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Andragogy Based E-Training Model for Early Childhood Education Educators

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Keywords

E-Training, Andragogy, Educators

Abstract

Learning virtual is built with a learning climate that is packaged in the form of interactive online design . The purpose of this research is to design, analyze, and develop an andragogy-based e-training model to improve the competency of Early Childhood Education educators. E-training is used to make it easier for educators to learn more flexibly, adjusting to the assumptions of adult learning. This research does not only discuss the management of e-training, but also explains adult learning in the digital era, with learning steps that are closely related to the learning needs of adults. The qualitative approach in this study involved 5 informants, including 2 educators, 1 manager, and 2 experts to provide feedback on the conceptual model developed, with data collection techniques through interviews, observation, discussion and documentation. The results of the study show that the learning climate for adults via the internet can be carried out, but it needs to start with conditions of learning readiness through learning contracts and the freedom of learning citizens to access material both synchronously and asynchronously which can be embedded on the training website.

INTRODUCTION

Advances in technology provide many conveniences in various aspects of life, including science. Innovation must be created to provide positive benefits for humans. To deal with this, quality and innovative human resources are needed that can quickly adapt to technological and information developments, (Serdyukov, 2017). The world of education is the main sector in creating technologically literate human resources. Therefore, it is necessary to adjust the curriculum in accordance with developments in the digital era.

Learning that was originally cantered on educators as a transfer of knowledge becomes cantered on students who build their own knowledge. (Fitri et al , 2017) Learning changes from a process of transmission to construction, (Saavedra & Opfer, 2012) adding that the transmission model is not effective in creating 21st century skills. This digital era learning requires students to be able to construct knowledge and skills and apply them. Students must also be able to communicate, work together, and collaborate both with educators and with their peers.

The ICT curriculum developed by educational units should contribute to the development of the competencies mentioned above. This digitization program is a new breakthrough that utilizes ICT developments to facilitate the teaching and learning process (Miller & Clark, 2000). The use of ICT in education has developed into the management of education in the field of training by distance (e-training), this aims to provide the widest possible access to education and training for students who do not have the opportunity to attend face-to-face education due to various constraints. . e-training is a learning that frees training participants to be able to learn without being bound by space and time with a little help from other people. In e-training activities, there is no direct contact between the instructor and the training participants, the learning process is carried out by means of learning media, which are currently mostly in the form of specially designed ICT. e-training is defined as the use of several technological devices to deliver training and other educational materials, via the internet (Barrow, C., 2003). Distance learning or distance education has several e-learning characteristics that are often used to describe web-based education. This process can be divided into three categories, namely Computer Aided Instruction (CAI), Computer Managed Instruction (CMI), and Computer Supported Learning Resources (CSLR) (Barrow, C., 2003).

The concept of training is closely related to the Andragogy approach, as a learning

approach that puts forward the principles of adult learning. The application of the "new method" in adult education activities must be based on the following principles: 1) learner's need to know, 2) self-concept of the learner, 3) prior experience of the learner, 4) readiness to learn, 5) orientation to learning, 6) motivation to learn (Knowles, 2005). As a learning approach, Andragogy can be implemented in various learning modes, one of which is through e-training. Digital Andragogy is a concept that is relevant to andragogy in e-training (Blackley, S., & Sheffield, R., 2015) explains the concept of digital andragogy, namely the practice of educators to equip and encourage adult students to choose and use accessible digital technology capabilities for personalize learning and facilitate their interaction with peers and tutors. There are several principles that need to be considered in implementing digital andragogy, including: 1) students are made very aware of the reasons for using the andragogy approach, and know how it works. 2) learning modules are information/skills/strategies that encourage collaboration and reflection activities in order to build meaning and relationships with prior knowledge. 3) the purpose of the assessment consists of 3 objectives, namely the assessment of learning, for learning and as learning. 4) task feedback (formative and summative) is fast, personal and provided in a variety of different formats (written, video, and audio) (Blackley, S., & Sheffield, R., 2015).

Reviewing the concept of e-training that has developed at this time, the government have made efforts to provide training to Early Childhood EducatioN educators, both face-to-face and in-network or online training, but this training is still limited and has not been able to reach all Early Childhood Education teachers. It can be seen from the achievements of tiered training participants that up to 2019 face-to-face training participants were only able to reach 200,528 participants, while for online training in 2018 they were only able to capture 4,223 participants, this data increased from the previous year which was only able to capture as many as 3,363 participants (PP-PAUD dan Dikmas Jawabarat, 2018).

The achievements of offline education and training are faced with several obstacles, including the high cost of implementation, especially from the operational aspects of the program, printing of learning materials, relatively high expenses for accommodation and consumption, and time constraints. By because that, *e* -training based *training* for Early Childhood Education educators can be a solution because This training has several advantages, namely: 1) low cost of implementation more affordable and efficient; 2) quota participant no limited so that could capture more targets and can reach a wider area; 3) can be accessed by various media connected to the internet; 4) more flexible training time because the material is available and can be studied *offline* as well as Theory could be repeated any time; 5) Theory which available more broad, not only training materials but also other materials that support increasing competency preschool educator .

Increasing the competence of educators can be in the form of increasing knowledge, skills and attitudes. The implementation of andragogy-based e-training in improving the performance of Early Childhood Education educators, of course, does not just happen, but goes through a long process Widiyanto & Wahyuningsih, 2022). The need for mature management of training implementation so that the objectives to be achieved can be realized. Management of learning in training consists of three simple stages, planning, implementation, and evaluation (Riadi, 2018). These three stages are carried out with the hope of implementing effective training so that all objectives are achieved.

THEORY STUDY

Training

One way to encourage one's performance is education and training. An effective and efficient training program, the skills acquired through formal and non-formal education possessed by employees will also increase their ability and mastery of their work which will ultimately have an impact on good work productivity. (Nirtha et al , 2021); (Rustiana, 2010); (Slameto, 2017).

Training is a systematic process change employee behavior in any direction achieve organizational goals (Pratiwi , 2016). Training means giving opportunities for employees to develop job skills certain, experience and knowledge they need to do their job or improve their performance (Pratiwi , 2016). Training is a process of providing skills, expertise or abilities to someone in order to improve the quality of performance in the field of work. Training is a form of investment with the expectation that a person's quality and competence can be improved so that it will affect productivity and performance in service in general.

Andragogy

The position of andragog i is as a science that presents the core principles of adult learning which in turn enable them to design and conduct adult learning to build more effective learning processes for adults (Knowles, Holton III, & Swanson, 2014). Andragogy focuses on adult education and is based on the following tenets: adults need to know why they should learn something; adults retain the concept of responsibility for their own decisions, they live alone, adults enter educational activities with a greater volume and more varied experience than children, adults have a readiness to learn the things they need to know to cope effectively with situations real life, adult living centered on them . Orientation to learning, and adults are more responsive to internal motivators than external motivators. The andragogical model is not an ideology; it is a system of alternative sets of assumptions, a transactional model that speaks to the characteristics of those learning situations.

METHOD

This study uses a qualitative descriptive approach, which aims to describe the implementation of andragogy-based e-training conceptual models in improving the performance of Early Childhood Education educators. Data collection techniques used in this study include observation, interviews, discussions and documentation studies. The descriptive method with a qualitative approach an effort to present the social world, and its perspectives in the world, in terms of concepts, behavior, perceptions, and issues about the humans studied (Moleong, 2021). This study intends to understand the phenomenon of what is experienced by research subjects, namely the andragogy-based e-training model used in training Early Childhood Education educators.

RESULTS AND DISCUSSION

The implementation of the andragogy-based e-training conceptual model in improving the performance of Early Childhood Education educators can be seen from the planning, implementation and evaluation carried out.

E-training planning

The planning stage in *e-training* is the most important stage in determining the next steps as well as a reference for program achievement. *E-training* planning is carried out by prioritizing training needs with managers, prospective participants and instructors. Then the manager arranges the *e-training priorities* . Analyzing the initial data as an effort to develop a program for implementing andragogy concepts. In this step, training development is analyzed and training needs are based on: a) Participants' needs, competencies, and other characteristics (technological abilities) that must be adapted to the training; b) Characteristics of the participant's environment that may influence the design of the training; and c) Skills, knowledge and/or attitudes that must be improved or trained. Based on this data, learning objectives are developed that describe what the trainees should be able to do or know after they have completed the training. It also identifies the types of training materials that are most effective in fulfilling learning through *e-training* .

After describing the training needs, the administrators develop an *e-training curriculum* . The specifications for the preparation of learning materials that are presented to training participants are:

1. Theory consisting of: Early Childhood Education educator ethics, early childhood learning methods, use of media and learning resources, and others (30%).
2. Practices consisting of: developing learning tools, assessing early childhood development (70%).
3. The evaluation consists of theoretical evaluation and practical evaluation.

The material is made based on the principles of learning in adults, namely: 1) The *trainees must be motivated to learn* , (2) The trainees must be able to learn (*The trainees must be able to learn*) , (3) Learning must be reinforced (*The learning must be reinforced*), (4) Training must provide material for practice (*The training must provide for practice of the material*), (5) The material presented *must be meaningful* , (6) *The material must be communicated effectively* , (7) The material taught must be transferred to *the job* (Pratiwi, 2016).

The next step is the selection of trainees and the selection of instructors. This is adjusted to the previous step. Training participants are limited to predetermined training administration prerequisites. Meanwhile, the instructor must have a good understanding of the *e-training curriculum* . Instructors must also have a deep understanding of technical activities, training materials, methodologies and media used. In addition, trainers must be familiar with the condition of participants who communicate without face to face.

The last step in the planning process is the *e-training* assessment . *E-training*

assessment is a series of evaluation processes carried out during and after *e-training learning is* implemented. The assessment includes several factors: a) the process of *e-training learning* (among other things: transfer of knowledge, progress in learning), b) the efficiency of using the method (creating modules and virtual face-to-face), c) organizing *e-training* (instructors).

e-training evaluation can be done with three methods, namely: a) interview. Interviews can be carried out by asking questions to e-training participants, instructors and administrators; b) Observation, carried out to determine the satisfaction of participants and organizers. Can be done through forum discussions; and c) Tests. Evaluation through this test is carried out to measure the actual knowledge and *performance improvement* (skills, competencies) of *e-training participants* .

Implementation of e-training

implementation of andragogy-based *e-training* to improve the performance of Early Childhood Education educators is carried out as follows:

1. pre-test stage

The pre-test was carried out aiming to determine the initial ability of the trainees in understanding and interpreting the competency of the trainees

2. E-training learning process

e-training learning climate is carried out with learning orientation (introduction). on the method or technology used in learning. This orientation was carried out intensively for 1 meeting to the participants on how to use online learning at the same time participants register themselves as e-training participants . Furthermore, the learning process is carried out according to the schedule set or agreed upon by both parties through the learning website.

3. Post-test stage

The post-test was carried out aiming to measure the level of understanding and mastery of the competency of the trainees.

Participants take part in andragogy-based e- *training with an asynchronous model*, which means not simultaneously. Trainees may have a different study time than the educator who provides the material. *Asynchronous* training in learning allows participants to access learning materials anytime, anywhere. Trainees can continue to carry out work and complete it at any time according to a predetermined time period. Learning in *e-training* is carried out through tests, quizzes, and a series of exercises.

Creating a learning climate in the learning process *e-training* is structured in a conducive manner so as to foster a pleasant learning climate, knowing each other, trusting each other , and accepting each other. According to the organizers , the creation of a learning climate is carried out through strengthening motivation and exchanging experiences and other similar activities. Some of the services commonly used to stimulate training participants to create a conducive climate are conditioned participants to ask questions during the virtual face-to-face process. After that, then the participants can carry out activities such as throwing questions at each other, looking for answers , discussing the problems they face .

synchronous model *is* used to carry out conversations between instructors and trainees to talk to each other via chat, *video conference* , and so on. The role of the instructor here is to provide reinforcement and can be used as an evaluation to determine participants' understanding of the material being studied independently and for a question and answer session regarding the problems faced by participants.

In *virtual learning learning ,* the creation of a learning climate is packaged in the form of a strategic interactive *online design* . This interactive *online* support is supported by *e-learning tools* , namely dynamic *web* , discussion groups (forums), e *-mail* , *chat* , *instant messaging* , *video* , *animation* , and *sharing* applications . *Virtual learning* can enable instructors to actively interact by utilizing computers and networks so that instructors and participants can communicate with each other .

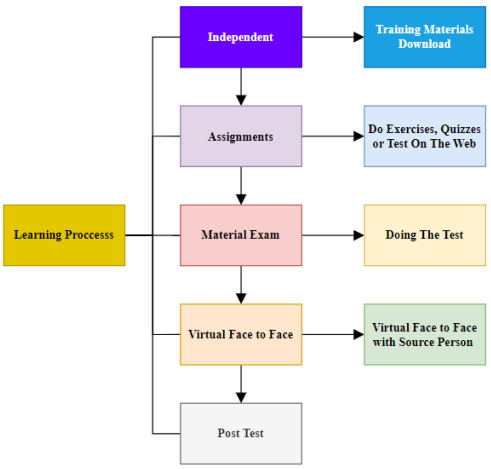

Figure 1. The learning process in andragogy-based *e-training*

Evaluation *of e-training*

Assessment is a measuring tool in training management. Based on the results of interviews with the instructor, according to the instructor *e-training* evaluation is carried out through quizzes that must be carried out by each participant after studying the module that has been *downloaded* . The scores of each participant will be displayed later. If the score has reached the specified limit, participants can enter the next session. This was justified in the opinion of the participants, that " The *e-training* evaluation form is carried out through quizzes in which each participant has finished understanding the module or video that has been downloaded. Each participant can see the scores obtained from each quiz they take.

The evaluation aspect of *e-training* according to instructors and managers emphasizes knowledge of the material that has been learned during the training process. The presence of participants is also an assessment when participating in virtual face-to-face. The assessment was also seen from the activeness of the participants in asking questions during a discussion session with the instructor. Meanwhile, the results of *e-training* can be seen from the participants being able to apply the material they get directly in the process of teaching students. Another impact is that participants can share with other educators what they have learned while participating in *the e-training*.

Successful implementation of e-training

Participants participating in *e-training are* based on their need for material related to their competence and at the end will receive a reword in the form of a certificate. Instructors carry out *e-training* by exploring the problems faced by educators as material for discussion so that participants can express their opinions to each other (Al-Adwan, & Smedley, 2012). The material presented can be related to the participants' daily experiences as an educator, this shows that *e-training* has created *presenting information.*

Guiding the student in practice , instructors can help participants understand the material, especially during virtual discussions. If there is interesting material, participants can re-evaluate the extent of their abilities (*self- assessment*). The material provided in *e-training* can be applied in learning activities because it relates to the participant's profession as an early childhood educator (Siswanto, et.al, 2018). However, there is material that is less in-depth so that participants still have difficulty developing it in learning. Therefore, participants apply the material they have mastered the most and materials that are innovative in nature to be applied in the teaching process, this illustrates that *e-training* encourages *practicing by the student.* Implementation of andragogy-based *e-training* can bring about changes in the teaching process of trainees, Participant satisfaction with *e-training,* because the material is in accordance with the needs of an early childhood educator, *assessing the student's learning.*

The shortage of andragogy-based *e-training* can be caused by participant factors (lack of technology literacy) and facility factors (internet network and laptop or computer condition). Based on the implementation of the model implemented, the researcher reconstructed the model by adding *synchronous* and *asynchronous features to be embedded on the training website, with the aim of making it easier for participants to be face-to-face (Live) and Offline.*

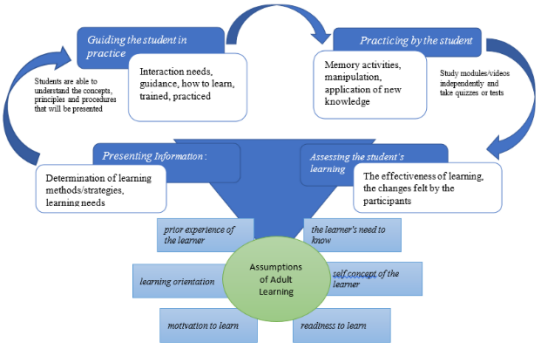

Figure 2. The validation model of andragogy-based e-training management in improving *the* performance of Early Childhood Education educators

Educator with high performance will try to show higher achievement in order to improve the quality of teaching so that the quality of learning is increasing. The performance of educators will be seen from how these educators carry out their main duties (Rachmawati, 2016). An educator is required to be able to develop good learning plans because with good planning, educators can carry out learning according to the expected goals (Nugraheni & Rahmayanti , 2016). Educator performance is one of the determinants of the high and low quality of education. Education can be declared of high quality if educators work professionally. Educator Professionals are educators who have special abilities and expertise in the field education so that he is able to carry out his duties and functions towards planning learning, learning implementation,

curriculum management, student services, school-community relations, school climate management, and program evaluation school (Jakaria , 2014) .

Educator performance is the result achieved by educators in carrying out the tasks assigned to them based on skills, experience, earnestness, and time consuming. The performance of educators will be good if educators have implemented elements consisting of high loyalty and commitment to the task of teaching, mastering and developing learning materials, discipline in teaching, creativity in the implementation of teaching, cooperation with all residents in the school, leadership who is a role model for students, as well as responsibility for their duties (Nurhayati, S., & Rakhman, A., 2017).

CONCLUSION

Planning an andragogy-based e-training training program is the first step that will determine the success of the next e-trianing management function. In order to achieve a good first step in training, systematic program planning stages are also needed, well programmed according to priority needs as well as an analysis of environmental characteristics and potential training participants . Implementation *of e-training* is carried out by determining training materials, instructor qualifications, preparing training modules and videos, setting quizzes to be followed by participants, assessment formats and training reports for evaluation. The position of the instructor is very important, especially maintaining an adult learning climate and the involvement of participants is key in the learning process through e-training. The shortage of andragogy-based e-training can be caused by participant factors (lack of technology literacy) and facility factors (internet network and laptop or computer condition). Based on the implemented model implementation, the researcher reconstructed the model by adding synchronous features *and a* synchronous to be embedded on the training website, with the aim of making it easier for participants to be face-to-face (live) and offline.

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