Educative and digital based game (PowerPoint) game games as a stimulation method of discussion skill development early childhood

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Abstract. Educative magic games are a concept of developing educational methods that are used to stimulate early childhood development that depart from an educational game concept that is integrated with the concept of magic games. While digital-based games (Power point) is a concept of developing computer applications developed into digital games based on the design of early childhood education needs. Both methods of education are felt to have a significant impact on stimulating early childhood development. This research was conducted through an experimental method to prove the superiority of each concept of play in improving the listening skills of early childhood. The results showed that educative magic games were more significant in improving the listening skills of early childhood compared to the application of digital-based games (power point) with a confidence level of 95%.

1. Introduction
An innovation in education needs to aim at various aspects of the urgency and purpose of education. Educational innovation is a positive movement through scientific concepts that are based on comprehensive educative values [1]. Relevant innovation in early childhood education in the form of developing the concept of play approach. Lucas suggests that games are the main methodology used in all children's education [2]. Yasbiati and Gandana suggests that educational games are an appropriate educational method to be applied in early childhood education [3]. Today, digital-based games (power point) were chosen as educational methods that are able to provide children's interest in the learning process [4]. This is seen as the impact of globalization and revolution 4.0 which encourages children to keep abreast of the times. Another view was expressed by Gandana who innovated by combining the concepts of educational games with the concept of magic games [5]. Magic games are believed to be able to provide a very high attraction to each individual. Through the integration of the two game concepts, it is referred to as the educative magic game. Regarding positive stimulation, educational magic games and digital-based games (Power point) are designed for educational purposes specially to increase children's attractiveness in the learning process [5,6]. Nacher et al. stated that playing games is an important basis for the development of children and that is the main driving force when designing educational activities during childhood [7].

Listening is listening specifically and centered on the object being listened to. Listening can be defined as an activity that includes listening to language sounds, identifying, observing, and reacting to the meaning contained in recycled material. The development of dominant listening skills for early
childhood is difficult for every educator in the field. Even though listening to each individual is one of the early language skills that must be developed within themselves. Early childhood requires receptive language skills and experience, where children as listeners actively process and understand what their senses hear and feel.

The development of listening skills in early childhood is closely related to each other with language skills especially speaking. Children who develop listening skills will influence the development of their speaking skills. Both of these language skills are direct two-way communication activities and are face-to-face communication.

Based on this phenomenon, this study focuses on the application of educative magic games and digital-based Games (Power point) as a method of stimulating the development of listening skills for early childhood.

2. Method
This study was conducted using the experimental method nonequivalent pretest-posttest control group design in 2 experimental classes in 4-5 years old children. Structured observation and documentation techniques are used to retrieve research data, all collected data is analyzed through stages of score conversion, gain normality, and hypothesis testing to determine the advantages between educational magic games with digital-based games (power points) in order to improve listening skills early age.

3. Results and discussion

3.1. Results
The results of research on two different classes related to the ability to listen to children stated an increase after the implementation of educational magic games and digital-based games (power point). The results of these studies can be seen in the following graph:

**Figure 1.** Comparison of pretest-posttest listening skills through educational magic games.

**Figure 2.** Comparison of pretest-posttest listening skills Through Digital Based Games (PowerPoint).

Informations:

A: The ability to focus on the communication
B: The ability to refrain from talking
C: Ability to interpret material
D: Ability to compare between materials
E: Ability to express opinions
F: Ability to provide relevant examples
G: The ability to compare material with experience
H: Ability to choose relevant material
I: Ability to justify material
A: Ability to refute the theory
In plain view, the two classes experienced increased listening skills in children aged 4-5 years. Based on the results of the test score data processing through the N-Gain test on the pretest-posttest data of the two experimental classes, each N-Gain data was normally distributed. Since both N-Gain data in each class are normally distributed, the researcher conducted a difference test with an independent sample t test (parametric statistics) with the results of the sig value of 0.00 <\alpha (0.05). From what was obtained from a more detailed analysis of data based on statistical measurements, it was shown that the improvement in listening to children aged 4-5 years in educative magic games was superior to improving listening skills in digital-based games (power point).

So from the description above proves that the application of educational magic games is declared superior compared to the application of digital-based games (power points) in improving listening skills of early childhood with a 95% confidence level.

3.2. Discussion

Listening skills are the most basic language skills. This opinion shows that the importance of listening skills is optimized for each individual from an early age. Levan et al. said that in this condition it was only realized the importance of the competence of professional teachers as reliable facilitators to deal with the urgency of early childhood education [1]. The need to improve the structure of didactic games is felt to be very urgent in order to increase the ability of teachers in the teaching of [8]. Besides Lopez et al. suggested that in order to achieve education goals optimally, the strategic design of mental and physical health programs for early childhood needs to be optimized [9].

Nugraha and Gandana convey the process of developing listening skills can be carried out and applied through 5 stages [10]. The hearing stage, this stage each individual hears everything that is said by the speaker in his speech. The stage of hearing in early childhood tends to be short and requires a very high attraction from the communicate so that children want to listen to the information conveyed. The stage of understanding (understanding), after hearing ability can be done by every child, it is believed that there will be a desire to understand the contents of the utterances conveyed by the informants. This stage is very dependent on the attractiveness and self-need for information received. In early childhood education so that the stage of understanding can be done by children, each teacher must make the concept of education as attractive as possible and oriented to the needs of the child. The stage of interpreting, good listeners will feel dissatisfied if they only hear and understand the contents of the speaker’s speech, they will interpret the points of opinion contained in the speaker’s speech. In early childhood this stage is quite heavy to stimulate. But basically it has become the duty of adult humans to facilitate the fulfillment of this developmental task in early childhood. Educators must make extra educational concepts and scenarios so that in each step of the lesson there is stimulation that can connect material with the child's life experience. The stage of evaluating (evaluating), at this stage the observer starts to assess the speaker's speech, where the advantages and disadvantages are. For early childhood, this concept must be simplified. That is, the concept of children's ability to assess the advantages and disadvantages of the information conveyed by the teacher must also be stimulated in the learning process. That is, children must be able to respond intrinsically in the sense that children are able to think critically about the information conveyed by the teacher. Last is the stage of responding, this stage is the final stage in listening activities, listeners welcome, absorb, and accept ideas or ideas expressed by the speaker. Early childhood will be able to respond to all information conveyed by the teacher if the information is really needed by the child. If this stage has been carried out by the child in learning activities, then the teacher can be declared successful in stimulating the listening skills of the child.

Related to the concept of playing, Stonehouse et al. suggests that playing is an important part of children's lives [11]. Sampayo et al. emphasize that learning will show higher learning outcomes through play [12]. In this digital era, games based on digital power point are seen as a method for developing listening skills for early childhood. Dzeng and Wang states that digital-based games are technically capable of increasing students' understanding [13]. But in this context, educative magic games are seen as providing far more high attraction in the process of stimulating the development of listening skills for
early childhood. Therefore, educative magic games can be assumed as a solution for developing listening skills for early childhood in the era of industrial revolution 4.0.

Educative magic games are expressed as innovations in education moving from a combination of two game concepts. Gandana innovates through the integration of educational game concepts with the concept of magic games which in the end is referred to as the educative magic game [5]. Educative magic games are a concept of magic games that are deliberately designed specifically for educational purposes. The design of this game tends to be more directed at stimulating the achievement of children's development, especially in the realm of children's language development.

Educative magic games are game concepts that have high appeal so that they can be used as a method of playing specifically for early childhood [5]. The world of early childhood is essentially a world of play, so the game concept from the results of this innovation should be the basis of educators to be used as a learning method while playing in the context of developing the competence of early childhood.

The effectiveness of the educational game concept in the context of achieving educational goals is a context that must be a priority. In this case the priority form and positive contribution from the design of educative magic games towards the achievement of educational goals are more dominated in the realm of stimulating the development of listening to early childhood skills. But basically the context does not mean that digital power point based games do not give meaning to the development of children's potential in the world of education. As is the case stated by Homer et al. that digital based games can be an effective tool when the game is designed explicitly to increase the attractiveness of children in the learning process [14].

The characteristics of educative magic games that can be used as stimulation methods for developing listening skills tend to be simple and easy to digest by early childhood; this educational magic game uses tools that are child-friendly and not harmful if imitated by children; educative magic games contain elements of a communicative story with children; educative magic games carried out by involving children; and the tools used for educative magic games are close to the child's life [3,5,15].

4. Conclusion

Based on the results of research on PowerPoint-based games and educative magic games as a method of stimulating the development of listening skills for early childhood, it can be concluded that the two educational methods used were able to provide a positive impact on improving listening skills for children aged 4-5 years. However, the ability of early childhood to listen tends to be increased more significantly through the stimulation process of the application of educational magic games compared to PowerPoint-based games. The results of the study mean that educative magic games can improve the listening skills of children aged 4-5 years with a 95% confidence level.

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