

Development of Maze Puzzle Learning Media in Indonesian Language Learning Storytelling Material

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Abstract: This study aims to produce valid and appropriate Indonesian language learning media material for storytelling fiction and non-fiction. The type of research being developed is Research and Development (R&D) referring to the 4D model, namely Define, Design, Development, and Disseminate. This research produced a product in the form of a maze puzzle with a size of 70 cm × 60 cm with wood or plywood as the basic material. Data analysis techniques were carried out using percentage calculations which were then described to obtain valid and feasible media results. Based on the results of data analysis using media validation, a percentage of 82% was obtained with very valid criteria, and for material expert results, a percentage of 80% was obtained with valid criteria, then the results of the student response questionnaire from one to one results obtained an average value of 90.8% with the criteria very feasible, then the small group questionnaire results obtained an average score of 90.2% with very feasible criteria and the field test obtained an average value of 94.64% with very feasible criteria. It can be seen from the group of criteria included in the criteria 81% - 100% with a very decent category. Thus, it can be concluded that the maze puzzle media in Indonesian language learning storytelling material can be said to be valid and feasible.

Keywords: Indonesian Language, Media Maze Puzzle, Storytelling Material

A. Introduction

Education is something that cannot be separated from the life of each individual since the individual is born, even education can be said to be life, and also a learning experience. This is because education is long-life, taking place in all processes of life and throughout life (Soyomukti & Conscience, 2016). Based on the Law on the National Education System, education is a conscious and coordinated effort in creating a learning climate in a conducive learning process, this aims to form students who have the potential for spiritual strength, self-control, personality, intellect, character, and skills needed by these individuals and also the wider community (Neolaka & Kamsyach, 2016).

Education is designed to encourage people to become involved in changing their lives for the better, to develop self-confidence, stimulate curiosity and enhance the

knowledge and skills they have acquired throughout their lives. Thus, education improves the quality of personal and social life. The role of education is very important in preparing students to face environmental changes (Syafri & Zen, 2017).

The official (Yulianto & Nugraheni, 2021) argues that the purpose of learning Indonesian is to improve student communication by using good and correct Indonesian. At the elementary school level, learning Indonesian is one of the subjects intended to develop student activities. Learning Indonesian has goals that are in line with other learning goals, namely knowledge, skills, creativity, and attitudes. As for learning Indonesian, there are several aspects of language skills, including; 1) listening skills, 2) speaking skills, 3) reading skills, and 4) writing skills (Ali, 2020).

The four skills above have a very close correlation. Such as listening with speaking skills, listening and reading, speaking and writing, and reading and writing. Because of this correlation, the four language skills greatly influence the level of understanding of the material and student's language skills (Nuriyatuzzahro, 2020). In line with the statement above, Habiburrahman (Magdalena, et al., 2021) states that the difficulties that elementary school students often face in learning Indonesian are caused by several factors, both internal and external factors from students.

Hijjah & Bahri (2022) said that learning literature in elementary schools must provide experiences for students that contribute to 4 objectives, including; 1) seeking pleasure in books (discovery delight in books), 2) interpreting literary readings (interpreting literature), 3) developing literacy awareness and 4) developing appreciation abilities. To realize the goals of the aspects above, the teacher can realize them in the learning process assisted by teaching aids or learning media which are believed to be able to realize the goals of learning Indonesian and the aspects in it.

Learning media is anything that conveys messages through various channels that can evoke students' thoughts, feelings, and willingness to motivate them to create a learning process that adds new information to students so that learning objectives are achieved properly (Hamid, et al., 2020). According to Hamid, et al. (2020), learning media is generally defined as tools, methods, and techniques used to encourage communication and interaction between teachers and students for a more effective education and teaching process. In line with the statement above, Learning Media is very useful for creating a pleasant and conducive classroom climate.

One of the interesting learning media is the maze puzzle. Maze Puzzle is an educational game tool. The Ministry of National Education states that what is meant by educational game tools mean anything that can be used as a toy or tool that has educational value and can develop the skills of all students. These educational toys vary, including building blocks, Legos, puzzles, mazes, or mazes. In line with that,

(Putri, 2019) states that this maze media is intended to train individual concentration and thinking, which has the ultimate goal of solving puzzles. Tobias, et al., (2020) said that a maze puzzle, or what is known as a maze is a complex visual-motor planning and problem-solving task that requires finding a path from the beginning to the end of the maze as quickly as possible. The labyrinth is verbal and non-verbal, in which this medium can be easily understood and used, relatively independent of the level of education and suitable for all ages.

Based on the results of observations and initial interviews conducted by researchers, who took place at SD Negeri 91 Palembang, the researchers found the fact that students were less enthusiastic when learning Indonesian, especially storytelling material. This can be observed in the lack of enthusiasm and student learning output, as well as the lack of involvement and limited use of learning media by teachers.

From these problems, it is necessary to make improvements to the implementation of the learning process which will be adapted to the abilities and circumstances of students, especially in the use of learning media. One of the learning media that can be used in Indonesian learning materials is the Maze Puzzle learning media. Azizah (2022) mentions Maze is a puzzle-type game in the form of branching paths to train eye and hand coordination in finding the right route to achieve a customized goal. The benefits of maze media are to train students' patience, find solutions to achieve goals and learn colors and shapes, train grouping skills, train students' fine motor skills, and train students' logical thinking flow. This is in line with the opinion of (Kuswanto & Suyadi, 2020) The game of finding traces or maze is an educational game with narrow roads that wind and turn and sometimes are dead ends or roads that have obstacles to be able to find a way out. The game in the maze is where children have to think about and choose the right way out of the many available ways. Mardhotillah (2018) expressed the opinion that a maze is a game that can develop all aspects and potential of children because maze games can be modified according to the goals to be achieved.

In the opinion of the experts above, the authors can conclude that Maze is a game that involves children, which in this context is that students can find a way out with winding and branching streets, which can develop all aspects of students, both motor development, cognitive, language, creativity, emotional and social children that can be adapted to the goals to be achieved. The Maze Puzzle learning media is expected to be able to build and improve students' understanding of concepts, especially in storytelling abilities in fiction and non-fiction Indonesian Language Learning.

Based on the results of (Frilianisa, 2019) shows that maze matching board games can improve fine motor skills of young children early. In addition, the results of (Mardhotillah, 2018) show that after using math maze media, early childhood cognitive development develops as expected. In line with that, the results of (Hasanah,

2015) shows that after using the alphabet maze educational game tool, there are significant results. This shows that the alphabet maze educational game tool is declared "appropriate" to be used as learning support by the teacher or used by students themselves.

The Maze Puzzles developed by the researchers above have different characteristics, some are related to mathematical material with a research focus that intersects with motor skills, and some relate to cognitive abilities. In addition to the two studies above, there is also research on maze development which is in line with the author's material, namely Indonesian language material, but there are differences, in research (Hasanah, 2015) the topic of material raised is alphabetically arrangement, while the product development developed by the author is lead to the development of students' storytelling skills.

Based on previous research, the researcher wants to develop learning media to encourage the storytelling skills of grade 5 students, namely through the Maze Puzzle learning media. Therefore, researchers are interested in conducting research with the title Development of Maze Puzzle Learning Media in Indonesian Language Learning Storytelling Materials.

B. Methods

The type of research used is Research and Development (R & D) which is a research method that produces a product in a certain field, which has effectiveness according to the intent of developing the product (Khaeroni, 2021). The aim of the Research and Development) research and development method is to produce a new product, whether it is completely new or even giving a new touch to an existing product.

The R & D steps used in this study are based on research and development products adapted from Thiagarajan, the 4D model was chosen by the researcher because it is one of the development models that has been systematically made so that it makes it easier for researchers to carry out the process of developing Maze Puzzle learning media in Indonesian language learning storytelling material.

Khaeroni, (2021) suggests that research and development adapted by Thiagarajan has a research flow that is abbreviated as Define, Design, Development, and Dissemination (4D). In this study, researchers used 4D research which consisted of 4 stages, including definition, design, development, and dissemination.

C. Results and Discussion

This type of research is RnD (Research and Development) research using the 4D development model. This research was conducted at SD Negeri 91 Palembang which is located on Jl. Telaga Swidak, 14 Ulu, Kec. Seberang Ulu II, Palembang City in May for the seven-semester period of the 2022/2023 academic year. The research trial was carried out on 10 grade V students at SD Negeri 91 Palembang. The product produced by the researcher is a Maze Puzzle learning media to facilitate the achievement of speaking skills for fifth-grade elementary school students.

Define

At this stage, the activities carried out are analyzed. Analysis activities are carried out to determine the conditions or circumstances of matters relating to research. The things that are analyzed at this stage include learning analysis, analysis of student needs, and material.

Design

The initial product design stage has been adjusted to the needs of students in the form of learning media designs in the form of maze puzzle media. The early stages of planning are carried out to design and design learning media that will be developed and can produce the initial stages of product development.

This initial design is a learning media design that must be made before the trial is carried out. This initial preparation will produce a maze puzzle media design. The stages in this initial design are; 1) prepare the material to be applied in the maze puzzle media 2) make a design plan for the maze puzzle media, which is made as attractive as possible so that students are interested in the media, 3) the results of the media that have been designed are then printed in the form of wood made from plywood measuring 70 cm × 60 cm. the following is the initial design or design of the media:



Figure 1. Design Prototype Media maze puzzle

Develop

The following is a picture of the maze puzzle media that will be used when carrying out learning, the maze puzzle media is placed on the floor and is played directly by students who have previously been divided into several groups.



Figure 2. Media Maze Puzzle

After the maze puzzle media for learning Indonesian, fiction, and non-fiction storytelling materials, the validation is then carried out by the validator, namely the media expert validator and the material expert validator.

Dissemination

The dissemination stage is the final stage of media product development. The dissemination stage is the final stage of product development for media maze puzzle fiction and non-fiction storytelling material that has been tested on fifth-grade students of SD Negeri 91 Palembang, which is done by distributing the product finally limited to the class as a place for research. At this stage, the researcher gave a product in the form of maze puzzle media to educators, especially to teachers in grade V. In Indonesian language maze puzzle learning media, fiction and non-fiction storytelling materials have received a positive response from educators. One of the positive responses obtained from educators is about the feasibility of the material and the feasibility of the product.

In the opinion of Supriono (2019) states that learning tools or media are one of the components in the learning system that can determine success in learning, so learning media must exist and be used by educators during the learning process. If one of these components in learning is not present, the results will not be optimal and the learning

objectives will not be maximized or will not be achieved. So the goal to be achieved in the development of this media is to produce a product in the form of maze puzzle media on fictional and non-fiction storytelling material that is valid, feasible, and effective. Based on the results obtained from the development of maze puzzle media in learning Indonesian, storytelling materials from the results that have been done before are as follows.

Validity

The goal to be achieved in development is to produce a product in the form of maze puzzle media for learning Indonesian, fiction, and non-fiction storytelling materials that are valid and feasible. At the validity stage, some become experts in their fields, namely media experts. The validation of media experts is carried out by lecturers from PGRI Palembang University. The results obtained from experts at the validation stage to see the initial stages of media development carried out according to suggestions and comments to produce valid media according to predetermined scores and percentages.

These results are following relevant development research conducted by (Hasanah, 2015) with the title of developing an alphabet maze for Indonesian language subjects for grade 1 SD, this research instrument uses validation sheets and feasibility sheets, in material validation it meets very valid criteria with the percentage value is 90% and the valid percentage value is 88% in the media expert validation. Furthermore, the developed media has been categorized as eligible by the teacher with a percentage value of 97% in the very feasible category and students obtain a percentage value of 98%. So, it can be concluded that the alphabet maze learning media in grade 1 SD Indonesian material is said to be valid and feasible so that it can be used in one of the learning media.

According to the results of research with the title Development of smart tree learning media on summation material in class 1 SDN 52 Parapuk Tabing using development research using 4D models in this research instrument using validation sheets and practicality sheets, namely teacher and student response questionnaires with a total of 21 students, at the material, validation has met the very valid criteria with a percentage value of 91% and a valid percentage value of 85.5% in media validation. Furthermore, the developed media has been categorized as feasible by the teacher with a percentage value of 86.6% in the very feasibility category and for students to obtain a percentage value of 95.4%. So it can be concluded that the smart tree learning media in addition to the material in class 1 SD is said to be valid and feasible so that it can be used in one of the learning media. So from the 2 previous studies, it can be concluded that media development can be said to be valid between a score of 89% - 100% with a very valid category and can be tried out.

Appropriateness

At this stage, the aim is to see the feasibility of filling out the student response questionnaire and educator assessment. obtained by students. These results are following relevant development research (Frilianisa, 2019) entitled Development of thematic integrative maze matching board games to improve fine motor skills of children aged 5-6 years in PAUD Negeri Pembina 1 Bengkulu City, based on the results of the research that has been conducted, it is found the result is that the maze matching board game media product to improve fine motor skills of children aged 5-6 years is feasible to use and has been validated by experts and PAUD teachers with a percentage of 100%. According to the results of the study, it was found that media got a percentage of 91% with very feasible criteria.

D. Conclusion

Based on the results of research that have been done by researchers at SD Negeri 91 Palembang Class V using maze puzzle media for learning Indonesian, fiction and non-fiction storytelling materials, several conclusions can be obtained, including: 1) The results of the development of maze puzzle media for learning Indonesian, fiction, and non-fiction storytelling materials, were declared valid based on the results obtained through the material expert validation sheet with an average score of 80%, then media experts with an average score of 82%; and 2) the results of the development of maze puzzle media for learning Indonesian, fiction, and non-fiction storytelling material, were declared feasible based on the results obtained through student questionnaire response sheets with an average score of 94.64%.

References

- Ali, M. (2020). *Learning Indonesian and Literature (BASASTRA) in Elementary Schools*. PERNIC, 35.
- Azizah, R. N. (2022). *The Influence of Media Maze Media on the Ability to Count Add and Subtract Class 1 SDN Margorejo 1/403 Surabaya*. Surabaya.
- Frilianisa, D. (2019). *Development of Maze Matching Board Thematic Integrity Games to Improve Fine Motoric Skills for Children Aged 5-6 Years at PAUD Negeri Pembina 1 Bengkulu City*. Bengkulu.
- Hamid, M. A., Ramadhani, R., Masrul, J., Safitri, M., & Munsafir, M., & Simarmata, J. (2020). *Instructional Media*. Our Writing Foundation.
- Hasanah, A. R. (2015). Development of an Alphabet Maze for Indonesian Language Subjects for Grade 1 Elementary School. *Journal of Education*, 4.
- Hijjah, N., & Bahri, S. (2022). Development of Indonesian Language Scrapbook Learning Media for Short Story Materials in Class V SD Negeri 064970 Medan Denai. *EduGlobal: Education Research Journal*, 26.

- Khaeroni. (2021). *Research and Development Methodology with a Practical Approach and Accompanied by Examples of 4D Development in the Field of Education*. Attack: Civil Media.
- Kuswanto, A. V., & Suyadi. (2020). Systematics of Literature Review: *Journal of Early Childhood Education*, 120.
- Magdalena, I., Shafani, H. T., & Ramadhani, V. (2021). Analysis of Students' Learning Difficulties in Indonesian Language Learning in Grade 5 SDN Dukuh 3. *Pandawa: Journal of Education and Da'wah*, 360.
- Mardhotillah, I. (2018). *Development of Mathematical Maze Media to Develop Cognitive Ability of 5-6 Years Old Children in Kindergarten*. Lampung.
- Neolaka, A., & Kamsyach, A. (2016). *Research Methods and Statistics*. Bandung: Remaja Rosdakarya.
- Nuriyatuzzahro. (2020). *Analysis of Difficulty Factors for Class V Indonesian at SDIT Bina Anak Islam Krapyak Yogyakarta*. Yogyakarta.
- Putri, R. A. (2019). Improving Children's Cognitive Abilities Through Media Maze (Searching for Traces). *Early Childhood Education Indonesian Journal*, 188.
- Soyomukti, & Conscience. (2016). *Educational Theories; From Traditional, (Neo) Liberal, Marxist-Socialist, to Postmodern*. Yogyakarta: Ar-Ruzz Media.
- Syafril, & Zen, Z. (2017). *Fundamentals of Educational Sciences*. Jakarta: Kencana Prenada Media Group.
- Tobias, N., Chesham, A., Schutz, N., Botros, A. A., Vanbellinghen, T., Burgunder, J. M., & Urwyler, P. (2020). Development and Evaluation of Maze-Like Puzzle Games to Assemble Cognitive and Motor Functions in Aging and Neurodegenerative Diseases. *Frontiers in Aging Neuroscience*, 2.
- Yulianto, D., & Nugraheni, USA (2021). The Effectiveness of Online Learning in Indonesian Language Learning. *DECODE: Journal of Information Technology Education*, 38-39.