

The Role of Educational Technologists in Building the Skills of Early Childhood Teachers With TRINGO Ki Hadjar Dewantara Approach

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ABSTRACT

The purpose of this study is to examine and describe the efforts to build the skills of Early Childhood Education (PAUD) teachers through training in the use of technology in PAUD learning with the TRINGO approach (Ngerti, Ngrasa and Nglakoni). Training activities in the New Normal era that prioritize health, so the process of implementing PAUD learning is required not to be held face-to-face, but prioritized online learning. This is a challenge in itself, especially for early childhood teachers in teaching their students online. So there is a need for training that can improve skills for early childhood teachers in the use of Information and Communication technology (ICT) which is more meaningful for teachers. The TRINGO approach applied to training has various benefits. So that the implementation of this training has a big influence on each individual.

Keywords: Early Childhood, Training, Teachers, TRINGO Concept

1. INTRODUCTION

This year, which began in early March 2020, the spread of COVID-19 began to enter Indonesia. Until now (25 September 2020) the total number that has been confirmed positive is 266,845, with 196,196 people being declared cured and 10,218 people died [1]. This number continues to grow until unpredictable times. This has resulted in a big impact and influence in a variety of activities that were initially able to be carried out in person meetings, now there are many restrictions. This aims to break the chain of spread of the COVID-19 virus so that it does not spread.

The impact of the COVID-19 pandemic has caused various problems in the life sector. The education sector is one of the sectors that has been greatly affected by the massive spread of COVID-19. There has been a change in learning patterns from previously face-to-face to completely online. In the decision issued, the yellow and

green zones are allowed to carry out face-to-face learning, while the orange and red zones are still required to carry out face-to-face learning [2]. The purpose of this policy is to minimize the spread of COVID-19 among education personnel, especially among students. Because students are very susceptible to contracting this virus [3], [4].



Figure 1 Increase trend in positive cases, recovered and died.

As a learner, the teacher has an additional task, namely being able to use, manage or operate a variety of media and digital learning resources as part of supporting the implementation of online learning. This is as stated by Thaariq [5], that current technological developments give birth to digital learning sources and media that can provide a learning environment that tends to be constructive. So, this is a challenge for teachers, especially in facing the implementation of online learning.

With the rapid development of Information and Communication Technology (ICT), there is a need for a learning process that can improve the quality of learners [6]. The challenge of teachers is to meet these needs, especially early childhood teachers in teaching their students because they are assets that are vulnerable to being affected by the flow of change. Educators need to be able to adjust aspects of development according to the characteristics of early childhood. Thus, educators must be able to classify and identify early childhood abilities in various fields of development and be able to identify early childhood difficulties in these area [7]. Given the importance of early childhood in creating the foundation for environmental sensitivity, interests, and behavior later in life [8].

So, in an effort to facilitate these needs, it is necessary to have a series of trainings that can help early childhood teachers in developing their skills. Training, of course, needs to have a different approach to it. In the educational technology clump, there is a central role in improving the quality of human resources, especially in designing useful training. For this reason, the authors offer a TRINGO (Ngerti, Ngrasa and Nglakoni) approach to training with the main objective of developing teacher capabilities and competencies as part of the realm of educational technology.

2. METHOD

This research is analytic in nature, so the writer uses literature study method. The literature review serves as a driving force and a jumping-off point for future research investigations [9]. Various writers get literature ranging from books, journal scientific articles, news from the internet and so on. The steps in conducting this research are (1) collecting data and facts, (2) collecting various literature reviews, (3) processing data from various sources and (4) drawing conclusions. The results of the study are in the form of descriptions of the role of educational technology in building early childhood teacher skills.

3. DISSCUSION

3.1. *Problems of Early Childhood Teachers in the New Normal Era*

The new normal policy is a government step in minimizing the spread of COVID-19, especially among educational people. In order to minimize the spread of COVID-19, the government through the Ministry of Education and Culture (Kemdikbud) has made mandatory regulations for implementing non-face-to-face learning in areas that are classified as vulnerable zones [10].

Teachers have a central position in the world of education [11]. Because teachers are role models who determine the quality of human resources in the future [12]. So there needs to be an increase in teacher performance. Five aspects that need to be considered (1) the quality of work is directly related to the ability of teachers to master all matters related to the learning process, which consists of subject matter, teaching and learning management and classroom management. (2) work speed or accuracy, is an indicator related to the use of instructional media in accordance with the content of learning material, even directly related to the accuracy of teachers in planning learning programs with the time available. (3) initiative in work, is the ability of the teacher, leading the class, managing the interaction of learning and teaching in the classroom properly, and assessing student learning outcomes. (4) work ability, it can be seen from the teacher's ability indicators including the use of various methods in learning, understanding and implementing functions as well as counseling service guidance to students who need guidance and direction. (5) communication in this indicator the teacher is expected to speak well, understand and manage school administration, and develop their abilities [12], [13]. This aspect can improve performance, so that in the learning process, the learning objectives that have been designed by the teacher can be achieved [14], [15].

At all levels, especially early childhood teachers are required to be able to adapt to conditions, especially in the implementation of online learning. This is a problem, considering that early childhood levels are different from other levels. This is because early childhood education is a coaching effort aimed at children from birth to six years of age which is carried out through providing educational stimuli to help their physical and spiritual growth and development so that children have the readiness to participate in the next level of education [16]. So, of course this is a bit difficult for early childhood teachers in adjusting current learning that tends to work online.

For educators, the COVID-19 Pandemic is a classic adaptive and transformative challenge, no preconfigured guidelines can guide learning precisely [17]. So, to answer these challenges, training is needed that can build

the skills of early childhood teachers in managing online learning. The approach used must be different from other approaches. For this reason, the authors offer a TRINGO approach that can be applied in the implementation of training, especially for early childhood teachers.

3.2. TRINGO Foundation in Education and Training

TRINGO which stands for Ngerti (understand), Ngrasa (feel) and nglakoni (do). The TRINGO learning concept is a concept taken from the theory of Ki Hadjar Dewantara. This concept can be developed into various components of learning. In addition, the TRINGO learning concept is also a classic concept that can be developed as a learning model, learning resource, learning strategy and so on [18].

One of the programs that can be implemented using the TRINGO approach is training. The concept of training has a clear meaning in terms of a set of standards, or performance, that individuals are expected to meet. Although the expected results are different for each individual, basically each individual gets the same learning experience [19]. For this reason, training objectives are oriented towards the development of each teacher's competence, depending on the training to be carried out [20].

The TRINGO concept relates to metaphorical activities, creativity being a conscious process. Metaphors build comparative relationships between objects or ideas and other objects or ideas by changing positions [21]. The training scheme that uses the TRINGO approach (see Figure 2). In an effort to support online learning, this kind of training should be encouraged, so that teachers can maximize their skills. Like a person who is an example, if the teacher is active then the students will also be active.

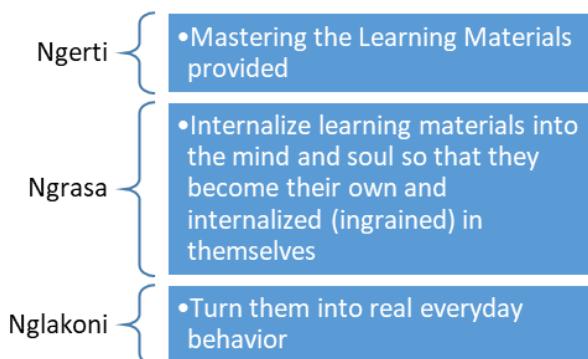


Figure 2 TRINGO Assisted Training Concept.

3.3. Online Early Childhood Learning Based on the TRINGO Concept

During this pandemic, all teaching and learning activities were shifted to online learning. This also

applies to early childhood levels. Some children will remember the coronavirus pandemic as a time when they had to spend more time with their parents, collect puzzles, play board games, and have to watch their peers in virtual classes rather than at school [22]. As a result, children lack social and cognitive stimulation outside their home [23].

Basically, early childhood is children aged 0-6 years. At this stage children need a lot of stimulus to develop aspects of their development such as religious and moral values, physical motor skills, language, cognitive, social emotional, and art [24]. The social and mental stress associated with the COVID-19 pandemic can promote long-term effects on child development [25]. This stress is also experienced by early childhood teachers, because basically it is difficult to apply online learning in difficult times like this. If the problem is not resolved, it impacts on children's learning, anger, aggression, anxiety, social withdrawal, and overall social competence [26].

The capacity of early childhood educators to function well in their work environment is essential to provide high quality programs for children [27]. So in supporting it, it is necessary to have a teaching foundation that can provide quality learning to students. The author offers a learning concept for early childhood based on the TRINGO concept.

As previously mentioned, TRINGO is a learning concept that contains Ngerti, Ngrasa and Nglakoni, so that when it is applied, students not only understand the material provided, but also there is a process of building a sense of sensitivity accompanied by action

Table 1. Examples of online learning design

Learning Objectives	1. Know God's Creation (Ngrasa) 2. Shows Good Behavior (Ngrasa) 3. Know the various shapes, colors and tastes of fruits (Ngerti) 4. Mention the kinds shape, color and taste of fruits (Nglakoni)
Learning Model	Picture and Picture
Learning Methods	Q & A
Learning Resources	Conditional (Adaptive)
Learning Media	Zoom or Google Meet

In the implementation of online learning with the TRINGO concept, there needs to be a systematic design, starting from the learning objectives to be achieved, the models used, the methods used, learning resources and learning media. Table 1 is an example of an online learning design based on TRINGO.

In implementing this kind of learning concept, there are supporting and inhibiting factors in it. The supporting factors of this concept are starting from increased student support capacity, interest in learning and so on. While the inhibiting factor of implementing online learning with the TRINGO concept is the inadequate internet network

access [28], so it is highly recommended that this learning model and media be adjusted accordingly. The main advantage of implementing this online learning is that it is able to build meaningful student learning experiences. What is meant by meaning is that students acquire knowledge, good attitudes and adequate skills [29], according to their age development. While the drawback of this implementation is that the main thing is that the teacher has not been able to fully apply this concept, so there needs to be training or socialization that can improve the ability of teachers to apply this concept.

3.4. The Strategic Role of Educational Technology In The Development of Early Childhood Teachers

Educational technology is a competent scientific clump in facilitating learning [30]. Facilitating these can be in the form of models, curricula, media, learning designs and so on. Association for Educational Communinaciton and Technology (AECT) [31] defines it as the study of ethical practice to facilitate learning and improve performance by creating, designing, and managing appropriate technological processes and resources. The indispensable role of technology in teaching and learning is fast becoming one of the most important and widely discussed issues in contemporary education. Experts in education agree that when used properly, technology holds great potential and promise in enhancing teaching and learning in addition to shaping promising workforce opportunities [32]. Thus, educational technology has a strategic role, especially in the professional development of early childhood teachers in order to increase their competence.

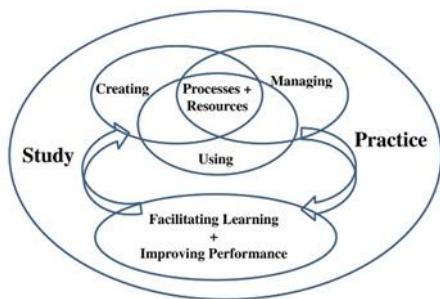


Figure 3 Educational Technology Scheme according to AECT.

Department of Educational Technology in the undergraduate study program has interest courses related to training. In this course, students are invited to start from designing, managing and evaluating education and training programs. This knowledge can be a provision for learners, especially related to the development of competencies needed in the community environment.

Early childhood teachers should have various competencies that support this profession [33]. Competence is the ability to perform an activity

according to a standard and with good results, which is repeated in different timeframes and situations [34]. For this reason, as part of the scientific domain of educational technology, training related to competency development, such as media or models.



Figure 4 Training as one of the fields of education technology.

The needs to be considered in the development of the early childhood teacher profession are as follows.

Training Material	Training Model	Media
<ul style="list-style-type: none"> •Competence-Appropriate in K13 •Adaptive to the situation and conditions 	<ul style="list-style-type: none"> •Try to do it actively and interactively •The model needs to be adjusted to the conditions of the training participants •Prioritize using the TRINGO approach 	<ul style="list-style-type: none"> •Use media that has been provided by the venue •If forced to use external media, then there needs to be a draft cost budget

Figure 5 Overview of the Training Curriculum.

The results of previous research which also used the TRINGO approach in training showed the success of increasing teacher competence in supporting online learning. If this can be applied to early childhood teachers, it can support their professionalism. This is important because early childhood teachers have a tough task in preparing future generations that will be increasingly complex with various existing paradigms.

4. CONCLUSION

The new normal era has brought about various transformations in the field of life. However, if analyzed more deeply, this phenomenon becomes a momentum,

especially for early childhood teachers in developing their skills, so that the teaching and learning process can be more interesting than before. For this reason, the role of educational technology as a scientific field in facilitating learning is very important in the development of the teaching profession, especially early childhood teachers. Even after a pandemic, educational technology will continue to be needed to face these rapid changes. Therefore, knowing the central role of educational technology can be a foundation for teachers or early childhood schools in striving for this clump into the learning structure. This is just like ants who are always together with other ants to bring food into the nest, indicating that humans cannot live alone, including teachers who need learning partners. So, hopefully this article can provide more insight into the strategic role of educational technology in developing the capacity of a teacher.

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