Online Learning of Early Children's Languages in Student

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Abstract— *This study aims to analyze: 1)To analyze the process of developing the google classroom learning for the Early Childhood Language Development course for third-semester students of the Early Childhood Education Teacher Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor. 2) To analyze the feasibility of online learning, the google classroom for the Early Childhood Language Development course based on the ADDIE model was integrated with the PEDATI model for third-semester students of the Early Childhood Education Teacher Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor. 3) To analyze the effectiveness of Google Classroom online platforms for teaching early childhood language development course for third grade students of Primary School Teacher Education Program (PGPAUD) STKIP Muhammadiyah Bogor. This research process is called R&D or R&D (RandD). By using the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation).using integrated with the PEDATI learning system design model. The subjects in this study are V semester students of the Early Childhood Education Teacher Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor. The results shown are the assessment of the feasibility of multimedia by material experts obtaining a score of 83% (good). The feasibility assessment by media experts scored 89% (good). Based on the results of the study, it can be concluded that SKIP Muhammadiyah Bogor's online learning activities are effective. From these calculations, the average N-Gain of students is equal to the online learning of STKIP Muhammadiyah Bogor students in the High N-Gain category, which is 0.78.*

Keywords— *Online Learning, Google Classroom, Childhood Language Development Courses early.*

I. INTRODUCTION

The impact of the COVID-19 pandemic has changed the learning process from face-to-face in the classroom to remote. This effort was made to break the chain of the spread of Covid-19. Of course, there is a need for facilities that support the distance learning process that is effective and efficient. One of the means to support the distance learning process is the LMS and the web. One of the courses at STKIP Muhammadiyah Bogor is the Early Childhood Language Development course. The teaching method used by the lecturer is the lecture model, discussion, question and answer, and student presentations.

Based on the results of initial observations, it shows that the average score of students in the Early Childhood Language Development course at STKIP Muhammadiyah Bogor has not shown a significant increase. Based on the results of previous observations made at STKIP Muhammadiyah Bogor, there is no use of the web as a learning medium in students' third semester This is especially the subject of Early Childhood Language Development.

Using Google Classroom, which is used as a digital learning resource, the use of the LMS can support the implementation of the learning process to increase student independence and learning outcomes. Google Classroom is a medium that provides convenience in distributing learning materials and required practice questions. Lecturers (educators) can upload various forms of learning materials so that it can make it easier for students to download materials independently and study them before learning takes place. Google Classroom can also be used to give quizzes or assignments by using a grace period that can be determined using a google calendar.

The author is interested in developing a learning system by designing an online learning media with the title "Online Learning for Students' Early Childhood Language Development Course.third semester Early Childhood Education Educator Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor.

The focus of the problem in this research is online learning for students' Early Childhood Language Development Coursesthird semester Early Childhood Education Educator Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor.

Briggs explained that the model is a set of sequential procedures to realize a process, such as a needs assessment, media selection, and evaluation (Isha', 2017)Learning development has a broader meaning because it includes learning design. Learning development is a systematic approach in the design, production, evaluation, and utilization of a complete learning system, covering all the right system components with a structure and management pattern to use them.(Miarso, 2007)

The term model can be interpreted as a graphical display, regular or systematic work procedures, and containing thoughts that are descriptive or explanatory along with suggestions. The description or explanation shows that a learning design model presents learning built based on theories such as learning, learning, psychology, communication, systems, and so on.(Prawilradilaga, 2008).

The development form used in this study is ADDIE. The model has five phases, namely: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation.(Tegeh & Kirna, 2013). The result of the literature search by the

researcher, as explained by Branch, is that if the performance gap is caused by reasons other than lack of knowledge and skills, then stop the ADDIE process. If the performance gap is caused by a lack of knowledge and skills, then proceed to propose instructional options. Thus, the ADDIE development model is relevant for the development of interactive multimedia as an effort to apply students' metacognition(Branch, 2009).

PEDATI referred to in this discussion is a blended learning system design development model created by Chaeruman. The term PEDATI comes from the words Learn, Deepen. Apply. and Evaluation. As a learning design model, PEDATI can be a guide or reference in designing or programming a blended learning system because it contains a systematic work process flow to develop blended learning(Chaeruman, 2018). The five steps in the design of the PEDATI blended learning system made by Chaeruman are (1) Formulating learning outcomes/objectives, (2) Mapping and organizing learning materials (3) Selecting and determining synchronous and asynchronous learning activities (4) Designing asynchronous learning activities, and (5) Develop asynchronous learning plans(Chaeruman, 2018).

Learning is a conscious effort by individuals so that there is a change from not knowing to know, from not having the attitude to being right, from being unskilled to being skilled at doing something.(Efgivia, Arista, et al., 2021). Development is a process of change in which children learn to master a higher level taller from various aspects. One of the important aspects of development is the aspect of development language. Language is a symbol or symbol of an idea or a thought

that the sender of the message wants to communicate and is received by the recipient of the message through certain codes both verbally and nonverbally. Language is used by children in communicating and adapting or adjusting to their environment which is done to exchange ideas, thoughts, and emotions. Language can also be expressed through speech which refers to verbal symbols(Kurniati, 2017). Childhood is the most appropriate time to develop language. Early childhood (AUD) is in the most rapid stage of growth and development, both physically and mentally.

Language development for early childhood (AUD) includes four developments, namely listening, speaking, reading, and writing. This development must be carried out in a balanced manner in order to obtain optimal reading and writing development. Language development for children based on the standard reference for early childhood education no. 58 of 2009, developed three aspects, namely receiving language, expressing language, and literacy(Rusniah, 2017). For parents and educators, an understanding of language development Early childhood education (AUD) is very helpful in improving the development of children's language skills (Isna, 2019).

Course Description Early Childhood Language Development is included in the Learning

Process Skills Course for PG-PAUD Study Program. This lecture discusses the nature of language development in early childhood, theoretical views and the context of language development among children with linguistic diversity, language development of children from infancy to elementary school age (1-3), language assessment in young children. early childhood,

language development among children with communication disorders

The selection of teaching models and designs must consider the uniqueness of the material being taught(Efgivia, Ukhrowati, et al., 2021). Abdin Zaenal Arief explained that the design of the learning system (Instructional System Design / ISD) is an organized procedure that includes the steps: Analyzing, Designing, Developing is the process of guiding and producing learning materials, Implementing, Evaluating learning. (Arief, 2017).

Learning a language, it involves building one's cognition or knowledge of the language from one's own experience. Aspects that must be developed in designing learning are objectives, materials, procedures, and evaluation of learning(Efgivia, Zhahiriyah, et al., 2021). The following are the indicators tested in the test of learning media adapted from an example of an online teaching material evaluation instrument, Design(Efgivia et al., 2021) , Content material, learning design, content material (Efgivia, Ardiansyah, et al., 2021). Language and Communication(Kustandi, 2011).

II. METHOD

The research method used is the research and development method or also known as R&D. Research and development or R&D methods are research methods used to produce specific products and test their effectiveness. (Sugiyono, 2010). The model developed in this research is the ADDIE model. This model of ADDIE development is relevant to the development of online learning because Branch explains that if vacancies occur for reasons other than lack of knowledge and skills, stop the ADDIE process. If the performance gap is caused by a lack of knowledge and skills, then proceed to propose instructional options or options(Branch, 2009).

In this study, the ADDIE model will be integrated with the PEDATI model at the learning strategy development stage. PEDATI stands for online learning in higher education, it is also an acronym for the words learn, explore, apply, and evaluate which describes the learning flow that is applied to this model (UA Chaeruman, 2017). PEDATI as a learning system design model consists of systematic and logical work procedures, consisting of clear components that relate to one another (UA Chaeruman, 2017). This research was conducted in STKIP Muhammadiyah Bogorwhose address is at Jl. Leuwiliang Highway No. 106 Bogor 16640 Bogor Regency, West Java Province. The research projects of the PAUD teacher training program are the third part of the students. The steps of Development Research carried out are (1) Assessment/Analysis, (2) Instructional Target Design, (3) Development, (4) Implementation, and (5) Evaluation. Data analysis techniques were carried out quantitatively and qualitatively.

III. RESULTS AND DISCUSSION

Online media development student's Early Childhood Language Development course third semester The Early Childhood Education Educator Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor is based on the needs that exist in the field. The results of the needs analysis

found that there is no specific online material that can be used to supplement online material, especially by using the Blended Learning method. However, the availability of Internet network facilities is working, the good support of online learning centers, hardware devices and Internet networks by trainers at home, as well as training participants are accustomed to accessing learning materials via the internet support the implementation of learning-based online.

In developing Online Learning for students' third semester Study program of Early Childhood Education Educator Education (PGPAUD) STKIP Muhammadiyah Bogor, the first step that researchers took in developing Online Learning was to analyze needs and objectives.

Interviews were conducted on August 28, 2021, with the following results: 1. Lecturers of courses have difficulty doing PJJ because students have technical problems such as signals, unsupported devices, and no internet quota. 2. The purpose of online learning is for lecturers to provide students with teaching materials before doing online learning through Google Classroom. 3. The material taught to students is difficult to understand which is delivered online because it is technically disturbed. 4. Online learning through zoom meet faces obstacles, namely students tend to turn off the camera so that the lecturer does not know whether the students are listening to the explanation given by the lecturer. 5. Facilities and infrastructure in schools are not well available, such as computer laboratories and internet networks as well as supporting personal computers. . 5. In this pandemic condition, the problem is getting bigger because face-to-face learning is done online, lecturers find it difficult to keep students' attention if online face-to-face is done for a long time, lecturers find it difficult to maintain two-way interactions with all students, and the tasks given have a heavy burden. big and boring for students. 6. Lecturers try to link learning with the real world to make learning fun, after learning the lecturers distribute soft copies of materials to help students who have never been able to relearn, and lecturers continue to maintain interaction with all students even though it is not yet effective. In this pandemic condition, the problem is getting bigger because face-to-face learning is done online, lecturers find it difficult to keep students' attention if online face-to-face is done for a long time, lecturers find it difficult to maintain two-way interactions with all students, and the tasks given have a large and heavy burden. bored students. 6. Lecturers try to link learning with the real world to make learning fun, after learning the lecturer distributes a softcopy of material to help students who have never been able to relearn, and the lecturer continues to maintain interaction with all students even though it is not yet effective. In this Pandemic condition, the problem is getting bigger because face-to-face learning is done online, lecturers find it difficult to keep students' attention if online face-to-face is done for a long time, lecturers find it difficult to maintain two-way interactions with all students, and the assignments given have a large and heavy burden. bored students. 6. Lecturers try to link learning with the real world to make learning fun, after learning the lecturers distribute soft copies of materials to help students who have never been able to relearn,

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Asynchronous and Synchronous Learning Model

After mapping the material, the next step is to select and determine synchronous and asynchronous learning activities. Through this analysis, it is determined whether certain materials will be optimally achieved through asynchronous learning strategies or through synchronous learning. The process of selecting and determining asynchronous and synchronous learning strategies is carried out based on the hierarchical level of learning objectives. Based on this, it is concluded that the ideal division for asynchronous learning settings is 70% and synchronous is 30%.

The following is a display of Asynchronous and Synchronous Learning.

Results of Model/Feasibility Trial Analysis (Implementation)

Before the development of online media for the students' Early Childhood Language Development course third semester The Early Childhood Education Educator Education Study Program (PGPAUD) STKIP Muhammadiyah Bogor is implemented, the product is first reviewed by experts, namely learning material experts, learning design experts and media experts.

The material review was carried out by a material expert, namely Dr. Helwiyah Makarim, M.Pd. lecturer at STKIP Muhammadiyah Bogor. Product reviews conducted by learning materials experts are intended to assess aspects of online learning materials for the Google Classroom-based Early Childhood Language Development course as follows:

Based on the results of the recapitulation of material experts, the results of the calculation of the material expert's assessment obtained an average value of 83% which means "Good". This means that in the aspect of the material developed, it is feasible to be used for research.

After testing the experts, the next step in learning and online learning design development is to test the platform experts and learning designers, that is, people who are proficient in the study program. The media expert was conducted by Dr. R. Andi Ahmad Gunadi, M.Pd. he is a lecturer at the Muhammadiyah University of Jakarta.
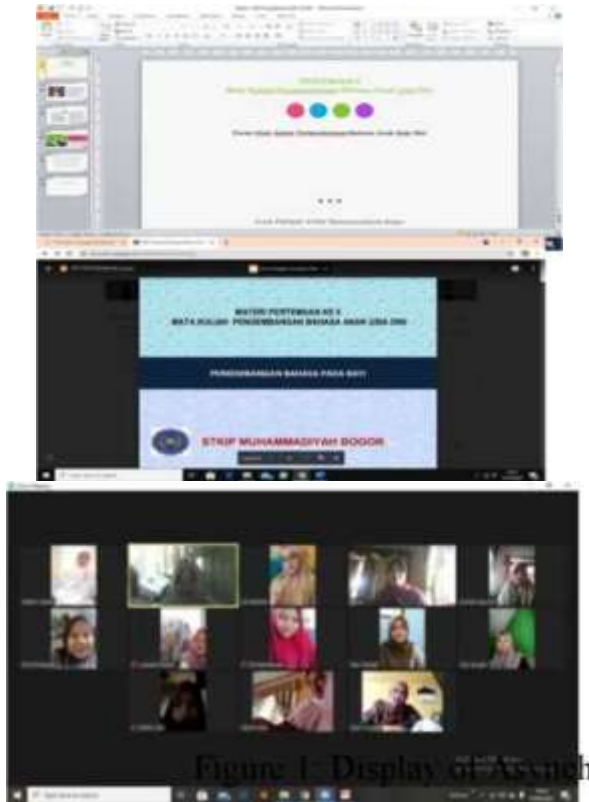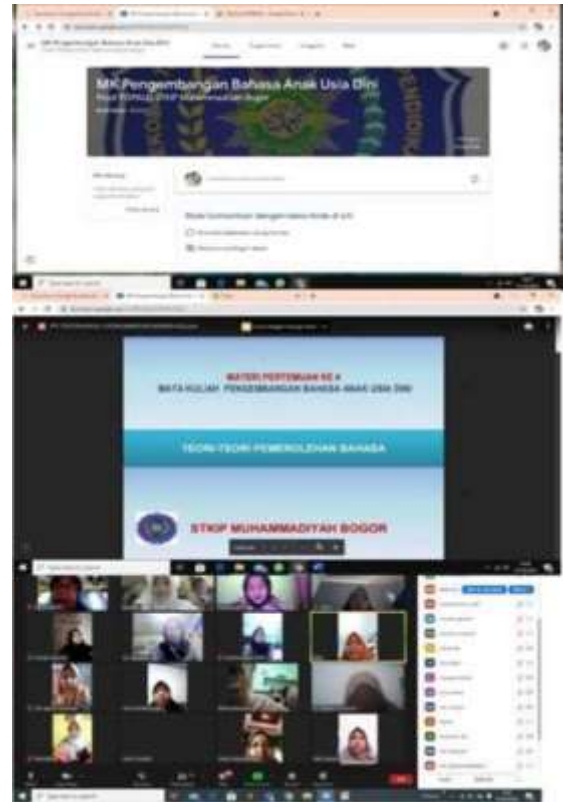
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Figure 1. Display of Asynch

Based on the recapitulation results of media experts, it shows the results of the calculation of the media expert's assessment obtained 89% which means "Good". This means that in the media aspect, the product developed is feasible to be used for research. Based on the results of the recapitulation of learning design experts, the results of the calculation of the media expert's assessment obtained 88.8% which means "Good". This means that in the media aspect, the product developed is feasible to be used for research.

After making improvements to the prototype of student online learning development third semester PGPAUD Study Program, the prototype results were tested on students. The students selected were one student with a low level of ability, one student with a moderate level of ability, and one student with a high level of ability based on the acquisition of scores on the online learning development of STKIP Muhammadiyah Bogor students.

Based on the results of the One to One Test recapitulation in Figure, the results of the One to One Test obtained 93.7% which means "Very Good".

After making improvements on the recommendations of material experts and media experts, a field trial was then carried out involving 3 people4 student third semester Early Childhood Education Educator Education study program.

Based on the results of the field test recapitulation shows the results of the field test calculation of 93.8% which means "Very Good". This means that in the media aspect, the product developed is feasible to be used for research.

Model Effectiveness Test

Researchers looked at the effectiveness of online learning for STKIP Muhammadiyah Bogor students by comparing the results of the lecturer's pre-test before carrying out the lessons made with the post-test results after using the learning made. This test was carried out on 36 students, the comparison of the average pre-test and post-test scores can be seen in the table and graph below.

From these calculations, the average N-Gain of students is 0.77. Based on these data, it can be concluded that the online learning of STKIP Muhammadiyah Bogor students belongs to the High N- Gain category. Based on the table of interpretation of the N-Gain percentage, online learning activities for STKIP Muhammadiyah Bogor students are effective.

IV. CONCLUSION

The development model used is the ADDIE model which consists of 5 stages, namely 1) Analysis (analysis), 2) Design (design), Development (build), 3) Implementation (implementation), 5) Evaluation (evaluation). The ADDIE model is integrated into the model learning system design framework. Learning Media online support the distance learning process

Eligibility of learning media on line determined based on the results of the validation of material expert tests, and learning media, trials by supporting lecturers, and good student responses

STKIP Muhammadiyah Bogor's online learning activities are effective. From these calculations, the average N-Gain of students is equal to the online learning of STKIP Muhammadiyah Bogor students in the High N-Gain category, which is 0.77.

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