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Literature Review: Improving Elementary School Students' Problem-Solving Skills Through the Discovery Learning Model Assisted by Canva Media

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ABSTRACT

This study aims to show how elementary school students can improve their problem-solving skills through the use of the Discovery Learning approach assisted by the use of Canva media. The method used is a literature study by analyzing a number of relevant scientific journals. The research findings show that the Discovery Learning model is able to increase students' active participation in learning and develop critical, creative, and problem-solving thinking skills. The use of Canva media as a visual medium supports every stage in discovery learning, such as the stimulation, data collection, and verification stages, so that the learning process becomes more interesting, interactive, and meaningful. In addition, the integration of Canva helps teachers in designing teaching materials that suit students' learning styles. Therefore, the application of the Discovery Learning model moderated by Canva media is an effective learning strategy to improve elementary school students' problem-solving skills.

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1. Introduction

Problem-solving ability is an essential skill in learning mathematics and other sciences. It allows students to think critically, analyze situations, and find solutions to complex problems. In terms of basic education, strengthening this ability needs to be done from an early age to form a strong foundation of thinking for facing higher learning challenges. However, the reality in the field shows that problem-solving abilities in elementary school students are still relatively low.

According to research by Susilawati et al. (2023), students often have difficulty understanding story problems and are unable to relate the concepts they have learned to the problems they face. This is because the learning approach used is still centered on the teacher. Not enough is given to students to explore and discover learning concepts themselves. Therefore, a learning model is needed that can stimulate students' thinking activities independently and creatively.

One of the relevant learning models in this case is the Discovery model. Learning. This model emphasizes the learning process through the discovery of concepts by the students themselves. According to Bruner (Yulifa, 2022), discovery learning allows students to be active in finding new knowledge through direct experience, observation, and exploration. This model is believed to improve conceptual understanding as well as critical thinking and problem-solving skills. Study Sintri et al. (2022) shows that the implementation model of Discovery Learning can improve students' learning motivation and learning outcomes, especially in materials that require high-level thinking skills. Discovery learning also provides space for students to discuss, collaborate, and express opinions so that the learning process becomes more meaningful and not monotonous. However, the application of the Discovery model of learning will be more effective if supported by interesting and interactive learning media. Digital media such as Canva offers a variety of interesting visual features, such as infographics, animations, and presentation templates that can help students understand the material visually and legally. Canva also allows teachers to present information systematically and easily understood by elementary school students.

Yulifa et al. (2023) emphasized that the use of information technology-based media in learning can increase student involvement, clarify the delivery of material, and facilitate the independent learning process. Canva, as a user-friendly digital media platform, can be used by both teachers and students. To create creative and communicative learning materials and products. Research by Yuningsih et al. (2023) proves that the use of Canva media in learning can increase students' interest in the material, improve conceptual understanding, and improve learning outcomes. When Canva media is used in the Discovery process, learning, students not only study through text or lecture but also through visual experience and active thinking processes.

Based on the description above, this research aims to further examine how the implementation model learning Discovery Learning, combined with Canva media, can

improve elementary school students' problem-solving abilities. This research is expected to contribute to efforts to develop innovative learning models that support the achievement of 21st-century competencies, especially in forming students who are critical, creative, and able to solve problems independently. The introduction section contains the background of the research, why the issues need to be studied, state-of-the-art or more specific statements about the aspects of the problem already studied by other researchers, a very specific statement giving the purpose/objectives of the studies, and optional statements that give a value or justification for carrying out the study.

2. Research Methodology

This research is a type of library research, which is a research method that focuses on collecting, reviewing, and analyzing data sourced from various available literature, such as books, journals, scientific articles, documents, and other relevant publications. In this study, data is collected through a process of in-depth reading, critical review, and analysis of the contents of various literature to gain a comprehensive and in-depth understanding related to the topic being studied. This library research aims to explore relevant information, theories, and concepts, as well as to understand the development of previous research as a basis or reference in answering the research problems raised. Thus, this study does not require direct field data collection but rather utilizes available library sources as its main data.

3. Results and Discussion

Discovery Learning Learning Model in Elementary Schools

The discovery learning model of Learning has a basic principle that students must be actively involved. Active in finding knowledge through experience and study that is meaningful. Bruner is the main figure of the developer model. This emphasizes that knowledge will be more long-remembered if found alone by a student. Discovery learning consists of some stages: (1) stimulation, (2) identification of the problem, (3) collection of data, (4) processing data, (5) verification, and (6) conclusion. This process is very relevant to the development of problem-solving skills because students are invited to think, analyze, and evaluate information independently.

The Discovery Learning learning model has been proven to be able to improve critical and problem-solving skills in students. Study Dear Ardiansyah, Wijayanti, & Estiyani (2022) shows that model discovery learning pushes students to actively explore, observe, and conclude knowledge through an independent discovery process. This approach is very suitable for elementary school students who are at the concrete operational development stage, where real experience-based learning is very necessary to hone cognitive abilities, including problem-solving. In addition, learning with this model also increases students' activeness in expressing opinions as well as solving problems gradually and logically.

Muna and Mulyani (2023) emphasized that discovery learning is effective in improving mathematics learning outcomes as well as problem-solving skills, especially when supported by interesting and interactive media. The same thing was stated by Ruswianti, Hermawan, and Sri Gustini (2023), who researched the influence of the Discovery Learning model on the problem-solving abilities of elementary school students and obtained significant results. The addition of digital media such as Canva as a visual support can strengthen students' thinking processes at the exploration and elaboration stages. Canva allows teachers to present problems in the form of images, diagrams, and animations that clarify information and pull students into learning. With this, the utilization of Discovery Learning-assisted media, Canva, becomes a combined strategy for learning, which is not just innovative but also effective in developing skills and breaking down problems in elementary school students.

In its implementation in elementary schools, discovery learning can be used for various purposes, including mathematics, language, and knowledge of nature. Yuningsih et al. (2023) emphasize that discovery learning can increase students' independence in learning and encourage their active involvement in the learning process. This strategy is very suitable for building the character of active, creative, and problem-solving learners at an early age. Role of Media Canvas in Support of Discovery Learning.

Canva is an online graphic design application that provides various interesting templates such as infographics, posters, presentations, and worksheets. Using Canva in learning aiming To make teaching materials more visual, interactive, and fun for students. Sintri et al. (2023), in their research, explained that Discovery Learning-based LKS designed using Canva were proven to be valid and practical and had great potential to improve the quality of mathematics learning in elementary schools through attractive visual displays and active learning approaches.

Canva-based learning media makes it easy for teachers to design exploratory activities that align with the Discovery Learning stages. Infographic templates can be used to stimulate students with factual problems that attract their attention. In addition, visualization designs through images, charts, and animations provided by Canva help students understand information in a faster and more efficient way.

Ramadan et al. (2024) also show that using the media Canva in a learning model based on problem-based learning (PBL) can increase results in student studies, because this media is capable of serving as a material with interesting methods, growing interest, and encouraging active involvement of students in the learning process. This shows that the use of Canva is not only relevant for discovery learning but also for learning models that are innovative and oriented towards solving problems.

Improvement Ability Solution Problem

Based on various literature studies analyzed, it was found that the problem-solving ability of students increased significantly after the implementation of the model discovery learning. In

research conducted by Sintri et al. (2023), this increase can be seen from the increasing motivation study and results of students after using LKS Discovery-Based Learning, which was made with Canva. Study This use method is Research and Development (R&D) with the 4-D development model (Define, Design, Develop, Disseminate), which aims to produce product learning that is valid and practical.

In mathematics learning, which is considered difficult and boring by students, the approach of Discovery Learning helps media like Canva to change the paradigm so that students become more interested, active, and motivated to follow the learning process. Besides that, the ability of students to identify problems, collect information, and analyze and conclude learning outcomes also increased. Research by Ramadhan et al. (2024) strengthens these findings, where the problem-based learning model, combined with the media Canva, shows positive results in improving skills, critical thinking, and the ability to break down problems for students. Matter This shows that the effectiveness of Canva media is not limited to one particular learning model but can be integrated with various learning approaches that focus on 21st-century skills.

The discovery learning model Learning consistently shows a positive impact on improving the ability to break down problems. Matter. This is proven in research by Susilawati et al. (2024), who explained that learning with a discovery approach provides space for students to actively build their knowledge. With supporting media such as Canva, students can more easily understand concepts through visual representation, which is interesting and interactive, so that they can solve problems while learning independently and creatively. The Sustainable emphasizes that inquiry-based learning invention stimulates powerful thinking in students rather than conventional lecture methods.

In the research of Sari and Pratikto (2022), it was shown that the constructivist approach, like discovery learning, can facilitate students developing high-level thinking skills, one of which is problem-solving skills. Miranda also states that when learning is integrated with Canva, students can more easily construct knowledge through fun exploratory activities. Canva helps teachers design discovery-based Student Worksheets (LKS), which guide students to identify problems, gather information, and conclude a solution. This is in line with the principle of discovery learning that encourages active participation in learning.

Meanwhile, Yulifa, E., et al. (2023), in their research, stated that student involvement in the learning process increased significantly when learning was combined with digital media such as Canva. The study showed that visualizing material with Canva strengthens students' conceptual understanding so that the discovery process becomes more meaningful. Canva also allows teachers to adjust the learning design to the learning styles of elementary school students who are visual and kinesthetic. This supports the stages of discovery learning, like stimulation and processing data, which need media visual aids so that students are more focused and interested in solving the problems given.

Furthermore, Novianty and Fauziya (2024) strengthened previous findings by showing that the integration of Canva in learning encouraged improved student learning outcomes. In a way, overall, especially in the aspect of thinking critically and breaking down problems. Canva media, according to Novianty, provides a creative space for students to express their understanding of material in the form of diagrams, posters, and presentations. Matter is relevant to the verification and conclusion-drawing stages in the Discovery model of learning. Ability of a student to find a solution not only through process thinking but also through presentation ideas, which they present visually. So that learning not only becomes a process of cognition but also creative and reflective.

Based on a review of various literature sources, it was found that the application of discovery learning consistently provides a positive contribution to improving the problem-solving abilities of elementary school students. This model activates student involvement in identifying, analyzing, and solving problems independently and in a directed manner. This approach is very much in line with the characteristics of the cognitive development of elementary school students who are at the concrete-operational stage, so that discovery-based learning becomes an effective method for training logical and reflective thinking patterns.

Furthermore, when the Discovery Learning model is supported by interactive visual media such as Canva, the learning process becomes more meaningful. Canva plays an important role in presenting information through attractive graphic displays, such as diagrams, infographics, and animations, which not only clarify concepts but also foster students' learning motivation. This integration has been proven to improve the quality of learning stages, from stimulation, data exploration, to the verification and conclusion process. Thus, the combination of the discovery learning model and Canvas media can facilitate students in thinking critically, creatively, and formulating solutions to complex problems more independently.

4. Conclusion

From the results of an in-depth literature review, it can be concluded that the integration between the Discovery Learning model and Canva media forms an innovative and effective learning strategy in improving elementary school students' problem-solving skills. Canva media, as a digital technology-based tool that is visual and user-friendly, is able to increase the appeal of materials and student participation in the learning process. The use of Canva also makes it easier for teachers to adjust the presentation of materials to the characteristics and learning styles of students.

Overall, this strategy not only supports the creation of an active and interactive learning atmosphere but also contributes to the achievement of 21st-century competencies, especially in forming a generation of learners who are able to think critically and creatively and provide solutions in facing academic challenges. Therefore, the literature analyzed in this study

strongly recommends the application of the Discovery Learning model assisted by Canva media in elementary school learning as an alternative approach that is relevant to the needs of modern education.

References

- Ardiansyah, M. R., Wijayanti, A., & Pd, E. S. (2022). Peningkatan Hasil Belajar Kognitif Tema 1 Organ Gerak Hewan dan Manusia Melalui Model Discovery Learning Berbantuan Media Pembelajaran Canva Kelas V Semester 1 Sdn Panggung Lor Semarang Tahun Pelajaran 2022/2023. Literasi (Jurnal Pendidikan Dasar), 2(2). http://journal.upgris.ac.id/index.php/jpd
- Muna, L. N., & Mulyani, P. K. (2023). Pengembangan LKPD Berbasis Discovery Learning Berbantuan Canva Pada Kelas V Sekolah Dasar. Prima Magistra: Jurnal Ilmiah Kependidikan, 4(4), 498-508. https://doi.org/10.37478/jpm.v4i4.3035
- Novianty, N. T., & Fauziya, D. S. (2024). Penerapan Model Discovery Learning Berbantuan Media Canva Untuk Meningkatkan Motivasi Siswa Pada Pembelajaran Menulis Surat Pribadi. Jurnal Arjuna: Publikasi Ilmu Pendidikan, Bahasa dan Matematika, 2(4), 10–21. https://doi.org/10.61132/arjuna.v2i4.1012
- Nurhayati, E., & Rostikawati, Y. (2023). Penerapan Metode Discovery Learning Berbantuan Aplikasi Canva Untuk Meningkatkan Kemampuan Menulis Teks Anekdot Siswa SMK. Parole: Jurnal Pendidikan Bahasa dan Sastra Indonesia, 6(3), 211-220.
- Ramadhan, R. A., Nugroho, M. K. W., & Mutiara, A. (2024). Penerapan model pembelajaran problem based learning berbantuan aplikasi Canva untuk meningkatkan hasil belajar IPAS. Jurnal Review Pendidikan dan Pengajaran, 7(3). http://journal.universitaspahlawan.ac.id/index.php/jrpp
- Ruswianti, R., Hermawan, Y., & Srigustini, A. (2023). Pengaruh model discovery learning berbantuan media Canva untuk meningkatkan hasil belajar siswa. Jurnal Pendidikan Tambusai, 7(3).
- Sari, M. L., & Pratikto, H. (2022). Pengembangan Media Pembelajaran Interaktif Berbasis Aplikasi Canva: Efektif Dalam Meningkatkan Berpikir Kritis Dan Hasil Belajar Peserta Didik. Jurnal Ekonomi, Bisnis Dan Pendidikan (JEBP), 2(2), 236–245. https://doi.org/10.17977/um066v2i22022p236-245
- Sintri, A. S., Rosalina, E., & Fitriyana, N. (2023). Pengembangan lembar kerja siswa (LKS) berbasis model discovery learning menggunakan Canva. Journal of Elementary School (JOES), 6(2). https://doi.org/10.31539/joes.v6i2.6608
- Susilawati, W. O., Saputra, R., & Friska, S. Y. (2024). Pengembangan e-modul berbasis discovery learning menggunakan aplikasi Canva pada pembelajaran IPAS kelas IV sekolah dasar. Pendas: Jurnal Ilmiah Pendidikan Dasar, 9(3).
- Yulifa, E., Pramasdyahsari, A. S., Suneki, S., & Sijamtini, N. (2023). Efektivitas model PBL berbantuan Canva terhadap hasil belajar kognitif siswa kelas III. Didaktik: Jurnal Ilmiah PGSD FKIP Universitas Mandiri, 9(2).