

# Development of Powerpoint Learning Media on the Material of Examining the Structure of Review Text (Poetry) Class VIII SMP Negeri 1 Moro'o

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Abstract- The primary aim of this research is to create PowerPoint learning media specifically designed to facilitate the review of poetry structures within textual analysis, with a focus on feasibility, practicality, and effectiveness. Following the systematic approach of the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation), this study incorporates various methods including material expert validation questionnaires, linguistic assessments, design expert evaluations, as well as feedback from students and assessments of learning outcomes. The findings reveal the successful development of PowerPoint learning materials tailored to the needs of poetry review text analysis. Notably, feasibility evaluations demonstrated promising results, with material expert assessments achieving a revision rate of 67.3% in the initial stage and a perfect score of 100% in the subsequent revision. Linguistic assessments similarly improved from 65.7% in the first revision to 94.2% in the second. Design expert evaluations showed a significant increase from 38.9% to 94.7% between revisions. Practicality assessments from small group and field trials scored impressively at 96% and 94.2%, respectively, indicating high levels of practical application. Furthermore, effectiveness evaluations exhibited noteworthy outcomes, with a 100% success rate in small group trials and a commendable 92% success rate in field trials, underscoring substantial effectiveness. In conclusion, the developed PowerPoint learning media emerges as a feasible, practical, and effective tool for enhancing the learning process, particularly in the context of reviewing poetry structures. These findings contribute to the advancement of educational technology and instructional design practices.

Keywords: Learning Media, Power Point, ADDIE

#### I. INTRODUCTION

An essential part of human life is education. One of the goals of education is as a process that can help humans develop potential so that they can face and follow various changes and become the basis for preparing human resources in order to face the process and changes in the dynamics of life (Kajal 2018). Therefore, improving the quality of education is very important to continue and continue to be improved, especially the quality of educators and students.

An effective education is one that makes learning enjoyable, easy, and helps students reach their learning objectives. Things that need to be improved by educators are the efficiency of time dedicated to the teaching process, the quality of teachers, and the ability of educators to deliver teaching materials well so that they are easily understood and make students interested in learning (Saraswati et al., 2022: 103). Thus, the process of teaching and learning requires innovation. Innovation is a rejuvenating process that affects every facet of a country's development. Education and innovation are interrelated and cannot be separated. Rusdiana said that innovation in education refers to the introduction of something new to achieve certain goals or solve problems, both individuals and groups (Ambarwati et al., 2021:174). Producing innovative human resources certainly requires a process. The learning process is one of the processes that take place in education. Asyhar (2012: 7) claims that learning is an interactive process in which teachers and students share all of the knowledge and information. If student comprehension of the subject matter increases and learning outcomes rise following the learning process, then learning objectives can be met. Digital technology can be used to achieve innovation in the sphere of education (Ambarwati et al., 2021: 178).

Current technological developments can make it easier for educators to find or create various types of learning media. Technology in the world of education can function to provide information that supports learning. In general, the goal of using technology in the learning process is to facilitate interaction between educators and students so that learning becomes effective and efficient (Aryadillah & Fitriansyah, 2017: 8).

Educators in the 5.0 era must have good digital skills and creative thinking. Teachers are expected to teach more innovatively and dynamically in the classroom (Saraswati et al., 2022: 63). The tools of the teaching process must be updated so that the message conveyed reaches students and is interested in the media used and the achievement of learning outcomes in accordance with the specified target. The change in question is to keep up with the times such as utilizing learning media in accordance with the wishes of students.

Media and learning cannot be separated, because if the two are separated then learning will not go well and not maximized. Learning media is a tool used by educators in delivering learning materials to students which functions to facilitate the learning process, create a pleasant learning atmosphere, facilitate understanding of the material and improve students' memory. According to Asyhar (2012: 8), learning media is

dissemination of messages from a the prearranged source in an enjoyable setting to enable the recipient to carry out an efficient and successful learning process. The media has a crucial part in the process of teaching and learning. The success of learning can be strengthened by media. In addition to serving as completely human-regulated information а conduit, the media can also partially replace the role of the instructor in distributing instructional materials (Nurdyansyah, 2019: 25). As a result, educational media are essential for raising the standard of instruction.

The use of media in teaching can help educators in perfecting their creativity to design learning, which can bring students to independent or enjoyable learning (Ningrum & Suryani, 2022: 222). The right teaching media will help students understand learning. Learners are not just objects receiving material but there must be two-way communication between educators and students so that the thinking and creativity of students can develop.

Based on the findings of observations conducted by researchers at SMP Negeri 1 Moro'o school, it was discovered that pupils continued to struggle with comprehending the course contents and that they were not very attractive when they were learning. Educators in delivering material only use package books, namely student books and teacher books as learning aids and only utilize blackboard media. The variety of learning resources used by educators in learning activities and the use of technology as a learning medium is still lacking. So that resulted in students feeling bored in following the learning process. In addition to the computers and laptops that the school already has available for use in assisting with the teaching and learning process, there is also a projector available. Because educators' roles as mentors, facilitators, and motivators are not fully realized, students experience boredom and discomfort in addition to a lack of understanding of the content being studied.

To overcome this, educators must be creative in choosing learning media that can support student learning outcomes. Using and developing varied learning media can attract the attention of students, foster enthusiasm, interest and student activeness in learning. One of the efforts to overcome this is to use learning media through PowerPoint.

PowerPoint can be used in activities such

as presentations that can organize an effective, easy presentation and help an idea become more interesting when presented. In addition, PowerPoint can be used as a learning resource for students that can be used as teaching materials for learning. In making this PowerPoint learning media can be done using an application in the form of Microsoft PowerPoint as a program from Microsoft Office that is used to create presentations through the form of slides for the purposes of presentation, teaching, and creating simple animations (Aryadillah & Fitriansyah, 2017:24). Microsoft PowerPoint is a computer program specifically designed to display multimedia programs with an attractive appearance, easy to create, easy to use, and has a relatively affordable cost, because it does not require raw materials other than tools to store data (Asyhar, 2012:186). Therefore, educators do not need to install other applications on their computers or laptops, because the PowerPoint application is already present on every desktop. Thus, it can be said that there will be no difficulties in using this learning media in the classroom. In terms of learning objectives, the use of learning media is very helpful in improving learning outcomes.

According to Hasanah (2020:38) the advantages of PowerPoint are that it can facilitate the creation of presentation slides for users; making someone who often presents in public younger using Microsoft PowerPoint, especially when integrating supporting technology such as a screen projector; slides can be made to look attractive by using various tools, such as text art, image import, animation import, video import, and others; one of PowerPoint's tools to enhance the presentation background is a variety of templates; PDF export can be used to make it easier for users to share the resulting files and run PowerPoint commands; the collaboration feature function allows simultaneous editing of presentation files from different computers; saving before the user saves it to local storage is the save to one cloud feature of the cloud feature and the authoring feature function that protects documents from irresponsible parties, namely authorization.

The use of PowerPoint learning media can be used by educators in learning and students can get varied learning materials. In this PowerPoint learning media developed by determining one of the learning materials, namely examining the structure of the review text (poetry).

Understanding the structure of review text, especially poetry, holds significant relevance for Class VIII students, as it directly contributes to their academic development and learning objectives. Analyzing the intricate components of review text aids students in honing their critical thinking skills, enhancing their literary comprehension, and fostering а deeper appreciation for language and literature. By delving into the nuances of poetic structures, students not only broaden their understanding of literary devices but also cultivate their ability to express ideas effectively and eloquently. Therefore, the study titled "Development of PowerPoint Learning Media on the Material of Examining the Structure of Review Text (Poetry) Class VIII SMP Negeri 1 Moro'o" aims to provide an innovative approach to facilitate the learning process, catering to the specific needs and interests of Class VIII students at SMP Negeri 1 Moro'o. Through the utilization of PowerPoint learning media, this study seeks to engage students actively, enabling them to grasp the complexities of review text structures, particularly in the realm of poetry, thus fostering a conducive environment for academic growth and development.

# II. METHODS

This research adopts the method of development (Research research and Development). Research and development methods are chosen for their ability to create products and assess their effectiveness, in addition, R&D methods play an important role in making certain products and measuring their efficacy (Sugiyono, 2014). The ADDIE paradigm, comprising five primary phasesanalysis, design, development, implementation, evaluation-was employed as the and development methodology for this study (Khaeroni, 2021: 58). The purpose of this project is to create PowerPoint learning materials specifically for the analysis of review text structures, especially in poetry, for SMP Negeri 1 Moro'o Class VIII students. This would improve lucidity.

The process of conceptualizing the structure and content of the PowerPoint learning media was meticulously executed, adhering to the stages of the ADDIE model. In the initial analysis phase, comprehensive investigations were conducted to discern the specific needs and characteristics of the target audience. This phase served as the foundation for subsequent stages, providing crucial insights that informed design decisions. The design phase was dedicated to translating the findings from the analysis into tangible design elements for the learning media. This involved strategic considerations of layout, content organization, and visual aids, all aimed at enhancing engagement and comprehension. Development encompassed the actual creation of the learning materials, employing the identified design principles and leveraging appropriate tools and software. The selection of these tools was carefully made to ensure the effectiveness accessibility of the final product. and Furthermore, the implementation phase involved the deployment of the learning media in real classroom settings, facilitating hands-on learning experiences. Finally, evaluation was conducted to assess the media's efficacy in achieving the intended learning outcomes, allowing for iterative improvements and refinement as Through necessary. а systematic and comprehensive approach, each phase of the ADDIE model contributed to the creation of impactful and tailored learning materials.

## **III. RESULT AND DISCUSSION**

#### 1. Results of Research and Development of PowerPoint Learning Media

The result of this development is learning media through PowerPoint on the material of reviewing the structure of review text (poetry) which is carried out at SMP Negeri 1 Moro'o class VIII-A. This learning media is validated first by material expert validators, linguists, and design experts. After validation and revision of the product in accordance with the suggestions of the validator, the product of this PowerPoint learning media development was tested at school to obtain data on students' responses or responses as well as effectiveness data in assessing the feasibility of the media developed.

This PowerPoint learning media development procedure is carried out using the ADDIE model which includes 5 stages namely Analysis, Design, Development, Implementation, and Evaluation. The following is each stage carried out.

#### a) Analysis

The analysis stage is the initial stage carried out in obtaining a series of information that can be used as a basis for researchers in developing PowerPoint learning media on the material of reviewing the structure of the review text (poetry). At this stage the researcher analyzes the competencies required of students, analyzes the characteristics of students and analyzes the material being taught.

Analyzing students' abilities in relation to learning materials is known as competency analysis. At this point, the 2013 curriculum syllabus is used by researchers to develop learning materials, core competencies, and fundamental competencies.

To create a PowerPoint learning media that suits the interests and abilities of learners, it is necessary to analyze the characteristics of these learners. This analysis is done by knowing the academic ability, learning motivation and interest of the learners.

The learning materials chosen to be developed in this PowerPoint learning media are materials that are in accordance with the class VIII syllabus on KD 3.12 Examining the structure and language of review texts (films, short stories, poems, novels, regional artworks) that are listened to and read. The material analysis in this PowerPoint learning media consists of review text structure, review text linguistic rules, and how to write review text.

## b) Design

At this point, the researchers completed the design phase, which involved creating, organizing, and designing the PowerPoint training materials that would be produced. At this point, the researcher ascertains the competencies that students should acquire after reading the content. Researchers identify the necessary learning objectives in the chosen material, which include enabling students to analyze the review text's structure. At this stage, researchers also compile evaluation questions that will be done by students to determine the effectiveness of the PowerPoint media developed.

## c) Development

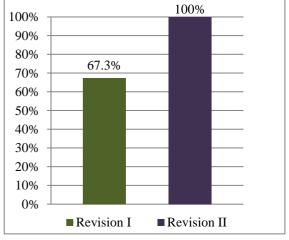
At this stage, the activities carried out are to develop PowerPoint learning media on the material of reviewing the structure of the review text. Then, after the PowerPoint learning media has been developed, the researchers then validate the product that has been designed previously to find out whether the product designed is feasible or not feasible to be implemented.

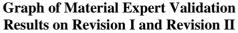
Following development, the learning video must be validated to validators (material, language, and design) in order to receive feedback and suggestions for improvement. This process ensures that the learning video is workable before it is put to the test in real-world settings. The following are the outcomes of the language, design, and material/content validation processes.

#### Data on Material Expert Validation Results

The results of validation by material experts in revision I on products in the form of PowerPoint learning media, after averaging, a percentage of 67.3% was obtained from several aspects, namely aspects of relevance reaching 70% of 10 indicators, aspects of accuracy reaching 65% of 4 indicators, aspects of completeness of presentation reaching 73.3% of 3 indicators, aspects of systematic presentation reaching 70% of 2 indicators, aspects of suitability of presentation with student-centered learning demands reaching 68% of 5 indicators, aspects of how to present reaching 60% of 5 indicators. The results of validation by material experts in revision II, after averaging, obtained a percentage of 100% from several aspects, namely the relevance aspect reached 100% of 10 indicators, the accuracy aspect reached 100% of 4 indicators, the completeness aspect of the presentation reached 100% of 3 indicators, the systematic aspect of the presentation reached 100% of 2 indicators, the aspect of the suitability of the presentation to the demands of studentcentered learning reached 100% of 5 indicators and the aspect of the way of presentation reached 100% of 5 indicators.

The results of revision I with 67.3% achievement and revision II with 100% achievement can be seen in the following graph.

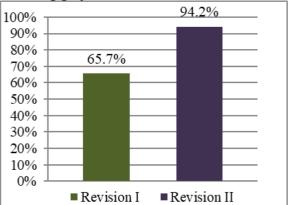




## Data from Language Expert Validation

The results of validation by linguists in revision I on products in the form of PowerPoint learning media, after averaging, obtained a percentage of 65.7% from 2 aspects, namely aspects of language conformity with good and correct Indonesian language rules reaching 66.6% of 3 indicators, and aspects of readability and communicativeness reaching 65% of 4 indicators. The results of validation by linguists in revision II, after averaging, obtained a percentage of 94.2% from 2 aspects, namely aspects of language conformity with good and correct Indonesian language rules reaching 93.3% of 3 indicators and aspects of readability and communicativeness reaching 95% of 4 indicators.

The results of revision I with an achievement of 65.7% and revision II with an achievement of 94.2% can be seen in the following graph.



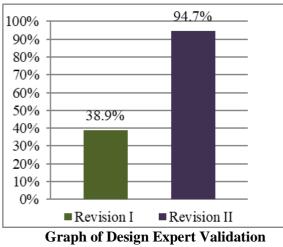
#### Graph of Language Expert Validation Results on Revision I and Revision II

## **Design Validation**

The results of validation by design experts in revision I on PowerPoint learning media products, after averaging, obtained a percentage of 38.9% of 19 indicators. The results of validation by design experts on revision II, after averaging, obtained a percentage of 94.7% of 19 indicators.

The results of revision I with an achievement of 38.9% and revision II with an achievement of 94.7% can be seen in the following graph.

Development of Powerpoint Learning Media on The Material of Examining the Structure of Review Text (Poetry) Class VIII SMP Negeri 1 Moro'o



Results on Revision I and Revision II

#### d) Implementation

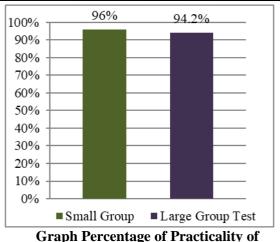
After validation with material expert validators, linguists, and design experts, then proceed with the implementation stage. At this stage, testing is carried out to determine the practicality and effectiveness of the products that have been developed. To find out the practicality of PowerPoint learning media, students fill out a questionnaire that has been prepared by the researcher. After that, researchers gave tests to students to test the effectiveness of PowerPoint learning media. The results of the trial can be known the feasibility of PowerPoint learning media. PowerPoint learning media products are implemented at SMP Negeri 1 Moro'o class VIII which is done twice, namely.

- 1) Small group trial consisting of 7 students of class VIII-A SMP Negeri 1 Moro'o.
- 2) Field trial consisting of 25 students in class VIII-A SMP Negeri 1 Moro'o.

The following results of learner responses from 2 trials can be seen in the following table and graph.

Table Percentage of Practicality of
PowerPoint Learning Media Trial

Number	Product Trial	Achievement Level	Category
1	Small Group Test	96%	Very Practical
2	Large Group Test	94.2%	Very Practical

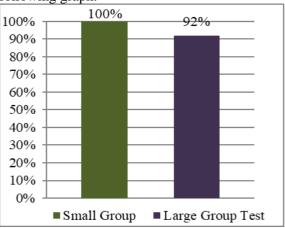


Graph Percentage of Practicality of PowerPoint Learning Media Trial

#### e. Evaluation

At this evaluation stage, researchers evaluate the learning outcomes of students using PowerPoint learning media. This evaluation is carried out with the aim of knowing the weaknesses of the product that has been developed. At this evaluation stage, the effectiveness test is also carried out through the test or evaluation given and evaluates the response of students through the questionnaire that has been given.

The completeness of student learning outcomes is said to be effective if it meets classical completeness. In the small group trial consisting of 7 students obtained scores above the KKM with a percentage of 100% completeness and in the field trial consisting of 25 students obtained scores above the KKM with a percentage of completeness of 92% with a very good category. Thus, it can be concluded that the PowerPoint learning media on the material of analyzing the structure of the review text (poetry) is declared effective to use. The percentage of students' learning completeness can be seen in the following graph.



Graph Percentage of Students' Learning Completeness

#### 2. Discussion of development results

## a. Development of PowerPoint Learning Media.

When creating PowerPoint learning materials, the five stages of the ADDIE development model—analysis, design, development, implementation, and evaluation are adhered to.

At the analysis stage, namely conducting analyzing competency analysis, learner analyzing characteristics and material. Competency analysis is an analysis of the ability of students to learning materials. At this point, the 2013 curriculum syllabus is used by researchers to develop learning materials, core competencies, and fundamental competencies. Researchers adapt to SMP Negeri 1 Moro'o's curricula, specifically the 2013 curriculum.

The analysis of students' characteristics was carried out by knowing the academic ability, learning motivation and interest of students. This analysis was conducted in class VIII-A SMP Negeri 1 Moro'o. Material analysis is the study of the form and vocabulary of review materials (movies, books, poetry, novels, and local artworks) that are read aloud and on audio. The learning content selected for this PowerPoint learning media is in line with the class VIII syllabus on KD 3.12. The topic matter of learning that will be created in this PowerPoint presentation is determined by the researcher based on the material analysis, specifically by looking at the review text's (poetic) structure.

During the design stage, the researcher creates, gathers, and designs the PowerPoint learning materials that will be utilized throughout the instructional process. PowerPoint Learning Media's Viability

## b. Feasibility of PowerPoint Learning Media

The results of validation by material experts in revision I on products in the form of PowerPoint learning media, after averaging, a percentage of 67.3% was obtained from several aspects, namely aspects of relevance reaching 70%, aspects of accuracy reaching 65%, aspects of completeness of presentation reaching 73.3%, aspects of systematic presentation reaching 70%, aspects of suitability of presentation with student-centered learning demands reaching 68%, and aspects of how to present reaching 60% of 5 indicators. Following an average of the

validation results by subject matter experts in revision II, a percentage of 100% was obtained from multiple aspects: 100% for relevance, 100% for accuracy, 100% for completeness, 100% for systematization, 100% for suitability of the presentation to the demands of student-centered learning, and 100% for presentation style. This leads to the conclusion that PowerPoint learning materials are classified as appropriate for trial based on their material and content.

The results of validation by linguists in revision I on products in the form of PowerPoint learning media, after averaging, obtained a percentage of 65.7% from 2 aspects, namely aspects of language conformity with good and correct Indonesian language rules reaching 66.6% and aspects of readability and communicativeness reaching 65%. While the results of validation by linguists in revision II, after averaging, a percentage of 94.2% was obtained from 2 aspects, namely the aspect of language suitability with good and correct Indonesian language rules reaching 93.3% and the aspect of readability and communicativeness reaching 95%. Based on this, it can be concluded that PowerPoint learning media in terms of language is categorized as feasible for testing.

The results of validation by design experts in revision I on PowerPoint learning media products, after averaging, obtained a percentage of 38.9% of 19 indicators. The results of validation by design experts on revision II, after averaging, obtained a percentage of 94.7% of 19 indicators. Based on this, it can be concluded that PowerPoint learning media in terms of design is categorized as feasible for testing.

# c. Practicality of PowerPoint Learning Media

The practicality of PowerPoint learning media was obtained from the students' response questionnaire which was carried out in 2 stages, namely small group trials and field trials. The trial was conducted at SMP Negeri 1 Moro'o. The results of the learner response questionnaire in the small group trial obtained a percentage result reaching 96% with the category "Very Practical". After the small group trial, followed by a field trial with a percentage achievement of 94.2% and categorized as "Very Practical". Based on the results of the data above, the PowerPoint learning media that has been developed shows that it is practical to use in the learning process.

# d. Effectiveness of PowerPoint Learning Media

The analysis of the calculation of the students' learning outcomes test shows that the students' learning completeness on the material to analyze the structure of the review text (poetry) has met the KKM. The completeness of students' learning outcomes is said to be effective if it meets classical completeness. In the small group trial consisting of 7 students obtained scores above the KKM with a percentage of 100% completeness and in the field trial consisting of 25 students obtained scores above the KKM with a percentage of completeness of 92% with a very good category. Thus, it can be concluded that the PowerPoint learning media on the material of analyzing the structure of the review text (poetry) is declared effective to use.

# **IV. CONCLUSION**

The conclusion of the research highlights the successful development and implementation of PowerPoint learning media for the examination of the structure of review text (poetry) in Class VIII at SMP Negeri 1 Moro'o. The process followed the ADDIE development model, which comprises the Analysis, Design, Development, Implementation, and Evaluation stages. The validation results, including 100% from material experts, 94.2% from linguists, and 94.7% from design experts, indicate a high level of validity. Moreover, the practicality of the media was demonstrated through small group trials (96%) and field trials (94.2%), both falling within the "very practical" category. The effectiveness of the PowerPoint learning media was also notable, with student learning outcomes showing a 92% improvement.

While these findings underscore the viability of the developed learning media, it's important to place them in context within the broader educational landscape. Comparing these results to similar studies or existing literature on educational media development and implementation would offer valuable insights into their significance.

Acknowledging any limitations encountered during the research process is crucial. Factors such as resource constraints, time limitations, and challenges in accessing participants may have inevitably influenced the study's scope and outcomes. Moreover, by acknowledging these constraints, we can better understand the context within which the research was conducted and the

potential impact they may have had on the results. Furthermore, identifying areas for further investigation or refinement of PowerPoint learning media not only fosters continuous improvement but also provides valuable insights for future studies. Educators could greatly benefit from practical recommendations derived from these findings, enhancing the relevance and applicability of the research outcomes to similar contexts. Therefore, by incorporating these considerations, the conclusion serves to offer a more holistic understanding of the research outcomes and their implications for educational practices. based on the findings of a study on the structure and cultural significance of the hamlet names in Sembalun District. The three sections of the research findings include the meaning of hope, the process of word development, and the shape of toponym variants. The topography of the area is taken into consideration when designating a hamlet. Aspects such as the environment, the hamlet's position, and the way nature manifests itself can all be considered parts of topography. First, three categories are used to Toponymic variants: embodied categorize aspects, social factors, and cultural elements. More aspects of embodiment can be discovered at the level of nature, location circumstances, and water form (topography). Second, the term "creation process" describes the process of creating noun compositions with nouns, metaphorical noun compositions, noun with compositions adverbs, and noun compositions with adjectives. As of right now, nouns and adverbs are the most often used word composition unit in the Sembalun district's hamlet names. Third, the meanings of hope and memory are used to categorize the significance of naming hamlets in the Sembalun District. The Sembalun District's hamlets are named primarily with the intention of giving its residents advice in life and the ability to always submit to their creator. As a result, the Sembalun people's hamlet names all often allude to the idea of giving oneself over to God. Future research, especially in the Sembalun region, is desired to expand on this study by delving more into the linguistic aspects of the Sasak language and the practices surrounding surrendering oneself to Allah SWT. A more thorough examination of the historical background of hamlet name formation in Sembalun District is necessary, as this research primarily focuses on the form and meaning of hamlet names. Consequently, this study aims to investigate the other side of the hamlet naming controversy in Sembalun District in future research.

#### REFERENCES

- Ambarwati, D., Wibowo, U. B., Arsyiadanti, H., & Susanti, S. (2021). Studi literatur: Peran inovasi pendidikan pada pembelajaran berbasis teknologi digital. Jurnal Inovasi Teknologi Pendidikan, 8(2).
- Aryadillah, & Fitriansyah, F. (2017). Teknologi Media Pembelajaran: Teori dan Praktik. (1st ed.). Herya Media.
- Asyhar, R. (2012). Kreatif Mengembangkan Media Pembelajaran (1st ed.). Referensi.
- Hasanah, N. (2020). Pelatihan Penggunaan Aplikasi Microsoft Power Point Sebagai Media Pembelajaran pada Guru SD Negeri 050763

Gebang. Jurnal Pengabdian Kepada Masyarakat., 1(2).

- Kajal. (2018). Importance of Education in Life. The Asian School. <u>https://www.theasianschool.net/blog/importanc</u> e-of-education/
- Khaeroni, K. (2021). Metodologi dan Penelitian Pengembangan. Media Madani.
- Ningrum, A. R., & Suryani, Y. (2022). Peran Guru Penggerak dalam Kurikulum Merdeka Belajar. Jurnal Pendidikan Dasar, 5(2).
- Nurdyansyah. (2019). Media Pembelajaran Inovatif (P. Rais (ed.); 1st ed.). UMSIDA Press.
- Saraswati, Meilana, F., & Utami, S. (2022). Tantangan Pendidikan di Era Digital 5.0 (1st ed.). Yayasan Wiyata Bastari Samasta.
- Sugiyono. (2014). Metode penelitian pendidikan : Pendekatan kuantitatif, kualitatif, dan R&D (19th ed.). Alfabeta.