Development Of Learning And Classroom Management Competencies Of Student Teachers Using The Transformative Learning Concept

Suttipong Boonphadung[a], Pintipa Seubsang[b]

[a]Assistant Professor, Faculty of Education, Suan Sunandha Rajabhat University, Thailand.
[b]Ph.D. in Education, Faculty of Education, Suan Sunandha Rajabhat University, Thailand.
[a] suttipong.bo@ssru.ac.th , [b] pintipa.se@ssru.ac.th

Abstract: The development of competency in learning and classroom management of student teachers according to the transformative learning concept is an important student-centered teaching method in correspondence with the development of students to become teachers in the New Normal era. The objectives of this research were to assess and compare students' competency levels in learning and classroom management with 86% competency criteria and to assess the level of their transformative learning. The sample of the research was 32 third year student teachers of the Faculty of Education in Suan Sunandha Rajabhat University. The research was conducted in the academic year 2020. The sample was selected through cluster random sampling. The research instruments included 15 transformative learning-based lesson plans, a knowledge test on learning and classroom management, an assessment form on the learning and classroom management, and an assessment form on transformative learning. The data was analyzed using Mean, standard deviation, and t-test. The research results revealed that the competency level of student teachers was at a high level or 80.46%, however their competencies were still significantly lower than the 86% competency criteria with the statistical significance at the .01 level. The findings also showed that the levels of the student teachers 'transformative learning was high (Mean=4.35, S.D.=1.02). The research results are beneficial for the academic affairs such as publication of teaching materials developed in accordance with the educational guidelines for transformative learning to the Graduate Teacher Production Unit. The results reveal an insight into the management of teacher education in the Faculty of Education and related agencies for enhancing the quality of 21st century teacher. Moreover, the findings of this study also indicate the importance of teacher professional development programs and trainings that can encourage teachers to implement transformative learning methods in classrooms in order to develop their learners effectively and appropriately.

Keywords: Development of competency, Transformative learning concept, Learning and classroom management, Student teachers

1. Introduction

The rapid change and increase in information technology and technological innovation allow people to prepare themselves for the potential to cope with and prepare for the changing situations that are too complex to manage. This is the gap between the progress of the global society and the competencies of people. Hence, it is imperative for people to develop and encourage their knowledge, abilities, have process of thinking and adapt themselves to cope with changes effectively corresponding to the needs of the global society through the use of propulsion through educational institutes (Yukawa, 2015, p. 158; Turner, 2018; Papagiannis & Sipitanou, 2018, p. 246). The key factors involved in this matter are the quality of teachers who have gone through the process of producing graduates with standards and qualifications of modern teachers divided into 3 main roles; Facilitator, Guide/Coach, and Co-learner/Co-investigator (Office of the Education Council, 2015) focusing on Mastery Learning and Action Learning (Parnichparinchai, 2016, p.3) using technology media to search for information focusing on the exchange of knowledge, listening to different opinion, having communication skills for the exchange of knowledge and other skills necessary for teaching profession (Nunart, 2017, p. 325). However, nowadays, online learning management has played an important role in coping with the coronavirus (COVID-19) epidemic situation (Hermond & Tanner, 2020). There are some endeavors to research the effectiveness of online learning management at the bachelor level. It was found that learners are not familiar with and are not involved in online learning activities enough (Bowden, 2017, p. 53; Lohr & Haley, 2018). Therefore, motivating learning activities are designed to promote participation of learners as well as encouraging students to be able to direct and transform themselves in their learning more effectively.

Transformative learning of Mezirow is essential to the 21st century learners who aim to empower the younger generation to learn deeply, create, work as a team and know how to solve problems (Hargreaves, 2003, p. 3). This is important for the management of higher education (Taylor, 2000, p. 24) with a learning process that emphasizes explaining, interpreting, and summarizing the contents learned in connection with experience using critical self–reflection and rational critical conversation (Mezirow, 1990, p. 141; Meesil, 2019, p. 58, 61). The critical reflection is essential for the transformation of the conceptual framework to help learners make good decisions whether it is contemplation from the content or knowledge that ever had, contemplating the process, and contemplating the paradigm. The critical discussion is an exchange of ideas. It helps examining personal feelings and values leading to the perception of different thoughts and perspectives. This leads to the most correct action

decisions (Pakdeto & Arpaichiraratana, 2016, p. 4). For the design of study activities, Nichols, Choudhary, and Standring (2020, p.52) conclude that teachers can use online learning to make a difference to learners. Meyers (2008, p. 219) discusses online teaching methods that promote self-transformative education such as encouraging people to learn more about past experience, belief, and prejudice. The teaching strategies can promote learner participation presenting real-world problems that arise in society and helping the learners to solve problems by focusing on practice. Illeris (2015, p. 46) states that transformative learning is a type of learning that is used to make the learners more effective changing according to their individual characteristics in their intelligence, emotion, and society. Teachers need to set up the environment and atmosphere to trust one another with the access to accurate and complete information, learning arrangement that encourages learners to solve problems through critical reflection, and logical discussion (Taylor, 2000).

According to the research of Gravett (2004, pp. 259–272), it was found that for activities that would give students reflection, the learners need to have a good foundation in conversation. This may be promoted by engaging learners with shared workloads. Stone, Duerden, Duffy, Hill, and Witesman (2017) researched and discovered that the learning activities that the learner surveyed and exchanged knowledge would guide the context of education for transformative learning. It has also suggested that studies and research on learning activities in different contexts are to be performed according to the educational structure for transformative learning. As a result of the above reasons, it is found that there are still issues necessary for education and research on learning activities based on educational concepts for changes towards the development of learners' potential especially those who are graduate teachers. This is the product and a vital force of each country in enhancing the quality of education. The Faculty of Education has an important mission to produce qualified and capable graduates particularly the production of teacher graduates who are competent in learning and classroom management. It corresponds to the needs of the government and the changes that occur all the time in the society of the country and the world. Therefore, the researcher sees the importance and the necessity of education and research to develop competencies in learning management and classroom management of student teachers according to educational concepts for transformative learning. It includes the changes that occur to enable students to have the immunity to change themselves and to be able to use them to improve the quality of education along their teacher career paths for the quality further.

2. Literature Review

The education and research to develop competencies in learning and classroom management of student teachers according to educational concept of transformative learning will find answers that lead to the development of teacher graduates to be those who are ready before entering the career path and to be a qualified teacher in the future. This will lead the education of society and the nation to prosperity and sustainability. Therefore, the literature review is for finding the above answers as well as clear guidelines for setting the conceptual framework of the research. The revision was on the learning theory of adult people, concepts and theories related to education for transformative learning and concepts about development and evaluation of performance in the following order.

2.1 Adult Learning Theory

The adult learning theory is the concept of building one's self-knowledge in learning that connects experiences and builds new knowledge based on existing knowledge and understanding. In particular, the revision of past mistakes (Cox, 2015, p.29) make changes in knowledge, skills, behaviors, abilities, cognitive systems (Drago–Severson, 2007, p.75). The principles of the adult learning theory are (Drago–Severson, 2007, p. 76; Merriam, 2001, p.5; Knowles, 1984) (1) Self–concept: Adults have their own concept of self–direction, (2) their own experience: Adults come into learning situations that they find valuable and meaningful to them, (3) Learning approaches: Adults use real life or real life problems as the center of their learning. This is motivated when adults find that such learning can be used to solve real-life problems, (4) Readiness to learn: Adults will be readily to learn when the experience will allow them to apply it in life situations such as social role-based work. Knowles (1975, pp. 34–37) offers a method for managing learning which can be applied to student teachers for achieving self–learning including (1) creating an atmosphere that promotes trusting learning, respect for the rules altogether, respect for humanity altogether including the physical environment of the learning place that must facilitate learning; (2) systematic planning of learning activities between learners and teachers; (3) study of learners and teacher's needs, (4) determining directions or objectives for collaborative learning, (5) designing learning methods and joint learning activities **between** learners and teachers, (6) conducting planned activities, and (7) evaluating joint learning activities between learners and teachers.

However, the adult learning theory is associated with self-directed learning emphasizing the independence of the individual and their own responsibility for learning which is the basis of higher education. In addition, learners will be keen to know and try to learn what they are interested in. It is the characteristic of the learners who are self–directed in their learning. They will be able to learn better than learners who learn by directing others. Knowles (1984) has stated the importance and benefits of self-directed learning that the individuals who learn on

their own initiative learn more will have higher intention, purpose, and motivation. They can benefit from learning better and longer than those who learn by being merely the recipient or waiting to be conveyed by the instructors. Therefore, it is found that the adult learning theory which is related to self–directed learning play an important role as a conceptual framework for designing learning activities in this research.

2.2 Concepts and theories of Transformative Learning

The concept of transformative learning is relevant to the management of education and adult learning (Biasin, 2018, p.5; Taylor & Cranton, 2013, p.33; Taylor, 2007, p.173). It refers to the learning experience as a cause for changing individual perspectives in reinterpreting or revising that interpretation (Mezirow, 1990). Moreover, the disorienting dilemma is indeed a powerful catalyst for transforming a person's perspective or worldview (Christie, Carey, Robertson, & Grainger, 2015, p. 11) which is a key element that connects learning management of aging. The significant elements connected to the adult learning management include conditional learning and learning for communication (Biasin, 2018, p.6; Mezirow, 1981, pp. 3–6).

Educational theory for transformative learning is an adult learning model that offers a theoretical perspective on principled and conditional learning management. It offers an interpretation of how learners understand and conceptualize the experience (Cranton, 2005, p. 167) in order to make the learners' existing assumptions clearer. (Johnson & Olanoff, 2020, p. 734). The 3 factors that represent the learning management using educational theory for transformative learning are individual experiences, critical reflective thinking, and rational discussion (Taylor, 2000, p. 4). Taylor (2008) proposed the nature of learning activities in which learners perform group activities in exchanging knowledge and giving feedback as important to educate learners to transform themselves. Rosebrough and Leverett (2011, p. 16) suggests that it should be an activity designed for the academic, social and spiritual transformation of learners to become self-aware. The role of the teacher is to train the intelligence and make the learning activities a platform for changing the life experience of the learners as well as reflecting on what we have learned. In this regard, teachers need to select contents, learning materials, methods of transmission and activities that increase awareness and thinking within a learning context. This is consistent with Christie, Carey, Robertson, and Grainger (2015, p. 22) proposing that learners should be trained or learned in applying knowledge to situations that were not previously expected and consistent with their career path to transform existing paradigms, beliefs, practices to larger, wider, deeper, more reflective and more accurate visualizations (Mezirow, 1978, 1991, 2000, 2003).

However, the concept and theory of transformative learning state that there are two types of learning essential to the development of adult learners to transform themselves (Mezirow, 1991); Instrumental learning and Communicative learning. The Instrumental learning focuses on task oriented problem solving learning, various technical controls, learning for the Determination of cause and effect relationships, and how to achieve goals. The results will be abstract, such as skills and knowledge in doing things (Quinn & Sinclair, 2016, p. 201; Moyer & Sinclair, 2020, p. 343). Communicative learning is the learning of persons on how to express their feelings, needs and desires for others. It leads to a deeper understanding, able to distinguish, identify, characterize problems that arise. It is related to the interpretation, demonstration of understanding, and conveying meaning while socializing with others (Mezirow, 2000, p. 10; Moyer & Sinclair, 2020, p. 343). This will bring in a deep understanding of others' self, social values, belief, and expectation to meet benchmarks. Mezirow (2003) believes that both types of learning can be achieved through the use of two important learning tools; critical self–reflection and critical discourse. Slavich and Zimbardo (2012 as cited in Fazio–Griffth & Ballard, 2016, p. 226) proposes a management approach using educational theory for transformative learning using as the base such as a common course goal setting between teachers and learners, organizing experiences that give learners a clear knowledge of, encouraging learners to find challenging and intellectually stimulating activities, creating activities that allow learners to gain experience beyond the scope of their studies and encouraging learners to reflect learning results.

From the above information, it can be seen that learning activities based on the educational concept of transformative learning are feasible to be used in the development of teacher graduate's potential. This is the product and a vital force of each country in enhancing the quality of education. Therefore, in this research, educational concepts and theories for transformative learning are applied in order to obtain academic knowledge that is useful for creating changes in the desire of the teacher graduates along with the change of society and the world.

2.3 Concept of development and assessment of competency

The concept of competency can be considered from the key elements including knowledge, skills, attitudes, values and personalities (McCleland, 1978). The professional teacher competencies are related to knowledge, skills, attitudes and values in the field of study (Houstan, 1987 as cited in Vazalwar & Dey, 2011, p. 90). The theories are related to learning management for competency development including self-determination theory (Deci & Ryan, 1985; Mulder, 2018). This proposes a learner-centered approach to learning management with the

freedom to lead oneself, take control of learning, and make one own decision. As for the competency assessment method, several educators have proposed some. Van Loo & Semeijn (2004) proposed the self–report method. Vaatstra & De Vries (2007) suggested that it was based on knowledge and attitudes applied in the context of their profession. Henri, Johnson, & Nepal (2017) proposed to consider progress in demonstrating deep knowledge of that competency. Such competency must be observed and measured. In addition, if it is a concept of self-transformation education, it should encourage learners to go beyond just knowing and doing (McTighe & Wiggins, 1999). Fook & Sidhu (2013, p. 9) proposed using the Formative assessment because it will help motivating the learners to study for self-transformation. Teachers, as assessors, are required to summarize learner competency levels most accurately and fairly to learners using accurate and precise tools (Giroux, Tetreault, & Landry, 2015, p. 1).

2.4 Research Conceptual Framework

The research conceptual framework was based on a literature review on the adult learning theory, educational theory of transformative learning, and self–determination theory. This research will understand graduates as teachers who will serve in the future of society and the nation. Therefore, from the concept of the adult learning theory, educational theory of transformative learning, self–determination theory, and the assessment on the performance of the learners summarized above, the researchers have set up a conceptual framework for education and research on the development of competency in learning and classroom management as shown in Figure 1 as follows.
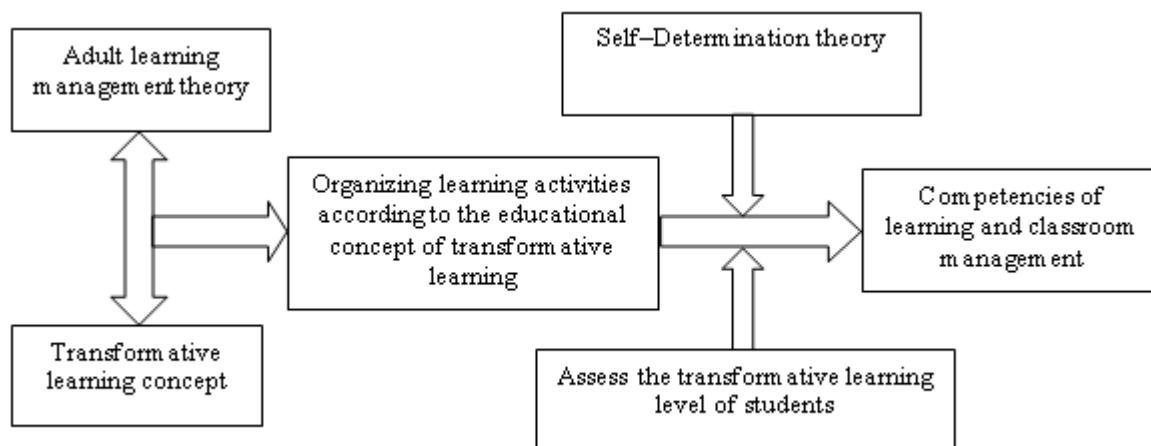

Figure 1. Research Conceptual Framework

2.5 Research Objectives

The objectives of this research were to assess and compare students' competency levels in learning and classroom management with 86% competency criteria and to assess the level of their transformative learning in the course of learning and classroom management.

3. Methodology

This research was a quantitative research that was designed as an experimental research on the 3rd year student teachers of the academic year 2020 Suan Sunandha Rajabhat University. There were 125 students enrolled in learning management and class management courses for 6 sections (Suan Sunandha Rajabhat University: Educational Service Division, 2020). The sample group used in this research was drawn from 1 group of cluster random sampling. A total of 32 students and teachers were willing to cooperate in this research. The research instruments were (1) conceptual learning activities, self–transformation education in the learning management and classroom management courses for 15 plans with Index of Item Objective Congruence (IOC=1.00), (2) Knowledge test about learning and classroom management. It is divided into 50 questions in the middle of the semester which was a four–choice test with an IOC value of 0.67–1.00 and an IOC value of 0.905. The difficulty value was between 0.34–0.73 and the classification power was between 0.31–0.61. The confidence value of the whole volume was 0.835 while 50 questions at the end of the semester were 4 options with an IOC value between 0.67–1.00 and the whole IOC of 0.934. The difficulty index was between 0.23–0.71. The discriminant index was 0.24–0.62, and the reliability was 0.739. Thus, all the tests were content-relevant and applicable to the sample group. (3) Skill–level assessment was used in student learning and classroom management. The content consistency could be applied to the sample group (IOC=1.00). (4) The educational level assessment form for

transformative in learning and classroom management had an individual IOC between 0.67–1.00 with an overall IOC of 0.92.

3.1 Data collection

This research used a quantitative research methodology designed as an experimental research with 32 student teachers by organizing learning activities based on educational concept for transformative learning in each unit of study divided into 15 units. Each unit consists of 4 hours; 2 hours of theory and 2 hours of practice, totaling 60 hours. During class, there will be 3 sub–tests with only 10 points collected (Quiz) and during the study, students have practiced workloads of 8 pieces. Each piece of work provides students with a demonstration of skills and attributes in learning and classroom management. 50 points were collected. In addition, there were 50 items of mid-term examinations and 50 items of final examinations with 20 points and 20 points collected, respectively. The researchers collected information about the educational level for the transformative learning of the student teachers. A self–report study level assessment questionnaire was used for self–change in learning and classroom management of 15 questions to summarize the results of further studies and researches.

3.2 Data analysis

The data analysis was on assessing the competency level of student teachers in learning and classroom management. It was analyzed using mean and standard deviation. The results were analyzed by applying the criteria of Best (1981, p. 182) as the percentage of the score as shown in Table 1. Then, the competency levels of student teachers in learning and classroom management were compared with the 86% competency criteria using t-test and educational level assessment for the transformative learning of student teachers in learning and classroom management using the mean and standard deviation. The results were interpreted according to the criteria of Best (1981, p.182) as shown in Table 1.

Table 1**.** Criteria for interpreting the competencies and levels of education for the transformative learning of student teachers in learning and classroom management

Mean	Percentage of points	Meaning
4.50 – 5.00	90 – 100	Highest
3.50 – 4.49	70 – less than 90	High
2.50 – 3.49	50 – less than 70	Moderate
1.50 – 2.49	30– less than 50	Less
1.00 – 1.49	20 – less than 30	Least

4. Result

This research will present results to meet research objectives to assess and compare the competency levels in learning and classroom management of student teachers with 86% competency criteria and to assess the level of education for transformative learning and classroom management to organize learning and classroom. 32 student teachers were willing to cooperate in the research. The results were analyzed in the following order.

4.1 Results of analysis on the student's competency level

The analysis of the student's competency level   in learning and classroom management was conducted to study the variables related to the competency consisting of knowledge, skills and attributes. The results of data analysis were presented in Table 2 and Table 3, respectively, as follows.

Table 2. Results of analysis on the student's competency level in learning and classroom management

Studied variables	Full scores	Mean	S.D.	Percentage	Competency level
Skill and Attribute	50	40.10	2.62	80.20	High
Quiz scores	10	9.21	.83	92.10	Highest
Mid scores	20	16.26	1.53	81.30	High
Final scores	20	14.89	2.11	74.45	High
Overall	100	80.46	4.15	80.46	High

From Table 2, it was found that the student's competency level in learning and classroom management had the mean of 80.46% which was at the high level. When considering each aspect, it was found that the skill level and characteristics of the student's learning and classroom management were at the high level (80.20%). The student's level of knowledge which consisted of Quiz test, midterm examination, and the final examination revealed that the midterm and final exam scores were high (80.30% and 74.45%, respectively). Only the Quiz test was at the highest level with the mean of 9.21 scores representing 92.10%.

Table 3. Results of analysis and comparison of the student's competency level in learning and classroom management with the 86% criteria

Studied variables	Mean	S.D.	t	df	p-value	Result
Skill and Attribute	40.10	2.62	–6.25**	31	.000	Lower than the 86% criteria
Quiz scores	9.21	.83	4.15**	31	.000	Over the 86% criteria
Mid scores	16.26	1.53	–3.47**	31	.002	Lower than the 86% criteria
Final scores	14.89	2.11	–6.21**	31	.000	Lower than the 86% criteria
Overall	80.46	4.15	–7.55**	31	.000	Lower than the 86% criteria

* Significant at the . 05level ,** Statistically significant at the . 01level

From Table 3, it was found that the student's competency level in learning and classroom management was significantly lower than the 86% criteria with the statistical significance at .01 level (t =–7.55, p=.000). When considering each side, it was found that the skills and characteristics of student's learning and classroom management were lower than the 86% criteria with the statistical significance at .01 level (t=–6.25, p=.000). The knowledge level of students consisting of Quiz test, midterm, and final examinations revealed that the midterm exam scores and the final exam scores were lower than the 86% criteria with the statistical significance at .01 level (t=–3.47, p=.002 and t=–6.21, p=.000, respectively). Only the Quiz test had the higher scores than the 86% criteria with the statistical significance at .01 level (t=4.15, p =.000).

4.2 Results of analysis on the educational level for the student's transformative learning

The analysis on the educational level for the student's transformative learning in the course of learning and classroom management was conducted on the details based on the studied issues. This consisted of changes in decision making and learning changes. The analysis results were as shown in Table 4.

Table 4. Results of analysis on the educational level for the student's transformative learning

Item	Questions	Mean	S.D.	Result
	Changes in decision making (Item 1–4)	4.73	.45	Highest
1	Students take part in expressing their opinions on learning activities.	4.80	.42	Highest
2	Students freely present their academic ideas to their lecturers both the same and the difference.	4.60	.52	Highest
3	Studying in this course helps the students make a comprehensive assessment in all aspects.	4.50	.53	Highest
4	Students see the benefits of reviewing their thoughts before making any decision.	5.00	.00	Highest
	Changes in learning)Item 5–15)	4.21	1.13	High
5	Students have the confidence to share their academic ideas with other peers.	4.00	.82	High
6	Students can learn how to manipulate opinions that differ from their own ideas.	4.90	.32	Highest
7	Students use self-reflection when encountering problems.	4.60	.52	Highest

8	Students think that working altogether as a group resulting in learning new things.	4.80	.42	Highest
9	Students think that they can clearly perform the tasks assigned by the lectures.	4.70	.48	Highest
10	Students can adjust their thinking processes when learning from the lecturers or friends.	4.80	.42	Highest
11	Students like to think or try to think in new ways.	4.80	.42	Highest
12	While studying, the students found that their existing knowledge and understanding are not correct.	4.40	.84	High
13	The studied subject wants the students to mainly believe in learning ideas from the teachers.	4.40	.52	High
14	Studying this course, the students think there is more important thing than passing exams or getting good grades.	3.20	1.14	Moderate
15	The students assess their knowledge and understanding of studying regularly to improve and develop themselves.	4.50	.53	Highest
	Overall)Item 1–15)	4.35	1.02	High

From Table 4, it was found that the education level of the student's transformative learning in the course of learning management and classroom management was entirely at a high level (Mean=4.35, S.D.=1.02). For each aspect, the changes in decision-making (Mean=4.73, S.D.=.45) and changes in learning (Mean=4.21, S.D.=1.13) were at the highest and the high levels, respectively. For the findings made to students in transformative learning, the students realize the benefits of reviewing their thoughts before making any decision (Mean=5.00, S.D.=.00). For the changes in learning, some interesting issues were that the students could learn how to manipulate opinions that differ from their own ideas, be able to modify their thinking processes when learning from an instructor or friend. They also like to think or try thinking in new ways and learn new things when working altogether as a group (4.80 ≤ Mean ≤ 4.90).

5. Discussion

1. The competency level of the students in learning and classroom management was at the high level. This finding aligned with Boonphadung (2019)'s research results, and the findings of Boonphadung and Seubsang's research (2020). They showed that student's curriculum development competencies were at the high level, however lower than 86% criteria. This result supports the implementation of the concept of transformative learning in that the teacher should play the role as facilitator and motivator rather than the main speaker in the class. To engage students' active role, teacher provide them with complex problems and allow them to work on the problems and share their thoughts. During the activity, students are also provided with a guideline of conditional learning and at the same time they can develop their communication skills. In addition, this idea is also correspond to the study of Moyer and Sinclair (2020) which pointed out the importance of action–based learning for behavior changes. To promote learners' competency, the design of activities or learning processes needs to be systematic and clear. Dirkx and Smith (2009 as cited in Johnson & Olanoff, 2020, p. 736) support this point as they proposed that online learning management based on the concept of transformative learning can engage learners in problem-solving situations. The students were encouraged to work collaboratively on solving problems, presenting the results, and reflecting their performance.

However, even though the competency of the students was very high but it was still below the 86% criteria, there was still the development gap. This was possibly due to differences in knowledge and ability of conversation and reflection. Gravett (2004) concluded that students need to have a good foundation for reflection through conversation to use educational ideas for transformative learning. Therefore, the promotion of competency was essential for students to enhance their conversational and reflective abilities in study activities as interpolated through further study activities.

2. The education for the student's transformative in learning and classroom management was entirely at the highest level. This was possibly due to the fact that learning activities based on the self–developed education concept had created an atmosphere that allowed students to express their opinions, exchange knowledge, apply knowledge and experience to discuss and contribute to the discussion about the study topic. This was consistent with Cox (2015) stating that interpersonal interaction influenced individual changes. In addition, allowing the students to face problems or situations that require consideration and selection which were different from those experienced made the students dare to think. They would have the courage to practice and the courage to make decision. On this point, Mezirow (1997, 2000), Kitchenham (2008) and Cranton (2002) said that exposing learners to situations that were not based on their original perspective or the Disorienting Dilemma was the first and important step of the learning process towards changes. It agreed with Merriam (2001) and Cox (2015) stating that

learners should have more learning through exchanging experiences rather than being taught and given the freedom without coercion. In addition, the issues that are clearly changing for students include how students see the benefits of reviewing their thoughts before making any decisions, learning how to manage their opinions that differ from their own ideas, being able to modify their thinking processes. They will love to think or try thinking in new ways and learn things when working altogether as a group. Van Halen–Farber (1997 as cited in Johnson & Olanoff, 2020, pp.736–737) summarized that allowing students to listen to stories from the experiences of their peers, reflect on what they heard, write a summary of the story according to the idea would help the students be aware of what they have learned. The students would have self-confidence and they would be able to direct and control themselves.

6. Conclusion

This study and research is useful for enhancing and developing student teachers to be competent in learning and classroom management. This is important to the development of education in each country. However, this research has brought the concept of Transformative learning as a key to develop the competencies for student teachers by collecting information from knowledge testing, skills and characteristics of the student teachers in learning and classroom management. This is an important competence for individuals to become teachers in the 21st century with academic knowledge that can be used or applied to the production of teacher graduates such as the ability of teachers to demonstrate knowledge, academic thinking with clarity and rich academic references. It can motivate students to see similarities and differences from various academic sources and to ponder them critically on those academic knowledge and their use in different contexts by expressing their skills and characteristics according to the standards and competencies of teaching profession according to the social and national context. In addition, there are guidelines for enhancing the quality of 21st century graduate teacher production for the Faculty of Education and or related departments. This will lead to improving teachers' level of awareness of education for transformative learning of their learners appropriately.

Acknowledgment

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