

Innovation and Implementation of Boardgame Media to Develop Aspects of Early Childhood Development

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ABSTRACT

The massive technology developments results to the high dependent on technological aid. Learning activities are conducted by using media. Learning media is needed to attract children's attention. In the learning process, the use of fun learning methods can be applied using educational learning media. One of the media that can be applied to children is board game. Board game is interactive and attractive media in adjusting content that can be adapted to the child's learning process. The purpose of this study was to develop a board game product as a learning medium in developing 6 aspects of child development in accordance with the kindergarten learning curriculum. This type of research uses research and development, with a 4D development model. Data collection uses questionnaires, interviews, documentation and validation of media materials, and uses data analysis techniques for validation, practicality and effectiveness. This research has reached the second stage, namely design which is expected to provide variance in the selection of learning media that can help development after playing board game media

Keywords: Boardgame, Developmental aspect, Early Childhood Education

1. INTRODUCTION

The learning style of children of the 2000s generation is now more visual and kinesthetic, this is influenced by the development of technological media. However, if exposure to technology is not managed wisely it can affect a child's development. To stimulate children's development to be active and informative, it is necessary to use the right media [1]. The media used can provide practice and application without memorization for children [3].

Appropriate stimulation can increase curiosity, interest and problem-solving processes so that children can observe, relate concepts and events and think creatively [3]. The use of media is an innovative one in realizing this [4], and the presentation of material must be able to achieve educational goals [5]. Learning for early childhood must be able to help improve aspects of child development by providing the right stimulation for children's needs [6].

One of the media that can be used is board game media, the use of board game media can provide

opportunities for children to hone thinking and problem solving skills [7], problem solving is one way for children to achieve educational goals [4]. The media used must be able to make children active, independent, creative and innovative so as to produce quality individuals [8]. Boardgame media is a media that is played by individuals/groups that aims to train children's level of independence in making decisions, problem solving, social and cooperation [9], as well as helping to improve children's communication skills [10]. This is supported by interesting pictures and illustrations displayed by the board game [11].

The opinion above is in accordance with [12], that board game media can provide a sensation that can train communication skills and increase interaction between children. Board Game is a medium that can increase children's interest [13] and can reduce the use of gadgets [14]. According to Cindra, boardgame media is considered more effective in packaging material and incorporating play activities [15]. For children aged 5-6 years, boardgame media can teach how to make decisions, accept consequences, face competition and

follow rules [16]. Through these early training activities, they can help children when they enter the community.

2. REVIEW OF RELATED LITERATURE

2.1 Learning Media

2.1.1 Definition

Media etymologically comes from the word "medium" which means intermediary. Learning media is everything to convey learning materials to students' subjects. Learning media can be in the form of humans, materials, or events that enable students to acquire knowledge, skills, or attitudes. Learning media is all forms of information distribution process. Learning media has benefits including the delivery of subject matter can be uniformed, the learning process becomes clearer and easier.

Interesting, the learning process becomes more interactive, effective in time and energy, improves the quality of student learning outcomes, the media make it possible to carry out the learning process anywhere and at any time , the media can promote positive attitudes of students to the material and the learning process, change the role of students to the longest and productive, the media can make the subject abstract more concrete, the media can also overcome the constraints of the Limits of space and deadlines, the media can help overcome the limits of human meanings.

Edgar Dale created a cone of Dale's experience which illustrates that at each age level and level of development students need different media. Dale's experience cone is as shown in the image below:

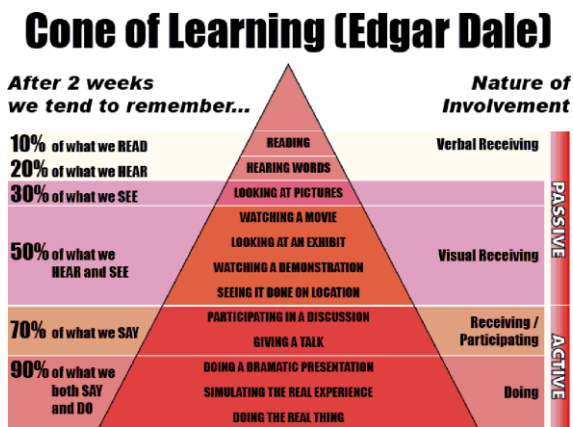


Figure 1. Edgar Dale . Cone of Experience

Dale's experience cone in Figure 1 shows that a child will acquire knowledge in advance from direct experience that uses all five senses and motor sensors. Children develop through experiences and thought

processes. Learners' learning experiences are gained by playing, experimenting with real objects, and through concrete experiences.

2.1.2 Principles of Learning Media

Learning media as an effort to improve the quality of teaching and learning activities carried out in schools. There are several principles in its use [17], including:

- Learning media should be viewed as learning resources used to solve problems faced by students in the learning process.
- The use of learning media is an important part that must exist in a learning process, not only as a tool used.
- Teachers can use beneficial multimedia learning media so as to facilitate the teaching and learning process and can stimulate children to be active in learning activities

2.1.3 Benefits of Learning Media

The benefits of learning media both in general and in particular are as learning aids for teachers to attract the attention of students, deliver teaching materials, and make it easier for the rest to understand learning. According to Sudjana and Rivai, the benefits of learning media in the student learning process are as follows.

Learning will further attract students' attention to promote learning motivation.

Learning materials will have clearer meaning so that they can be understood by students and allow them to control and achieve learning objectives.

Teaching methods will be more varied, not just a verbal communication through the teacher's speech so that students do not get bored and that the teacher does not lack energy, especially if the teacher teaches Each lesson.

Students can do more learning activities because they do not only listen to the teacher's description, but also other activities, such as observation, practice, demonstration, actor and others. In addition, the benefits of learning media for teachers and students (Astuti, 2015) are:

- Explain the structure and sequence of learning well,
- Provide guidelines, directions to achieve learning goals,
- Facilitate teaching about teaching materials,
- Improving the quality of teaching,
- Provide and increase learning variety,
- Provide fun learning conditions and situations.

The benefits of learning media for students; a) Increase children's learning motivation, b) Make it easy for students to learn, c) Stimulate students to think and analyze, and d) Learners can understand learning systematically [18].

2.2 Boardgame

2.2.1 Definition

According to Pitadjeng (2006), the game is an act that contains preoccupation and is carried out on their own free will without coercion with the aim of getting pleasure when doing these activities [19]. While the definition of the game according to Sadiman (2009) is every contest between players who interact with each other by following certain rules to achieve certain goals [20]. So it can be concluded that the game is an activity that can cause pleasure for those who play it.

According to Sadiman (2009), every game must have four main components, namely: 1) There are players, 2) There is an environment in which the players interact, 3) There are rules of the game, 4) There are certain goals to be achieved.

The benefits of using board games in learning activities according to Yanti (2014) are teaching rules, social interaction, education, risk and simulation, as well as generation levels[21]. In line with that, Triastuti (2017) stated that some of the benefits of using board game media are that it is effectively used to optimize social interaction, has interesting characteristics and is educative [22]. So it can be concluded that the use of board game media in learning activities is able to optimize students' abilities, be able to optimize students' social interactions, be able to create interesting learning activities, and be educative.

2.2.2 Boardgame as a Learning Media for Early Childhood

The commission's game is a game that encourages players to detect schemas, plan, predict the results for alternative movements and also take advantage of experience or media as a substitute for models [23]. Board Games are games that are played using characters who replace players in the background or The board provided by Boardgame is a medium on a board designed with certain characters with certain color and design innovations [24]. Boardgame is an alternative for teachers for ice breaking even to explain certain concepts to make it easier for students to understand, because according to the cone of experience, simulating is an effective way to gain knowledge [25].

Various studies show that board games have many benefits in learning. Boardgame can be useful for growing moral values, increasing cooperation skills, Board Game making the material content to be conveyed easily understood by children [26], board game improves students' hard skills, the use of this media can also improve students' soft skills including mutual respect, and foster attitudes be honest with the student. Boardgame is one of the media that can be developed in accordance with the objectives to be achieved by the boardgame maker.

3. RESEARCH METHODS

The type of research used in this research is research and development (R&D). development research is oriented to the development of educational products that can be used in developing and validating educational products. The development model used is a 4-D model which has 4 stages, namely Define, Design, Develop and Disseminate.

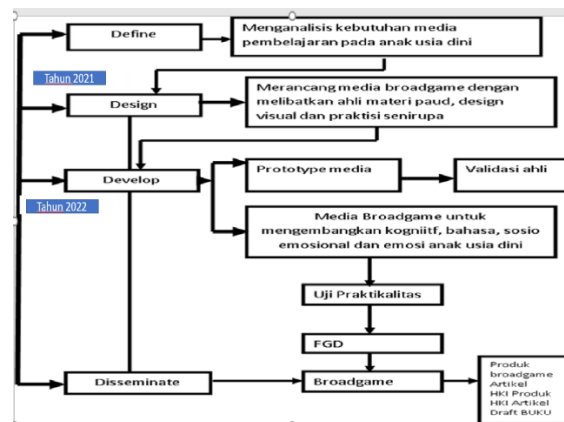


Figure 2. 4D Model Development

a. Define stage (defining)

Analyze the needs of learning media for students in Early childhood Education (ECE). At this stage the team will identify the character of the learning media that is appropriate for the child's growth and development. The team will collect initial data on the attractiveness of the media for students, either through interviews with ECE teachers, interviews with children and their parents.

b. Design Phase (design)

At the design stage, the activities carried out are planning the implementation of research including the formulation of specific research objectives, determining the criteria for success, and the types of instruments needed to achieve the objectives. At this stage, a prototype of the boardgame media will be developed as a medium in early childhood learning.

c. Development Stage (development)

The boardgame media prototype that has been produced in the first year will be tested by expert validators. Expert validation test to find out whether the model is feasible to be developed. The approach taken is the Focus Group Discussion (FGD). Experts to be selected include media experts, language experts and early childhood material experts.

d. Disseminate stage (spread)

The revised model based on expert validation will be tested on partner schools, namely TK Firdausi Nuzulla. This field test is to see how far the expected goals through the use of the model are achieved. After the product is revised, the final results of the boardgame media, journal articles and international seminar proceedings are indexed as well as product IPR and IPR articles

4. FINDING AND DISCUSSION

This research has reached the Design (planning) stage, which is in the form of focusing on the selection of formats that will be used in boardgame media that has been adapted to the level of child development and learning themes that apply in Kindergarten, structuring material in media that is adapted to the specified layout, and image visualization. The following is the result of the design of the boardgame media to develop aspects of child development.



Figure 3. Boardgame media design

This design can still be developed again according to the needs during the course of the research. Design development is aimed at aspects of child development that are adjusted to the developmental achievements and learning curriculum in kindergarten.

5. CONCLUSION

The conclusion obtained from this article is that through the manufacture of boardgame media for early childhood in Kindergarten, it can improve all aspects of development in children (cognitive, motoric, social emotional, moral, religion, language and art). This research is still ongoing and has reached stage 2, namely Design, the design is made according to the needs of early childhood development achievements and the learning curriculum in Kindergarten.

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