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Research Article

Development of Diorama Based Learning Media to Improve Elementary School Students' Creative Thinking Ability

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Article Info

Abstract

Education is a crucial tool for fostering the progress and advancement of a nation. This study is supported by a theoretical framework that emphasizes the cognitive abilities and creative thinking skills of pupils in relation to the material ecology. The current outcomes have not yet reached their optimal state, mostly due to the ongoing learning process and the lack of appropriate implementation strategies. The utilization of media dioramas as an educational tool has been shown to enhance participants' creative thinking abilities in the context of science learning. Hence, the imperative is in the advancement of 3D diorama media as an internal tool for teacher support in facilitating learning, thereby enhancing students' creative thinking capabilities. The objective of this project is to investigate and design learning media in the form of dioramas, with the aim of enhancing critical thinking skills among fifth-grade students in elementary schools. This study employs a comprehensive literature review methodology to investigate the relationship between science learning, diorama media, and creative thinking ability. The results of this study based on the findings found that the utilization of dioramas as an alternative learning method by teachers has the potential to enhance students' creative thinking abilities during the learning process.

Introduction

Education becomes a fundamental tool in facilitating the personal growth of individuals, enabling to cultivate the potential, talents, and personal attributes, ultimately leading to the enhancement of both their own well-being and the surrounding environment. Education at the school level is a crucial component since it plays a significant role in shaping a child's current developmental potential and serves as the foundation for their continued academic abilities.

Students in educational institutions exhibit heightened sensitivity and enhanced cognitive abilities, enabling them to effectively apply acquired knowledge. Consequently, in order to facilitate the optimal growth of students at the stage of their educational journey, it is imperative to implement a high-quality learning process (Islamiyah & Asmarani, 2022).

In the process of education, an individual's personality can be more readily developed by engaging in self-reflection and actively seeking to enhance their cognitive talents and mental aptitude. This aligns with the provisions of Law no. 20 of 2003, which stipulates that education is a structured and organized endeavor aimed at creating an environment and learning processes that enable individuals to develop their spiritual beliefs, self-control, personality, intelligence, and sense of national and state identity in accordance with their inherent capabilities. Education is not limited to teacher

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led activities. In the teaching process, educators must develop and build situations that promote effective and creative learning activities. This is necessary in order to optimize the study process and achieve the desired learning objectives (Palupi & Ninawati, 2022). Furthermore, education plays a crucial role in the holistic development of individuals. Consequently, it is imperative for individuals to get appropriate education, which is defined as education that aligns with the principles of Pancasila and the 1945 constitution of the Republic of Indonesia.

Globalization has a significant impact on the advancement of information and technology in today's modern world, and it has a significant impact on human education and future readiness, with each participant receiving training to prepare them for changes that may arise in the future. As a result, efforts to promote greater creativity in the teaching and learning process were made in Indonesian education. Technology and education have a very strong association since, when used properly, technology may make the educational field significantly more advanced, creative, and innovative (Son and Suniasih 2021).

Participant educate must study for think creative, different its typically only carry out learning by listening merely without do something p. Because that's learning to do teaches participant educate for study do activity learning by doing in a method direct, so participant educate will equipped in make something, ability in understand, communicate, work the same across groups and promote curiosity know. Main teacher's role it is not only transfer knowledge merely but also encourage activity learning so that student own opportunity active in learn in a way construct knowledge based on experience student independent (Dayana et al., 2021).

There are many methods in one way to optimize the learning process is by using learning media to use for motivating think creative student as well as can interesting attention student during the learning process going on. Learning media This diorama based is one example the type of media that can be used in learning in a manner real. One of the medias used namely 3-dimensional diorama media that can be increase ability think creative student. With this, researcher developing learning media diorama based for increase ability think critical student based on eye science lesson material ecosystem class V. The development of this diorama media aims for increase teacher creativity and optimize Skills the use of media in the learning process teach.

This is very helpful for reach objective learning (Evitasari & Aulia 2022).

Apart from that, this diorama media is cheap and easy get, got used back and only need material that can represent environment original, so facilitate the teacher in create media dioramas. This medium is not just Photo but also can change the learning mood become Spirit Because student could see direct circumstances ecosystem in practice original. With the development of this diorama media students can increase ability think creative as well as increase understanding about science material being taught. The use of this medium has superiority in the learning process that is interesting attention students, information easy teaching materials remembered and understood, improve ability think creative eye student science lessons (Prabowo & Wulandari, 2018).

Based on background behind problem above, author develop diorama learning media because this media can used in all eye lesson. Reason writer developing diorama learning media is for practice student more active, thinking creative and independent in find draft learned material, have Spirit tall for learn. Learning process using diorama media is expected can stimulate attention and got clarify delivery material so that can increase understanding and ability think creative with optimal results (Putra & Suniasih, 2021).

Methodology

In method of study in this research used an analysis studies focused literature descriptive and reference relevant theory related issues and problems found (Creswell, 2012). In this study, researcher use review journal that includes a number of study empirical and articles conceptual discussion about use of learning media which diorama-based contents impact on abilities think creative students at school basic. The data of this study are secondary data obtained through data collection techniques using literature review, namely in the form of analysis of data sources from national and international journals.

However, the research data is a secondary data obtained through data collection techniques with use studies references that is form data analysis from a number of journal national and international. Furthermore, the analysis technique in this study is an analysis technique content and development contents (Torres-Carrión, 2018).

Results

Media Dioramas

The media diorama is a shaped medium limitation three target dimension and explore the atmosphere or actual situation. Diorama media used in class V science learning material ecosystem that can used by teachers for give experience concrete or real. Using diorama media could give solution to problem related fulfillment media needs on the theme ecosystem (Prasetya & Maisaroh, 2023). Developed media is a 3-dimensional diorama media material ecosystem contained in the load 5th grade science lesson. According to Prabowo & Wulandari (2018) state that the diorama media is a special model used for create atmosphere environment study certain. Therefore, diorama media is very appropriate for developed on the material this ecosystem.

In this development research, the resulting product is a material diorama media ecosystem in science content in the form of learning media for simulate material operational learning using media in the form of three dimensions for fifth grade in elementary school. This diorama learning media is feasible applied to the learning process. It can see from a number of aspects. First, from facet the material presented in the diorama media is developed science content in accordance with competence basis and indicators learning, other than that this diorama media can help student in understand material ecosystem chain food. Material learning designed in a manner systematic. Through arranged activities in a manner systematic so expected objective learning can achieved and the learning process walk in a manner conducive. Teacher must could control four competence before carry out the learning process that is control material lesson, able diagnose Act in demand student, capable carrying out the learning process, and able evaluate results Study student. There are learning media will make student understand material in a manner deeper through gift existing problems (Islamiyah & Asmarani, 2022).

Second from facet clarity media design media form, suitability color selection, and usage example very good concrete so that make it easy student in understand material as well as answer the questions presented. In addition to the material presented in this learning media according to competence and goals learning as well as according to characteristics student class V. Learning media is whole tool that can used in reach objective education, learning media will make it easier for teachers convey teaching materials and will increase effectiveness learning (Kusumawati 2016; Nuri and Khairunnisa 2021). Learning media hold very important role in delivery information in the learning process. Interesting and interactive learning media can increase interest Study student in the learning process and can help the teacher in convey material to students (Son and Suniasih 2021).

Media dioramas have excess in use as a learning medium is a medium can made from cheap and easy material get, give experience direct to participant educate, the media can serve in a manner concrete and avoid verbalism, yes displays object in a manner intact, displays process structure and flow clear. This will make participant educate will more curious and enthusiastic to learning so that student easier understand learning thematic themes ecosystem.

Ability Think Creative

Skills think creative needed student for study and understand object or phenomenon nature. because that, the importance of teachers to optimizing competence think creative student in science learning. Think critically is ability somebody in analyze something new information as well as combine something problem. Skills think creative can is known from skill analyze data as well give response settlement varied problems. High creativity signifies bring somebody has capable for think creative (Muhtar & Dallyono, 2020).

Think complex branched become think in a manner cognitive and non- cognitive. Think creative is one form think in a manner which cognitive indicator think creative covers four indicators namely 1). Think smooth, achievement indicator This participant sis can find answer ideas for solve problem. 2). Think supple, achievable indicator This participant educate can give various solutions (from all corner), 3). Think original, achievement indicator This participant educate can produce unique answer with use easy language understood children, 4). Skills collaborate, which where participant educate can expand something idea or decipher in a manner detail something answer (Rahayu et al., 2023).

Discussion

Based on results Literature review from a number of studies previously show that learning diorama-based increase ability think creative elementary school students Research results This in line with research by Dayana et al (2021) which states that besides students, teachers too observer in learning because the media is intended and used by the students obtained from results the homeroom teacher's response to Class VA the use of diorama theme media ecosystem is carried out in a manner limited by 97% with category "Very Practical ". The teacher also conveys that this diorama media can interesting attention student like want know, ask level desire participant educate Study increase.

Research conducted by Kiswandari (2016) described that development of water cycle diorama learning media in class v sd science subjects. The research results show that (1) validation media experts obtained an average of 3.88 by category ok. (2) validation expert material obtained an average of 4.21 with a very good category . (3) assessment practitioner obtained an average of 4.69 with a very good category. (4) trial results got an average of 4.17 with a very good category. (5) trial results field got an average of 4.32 with a very good category.

Research conducted by Evitasari & Aulia (2022) stated the title Influence Use of Diorama Media on Learning Outcomes Class V Students on the Theme Ecosystems in Elementary Schools ". Based on research results that have been conducted at SDN Ketintang 1 Surabaya, then can concluded that influential use of diorama media significant to results Study students on the theme ecosystem. Based on analysis questionnaire is known that 91% of students like learning ecosystem by using diorama media because with that media student more interested and easier in understand material lesson. It can see from calculation scale questionnaire that shows that value 127 already is at between " agree " and "strongly agree" diorama media is used in learning on the theme ecosystem class V

Research conducted by Kiswandari (2016) argued the title Influence Use of Media Three Dimensions on Themes Ecosystem to Skills Write Exposition Grade V students at SDN Dukuh Pakis I Surabaya." Based on research results and discussion in chapter before , then can concluded that there is significant effect with the use of three media dimensions to Skills write exposition student class V at SDN Dukuh Pakis I Surabaya. It can prove to exist significant

improvement to value obtained student before given treatment and after given treatment. On calculations sheet observation implementation learning reach 95% with value achievement 91. The results of this acquisition have been reaching indicator specified success i.e. > 80%. So that can conclude that implementation media use three dimensions to Skills write student very well stated. With the use of media three dimensions learning become clearer and more attractive and enthusiastic in learn and earn help student for express ideas and thoughts in Skills write exposition.

In line with research by Prabowo & Wulandari (2018) described developing 3-dimensional diorama media in science learning with results criteria tall or very decent , p This showing that 3 dimensional diorama media in science learning interesting and not boring with results evaluation media experts an average of 97% and assessment results from expert material average 97% with very high criteria .Furthermore research conducted by (Rusdi et al., 2022) that is results the feasibility of diorama media in learning thematic integrity theme how beautiful my country from experts, class teachers, and students are said worth. On trials limited usage get very good response from student. On research This results from validation media experts get an average of 91.25%, on experts' material obtained an average of 91.7% and trials limited get an average of 92.2%. So that can conclude that proper media development used in learning.

Conclusion

Based on results and discussion found above, then can concluded that learning based on 3D dioramas is learning that provides very good impact for enhancement understanding and ability think creative student in learning. Learning based on this diorama can be motivating student in study. This research can developed more carry on through experiment, the implications of this study are expected can help students and teachers in understand material as well as explain material specifically material ecosystem chain food.

References

Abdurrahman, A. (2020). Sejarah Pesantren di Indonesia: Sebuah Pelacakan Genealogis. *Jurnal Penelitian Ilmiah INTAJ, 4*(1), 84–105.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating*

quantitative and qualitative research. Pearson Education, Inc.

Dayana, R., Winarni, E. W., & Agusdianita, N. (2021). Pengaruh Model Project Based Learning (PjBL) Diorama Dalam Pembelajaran IPA Terhadap Kemampuan Berpikir Kreatif Siswa Kelas IV Sekolah Dasar. *JURIDIKDAS: Jurnal Riset Pendidikan Dasar*, *4*(1), 106–114.

Evitasari, A. D., & Aulia, M. S. (2022). Media Diorama dan Keaktifan Belajar Peserta Didik dalam Pembelajaran IPA. *Jurnal Riset Pendidikan Dasar (JRPD)*, *3*(1), 1-9.

Islamiyah, L., & Asmarani, R. (2022). The Development Of Water Cycle Diorama Media To Improve Student Learning Outcomes. *IJPSE Indonesian Journal of Primary Science Education*, *3*(1), 151-158.

Kiswandari, S. (2016). Pengembangan Media Pembelajaran Diorama Daur Air Pada Mata Pelajaran IPA Kelas V SD. *Basic Education*, *5*(10), 970-975.

Muhtar, T., & Dallyono, R. (2020). Character Education From The Perspectives Of Elementary School Physical Education Teachers. *Jurnal Cakrawala Pendidikan, 39*(2), 395-408.

Palupi, L., & Ninawati, M. (2022). Pengembangan Media PENAWAPI Berbasis Kontekstual Materi Hewan Ruminansia Muatan Pelajaran IPA Siswa Kelas V. *Jurnal Educatio FKIP UNMA*, *8*(3), 838-845.

Prabowo, D. M., & Wulandari, D. (2018). Development of 3dimensional Diorama in The Natural Science Learning Especially Lesson of Ekosistem for Grade V Students. *Elementary School Teacher*, *2*(2).

Prasetya, R. I., & Maisaroh, S. (2023, December). Use of Diorama Media. In *2nd UPY International Conference on Education and Social Science (UPINCESS 2023)* (pp. 413-418). Atlantis Press.

Putra, I. K. D., & Suniasih, N. W. (2021). Media Diorama Materi Siklus Air pada Muatan IPA Kelas V Sekolah Dasar. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, *5*(2), 238–246.

Rahayu, V. A., Wardani, S., Sudarmin, S., Haryani, S., & Rahman, M. B. B. A. (2023). Development of a Creativity-Based Cognitive Test Design to Measure Students' Problem-Solving Abilities. *International Journal of Active Learning*, *8*(1), 21-30.

Rusdi, A., Fitriani, A., Hamzah, A., Handayani, T., & Bujuri, D. A. (2022). Development Of Diorama Media On Cultural Diversity Materials In My Country Islamic Elementary School. *Al-Mudarris: Journal Of Education, 5*(2), 157-172.

Torres-Carrión, P. V., González-González, C. S., Aciar, S., & Rodríguez-Morales, G. (2018, April). Methodology for systematic literature review applied to engineering and education. In *2018 IEEE Global engineering education conference (EDUCON)* (pp. 1364-1373). IEEE.