# Game Development Treasure Based Learning Discovery in Early Children in TK Az-Zikri Perbaungan District

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**Abstract.** This study aims to develop a treasure trove game based on discover learning to determine its feasibility and is ready to be used as a learning medium for early childhood at AZ ZIKRI Kindergarten, Perbaungan sub-district. This research is a type of research and development or research and development (R&D). This study uses the ADDIE model which focuses on developing discover learning-based treasure games which are equipped with a media use guidebook to make it easier for teachers to make and use discover learning-based treasure games. The instrument used to collect data is using a questionnaire on the validator based on the validation results of material experts getting a score of 90% and media experts of 83%. And interview instruments given by the teacher before and after getting a score of 93%. So it can be said that the development of a treasure game based on discovery learning in early childhood is very appropriate to be used as a learning medium in the Perbaungan sub-district.

Keywords: Discovery, Learning, Based Treasure, Game

## I. INTRODUCTION

Child education is, in fact, organized education with the objective of facilitating growth and development in a child in a manner that encompasses or emphasizes the whole aspect of personality development. Play is something activity-related in the world of children; with play, children feel fun, and with play, children can vent the energy they have with A fun activity. AZ-ZIKRI Kindergarten is one of the kindergartens in the district of Perbaungan. This kindergarten has been in operation since 2014. AZ-ZIKRI Kindergarten is one of the existing kindergartens that have become parents' choices. For schoolchildren aged 5–6 years. Based on results from observation, researchers interviewed teachers at AZ-ZIKRI Kindergarten in the District Compound and obtained that game at school. This is caused by the role of the teacher in implementing strategies and methods for teaching, which is still conventional momentary learning. Therefore, a strategy is needed. The right game can invite the child to become focused and pay attention to the teacher during the activity.

Then, with gaps that exist in the field, learning that is game-based and based on discovery can be chosen because games his play with the method group so that the child cooperates for find hidden objects, son will each other communicate, train each other share information and matching hidden thing with becoming map tool help game. Game This gives the child a new experience, and with their help, this child can play the game Treasure Treasure whenever they want. This game can also be used as a receptacle to help children develop skills such as telling and communicating with one another. It is suitable for children who are quiet, active, or both. One possible way to develop game treasure is through discovery learning. Study development this, developed to child age early with design game This is to hunt hidden objects with the use of five senses, i.e., sense sight (eyes), sense listeners (ears), sense smell (nose), sense taste buds (tongue), and sense touch (skin). Based on problems that have been exposed, researchers are interested in research on "Development Game Discovery Learning-Based Treasure."



II. METHODS

# **Research Design**

Study This is the type of research and development, also known as R&D. According to Sugiyono (2012: 407), research and development is a method of research used to produce product-specific products and test their effectiveness. Nana Syaodih Sukmadinata (2006: 169) defines research and development as an approach to study to produce a new or perfect product that has So research and development are methods For producing a certain or perfect product that has There is also a product effectiveness test. Researchers do research and development for Treasure Treasure based on discovery learning in children of known age through validation by experts materials, media experts, and interviews.

## **Approach and Research Methods**

Study This is a type study-ooriented development product. According to Sugiyono, *Research and Development* (R&D) is the method of research used to produce a product specified and tested for effectiveness. Models used in the study This is the ADDIE development model. According to Sugiono in Sarinah (2020:48), the ADDIE development model consists of five stages, which include *analysis*, design (*designs*), development (*development*), implementation (*implementation*), and evaluation (*evaluation*). According to Hasyim (2016:97), the ADDIE development model is a simple and easy procedure model For making products that can be used in research on short-term sustainability. As for steps in studying ADDIE development in study This, If served in the form of a chart, is as follows:

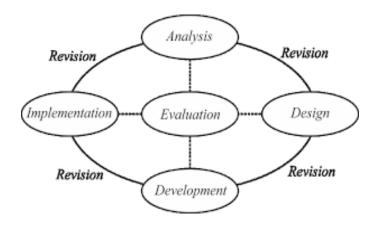


Figure 1 ADDIE Development Model

## **Procedure Study Development**

Procedure study development game treasure treasure based *discovery learning* in AZ-ZIKRI Kindergarten sub-districts smell grouped become three stages namely :

- 1. Analysis (Analysis)
- 2. *Design* (Design)
- 3. Development (Development)

# **Model Development Steps**

- 1. Preparation
- 2. Planning Model Development
- 3. Trials, Model Revision
- 4. Model Implementation
- 5. Evaluation



# **Techniques and Instruments Data Collection**

Data collection techniques are methods used to get information regarding the variables studied. Deep data collection techniques: study This is a questionnaire. According to Sugiyono (2014:142), a questionnaire is a technique of data collection carried out with the method of giving a set of questions to the respondent. For answered. Questionnaire used for knowing level appropriateness of treasure-based discovery learning. Data collection is done at the time of media development through observations, interviews, and scale evaluation for validators. Following This grid instrument questionnaire pre-research and grid instrument interview with educator.

**Table 1.** Interview instrument grid with educator

Variable	Sub Variable	Indicator	Question Number
Learning Media	3. The curriculum used	Know curriculum used in learning media	5
	4. Use of learning media	hook material with learning media	2
		Frequent media used	1, 4, 6, 9
		Explain the learning media needed for child	3, 7, 8 and 10

**Table 2.** Grid scale evaluation validation by media experts

Criteria	Indicator	Question Number
Aspect media	Media efficiency	1, 2, 3, 4
eligibility	Aesthetics	5, 6, 7, 8, 9
	media resistance	10
	Media security for child	11

**Table 3.** Grid scale evaluation validation by Material Experts

Criteria	Indicator	Question Number
Aspect	A. Up to date material	1
appropriateness content	B. Push curiosity	2, 3
Aspect appropriateness presentation	A. Serving learning	4
Aspect evaluation contextual	A. The essence contextual	5, 6

# **Data Analysis Techniques**

For knowing the results of expert validation data, we used a Likert scale to count average score results based on variables for knowing eligibility criteria, which are:



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Table 4 Likert Scale Criteria

No.	Criteria	Score
1	Very good	5
2	Good	4
3	Enough Good	3
4	Not good	2
5	Not good	1

(Source: Widoyoko, 2014)

Presentation results converted score data based on criteria results get score with use formula as following:

**Table 5.** Criteria Evaluation Appropriateness

Percentage	Criteria
81% - 100%	Very worth it
63% - 82%	worthy
44% - 62%	Enough worthy
25% - 43%	Not worth it

(Source: Widoyoko, 2014)

Based on the criteria table the feasibility of the media, development game treasure treasure based *discovery learning* in children age early can said worthy tested try it if results analysis obtained reach score with range 63% - 100% by experts.

# III. RESULTS AND DISCUSSION

## **Research Results**

Development game treasure treasure based *discover learning* based on analysis needs to be carried out observation in AZ-ZIKRI kindergarten research This use type study development *research and development* (R&D). Result research and development This produce something developed product form game treasure treasure based *discovery learning* in children age early in AZ-ZIKRI Kindergarten. As for Stage procedures and development carried out as following:

#### 1. Analysis

# a. Preliminary analysis

In the initial analysis stage the researcher made observations about the condition of the school which was used as a research location. At this initial analysis stage, it was carried out to find out and analyze the needs of teachers and children in AZ-ZIKRI Kindergarten, Perbaungan sub-district. At this stage, interviews were conducted with teachers in AZ-ZIKRI Kindergarten, Perbaungan sub-district.

# b. Child Analysis

The child analysis activities carried out in this study were only focused on early childhood in AZ-ZIKRI Kindergarten, Perbaungan subdistrict. Reduce.



# c. Task Analysis

Task analysis The task analysis in this study is to analyze the RPPH to find out KD needs, material indicators, sub-materials and an outline of the contents of the material to suit the material taken.

# d. Concept Analysis

At this stage, identifying the details and compiling the concepts taught in the formulation of learning objectives is relevant to formulating the results of material analysis. Analysis of the concept that is the goal of learning in the preparation of discovery learning treasure game media at Azzikri Kindergarten, Perbaungan sub-district.

# 2. Design

At this stage the researcher develops a treasure game based on *discovery learning* in early childhood along with the design of a treasure game based on *discovery learning* which will be made as follows:

#### a. Tools and materials

- 1) Scissors
- 2) Paper cardboard
- 3) Origami paper
- 4) Glue
- 5) Fruit orange
- 6) Lespeaker
- 7) Beam
- 8) box cardboard box
- 9) A sheet cloth
- 10) And soap

# Discussion Development Game A Treasure Trove of Discovery- Based Learning

Based on the results of development, it is known that product-based treasure-based *discovery learning* is developed in accordance with *ADDIE's* 5 stages, but researchers only use 3 stages: *analysis*, *design*, and *development*. The process of developing learning media started with the teacher's need to increase attention in children's learning. This too can help children age early in doing game-based treasure-based *discovery learning*. because that researcher pushed to study the development of game-based treasure-based *discovery learning* in children at an early age.

Game treasure is a treasure that is developed in children early, that is, with the use of five senses. Game Treasure will make a child more active B because oftemporary learning play. Based on the data analysis performed, the results validation from expert material receive a score of 27. Then score was processed and a mark was obtained as a big 90%, and such data converted into table qualifications, including a very decent category. Validation results: media experts get a score of 50. Then the score was processed and obtained as a big 83%.

Based on the results percentage from expert material, media experts, and the teacher's response, I calculated the average and obtained 56 percent of the converted table qualification eligibility and inclusion in a very decent category used in the learning process, with game treasures that make the learning process more effective, active, and fun.



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# IV. CONCLUSIONS

Based on results research and discussion in chapter IV then pulled conclusion development This as following:

- 1. Development game treasure treasure based on discovery learning using the *EDDIE* model that is analysis (*Analysis*), design (*Design*) development (*Development*) implementation (*Implementation*) and evaluation (*Evaluation*) that has been modified be and use three stages namely:
  - a. Stage analysis that is do interview with teachers at the sub-district AZ-ZIKRI Kindergarten school Smell Then do development.
  - b. Stage design that is aim for designing device learning.
  - c. Stage *development* that is which development develops product and validation expert material, media feasibility experts learning data collected form number the birth of media experts media and teacher response.
- 2. Based on results research conducted by researchers against the validator ie development game treasure treasure based *discovery learning* in children age early own quality with very good criteria proven with results validation from a number of expert covers expert material obtain assessment 90% of media experts obtain rating 83% other than That response educator to product development game treasure treasure based on discovery learning with very worthy category and views with gift mark response educator with obtain value 96% with such is the game media treasure treasure based around highly feasible learning used in Learning in children age early in the sub-district AZ-ZIKRI Kindergarten school Smell

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