HYBRID LEARNING-BASED EDUCATIONAL GAME FROG TO IMPROVE SPEAKING SKILLS

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Abstract
The educational game Frog is implemented with a hybrid learning model to improve the speech skills of pre-schoolers. This type of research uses Research and Development (R&D) with a Four-D (4D) development model. The research development adopts the 4D model of the figures of Thiagarajan, et al, namely: define, design, develop, and disseminate. The research subject focuses on preschool children group B (aged 5-6 years) as the object of research. The data collection technique used expert validation questionnaires, observations, and tests to measure learning outcomes against the media. The usefulness of research answers learning to improve children's speech so they grow into active and confident children. This hybrid learning-based frog educational game is designed to simulate existing problems so that essence or knowledge can be obtained that can be used to solve these problems. The results from media experts get a percentage of 78%, including the valid category and material experts get 89% in the beneficial type. Students' and teachers' responses to the frog educational media based on hybrid learning on speaking skills are fascinating. This can be seen from the small group trial, with a percentage of 84% and the field group, with a rate of 82%. The effectiveness of the hybrid learning-based frog educational game learning media on speaking skills with IK (an indicator of success) is 87.5%.

Keywords—Frog Educational Games, Hybrid learning, Speaking skills

Introduction
Early age is a sensitive period for children; children begin to be exposed to accepting various efforts to increase the development of all their potential. Preschool or early childhood is a critical period in language development, especially speaking skills. Children aged 5-6 years are essential in preschool children's speech skills (Nurkolis and Muhdi, 2020). Social distancing is a new dimension in early childhood education circles. The inhibition of interaction and communication always hampers children's emotional closeness. They are setting up online and offline learning patterns to provide learning opportunities for children, including preschoolers, to continue learning in the new average era.

Long Distance Learning (PJJ) makes children bored and passive in speaking in learning, especially in fairy tales. The learning reality that is expected at this time is that teachers design their learning media assisted by electronic devices, such as desktops, laptops, or smartphones owned by students or student's parents so that that distance learning can be implemented. However, this is not fully effective for pre-schoolers who need communication skills. Interaction and communication, the hallmarks of learning and fostering emotional closeness between education components, become "impeded" by lengthy online learning. The learning system makes cause children to have minimal attention and is limited in obtaining information from others (Sumitra et al., 2019).

Speaking skills are language skills where students can speak well, communicate orally, carry out verbal commands, listen and retell simple stories, compose sentences, and recognize
simple writing/symbols. In this study, the author focuses on the language aspect, namely speaking skills. There are 4 components of speaking skills that must be considered: phonology (sound), sentence structure, vocabulary, and fluency/accuracy (Wijaya, 2015). (Sit and Assingkily, 2020) explained the teacher needed to hone the results of their research on speaking activities in the classroom. As a result, children often tend not to talk for fear of being wrong. In addition, children need help understanding standard vocabulary and are lazy to express ideas or ideas due to a lack of confidence. This tendency will impact the development of children's speaking skills, so learning objectives will be challenging to achieve.

Based on the results of PJJ's current observations, online learning has several obstacles: (1) children need to be able to express their ideas during distance learning. This is because children tend to be passive for fear of being wrong. In addition, children need help understanding vocabulary and are lazy to express their ideas or ideas, so children lack confidence. This tendency will impact the development of children's speaking skills, so learning objectives will be challenging to achieve. (2) the decline in children's interest in learning during the long pandemic, limited activities, and learning resources. (3) the absence of innovative learning media that supports children's learning processes during distance learning activities. On further review, this problem lies in implementing PJJ, which is monotonous and teacher-centred. So the enthusiasm of children in responding to learning begins to be low. This has an impact on the low speaking skills of children.

Overcoming the above problems requires innovative learning media and appropriate learning models as effective learning strategies. Examining the existing facts, the learning process in Early Childhood Education (PAUD) is independent of online learning, but knowledge is also carried out offline. This study aimed to determine the development and implementation of the hybrid learning-based "FROG" educational game to improve speaking skills in preschool children in the new standard era. This research uses the Research and Development (R&D) type of research, using the Four-D Model (4D) development model, namely: 1) Define (defining); (2) Design (design); Develop (development); and (4) Disseminate (spread).

We know that hybrid learning is one of the most effective learning methods pre-schoolers use because this learning model uses a mixture of online and offline methods. Implementation of hybrid learning as planning, measuring student needs, support systems, teacher competencies, and evaluating children's learning outcomes using technology or platforms that support the learning environment. The policy and implementation of hybrid learning consider the needs of children, teachers, and other supporting facilities to provide a positive learning experience for children. The existence of Covid-19 prevention in the education unit and the implementation of early childhood education policies in the emergency period of the spread of the virus. The policy of studying at home is known as the policy of distance learning in the network (online) and visits to schools as a strengthening of the learning experience (offline) by utilizing hybrid learning channels (Chrestiany and Hasibun, 2018).

Hybrid learning represents a clear advantage to creating learning experiences that provide the proper learning at times of social distancing and at the right time for each individual. Hybrid learning becomes a universal and global boundary, bringing learning groups together across different cultures and time zones. The term hybrid learning usually relates to the inclusion of online media in learning programs while at the same time keeping in mind the need to maintain open meetings and other traditional approaches to student support. This combination is also used by mass media such as email, forums, and blogs combined with synchronous technology, text, or audio (Arikunto, 2010).

The combination of FROG educational games and hybrid learning models as a solution to make it easier for children to participate in learning in a fun atmosphere. Fairy tale puzzles are games presented in FROG media in videos that stimulate the functioning of the senses of hearing and the implications of sight. Based on previous research, children's understanding of natural disasters in the group taught by the storytelling method (fairy tales) using audio-visual media was significantly better than those led by conventional learning. Therefore, using media that makes children happy and interested will create acceptance of new knowledge using educational games. (Rochanah, 2016)
The teacher can design FROG educational games following the theme and learning objectives. Currently, teachers are required to have skills that can optimize learning. The teacher's skills help him improve the teaching carried out at school. The teacher is one of the determining factors for success in education. Teachers with creativity and innovation have a plus in children's eyes in learning. The teacher's ability is reflected in his competence (Sit and Assingkily, 2020).

As much as possible, this media will be designed and adapted by the teacher according to the child's ability. This educational game presents a series of fairy tales that create a puzzle. It is this puzzle that the child solves by choosing one of the available videos as a continuation of the fairy tale. This learning is an educational innovation to answer the challenge of the availability of varied learning resources. The success of a model or learning media depends on the characteristics of the students. As revealed (Vitianingsih, 2016), all literacy in e-learning (hybrid learning) indicates that not all students will succeed in online education. This is due to the learning environment and the students' characteristics (Sumitra et al., 2019).

This hybrid learning-based FROG educational game stimulates children's speaking and thinking skills in solving problems. At the end of the game, there is a score for the child's score on his learning outcomes. Next, the teacher will measure the child's speaking skills with offline learning, where the child retells his learning experience during online learning. The play world is colourful and filled with laughter, creativity, competition, and fun playing strategies. Playing in early childhood is a way for children to learn new things from their experiences. Through games, parents and educators can convey educational elements in a fun way. Early childhood as actors who like games will feel entertained and happy by doing these activities. Educational games are all types of games that aim to create an environment and types of games that are learning for the benefit of students. (Sumitra et al., 2019).

They are assessing the importance of this research being carried out so that children actively interact regularly. The speaking ability of children who are trained and guided from an early age to speak appropriately and well will affect their critical and logical abilities. This aligns with the general characteristics of language skills in early childhood. These characteristics include the child's ability to speak well, carry out verbal commands in sequence correctly, listen and retell simple stories in an easy-to-understand sequence, compare two things, and understand the concept of reciprocity as a sign of a child's intelligence.

Research Method

Development procedures in research (Research and Development) R&D. Research and development is a strategy or research method that is powerful enough to improve practice, a process or steps to develop a new product or improve an existing product and can be accounted for (Ariyana, Ramdhani and Sumiyani, 2020). This research uses the Four-D Model (4D) development model. According to Thiagarajan (2007: 65) the 4D model consists of four stages, namely: (1) Define (defining); (2) Design (design); Develop (development); and (4) Disseminate (spread). The primary considerations for selecting this 4D model are: as each step of the development procedure is explained in detail, what researchers will do when developing products in the form of teaching materials, books, or other teaching materials. Analysis in this type of research and development (R & D) is quantitatively categorized into descriptive analysis and inferential analysis. Back to obtain effective results in the context of learning media development. Data collection techniques used in this study used questionnaires to get information that leads to the media and instructional aspects, observations, and tests. The analytical method used is adjusted to the instrument used. The data obtained through questionnaires and comments will be described in a narrative descriptive manner.

Results and Discussion

This research uses the Four-D Model (4D) development model. According to Thiagarajan (2007: 65) the 4D model consists of four stages, namely: (1) Define (defining); (2)
Design (design); Develop (development); and (4) Disseminate (spread). Analysis in this type of research and development (R & D) is quantitatively categorized into descriptive analysis and inferential analysis. Back to obtain effective results in the context of learning media development. The stages of the development model include. 1) Planning Phase (Phase I-Planning), in this stage, a needs analysis is carried out, determining problems, and collecting materials to develop media; 2) Product Design (Design), this stage includes making storyboards and flowcharts, determining software; 3) Development in this stage is done by making graphic designs, doing alpha tests, making revisions.

The product developed is interactive multimedia using digital caricatures for learning to write anecdotal texts that meet validity standards; this research is limited to the expert validation stage (Expert Appraisal). The results of these stages are described as follows. The first step carried out in this research is a needs analysis. This needs analysis aims to dig up information about the needs of Riad Madani Kindergarten students for the educational game Frog. Student analysis was carried out through questionnaires distributed to 24 class A TK Riad Madani students who were taken in one class. Meanwhile, teacher needs were analyzed through questionnaires and interviews with an Indonesian teacher who teaches class A students at Riad Madani.

Based on the analysis of an open questionnaire filled out by the Indonesian language teacher for TK Riad Madani's class, the media in the school is quite adequate for learning. However, more attention is needed, especially in learning speaking skills through educational frog games. Today's media is a hybrid learning-based frog educational game that attracts students' interest in speaking. Regarding student responses, currently, the teacher states that the material being taught is less attractive. So with that, a creative learning media is held. After observing, it takes frog educational games to make it easier for children to speak so that children speak fluently.

The validation process for educational games that have been developed is given to two experts as validators: Sri Mulyati, S.Pd., M.Pd., and media validation is carried out by Dr. Susi Deliyanti, S.Pd., M.Hum. The following is a description of the results of expert validation. Results of the warranty It can be seen that the confirmation results by material experts obtained the following percentages: in the content feasibility component, a rate of 89% was obtained with the "Very Eligible" criteria. The next is a diagram of the results of Stage 1 and Stage 2.

Diagram 1. Material Expert Validation Results
Media expert validation aims to determine the quality of the graphic feasibility of the product being developed. Based on Table 4.3 above, it can be seen that the results of stage 1 validation by media experts obtained a percentage of the graphic feasibility component of 74% with the "Eligible" criteria. The results of Stage 2 validation that media experts have filled in are presented in Table 4.4 below Table 4.4 Results of Stage 2 validation by media experts. It is known that the results of stage 2 confirmation by media experts obtained a percentage of the graphic feasibility component of 93% with the "Very Eligible" criteria. The following is a diagram of the results of Stage 1 and Stage 2.

Diagram 2. Media Expert Validation Results

This study uses small and large group trials to test the product's effectiveness using Riadh Madani's TK-A class, showing that the average Pretest score is 62.5 and the Posttest average is 78.9. This indicates that the posttest score in the Kindergarten A class is better than the pretest score. The pretest and posttest value data will be analyzed by t-test with a significant level of 0.05. This analysis technique is used to determine whether there is an effect of a treatment imposed on the object of research. Thus, this frog educational game is suitable for mathematics learning activities. Therefore, this learning media can help students talk about exciting things.

This research is focused on the problem of the absence of the development of teaching media that helps children to learn to be independent. Problem-solving is done by developing educational games containing learning material to improve children's speaking skills. As for the development (Khurotin Ainia, 2019) of Cerbung Pizza Media (Continued Story) to Increase Interest Read Class Idi SDN Gelam II Candi Sidoarjo. Based on the study's results, using Pizza Cerbung Media reading interest of students in the I-d class of Gelam II Candi Elementary School, Sidoarjo, was stated to have increased by 41.75%, which initially only 45.75% (sufficient) to 87.50% (high). Media was asserted by media design experts, language material experts and practitioner experts had an effectiveness value of 86.45% (very effective), an efficiency value of 89.00% (most efficient/optimal), and the value of attraction was 0.87 (very interesting).

Conclusion
The conclusion obtained from this study is that the children's speaking skill material designed using the frog educational game has been validated to determine the feasibility of the designed media. The usefulness of research answers, learning in the new standard era as an increase in children's speech so that they grow into active and confident children. This research only focuses on media that attract children's attention. For future researchers, suggestions that can be given related to this research are expected for future researchers to add appropriate learning models to achieve practical learning goals.
References


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