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## **Online Training Methods in Improving Early Childhood Teacher Pedagogic Competence**

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**DOI: <http://dx.doi.org/10.15294/ijeces.v10i2.44724>**

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### **History Article**

Submitted August 2021  
Revised September 2021  
Accepted October 2021

### **Keywords:**

pedagogical competence; on-line training; early childhood teachers

### **Abstract**

This study aims to determine how the process of online training methods to improve early childhood pedagogical competence of teachers, early childhood teachers pedagogical competence results after following the online training methods as well as the responses obtained by the participants after attending online training methods. Pedagogic competence of teachers is the ability to manage learning, which includes planning, implementation, and evaluation of learning outcomes of students. Pedagogical competence developed through training in collaboration between knowledge and practice so easily applied in learning. One method of training was initiated by the government is an online training method implemented in basic training. This study uses qualitative research methods with the data source 24 early childhood teachers who are in the district of Bogor. Data collection technique used interview, observation and field notes with the data analysis using data reduction, data presentation, and verification of data. The results of this study mention the pedagogical competence of the 24 teachers who have been following the online training methods 21 people are at a high category and three are in the moderate category. Similarly with the results of interviews at every teacher stated that the results were very good and positive after following the online training to improve the quality of learning in the classroom.

### **How to cite**

Maryani, B., Yufiarti., & Yetti, E. (2021). Online Training Methods in Improving Early Childhood Teacher Pedagogic Competence. *Indonesian Journal of Early Childhood Education Studies*, 10(2), 89-95.

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## INTRODUCTION

The character of a student should be developed by a teacher because of important and strategic objectives to develop education in Indonesia. Presence technology can never replace the presence of a teacher in shaping the character and develop the potential of the students in multicultural and multicultural culture in Indonesia. Teachers have four competencies that must be developed and honed to have the maximum ability to achieve the national educational goals and become qualified teachers. *United Nations Sustainable Development Goals 2015-2030* were reminded that in 2030 the teachers must be qualified, well-trained, professional and be a motivator for the students to create students who excel and excel (Sutikno, 2018).

Creating efficient and effective learning requires a teacher who has the competence because competence is one step towards the professionalism of teachers. Ability or skill that competence (Ma'arif, 2011) taken from the English competence means skills and abilities (Musfah, 2012). Pedagogical competence of teachers is the ability to manage learning, which includes planning, implementation, and evaluation of learning outcomes of students (Mardia Hi. Rahman, 2014). So competency is a collection of knowledge, attitudes, and skills that should be owned by teachers to achieve the purpose of learning and education. In the 21st century need competent educators, namely: (1) interaction, (2) Family and Community, (3). Inclusion, Diversity and Democratic Values, (4) Assessment and Planning, (5) Teaching Strategies, (6) the Learning Environment, (7) Professional Development (Et.al., 2010). Pedagogical competence of teachers are a prerequisite to becoming a professional teacher (Liakopoulou, 2011) the recruitment of teachers in many countries has followed a systematic certification procedure, i.e. a selection procedure according to criteria set by the State which are considered the minimum qualification for entrance into the profession. The term used in the last few years to define the desired level of qualification of teachers is competence. The purpose of this article is two-fold: a. Teachers who have the competencies will work hard to implement the function and purpose of both special schools and in general (Sukartono, Samsudi, Tri Joko Raharjo, 2016).

About the teaching profession in Indonesia today, there are two issues discussed. This is related to the educational and pedagogical qualifications of teachers are still low. According to Sani

& Jurkiewicz teachers in Indonesia amounted to 3.9 million people with 25% of teachers have not had the academic qualification requirements and 52% of teachers have not had a professional certificate (Yusnita et al., 2018). This proves that in doing the learning of a teacher is not competent by following government regulations. Similarly, in 2015 the results of the implementation of the UKG (Competency Test Results), Minimum Competency Standards (SKM) is 55 to competence fields of pedagogic, the national average is only 48.94 (Desliana Maulipaksi, 2016), It shows that something is missing or there is something wrong about the way teachers teach. Therefore, to improve the competence of teachers is the training and education that is more targeted by following the results of UKG.

Is the availability of educators still far below the amount. The Ratio of teachers and learners according to Minister of Education and Culture Regulations No 137 years 2014 categorized by age learners. According to data released PDSPK Ministry of Education and Culture, the number of learners who recorded this time around 6,169,002 children and the number of educators who recorded this time only about 656 210 people ((PDSPK), 2019). Therefore, it is happening in the field is an early childhood educator can manage several different classes to schedule a time alternately learning as well as an early childhood educator role not only as educators but can act as a manager. Based on these results the necessary training, workshops related to teachers' pedagogical competence to provide conducive learning and effectiveness.

Following study revealed the phenomenon of teachers state in Nigeria that is not teacher education background to conclude that these teachers need to participate in seminars, conferences and workshops to develop pedagogical knowledge before education services for children (Aina Jacob Kola, 2015). A teacher who has not had the educational background and own background in education need to continue to develop themselves in terms of pedagogical knowledge through training, seminars, workshops to provide educational services by following the purpose of education. The following study states that the pedagogical competence can be developed through training and experience in teaching to develop the career of a teacher (Abdulwahed Ahmed Ismail Assoc & Mohamed Jarrah Asst, 2019). According to these studies revealed that through an educational approach methodology in the form of learning experiences will develop pedagogical competencies of a teacher (Zrim Martinjak, 2016).

The following study also states that the pedagogical competence developed through training in collaboration between knowledge and practice so easily applied in learning (Mirzagitova & Akhmetov, 2015). This study supports previous research by stating that the need for additional training activities for teachers which are programmed to increase knowledge and pedagogical style of a teacher (Woldehanna, 2013). The training will have a positive impact effective teaching (Fazalur Rahman, Nabi Bux Jumani, Yasmin Akhter, Saeed ul Hasan Chisthi, 2011). Teachers who have a learning experience, self-reflection, and training, workshop or anything else will be able to add insight and develop on its pedagogic knowledge that will affect teaching style.

Science and technology is growing at this time with the intent to provide ease in carrying out the tasks and jobs. One of the technological developments that the information technology sector. The development of increasingly advanced technology influence also on the progress of education. Changes in the learning process have taken place due to the development of multimedia and information technologies that use the Internet in the learning process is moving forward. Online learning is an Internet application that can connect between educators and learners in an online learning space. Online learning is no limit in space, time, conditions and circumstances of learners in acquiring knowledge (Darmawan, 2010).

ICT advances obliges students to be a computer-literate and information literate, marked a) have an understanding of the advantages and limitations of ICT, b) can use computers and ICT optimally, c) ability to obtain information, process, and communicate using ICT systems (Rusman, 2011). In facing the era of information and communication technology, the utilization of ICT-based learning media is indispensable in the field to provide access to quality education and cutting-edge as the system of information and communication technologies provide opportunities wide coverage, fast, effective, and efficient.

Learning media information and communication technology is growing so that the teacher's task becomes very helpful and lighter in the learning process, but it makes the responsibility of teachers who are greater in this era. With the increasing responsibility of a teacher according to intel education, should have skills in terms of a) accountability and adaptability, b) ability to communicate, c) creativity and intellectual curiosity, d) think critically and systematically, e) skills information literacy and media,

f) personal skills and partnerships, g) the identification of problems, elaboration and solutions, h) personal guidance, and social responsibility (Rusman, 2017). The new paradigm has occurred in the current study is learning that can be done anywhere, anytime, is not limited to space and time. Education or distance learning is one of the educational use of learning in which learners of different places with a teacher. In the era of information technology in the training, the system is only logical to create a learning environment disturbed, as a facility for teachers to improve their professional teaching. Disturbed learning is instructional models that use a variety of information technology to help participants learn.

On these studies revealed that online training is one alternative to traditional training that has been running previously, a web-based online training model makes it easy for participants to get learning through innovative materials and easy to learn (Prasetyo & Gintoro, 2010). Online training improve confidence in identifying and responding to knowledge. It provides support for the use of online training as a means of professional development of effective and efficient (Davies & Tedesco, 2018). The findings of this study indicate the number of success factors training online method that is skilled labor, training on time, effectiveness, efficiency, competitive advantage, receive training anytime, anywhere, the ability to provide tailor-made solution, accessibility 24 hours, flexibility, and independent learning skills (Kuzic, 2013). The following study also states that the online training that collaborated with teachers to make learning more confident and eager to prepare students to develop 6C (Neghavati, 2016).

On the explanation above, this study will (1) How is the online method of training which was held on early childhood teachers? (2) How do the results of early childhood teacher's pedagogical competence after training with the online method? (3) Any feedback early childhood teachers after participating in training activities online method?

## METHOD

The research method used in this research is a descriptive qualitative approach. Data collection techniques used were interviews, observation and field notes. Analysis of data using data reduction, data presentation, and data verification. The data source is the early childhood teachers who have attended basic training online that are in the Bogor Regency as many as 24 people.

**RESULTS AND DISCUSSION**

**1. The process of online training methods implemented in early childhood teachers**

On interviews with one person in charge of center for the development of early childhood education and community education in West Java training process with the online method has been implemented since 2017 with the number of participants of 4,223 people. This training is intended for early childhood teachers who have not center for the development of early childhood education and community education in West Java is one of the government institutions that have the responsibility to improve the quality of early childhood teachers. The main task of early childhood teachers is educating, teaching, guiding, directing, and evaluating the students to develop by following its development. Therefore, it requires the professional teacher who must master the competencies required.

Of computer network technology and the Internet is done on the training program online method. Training methods can be implemented by preparing an online learning system that independently provides instruction and learning services to participants without involving directly in the process of implementation. Training online method will shorten the distance and time to carry out training activities, thus saving the cost of the training itself. Trainees do not need to come to the training and the cost is relatively large for training, just go to a website that organizes training activities as required.

Online method is called with the online mode, the learning is done by combining the three strategies, namely face to face online learning, online tutorials and online activities which advance. Learning activities in which participants interact instructor training and distance learning through video conferencing facilities which do as many as 20 hours of lessons or 10 times a video conference. Face to face online performed 10 material with the first details of policies and 9 training material that has been determined by the Directorate GTK ECD and community education. Video conferencing is done simultaneously and followed by all participants in the class v-con to adjust the timing of the training participants so as not to disturb teaching hours. The second strategy is the online tutorial. This activity is undertaken following face to face online activities by giving assignments that must be completed and the results are sent or uploaded by training participants. Online tutorial activities conducted

through discussion Whatsapp Group (WAG) and e-mail, as many as 28 hours of lessons. The third strategy an independent activity that is carried out online activities (in the network) and offline (outside of network/face-to-face). This independent activity is the implementation of activities that have been obtained through online to the real situation in the management of early childhood learning. Practice on the activities carried out independently five times its own teaching practice in place and at least three times at another institution that is one group with early childhood institutions where participants teach. In the independent activity, Online mode is done at the stage of learning design planning consultation, after completion followed by applying a learning plan that has been designed offline and the last stage is the evaluation and reporting activities. At this stage, the online mode is done for consultation and guidance by mentors. Here is a basic online training material that is carried by early childhood teachers:

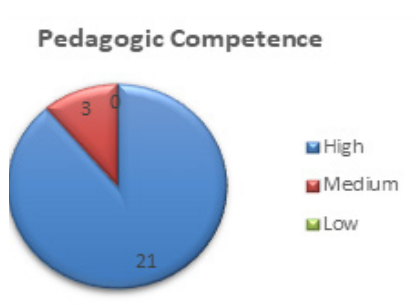
**Table 1.** Basic Training Material Online

No.	Theory	Lesson hours			
		Face to Face Online	On-line tutorials	Mandiri	
				Dar-ing	of-fline
<b>General material</b>					
1	Early childhood policies and Dikmas	2	-		
<b>Topic (Face to face and online tutorials online)</b>					
2	The basic concept of Early Childhood Education	2	2		
3	Early Childhood Development	2	2		
4	Introduction of Children with Special Needs	2	2		
5	How Early Childhood Learning	2	5		
6	Health and Nutrition in Early Childhood	2	4		
7	Ethics and character of early childhood educators	2	1		
8	Lesson planning	2	6		

9	Child Development Assessment	2	4		
10	Communication in care	2	2		
<b>Independent activity</b>					
	Preparation		72	8	
	the application of learning		64		
	Evaluation of learning and preparation of reports		48	8	
	<b>AMOUNT</b>	<b>20</b>	<b>28</b>	<b>184</b>	<b>16</b>
<b>TOTAL</b>			<b>248</b>		

**2. The results of early childhood teachers pedagogical competence after training with the on-line method**

The results based on observation and field notes regarding pedagogical competence demonstrated that of 24 teachers at the high category as many as 21 people and the middle category were 3 people while those in the low category does not exist



There are four aspects in determining the pedagogical competence that is the understanding of the learners, instructional planning, implementation of learning, evaluation of learning outcomes and use of ICTs. In the category average height of early childhood teachers implement the indicators in the fourth aspect, but the data held there is already full and there is not yet complete. Detailed data is already found in many aspects of planning, implementation, evaluation of learning outcomes and the use of ICT. Whereas in understanding aspects of learners, especially in the data indicators that include children with special needs expert notes and recommendations to experts several incomplete.

In the medium category average of early childhood teachers already do but data exist but were not completed contained on understanding aspects of learners in terms DDTK data ABK

child and expert recommendations, the recording of the difficulties of the child; on the planning aspects of learning in terms of designing a learning program based on the theme; aspects of the implementation of learning in terms of providing the tools to play at least 4 types of activities and give time choosing activities; evaluation aspects in terms of having the assessment document, the document exists but is not done; and on aspects of the use of ICT in the use of ICT in the learning process does not have.

Based on interviews with early childhood teachers on four aspects of pedagogical competence of teachers stated that they already do, but it is not documented or made its administration, and in fact they have such data but do not have time to fill it. They claimed had been lacking in administrative terms.

**3. The response after training early childhood teachers with online methods**

Based on the results of interviews about the implementation of online training an average of 24 teachers expressed positively benefits for the teachers because by following the online training method teaching obligations still be carried out. Here are the results of interviews with respondents.

**Tabel.2** Interview Results

respondents	Interview result
1	Very good
2	Very helpful
3	Very well, gaining knowledge on early childhood learning and increase knowledge about IT
4	Very nice
5	Can improve the quality of learning in institutions
6	Very useful for teachers
7	Excellent and support to improve the competence of early childhood teachers
8	Very useful because it can help improve the ability of teachers and broaden
9	A lot of knowledge and knowledge gained and to improve competence as a teacher in order to further better
10	Exciting because it can learn together, plus science, sharing, and many friends



- 11 Very good
- 13 Quite good, efficient and useful
- 14 Nice, made me more aware of how to teach children according to age early childhood education
- 15 Very useful for us as educators, add insight, can increase IT, increase knowledge teaching and learning are good and know ethics as an educator
- 16 All material really helped me to be applied in activities of daily learning process
- 17 Nice and structured as a lot of the knowledge gained from the modules studied, so that almost the same material in a lecture in the semester 1 and 2 in college
- 18 Very nice
- 19 Very helpful and broaden
- 20 Very helpful at all, it can add a lot of knowledge about early childhood education
- 21 Very well, gaining knowledge on early childhood learning and increase knowledge also in terms of IT
- 22 Module: Excellent  
Vicon: Resource OK  
Discussion and question and answer session: the percentage that can be active too small compared to the number of duty: It fit the bill activities on the ground, unfortunately tp cut no feedback or correction of a mentor.
- 23 Very useful, cost-effective and time
- 24 Very useful and help for early childhood educators, because I can learn more and gain experience from the discussion, increase in the IT field.

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Based on the above data shows that the method of online training can be implemented in lieu of conventional training methods, in accordance with the following research which states online training is one of the alternatives of training

traditionally has been running previously, a training model based online web makes it easy for participants to gain learning through innovative materials and easy to learn (Prasetyo & Gintoro, 2010). Online training improve confidence in identifying and responding to knowledge. It provides support for the use of online training as a means of professional development of effective and efficient (Davies & Tedesco, 2018). Online training methods do not interfere with the duties of the teacher in teaching. Teachers will still be able to perform usual activities and can perform online activities anywhere, anytime and time that can be agreed. This is in accordance with the following research which states that many online methods of training success factors that a skilled workforce, timely training, effectiveness, efficiency, competitive advantage, receive training anytime, anywhere, the ability to provide solutions that are specially designed, 24-hour accessibility, flexibility, and self-learning skills (Kuzic, 2013).

Online training methods can improve pedagogical competence of teachers at the high category were seen in the study. This is in accordance with the following research stating that pedagogical training developed through collaboration between knowledge and practice so easily applied in learning (Mirzagitova & Akhmetov, 2015). Through training and teaching experience, pedagogical competence can be developed in the framework of the development of a teacher's career (Abdulwahed Ahmed Ismail Assoc & Mohamed Jarrah Asst, 2019). Every teacher must continue to improve pedagogical competence through various ways one of which is the training in accordance with the skills they want to develop.

The response of participants after following the online training method is very good for the online training gain insight and knowledge as well as the utilization and use of information technology in learning. This is in accordance with the following studies that collaborated with the online training teachers to make learning more confident and eager to prepare students to develop 6C (Neghavati, 2016).

## CONCLUSION

Pedagogical competence early childhood teachers must be improved through various forms of training one of them is a method of online training. The positive impact of the online training method is the teacher can add insight about early childhood to late and do not interfere with training with teaching hours due to the execution

time is flexible and can be arranged and can be done anywhere. Followed online training teachers can also improve insight in the use of technology in the learning process, so that the learning can continue to grow.

## REFERENCES

- (PDSPK), P. D. S. P. dan K. (2019). *Statistik PAUD 2018/2019* (pertama). Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Abdulwahed Ahmed Ismail Assoc, S., & Mohamed Jarrah Asst, A. (2019). Exploring Pre-Service Teachers' Perceptions of Their Pedagogical Preferences, Teaching Competence and Motivation. *International Journal of Instruction*, 12(1), 493–510. <https://doi.org/10.29333/iji.2019.12132a>
- Aina Jacob Kola, O. S. S. (2015). A Review of Teachers' Qualifications and Its Implication on Students' Academic Achievement in Nigerian Schools. *International Journal of Educational Research and Information Science*, 2(2), 10–15.
- Darmawan, D. (2010). *Pengembangan E-Learning Teori dan Desain*. Bandung: PT Remaja Rosdakarya.
- Davies, S. C., & Tedesco, M. F. (2018). Efficacy of an Online Concussion Training Program for School Professionals. *Contemporary School Psychology*, 22(4), 479–487. <https://doi.org/10.1007/s40688-018-00213-0>
- Desliana Maulipaksi. (2016). 7 Provinsi Raih Nilai Terbaik Uji Kompetensi Guru 2015. *Kementerian Pendidikan Dan Kebudayaan*. Retrieved from <https://www.kemdikbud.go.id/main/blog/2016/01/7-provinsi-raih-nilai-terbaik-uji-kompetensi-guru-2015>
- Et.al., D. T. (2010). *Competent Educator of The 21st Century Principles of Quality Pedagogy*. the International Step by Step Association.
- Fazalur Rahman, Nabi Bux Jumani, Yasmin Akhter, Saeed ul Hasan Chisthi, M. A. (2011). Relationship between Training of Teachers and Effectiveness Teaching. *International Journal of Business and Social Science*, 2(4), 150–160. Retrieved from <http://ijbssnet.com/journal/index/206>
- Kuzic, J. (2013). Online Training in Australia. In *International Conference E-Learning* (pp. 374–379). IADIS (International Association for Development of the Information Society).
- Liakopoulou, M. (2011). Teachers' Pedagogical Competence as a Prerequisite for Entering the Profession. *European Journal of Education*, 46(4), 474–488. <https://doi.org/10.1111/j.1465-3435.2011.01495.x>
- Ma'arif, S. (2011). *Guru Profesional Harapan dan Kenyataan*. Semarang: Walisongo Press.
- Mardia Hi. Rahman. (2014). Professional Competence, Pedagogical Competence and the Performance of Junior High School of Science Teachers. *Journal of Education and Practice*, 5(9), 75–80. Retrieved from [www.iiste.org](http://www.iiste.org)
- Mirzagitova, A. L., & Akhmetov, L. G. (2015). Self-development of pedagogical competence of future teacher. *International Education Studies*, 8(3), 114–121. <https://doi.org/10.5539/ies.v8n3p114>
- Musfah, J. (2012). *Peningkatan Kompetensi Guru Melalui Pelatihan & Sumber Belajar (Teori dan Praktik)*. Jakarta: Kencana.
- Neghavati, A. (2016). Core Skills Training in a Teacher Training Programme. *Procedia - Social and Behavioral Sciences*, 232, 617–622. <https://doi.org/10.1016/j.sbspro.2016.10.085>
- Prasetyo, T. I., & Gintoro, G. (2010). Pengembangan Model Pelatihan Online Berbasis Web untuk Keunggulan Bersaing pada PT Intellisys Trip-ratama. *CommIT (Communication and Information Technology) Journal*, 4(2), 109. <https://doi.org/10.21512/commit.v4i2.544>
- Rusman. (2017). *Belajar dan Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Prenada Media Group.
- Rusman, D. K. C. R. (2011). *Pembelajaran Berbasis Teknologi Informasi dan Komunikasi: Mengembangkan Profesionalitas Guru*. Jakarta: Raja Grafindo Persada. Retrieved from <https://openlibrary.telkomuniversity.ac.id/pustaka/17075/pembelajaran-berbasis-teknologi-informasi-dan-komunikasi-mengembangkan-profesionalitas-guru.html>
- Sukartono, Samsudi, Tri Joko Raharjo, D. S. (2016). Training Effectiveness in Improving Teachers Professionalism Competence in School. *The Journal of Educational Development*, 4 No. 1, 1–7.
- Sutikno, A. (2018). Upaya Peningkatan Kompetensi Guru Melalui Pengembangan Diri. In *Profesionalisme Kompetensi Guru Abad XXI*. Yogyakarta: DPP IKA UNY.
- Woldehanna, W. A. and T. (2013). *Teacher Training and Development in Ethiopia: Improving Education Quality by Developing Teacher Skills, Attitudes and Work Conditions*. Young Lives.
- Yusnita, Y., Eriyanti, F., Engkizar, E., Anwar, F., Putri, N. E., Arifin, Z., & Syafril, S. (2018). The Effect of Professional Education and Training for Teachers (PLPG) in Improving Pedagogic Competence and Teacher Performance. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, 3(2), 123. <https://doi.org/10.24042/tadris.v3i2.2701>
- Zrim Martinjak, N. (2016). Developing pedagogical competency during teacher education through the experiential learning of didactic and methodological approaches (pp. 165–176). online. Retrieved from <https://repositorij.uni-lj.si/IzpisGradiva.php?id=88930>