Online Teaching Practice Patterns in Early Childhood Teacher Education Curricula in Distance Education in Indonesia

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ABSTRACT

This purpose paper describes a pattern of teaching practice in online learning programs using the moddle aplication. This article is the result of a study with paradigm. Research articles with survey methods and using structured interviews and questionnaires. The research subjects were 20 students (two classes) who took online teaching practice courses in the early childhood Teacher Education in Universitas Terbuka, Indonesia Open University courses. The online teaching practice program was only opened in 2018. The findings of the research are online tutorial patterns in Strengthening Teaching courses that have similarities and differences in the online tutorial pattern developed is more simple to understand by students independently can be an alternative practice teaching model online teaching.

Keywords: Online Teaching, Early Childhood Education, Distance Education, Teacher Curriculum

Introduction

Online learning systems are currently growing rapidly and are increasingly in demand by many universities in the world (Sokolova, et.al., 2018). This learning system accommodates many people's learning needs that are constrained by distance and time(Traxler, 2018)and facilitates teachers to improve their competencies (Nguyen, 2017). Similarly, education for Early Childhood Education (ECE) teachers. The use of Information, Communication and Technology (ICT), especially internet-based ones, has actually become a necessity in education. Especially in the teacher education program. Aside from being a means to teach, ICT is also very much needed

in learning for those who take part in teacher education programs (Nikolopoulou, 2015). Actually, this online system is very suitable for Indonesia, which has a large geographical area and 13,675 islands and spreads from 6° N-11° South Latitude and 95° - 141° East Longitude (Anonim, 2018)because of the vastness of the area, it also causes the spread to be uneven, including in the education sector. In addition, the Indonesian people are also not familiar with distance education or online learning (Diki, 2013). However, Indonesia Open University, Universitas Terbuka(UT) which organizes distance education, tries to develop online learning for all its study programs.

One of the main competencies that must be possessed by anECEteacher is the ability to teach (Michalopoulou, 2017). In addition to the ability to teach, ECE teachers must also have educational skills. These include skills, knowledge, attitudes, habits, communication, cognitive skills, intellectual abilities, wisdom, ingenuity, truth, honesty and creativity (Currie, 2018). The ability to teach and educate must be trained intensively. In the teacher education curriculum, there is usually some overlapping material. This is very reasonable because usually teacher education providers want to provide a lot of material to their students. This also happened in Turkey(T. Atay, et.al, 2018), in Turkey's previous curriculum, there were some courses with overlapping content. At the beginning, these courses were designed to deliver the subject matter in more than one semester; yet, it did not work as intended during the implementation period.

One example is when the teacher must implement a comprehensive learning model to improve children's social-emotional abilities, the teacher must have good teaching skills, such as the ability to explain material, the ability to ask questions, evaluation skills, ability to observe and soothing abilities. These skills are needed in applying the learning model and cannot be replaced by any media (Tatminingsih, 2019).Basma Faour stated that young children will be more confident and comfortable when they are taught by teachers who have good readiness and teaching skills acquired through adequate teacher education. Lack of teacher competence in teaching will cause children to be uncomfortable (Faour, 2003).

The experience of teaching practice is very important in the teacher education program. This experience is one of the mandatory curricula. This is in line with the opinion of(Undiyaundeye, 2018)which states that micro-teaching is one of the most recent innovations in teacher education programs which aims at modifying teachers' behavior according to modified objects. Education

in the country has been recognized as important for micro-teaching in preparing classroom teachers. Micro-teaching is one of those innovative ideas that have been used, in recent years, to improve classroom teaching. The impact of practice learning experiences on the views of prospective teachers in the ECE pre-service education program. It mainly focuses on multiple concepts that emerge as a result of mini-lessons executing in colleagues in simulated situations. Micro-teaching helps the teacherto overcome problems related to getting ready for class and presenting the lesson(Billen, 2015). Micro-teaching is based on social learning theory(Bandura, 1982). Demirel States that Micro teaching was first developed at Stanford University in 1960 as part of an experimental program that aimed to increase quality in teacher training (Billen, 2015).Rebecca Hun Ping Cheung stated that there are four main domains in teacher teaching practices, namely the characteristics of teachers, the learning environment, the teaching Strategies, the criteria for used to judge children's creativity (Cheung, 2012). The four domains will show that teachers who have attended teaching practice courses will be able to educate and teach according to expectations.

Meanwhile,(A Higgins & H Nicholl., 2004)stated that teaching practice is a cycle. The meaning is that teaching practices carried out by teacher education students must carry out repetitive layered teaching practices. They must practice making plans for teaching, teaching, reflecting and re-drafting plans with improvements from previous practices. They must practice making plans for teaching, teaching, reflecting and re-drafting plans with improvements from previous practices. The same is done in the Teaching Ability Strengthening course of UT's ECE Teacher Training. Students must practice teaching eight times where the second practice is an improvement from the first practice, and the third practice is an improvement from the second practice and so on. Repairs carried out by students must be based on reflections taken by themselves and / or obtained from supervisors' input. This is, as stated by (Kazu, 1996), namely:one of the most important links of the micro teaching process is the re-teaching process that will be developed through the thinking style and potential provided to student at the start and end of the teaching experiment and the feedback provided.

Teaching practice courses or Strengthening Teaching Capabilities (STC) course in the UT's ECE Teacher Education Study Program has just held an online tutorial for the 2018on semester July-December. Previously this subject was included in a face-to-face tutorial. The ECE Teacher Education Study Program has been held since 2007. Therefore, the learning pattern of this course still uses face-to-face tutorials. The STC course is a course that requires students to practice with repetitive layered systems where students make improvements to learning independently. Improvement of this learning is done by doing lesson study. Lesson Study (LS) is an approach to improving learning. LS provide a process for collaborating and designing lessons and evaluating the success of teaching strategies that have been applied in an effort to improve the process and acquisition of student learning(Lewis, 2002). In the LS process, the teacher works together to plan, teach, and observe the learning that he develops cooperatively. Meanwhile, a teacher implements learning in the classroom, others observe, and record questions and understanding of students(Suhartono, 2015). Therefore, this study aims to find a pattern of teaching practice in ECE teacher education in education with a distance learning system.Novak (1998)states that learning requires the use of technology that can integrate the learning process itself. This technology is used as a tool to actively support teaching and learning tasks so students learn to build their own knowledge through the completion of creative activities that enhance meaningful learning(Keengwe, 2009). This is what is applied in implementing TSC courses online. The use of ICT in this teaching practice course should not make this subject difficult and complicated, but instead must make this course an easy and comfortable learning. The main point is the achievement of key competencies, both as ECE teachers and elementary school teachers(Palomino, 2016).

Therefore, this paper describes the results of research that discuss the pattern of online tutorials in teaching practice courses in ECE teacher education programs in distance education in Indonesia. The organization of this paper is as follows. Section tworecallsthe theoretical background and methodology. Section threeshows the results of research and discussion. In Section four, we discuss about the model of online tutorial patterns. At the end, this article will be closed with a conclusion in Section five.

Teaching Practices and Online Learning

Teaching practices must be given in teacher training for several reasons, namely: 1) Each teacher comes from a different background so it is necessary to train the standard of the process in

teaching; 2) In teaching practice, teachers are trained to bring up all their competencies in managing classes and curriculum; 3) In teaching practice, teachers are given the opportunity to be able to provide the best service to their students, 4) teaching practices must be guided intensively by mentors who are experienced and have knowledge of learning and teaching; 5) in teaching practice, teachers can broaden their insights and in depth about early childhood development knowledge and material(Gasbarro, 2008).

(Fahrman, et. al., 2019). stated that the teaching practice carried out by the teacher before he actually became a teacher played a very important role in the learning process in children. In order for the learning process to succeed, the teacher must have sufficient knowledge and experience in several different fields. Fatmasari and Suripto stated that teaching practice is an activity designed to enable teachers to have expertise in teaching in front of the class so that the teacher can test his ability to apply the theories and knowledge he gets while studying in a teacher education institution(Fatmasari, 2018). In distance education, the use of the internet is important in implementing teaching practice courses, for example by using The World Wide Web, or 'Web' for short. With the web, teaching practice activities can be carried out in two directions even though the lecturers and students are in a distance(Polovina, 2014).

This study applies paradigm research with survey methods and using structured interviews and questionnaires. This method is used in order to be able to dig deeply into the practical courses conducted online. The research subjects are two online learning classes in STC courses in 2018 at odd semester which take place September - December 2018. Each class consists of ten students, so the total respondents are 20 students. However, only 15 students were active in the Online Tutorial (OT) and all of them were female. A total of six subjects were in the age range of 25-35 years and nine subjects were in the age range of 35-45 years. All research subjects teach in kindergarten with work experience of between 5 - 25 years. The respondentsare three in Mataram, six peoplein Palangkaraya, four People in Padang and two peoplein Bandung.Data is collected using questionnaires uploaded into the online tutorial application. This questionnaire contains five open questions, as follows.

Table 1 Content of questionnaire

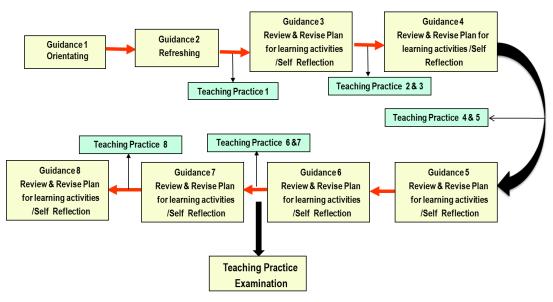
No	Data sought	Questions
1.	The reason students take online tutorials on STC courses	Mengapa Anda memilih tutorial online pada mata kuliah ini?
2.	Constraints and convenience of attending OT in TSC courses	What Constraints and convenience of attending OT in TSC courses?
3.	Feedback about tutorial patterns (Figure 1)	How do you respond to the pattern of this course tutorial? Your answers may be more than one.
4.	Good pattern of TSC course tutorials	What is the pattern of online TSC course tutorials that you think is good? Your answers may be more than one.
5.	Components of the TSC online tutorial pattern	What components need to be added to the pattern of online TSC course tutorials and what are the reasons?

The process of data collection is done in an integrated manner in online tutorial class activities. The stages are: 1) the questionnaire is delivered in the online tutorial class in a discussion forum and students are asked to answer it. 2) Student answers are entered and grouped according to the similarity of the answers. 3) Based on the results of grouping, the unique data is then deepened by asking questions to students individually (by email). 4) Data is then analyzed and described as the results of research through triangulation.

The Teaching Strengthening Capabilities Coursein ECE Teacher Education Program

In this section, we will discuss practical teaching courses at the Universitas Terbuka and the results of data analysis that has been carried out regarding this teaching practice. The Teaching Strengthening Capabilities(TSC) is a practice course that requires students to practice teaching throughout the lecture period. Students are asked to practice at the school where they teach. When carrying out this practice, students are assessed by supervisors who were previously chosen by students themselves. According to TSC Handbook

TSC course is a practical subject contained in the ECE teacher education curriculum in all universities that open this program even though the name of the course in each college is not the same. This course requires students to practice teaching as long as students follow this course. It usually lasts for one semester. In the course of TSC in UT, students are asked to practice at the school where they teach. When carrying out this practice, students are assessed by supervisors who were previously chosen by students themselves. According to the TSC handbook(FKIP Team, 2017). The TSC course is the final estuary of the program that trains and equips students with the ability to organize (prepare, design, implement, evaluate and improve) kindergarten learning based on scientific principles of early childhood education and education - teacher who can be justified. Pattern of face to face tutorial in TSC courses at UT is generally described as Fig. 1 (FKIP Team, 2017).



Guidance for the Teaching Strengthening Course

Fig. 1 Pattern of STC in face to face tutorial

The pattern illustrates that the tutorial activities in the TSC course consist of eight meetings held every Sunday, where students meet with tutors who guide them in the course. The number of practices that must be done by students as much as 8 times is done on weekdays between the time of face-to-face tutorial This teaching practice is carried out in the classroom where students teach in kindergarten or play groups. The pattern also shows what students activities take in each tutorial, including arranging, revising the learning plan that will be used for practice, making the results of self-reflection.

Practices carried out by students are monitored and assessed by the Supervisor chosen by the students themselves at the beginning of joining this course. Assessment is carried out on the planning and implementation of teaching practices. In this pattern also appears, the number of practices that must be done by students during the tutorial takes place, namely eight times teaching practice. Every time you have finished teaching practice, students must make a report in the form of a reflection sheet. But in this pattern it is not clearly illustrated for the practice of teaching which reflection sheet he made.

Practical exam activities are carried out in kindergarten/ Playgroup which are determined by the regional office and are usually located around the student's place so that students do not find it difficult to reach the practice exam place. At the end of the coaching, students must collect practice reports containing lesson plan and self-reflection sheets that they make during teaching practice.

The following are the findings and discussion base on Table 1.

1. Reasons for joining TSC online

These answers are then summarized into three categories as follows.

- a. The first reason is because in the area where they enrolled in this course, the quota was not reached to form one face-to-face tutorial class where one TSC tutorial class had to fulfill a quota of 10-15 students. Therefore, they were forced to take an online tutorial for this course. The number of respondents who gave this reason was seven people.
- b. The second reason is that from the start, they did choose to take this course online. This is because they realize that they do not have time to attend face-to-face tutorials on Saturday or Sunday, including: they must worship; they have family events; they have other activities. the research subject who gave this second reason as many as fivepeople.
- c. The third reason is answered by threepeople. They point out this reason, because the cost of online tutorials is much cheaper and the time is more flexible than face-to-face tutorials.

They don't need transport costs and can do it from home or school. They can do tutorials or coaching at any time according to their time and do not depend on others.

Based on aforementioned above, it appears that the top two answers are reasons caused by unintentional conditions by students. They were forced to follow OT because they could not attend face-to-face tutorial classes. Meanwhile, the subjects who did intentionally follow OT were those who realized that the costs, time and benefits were greater than taking face-to-face tutorials. So overall, the online tutorial for this TSC course is not an option that is deliberately chosen by students. Basically, they want face-to-face tutorials.

2. Constraints and convenience of attending OT in TSC courses

All these subjects provide answers that vary from one answer to the most four answers. The results obtained are then sorted according to the number of subjects who answered them.

	The Constraints		The conveniences
a.	unstable internet network. This greatly	a.	The time is very flexible to open
	inhibits students from being able to		a OT class, it can be in the morning or
	access OT on time.		evening and does not interfere with
b.	unable to upload assignments on time		work time.
	because they do not have time to open	b.	Can be done anywhere as long as there
	the OT application.		is an internet connection.
c.	Do not have a place to ask directly.	c.	OT stages and schedules are very clear
d.	not familiar with online lectures,		so that they can be followed easily.
e.	it is not easy to understand the contents	d.	Practical tasks are easy to implement
	of the material or assignments which are		which are important for students to be
	only described in writing.		diligent and honest when doing their
f.	Difficult to divide time for teaching		practice.
	practice activities and activities as daily	e.	Practice in your own school so that it
	teachers as kindergarten teachers,		does not interfere with teaching time.
	because the tasks in <u>OT</u> are very dense	f.	OT tutors are very accommodating

Table 2Constraints and convenience felt by students

The Constraints	The conveniences	
and must be done alone.	and responsive, espe	ecially in
g. It is difficult to ask Supervisors to	discussion forums when stude	nts have
provide an assessment in the	difficulty understanding the	material
implementation of teaching practices.	in OT.	
	b. All tasks can be collected (up	ploaded)
	to the application quickly, prov	vided the
	internet connection is smooth.	This can
	be done, especially at night.	

Based on Table 2, it appears that among the most important factors that facilitate students is the availability of a smooth internet network so that students can participate in all tutorial activities both in discussion and assignments smoothly.

3. The subject's response to the existing TSC online Tutorial patterns

The online tutorials used the face to face tutorial pattern as can be seen in Figure 1. The results of the analysis are summarized into four answers, as follows.

- a. This pattern is very good and can be easily followed by students. The pattern is also the same as the pattern contained in the guide and can accommodate the expected competencies of the TSC course. With this pattern, students can carry out teaching practices optimally and can improve their teaching strategies independently.
- b. This pattern is somewhat confusing because the pattern, it is illustrated that there are activities that must be carried out outside the meeting. On face-to-face activities this takes place on weekdays or Mondays to Saturdays and meetings are held on Sundays. In the OT class there are no days outside initiation because the initiation lasts for seven full days.
- c. This pattern does not match the online tutorial. Even though the pattern is contained in the TSC handbook, it is intended for face-to-face tutorials so that students cannot follow the pattern properly. In addition, the assignments are also unclear and students have difficulty asking, because the explanation given by OT tutors is in the form of writing with limited sentences.

d. A small number of students (only one person) stated that he did not care about the pattern. He just followed what was there and he did experience problems when uploading some of the results of the practice files, but with the help of others, he still managed to upload them and OT which he did smoothly.

4. What is the pattern of online TSC course tutorials that you think is good?

All subjects answered this question unfortunately they did not give the specific ones. Nevertheless, we tried to analyze them by deepening the student's answers via email personally to the student. The grouping of answers is categorized into the main answer, starting with a positive answer. Student answer analysis is divided into two main components, namely the general answer and the answers after being deepened and asked for more specifically. Student answers are sorted by their urgency. The answer is illustrated in following Table3.

The answer		
General		Specific
1. The pattern of a good	1.	The pattern must be able to help students achieve
online tutorial must be clear		their competence.
	2.	The pattern must be easily followed and
		implemented by students and tutors
	3.	The time of collecting assignments must be clear
	4.	The number of tasks must also be clear
	5.	The job description must be present (although it
		doesn't have to be in the pattern, but there is an
		additional explanation)
2. The OT pattern doesn't	6.	OT patterns are easy to read with clear guidance
need to be complicated	7.	Equipped with colors that distinguish between one
		component and another
	8.	An explanation of the pattern is available.
3. The OT patterns as needed	9.	Student practice must be reflected in the online
		tutorial pattern
	10.	Practices carried out by students should have

Table 3 The pattern of a good online tutorial in TSC course

	The answer	
General		Specific
		evaluations from peers (fellow students) and tutors
	11.	Guidance journals are attached to each practice
		result value

5. What components need to be added to the pattern of online TSC course tutorials and what are the reasons?

Each research subject provides input on the components that must be added and displayed in the online tutorial pattern. Their answers are then listed and grouped according to their similarity. After being analyzed, the components that must be added and displayed in the online tutorial pattern are as follows.

- a. Video of the implementation of practices carried out by students. This video is important in the OT pattern because it can prove that students actually practice teaching by being accompanied and assessed by supervisors. This video must be seen, analyzed and commented on by other students in the same class so that it can be given input or reviewed by other students. With this video, students can also reflect on their teaching abilities and can improve them according to the competencies in this course.
- b. Online pre and post tutorial activities. This activity needs to be displayed or provided so that students can prepare themselves and the files needed before OT begins and evaluate themselves and complete the files collected after the OT period ends. This pre and post activity can be provided for one week before and one week after the OT period.

The online tutorial pattern

Based on the results of data processing, the researchers tried to develop an online tutorial pattern for teaching practice courses (Figure 2). This pattern accommodates several components that should be present in teaching practice learning. These components include, among others, teaching, planning, implementation of teaching practices, self-reflection from students who practice teaching, peer evaluations and supervisors or supervisors, and evidence of coaching carried out by students and supervisors. In this pattern also illustrated the activities carried out by students in the online tutorial application and outside the online tutorial application. The following is an online tutorial, patternscheme that researchers developed for remote ECE teacher education programs with open, independent and long distance learning systems. In the pattern of this tutorial, students conduct online tutorial activities, with teaching practices being carried out in a real way in the class where they work witnessed and assessed by the supervisor who is chosen by the student. These supervisors are teachers who are considered senior or have more experience than students, for example the principal. The pattern of online tutorials has no difference with the pattern of face-to-face tutorials, especially in terms of the completeness of the components. in both of these patterns the components, planning, implementation, reflection, and observation are still carried out by students. Especially, a file must be completed by the student, namely the learning plan, reflection sheet, and the results of the assessment of the supervisor. The difference lies only in how to implement and report it. In the online pattern tutorial all practice reports carried out by students are reported in the form of both words and videos. In this way, students can achieve the expected competencies even though the tutorial patterns are different, namely face-to-face tutorials and online tutorials. The pattern is described as follows.

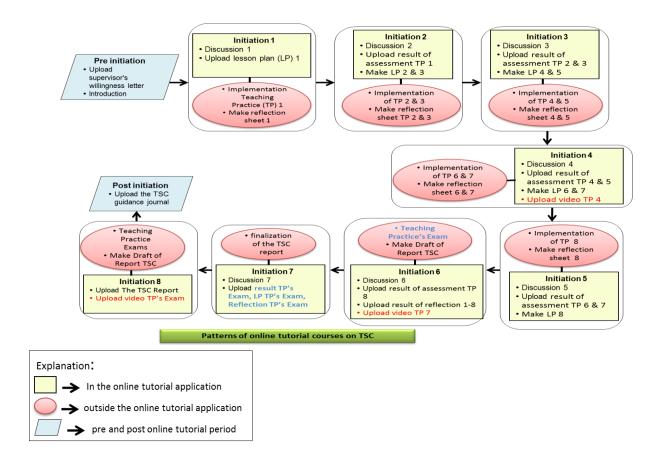


Fig. 2 Pattern of STC in online tutorial

The pattern of online tutorials (Fig. 2) is more clear compared to the pattern of face-to-face tutorials in Figure 1. This is indeed deliberately done because in online tutorials, no one explained verbally to students. This pattern is deliberately designed so that students can read, understand and apply it independently. In this pattern, students can more easily carry out the teaching practice process because in the pattern the steps and tasks that must be performed by students are drawn. The similarity of the tutorial, pattern in Figures 1 and 2 is that they last for eight weeks. The obstacle that may be faced in implementing this pattern is when students have to upload their practice report into an online tutorial with the Moodle application. This obstacle is mainly due to the uneven distribution of the internet network.

Conclusion

The experience of teaching practice for students in ECE teacher education programs is important. In the teaching practice course, students are required to carry out teaching practices as a whole or in micro teaching. Teaching practices should be a cycleie., planning, implementation, evaluation and reflection on their own teaching practices. In addition, to evaluate themselves, students can also be evaluated by the others students and peersbyonline. Therefore, the pattern of learning and coaching should be done in the same ways. This pattern of tutorials that have been developed is an alternative to the implementation of TSC courses that conducted by online. We believe that this this pattern can help students to get the good competencies. For future research, we will back with implementation this online pattern of TSC courses en massive at the ECE Teacher Education Program.

References

A Higgins & H Nicholl. (2004). *The experiences of lecturers and students in the use of microteaching as a teaching strategy*. Dubllin: Nurse Education in Practice, 3, 220–227.

Anonim. (2018). Land and Geography of Indonesia © 2008-2019,. Jakarta: factsanddetails.com.

- Bandura, A. (1982). *Self-efficacy mechanism in human agency*. USA: American Psychologist, 37, 122-147.
- Billen, K. (2015). Effect of micro teaching technique on teacher candidates' beliefs regarding mathematics teaching. Procedia - Social and Behavioral Sciences 174. Turkey: Elsevier Ltd. ((http://creativecommons.org/licenses/by-nc-nd/4.0/).
- Cheung, R. H. (2012). Teaching for creativity:Examining the beliefs of early childhood teachers and theirinfluence on teaching practices. *Australasian Journal of Early Childhood Volume 37 Number 3 September 2012*, 43-52.
- Currie, J. (2018). Early Childhood Education Programs. . Journal of Economic Perspective, 15(1), Retrieved March 19, 2018, from www.princeton.edu`, 213-238.
- Diki, D. (2013). nternational Collaboration of Distance Learning Universities for Online Learning in Indonesia. *LUX: A Journal of Transdisciplinary Writing and Research from Claremont Graduate University Vol 2*, 1-8.
- Fahrman, et. al. (2019). Experienced technology teachers' teaching practices. *International Journal of Technology and Design Education*, 1-25.
- Faour, B. (2003). *Early Childhood Teachers in Lebanon: Beliefs and Practices*. Lebanon: University of Leicester.
- Fatmasari. (2018). Teaching Practice in Distance Education Context. Global Conference on Teaching, Assessment, and Learning in Education (p. 7). Jakarta: SHS Web of Conferences 42, 00099.
- FKIP Team. (2017). Panduan pemantapan kemampuan Mengajar. Jakarta: Universitas terbuka.
- Gasbarro, M. (2008). Educating the Educators: Effective Practices for Early Childhood Teachers' Training and Professional Development. Denver: University of Denver.
- Kazu, H. (1996). Öğretmen yetiştirmede mikro öğretim yönteminin etkinliği. Turkey: (Fırat Üniversitesi Teknik Eğitim Fakültesi Örneği), (Basılmamış Doktora Tezi), Fırat Üniversitesi Sosyal Bilimler Enstitüsü.
- Keengwe, J. (2009). Technology and Early Childhood Education: A Technology IntegrationProfessional Development Model for Practicing Teachers. *Early Childhood Educ J* (2009) 37, 209–218.
- Lewis, C. C. (2002). *Lesson study: Ahandbook of teacher led instructional change*, . Philadelpia, PA: Research for Better School, Inc.

- Michalopoulou, M. S. (2017). Early Childhood Education Curricula: Human Rights and Citizenship in Early Childhood Education. *Journal of Education and Learning; Vol. 6, No. 2*, 53-68.
- Nguyen, J. L. (2017). An Undergraduate Inclusive teacherPreparation Programme In Early Childhood Education:an Online Delivery Approach. Florida: Florida Atlantic University.
- Nikolopoulou, K. (2015). ICT and play in preschool: early childhood teachers' beliefs and confidence. *International Journal of Early Years Education*, 1-17.
- Palomino, M. d. (2016). Teacher training in the use of ICT for inclusion: differences betweenEarly Childhood and Primary Education. 7th International Conference on Intercultural Education "Education, Health and ICT for a Transcultural World", EDUHEM 2016, 15-17 June 2016, (pp. 144-149). Almeria, Spain : Procedia - Social and Behavioral Sciences 237 (2017).
- Polovina, S. (2014). On The Practicalities of Distance Learning Using the World Wide Web: Technical Report SBU-CISM-95-21. London: School of Computing, Information System Matematics.
- Sokolova, et.al. (2018). The Pros and Cons of Distance learning. *18th PCSF 2018 Professional Culture of the Specialist of the Future* (pp. 1474-1486). Russia: The European Proceedings of Social & Behavioural Sciences EpSBS.
- Suhartono, D. (2015). Pemodelan Pembimbingan Praktik Pemantapan Kemampuan Profesional (PKP) Pada Mahasiswa Pendidikan Jarak Jauh Melalui Lesson Study. *Jurnal Pendidikan Terbuka Dan Jarak Jauh, Volume 16, Nomor 1, Maret 2015*, 10-28.
- T. Atay, et.al. (2018). The new Turkish early childhood teacher education curriculum: a brief outlook. *Asia Pacific Educ. Rev. (2009) 10*, 345–356.
- Tatminingsih, S. (2019). Coloured Stick: Teaching with a Comprehensive Game for Improving Children's Social-emotional Ability. KÜLÖNLEGES BÁNÁSMÓD, V. ÉVF. 2019/1., 59-65.
- Terbuka, U. (2017). Laporan Rektor Universitas Terbuka. Jakarta: Universitas Terbuka.
- Traxler, J. (2018). Distance Learning—Predictions and Possibilities. *Education Sciene Journal Ed 8 March.No.35*, 1-13.
- Undiyaundeye. (2018). *Micro-Teaching Experiences in a Pre-Service Early Childhood Education Programme Nigeria*. Nigeria: Nigeria Federal College of Education, Obudu, Cross River State.