project of competency-based teacher production process by integrating following the CCR approach were at the highest level. This was because the supervisors,

mentors, and students who participated in the research project were the persons raised with the awareness of teacher's qualifications from learning and teaching organization, organizing the activities, and performing the teaching profession. This made the inner of supervisors, mentors, and students teachers initially. When developing the CCR approach focusing on bringing the contemplative education to develop the learning management of supervisors, development of the mentor's coaching, teaching management in courses, and organizing activities to enhance students' experience. The students saw the importance of teaching profession and being a primary school teacher that they must have correct knowledge and understanding of science and behave accordingly. The students had behaviors that could express themselves to be a good teacher in the future by expressing the intention to design activities and produce consistent media, using voice guidance to talk to students, using language that was easy to understand, process demonstration of activities in language that students could understand and follow. This was consistent with the research results of Wanthanee Namsawat, Siriwan Sriphahon, and Kanjana Lintharattanasirikul (2015: 7) finding that the teacher's characteristics of the students in the Faculty of Education after learning with the contemplative education process were at the high level.

2. The results of analysis on the competency of comprehension in the learning management following the CCR approach of the supervisors, mentors, and students who participated in the research and development project of competency-based teacher production process by integrating following the CCR approach were at the highest level. This was possibly because the supervisors, mentors, and students were trained on the approaches of contemplative education, coaching system, and research-based as the concept which could be integrated in managing learning and conducting the activities for the students. There were some components and methods. When the supervisors, mentors, and students were assessed on the knowledge about CCR approach, the comprehension level was at the highest level. This was consistent with the research results of Thepphorn Lomarak and Bancha Nuansai (2019: 57) studying the teacher development process using the concept of contemplative education, coaching system, and research-based. The research results revealed that the average scores in testing the knowledge and comprehension in the process of integrated learning management of contemplative education, coaching system, and research-based after the training were higher than before the training with the statistical significance at level .01.

3. The results of analysis on the competency of CCR coaching of the supervisors, mentors, and students who participated in the research and development project of competency-based teacher production process by integrating following the CCR approach were at the highest level. This was possibly because the supervisors organized teaching and learning activities in the courses that focused on students to take action on creating innovation. The lecturers must periodically coach the principles of science, disciplines and working procedures for students to meet the standards of the curriculum. This agreed with Chanitsorn Trithayaphum (2015) finding that teaching was the work learning having a supervisor or an expert as a mentor to teach the job step by step letting the students to take action. The work was tracked for the students to be used to improve their work and help developing working skills to gain more confidence.

4. The results of analysis on the competency of learning management following CCR approach of the students who participated in the research and development project of competency-based teacher production process by integrating following the CCR approach were at the highest level. This was possibly because of the learning management process of lecturers and coaching of the lecturers and mentors in creating the innovation. Bringing innovation to organize activities to enhance the experience for kindergarten students at school gave the students the highest level of competency in learning management according to the CCR approach. The students also practice teamwork with their peers to develop innovation. Practicing teaching even in only short time allowed the students to understand being the primary teachers through organizing activities. This was in accordance with the research of Thepphorn Lomarak and Bancha Nuansai (2019: 57) studying the teacher development process using the concept of contemplative education, coaching system, and research-based. The research results were found that teachers had learning management competency. The teachers could apply knowledge gained from the workshop that integrated the concept of contemplative education, coaching system, and research-based in designing classroom learning activities, determination of purpose, instructional design, measurement and evaluation and the use of media/learning resources. They supported learning at a very high level in all areas. This agreed with the research of Sirimane Banjong (2020: 36-37) studying the development of learning management competency of teacher students by using a guidance process. The research results revealed that 1) the learning management competency of the teacher students using the guidance process was at a good level; 2) the learning management competency of the teacher students after using the guidance process had a higher level of learning management competency than before the experiment at a fair level.

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