



# Development of Thematic Magnetic Board Media (PAMANTIK) in Thematic Learning in Third Grade Elementary Schools

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## ABSTRAK

Penggunaan media pembelajaran di Sekolah Dasar umumnya masih kurang. Berdasarkan hal tersebut, dibutuhkan pengembangan media pembelajaran yang lebih variasi dan inovatif serta terintegrasi pada kurikulum 2013. Salah satunya media Papan Magnet Tematik (PAMANTIK) yang dikembangkan sesuai dengan kebutuhan pembelajaran tematik dan terintegrasi dengan kurikulum 2013. Tujuan penelitian ini adalah untuk menganalisis proses pengembangan media pembelajaran PAMANTIK yang sesuai dengan karakteristik pembelajaran tematik dan mengetahui kelayakan media pembelajaran PAMANTIK. Hasil kelayakan pada penelitian pengembangan ini dilakukan oleh tim ahli media, ahli materi dan ahli pendidikan dengan kategori interpretasi "Sangat Layak", sedangkan respon siswa terhadap media PAMANTIK dilakukan dengan uji coba terbatas pada siswa kelas 3 sekolah dasar didapatkan kategori interpretasi "Sangat Baik". Berdasarkan hasil penelitian dan pengembangan tersebut disimpulkan bahwa media pembelajaran PAMANTIK sangat baik dan layak digunakan di sekolah dasar. Pengembangan media PAMANTIK ini

berimplikasi pada meningkatnya motivasi belajar siswa pada pembelajaran tematik dengan menggunakan media pembelajaran yang terintegrasi pada pembelajaran tematik.

## ABSTRACT

*In general, the use of instructional media in elementary schools is still lacking. The development of learning media that is more varied and innovative and integrated into the 2013 curriculum is needed. One of them is the Thematic Magnetic Board (PAMANTIK) media developed by thematic learning and is integrated with the 2013 curriculum. The purpose of this study is to analyze the process of developing instructional media. PAMANTIK according to the characteristics of thematic learning and knowing the feasibility of PAMANTIK learning media. A team of media experts carried out the results of the feasibility of this development research, material experts, and education experts with the interpretation category "Very Appropriate." While the students' responses to PAMANTIK media were carried out with limited trials on third-grade elementary school students, the interpretation category was "Very Good." Based on the research and development results, it was concluded that the PAMANTIK learning media was very good and suitable for use in elementary schools. PAMANTIK media development has implications for increasing student motivation in thematic learning by using integrated learning media in thematic learning.*

## 1. Introduction

Learning is the interaction carried out by someone in changing mindsets, attitudes, and increasing knowledge. The learning activities carried out have an important role in seeing the achievement of students. Learning activities, especially those in the 2013 curriculum, require a balance between the domains of knowledge, attitudes, and skills (Fitri, Saparahayuningsih, & Agustriana, 2017; Krissandi & Rusmawan, 2015). Learning in the 2013 curriculum can be referred to as learning that unites several fields of study. This learning is often referred to as thematic learning. Thematic learning combines two or more of the subject content to provide deeper learning for students (Majid, 2014; Qondias, Anu, & Niftalia, 2016). Learning that is carried out is also contextual or related to students' real-life or daily activities to provide meaningful learning (Asrohah, 2014; Darmawan, 2010). Because thematic learning is integrated

learning with themes, it is necessary to have supporting facilities and infrastructure in learning aids, often referred to as learning media.

The problem that occurs today is that most schools that use thematic learning use makeshift learning media, such as blackboards, thematic books for teachers and students, and simple learning media such as pictures that are only intended for one subject content. Research conducted by [Rahmi, Budiman, & Widyaningrum \(2019\)](#) also stated that many teachers do not use learning media because the media in schools is very limited and only uses simple and makeshift teaching aids. Teachers' rare use of media is also caused by teachers' busyness so that teachers do not have much time to make learning media ([Diyantari, Wiyasa, & Manuaba, 2020; Rahmi et al., 2019](#)). This problem was also found in one elementary school. Based on the results of the needs analysis in class III A SDN Simpang Tiga on September 12, 2019, some data was found that the school had used the 2013 Curriculum and was running well because the school had understood the regulations of the 2013 Curriculum by shifting the curriculum from KTSP to Curriculum 2013. One of the needs analysis results is about thematic learning in class III A up to theme 4, sub-theme 1, learning 6. During learning, class III A educators have used various kinds of learning media. Some of the media often used include blackboards, thematic books for teachers' handbooks, student thematic books, and simple learning media such as pictures that are only intended for one subject. Based on the analysis results that the researchers conducted, overall, teachers have used learning media. However, all of these learning media cannot involve students directly in thematic learning activities, and the available learning media are also not integrated according to the 2013 curriculum. Thematic learning will run effectively if the learning activities are assisted by the use of learning media that have been integrated with the curriculum. 2013. The school has not implemented learning media that is integrated with the 2013 curriculum or for thematic learning. The process of delivering the material has not been effective, where students have not been able to receive some material or one particular topic on the theme as a whole.

Based on these problems, one solution is to develop learning media. One of the learning media that can be developed thematic learning media is called Thematic Magnetic Board (PAMANTIK). The media is developed and modified based on thematic learning in elementary schools, especially for the third grade. PAMANTIK learning media can be used directly by students to provide meaningful learning following thematic learning characteristics. This learning media also includes several subject content so that it follows the characteristics of thematic learning. In line with the results of previous research by [Rachma \(2018\)](#) that the Thematic Magnetic Board (PAMANTIK) learning media is needed by students because the learning media has been integrated with the 2013 curriculum and can involve students in learning directly and meaningfully. The development of learning media is needed in thematic learning. The same is the case with previous research by [Karisma, Margunayasa, & Prasasti \(2020\)](#) that the use of development media in elementary schools is expected to motivate thematic learning. It can make it easier for students to absorb information and knowledge.

The advantages and differences of products in research and development with existing ones, the Thematic Magnetic Board (PAMANTIK) learning media, can be used for thematic learning with three subject loads and can provide meaningful learning experiences of instructional media. PAMANTIK learning media has also been integrated with the 2013 curriculum and follows thematic learning characteristics to provide learning as a whole. The Thematic Magnetic Board (PAMANTIK) media developed also uses an attractive display quality following the characteristics of elementary school students where the media uses contextual images so that it is easy to understand and in accordance with daily activities, besides the Thematic Magnetic Board media (PAMANTIK) which is being developed is also a self-made media made from wood so that it can be used for the long term.

It is in line with previous research that Agustina has conducted. In this research and development, the results show that the Thematic Magnetic Board media can attract learning interest for students. Thematic Magnetic Board is a learning medium made of wood, a magnetic whiteboard, and coated paint. [Fadhilah \(2017\)](#) shows that the Thematic Magnetic Board or Point Magnet Board media is a learning medium that can be used in the long term because it is made from strong, light, and permanent wood. So that researchers are interested in developing learning media Thematic Magnetic Board (PAMANTIK).

The purpose of this development research is to analyze the process of developing the Thematic Magnetic Board (PAMANTIK) media for third-grade elementary school students in thematic learning. It determines the Thematic Magnetic Board (PAMANTIK) media's feasibility as a learning medium for third-grade students in Thematic learning and to know the response. Students towards Thematic Magnetic Board (PAMANTIK) media in Thematic learning. PAMANTIK media is expected to help teachers and students carry out thematic learning to increase student understanding and improve student learning outcomes.

## 2. Method

This research is a type of research development or Research and Development (R&D). There are ten stages of development research, according to Sugiyono. Due to time and cost limitations, the research on the development of PAMANTIK learning media has only reached the sixth stage, which is limited product testing. The first stage is problem analysis to find out school problems because research must start from a problem. The second stage, collecting data through observation, filling out questionnaires to informants to determine the problems and needs in school. The third stage, product design, by making learning media Thematic Magnetic Board (PAMANTIK) can be used to solve problems and needs encountered during the preliminary study. The fourth stage, product validation which is useful for determining the feasibility of PAMANTIK learning media. Three experts, media experts, material experts, and education experts, carried out this product validation. The fifth stage, product revision, aims to produce a better product to be suitable for use. Product revisions are carried out by the experts' validation team's criticism and suggestions—the sixth stage, limited trials. The limited trial was conducted at SDN Simpang Tiga on third-grade students. The limited trial aims to determine the response of students to the PAMANTIK learning media.

Data collection techniques in this study were using questionnaires and documentation. Questionnaires are used to find out needs, find problems, and find out the feasibility of learning videos. In contrast, documentation is used to obtain other information available to respondents in photos or questionnaire results. The instrument used for the validation team of media experts, material experts, and education experts was a closed questionnaire statement. The lattice of the instrument for expert testing can be seen in Table 1, Table 2, and Table 3.

**Table 1.** Media Expert Test Instruments

Criteria	Indicator
Display	<ul style="list-style-type: none"> <li>a. Media size</li> <li>b. Media coloring</li> <li>c. Shape selection accuracy</li> <li>d. Accurate use of fonts and font sizes</li> <li>e. Media image display</li> </ul>
Application	<ul style="list-style-type: none"> <li>a. Ease of use of the product</li> <li>b. Product targeting accuracy</li> <li>c. Ease of product maintenance</li> <li>d. Ease of product storage</li> </ul>
Utilization	<ul style="list-style-type: none"> <li>a. Increase interest in learning</li> <li>b. Provide meaningful learning</li> <li>c. It helps understanding learning material</li> <li>d. Improve student skills</li> </ul>

**Table 2.** Material Expert Test Instruments

Criteria	Indicator
Content Compliance Aspects	<ul style="list-style-type: none"> <li>a. Alignment of material with Basic Competencies</li> <li>b. Material accuracy</li> <li>c. Up-to-date material</li> <li>d. Language Accuracy</li> </ul>
The aspect of the appropriateness of use	<ul style="list-style-type: none"> <li>a. Procedures for implementation</li> <li>b. Serving support</li> <li>c. Implementation of learning</li> <li>d. suitability and orderliness of thought lines</li> </ul>
Contextual assessment aspects	<ul style="list-style-type: none"> <li>a. Contextual learning</li> <li>b. Contextual Components</li> </ul>

**Table 3.** Educational Expert Test Instruments

	<b>Aspect</b>	<b>Indicator</b>
Content Quality and Media Purpose	Learning objectives	a. clarity of learning objectives
	Student activities	a. Suitability of material selection b. The similarity of the Thematic Magnetic Board (PAMANTIK) media content with basic competencies and indicators c. Conformity of the concept with student learning activities Kesesuaian media Papan Magnet Tematik (PAMANTIK) dengan manfaat penggunaan media
Media Quality	Presentation	b. Conformity with the intellectual development of students c. Improve the skills of students d. Accuracy of language use and accuracy of sentence selection
	Display	a. a. Selection of color on the media b. b. Selection and readability of letters c. c. The quality of student interaction with the media d. d. Media quality

Questionnaires were also given to students at the end of the lesson after using the Thematic Magnetic Board (PAMANTIK) learning media. This instrument is used as a student response in a questionnaire with a closing statement with only true and false. From the questionnaire instrument, students only answer one of the two available answers. The student response questionnaire grid can be seen in Table 4.

**Table 4.** Student Response Questionnaire

<b>Aspect</b>	<b>Indicator</b>	<b>Item</b>
Media	Interesting image shape	2
	Attractive colors	2
	Use of media	1
Materi	Font selection	1
	The material is easy to understand	2
Language	Shows an interest in thematic learning	2
	Language is easy to understand	1
	The sentences used are simple	1

The next step is to analyze the data. The data analysis technique was carried out by analyzing the data's feasibility by expert test assessments and the students' response assessments. The instrument assessment sheet used to test the validation by the expert team uses a Likert scale, which is a questionnaire used as a survey of other people's opinions about a matter, both in the form of attitudes, social phenomena and regarding physical forms such as media (Sugiyono, 2015).

### 3. Result and Discussion

Thematic Magnetic Board (PAMANTIK) media were carried out based on the R&D modifications Sugiyono (2015), which consists of several stages including; potentials and problems, data collection, design of instructional media products, validation of instructional media designs, revision of instructional media designs, and product trials. This research was conducted at SDN Simpang Tiga with the following stages.

The first stage was potential problems. Potential problems begin with a problem analysis divided into three analyses: curriculum analysis, needs analysis, and material analysis. Curriculum analysis was carried out to determine the curriculum used, the 2013 curriculum. The needs analysis shows that the thematic learning carried out by teachers at SDN Simpang Tiga only uses thematic books for teachers' handbooks, student thematic books, and simple learning media such as pictures which are only intended for one content. The learning media cannot involve students directly in thematic learning activities and have not been integrated according to the 2013 curriculum. As the findings in development research by Sofyan, Rustono, & Hamdu (2016) stated, learning media is still very rarely done, especially in thematic learning. The available media is still partial and intended for one particular subject. A more varied and innovative Thematic Magnetic Board (PAMANTIK) learning media is needed and integrated in the 2013 curriculum to provide meaningful learning for students to fit thematic learning characteristics. The material analysis is carried out so that the material in the Thematic Magnetic Board (PAMANTIK) media is following the basic competencies contained in theme 5 about Weather, sub-theme 1 Weather Conditions which contain material on the content of Indonesian subjects, weather information, PPKn subjects are united in diversity and Mathematics about fractions in third grade.

The second stage was data collection. This data collection seeks to find out what kind of media can be a solution to the problems that have been found in the first stage, which needs analysis. The data and information are then processed according to the needs analysis that has been obtained, making thematic learning media in the form of Thematic Magnetic Board (PAMANTIK). To make this media, a collection of materials is needed related to the theme being studied, theme 5 about the weather. In making Thematic Magnetic Board (PAMANTIK) media, initial ideas, concepts, tools, and materials are needed as support and references in developing Thematic Magnetic Board (PAMANTIK) media. Then, all these components will be made into a storyboard, making it easier for researchers to design the product to be made. This study intends to develop learning media in thematic learning in a Thematic Magnetic Board (PAMANTIK). Thematic Magnetic Board Media (PAMANTIK) is included in visual-based learning media. This media's development also intends to make it easier for teachers to deliver thematic learning material because it is easy to use and can be used in the long term.

The third stage was product design. The product developed in this study was a Thematic Magnetic Board (PAMANTIK) learning media intended for thematic learning in third-grade Elementary School theme 5 about the weather, sub-theme 1, weather conditions. At the data collection stage, the results were obtained using materials for making the Thematic Magnet Board (PAMANTIK) learning media. Furthermore, making learning media Thematic Magnetic Board (PAMANTIK) will be explained as follows. a) The steps are taken to make this Thematic Magnetic Board (PAMANTIK) learning media are making an outline design or can be called a storyboard. This storyboard aims to describe the initial design to make it easier for researchers to compile parts of the Thematic Magnetic Board (PAMANTIK) learning media. b) The theme raised in making the Thematic Magnetic Board (PAMANTIK) learning media raises the basic theme of the learning theme itself, the theme of weather, which is identical to the sky's state outdoor conditions scenery. The theme's determination aims to make the Thematic Magnetic Board (PAMANTIK) learning media consistency. c) At the manufacturing stage, the researcher collected the materials used to make the Thematic Magnetic Board (PAMANTIK) learning media. At this stage of product development, it is adjusted according to the previously designed product. The tools and materials must be prepared, ; Plywood boards, wood glue, zinc sheets, sheet magnets, HPL sheets, stickers and scissors, Dutch teak wood, hammer, and nails, saws, paint, and brushes. The learning media is the same as the three-dimensional instructional media, whose appearance can be observed only and has dimensions of length, width, height, and thickness.

The fourth stage was product validation. A team of media validation experts carried out these validation test results, material experts and education experts, totaling five lecturers who are experts in their fields and one teacher. The purpose of validation by a team of experts is to determine PAMANTIK media development's feasibility. In addition, a limited trial was carried out on third-grade elementary school students. The final results of the PAMANTIK media validation test can be seen in Table 5.

**Table 5.** Media Expert Validation Assessment

Validator	Score	Percentage (%)	Explanation
I	77	77%	Feasible
II	95	95%	Very feasible

The Thematic Magnetic Board learning media's validation obtained a score of 77 and 95 from a maximum score of 100 with a percentage of 77% and 95%, which averaged to 86%. The score is not maximum from the first media expert by 23% because it has not obtained the maximum score due to the lack of effectiveness of the learning media, the size of the media, and the use of learning media. Whereas by media experts, the second learning media score was not a maximum of 5% because it was not following students' characteristics in the aspect of use. This data shows that the Thematic Magnetic Board (PAMANTIK) learning media is included in the interpretation criteria "very feasible" to be tested with revisions according to media experts' advice. The media expert validation assessment can be seen in Table 6.

**Table 6.** Material Expert Validation Assessment

Validator	Score	Percentage (%)	Explanation
I	89	89%	Very feasible
II	92	92%	Very feasible

The material expert validation results were 89 and 92 from a maximum score is 100, with a percentage of 89% and 92%, which averaged 90.5%. The non-maximum score obtained for the first material expert was 11% due to the less communicative content of the material and the less than optimal use of learning media. The score is not a maximum of 8% for the second material expert. It does not encourage students' curiosity and the presentation of material that is less attractive in using learning media. These data show that the entire learning media is included in the interpretation criteria "very feasible" to be tested without revision but still improves the learning process's effectiveness. The evaluation of the validation of educational experts can be seen in Table 7.

**Table 7.** Education Expert Validation Assessment

Validator	Score	Percentage (%)	Explanation
I	92	92%	Very feasible
II	91	91%	Very feasible

The education experts' validation obtained a score of 92 and 91 out of a maximum score of 100 with an average of 91.5%. The score is not maximum from the first media expert by 8% because the learning media content does not involve all the basic competencies and indicators listed in the lesson plan. Whereas by education experts, the second score is not a maximum of 9% because, in the use of the Thematic Magnetic Board media, it is used in groups that will be better if used in pairs by students to be involved in the use of learning media. Based on the assessment data, the Thematic Magnetic Board learning media, including the very feasible criteria, can be tested with revisions according to educational experts' suggestions.

Assessment of the Thematic Magnetic Board learning media's feasibility from all experts got the final percentage of 89.3% of the maximum percentage of 100% with the category of "very feasible" interpretation. Based on the results of the feasibility assessment of the Thematic Magnetic Board (PAMANTIK) learning media that has been obtained, of course, it can affect the effectiveness of the learning media on the thematic learning process.

The fifth stage was product revision. At this stage, the Thematic Magnetic Board (PAMANTIK) learning media that have been validated are then revised according to suggestions and input from experts during the validation process. After getting comments and suggestions from each expert at the validation test stage, a follow-up was carried out on this Thematic Magnetic Board (PAMANTIK) learning media. Judging from the validation of media experts, it can be seen that the Thematic Magnetic Board (PAMANTIK) learning media falls into the "very feasible" category to be used. It needs some improvements that must be made. Based on media experts' validation results that have been done, some comments and suggestions can be seen in Table 8.

**Table 8.** Revised Media Experts

Validator	Comments and Suggestions
Aan Subhan Pamungkas, M.Pd Dr. Aditya Rakhmawan, S.Si., M.Pd	- In the discourse or information on the weather, it should be broken down into non-sentence phrases

The following shows a sample of the revised results by a media expert. It can be seen in Figure 1.



**Figure 1.** Sample Revision Results of Media Experts

From the material expert's validation, it can be seen that the Thematic Magnetic Board (PAMANTIK) learning media falls into the "very feasible" category to be used. It needs some improvements that must be made. Based on the validation results by material experts that have been done, the comments and suggestions given are only used to use learning media previously carried out in groups and then carried out in pairs. Meanwhile, seen from the validation of education experts, it can be seen that the Thematic Magnetic Board (PAMANTIK) learning media falls into the "very feasible" category to be used. It needs some improvements that must be made. Based on education experts' validation results that have been carried out, some comments and suggestions can be seen in table 9.

**Table 9.** Expert Education Revision

Validator	Comments and Suggestions
	Attach the LKPD for the learning process and provide a specific media title In the drink drawing part, the fraction material should use a teapot shape

In the following, a sample of revised education experts is presented. It can be seen in Figure 2.



Figure 2. Education Expert Revised Sample

The sixth stage was product testing. Product testing was carried out as a form of student response to the Thematic Magnetic Board (PAMANTIK) media. It was carried out using a limited trial by 15 third-grade students on Monday, August 10 2020 and Tuesday August 11, 2020. The following is a table of data on student response results. Can be seen in Table 10.

Table 10. Student Response Results

Aspek Penilaian			NP (%) Total
Media	Materi	Bahasa	
95,5%	96,6%	86,6%	92,9%
Kategori Kualitas Respon Siswa			Sangat Baik

The data analysis results of students' responses to the Thematic Magnetic Board (PAMANTIK) learning media in Thematic learning showed that the media aspect was 95.5%. The material aspect was 96.6%, and the language aspect was 86.6%. Then, the final score percentage was an average of 92.9%, which is included in the "Very Good" criteria. The development of Thematic Magnetic Board (PAMANTIK) media is very suitable for thematic learning. PAMANTIK learning media can attract students' attention so that it can increase student interest and motivation. Several factors cause this.

First, the Thematic Magnetic Board (PAMANTIK) learning media developed can make it easier for students to learn. It is because this learning media provides material that can make students understand the learning material. Learning media is an intermediary for educators in providing learning material to students (Arianti, Wiarta, & Darsana, 2019; Prabaningrum & Putra, 2019). This media is used as an intermediary or liaison to transmit messages from the sender to the recipient through the senses so that it can stimulate the thoughts, feelings, and interests and attention of students used in teaching and learning activities with predetermined learning objectives (Hartini, Misbah, Dewantara, Oktovian, & Aisyah, 2017; Rahmayani, Siswanto, & Arief Budiman, 2019). Learning Media helps the teaching and learning process and clarifies its meaning to achieve learning goals better and perfectly (Devi & Maisaroh, 2017; Qondias et al., 2016). Learning media can also be said to be part of learning resources that contain instructional material in students' learning environment to stimulate students to learn. In this case, it can be seen that the role and use of media in learning activities carried out by educators and students are very important as a support for the course of learning (Siddiq, Sudarma, & Simamora, 2020; Wulandari, Sudatha, & Simamora, 2020).

Second, the Thematic Magnetic Board (PAMANTIK) learning media developed can attract students' interest in learning. Media Thematic Magnetic Board This media is made from wood and is magnetic to be used for a long time because it is made from strong and not easily damaged wood. According to students' characteristics, this learning media is packaged in an attractive appearance and integrated with the 2013 curriculum. An attractive appearance is using colors in learning media and images designed to be attractive and pay attention to image forms, fonts, and sizes in learning media. The media developed from the board is designed attractively and uses appropriate color selection and images to increase student interest in learning (Herayanti, Habibi, & Fuaddunazmi, 2017; Rosidah, 2016; Siddiq et al., 2020). This media can also provide direct experience to students to make learning easier (Kurnia, Damayani, & Kiswoyo, 2019; Lestari, Putra, & Negara, 2018).

Third, the Thematic Magnetic Board (PAMANTIK) learning media developed is adjusted to thematic learning characteristics. Student-centered learning provides direct experience to students. The

separation of subject content is not very clear, presents concepts from various subject content, is flexible, and uses the principle of learning while playing (Puspitasari, 2018; Sirait & Apriyani, 2020). Tafqihan (2011) also stated that the media developed interesting and following students' characteristics could help understand the subject matter. It can be concluded that the learning media developed according to students' characteristics can attract students' attention in learning so that it affects increased student learning outcomes. PAMANTIK media development has implications for increasing student motivation in thematic learning by using integrated learning media in thematic learning.

#### 4. Conclusion

The development of Thematic Magnetic Board (PAMANTIK) media is very suitable for thematic learning. PAMANTIK learning media can attract students' attention so that it can increase student interest and motivation.

#### References

- Agustina, F. (2017). *Pengembangan Media Papan Kantong Pintar Doraemon Pada Pembelajaran Tematik*. Universitas Muhammadiyah Malang.
- Arianti, N. M., Wiarta, I. W., & Darsana, I. W. (2019). Pengaruh Model Pembelajaran Problem Posing Berbantuan Media Semi Konkret terhadap Kompetensi Pengetahuan Matematika. *Jurnal Ilmiah Sekolah Dasar*, 3(4). <https://doi.org/10.23887/jisd.v3i4.21765>
- Asrohah, H. (2014). *Pembelajaran Tematik*. Jakarta: Rajawali Press.
- Darmawan. (2010). Penggunaan Pembelajaran Berbasis Masalah Dalam Meningkatkan Kemampuan Berpikir Kritis Siswa Pada Pembelajaran IPS Di MI Darrusaadah Pandeglang. *Jurnal Penelitian Pendidikan*, 1(1). Retrieved from <http://jurnal.upi.edu/md/view/195/penggunaan-pembelajaran-berbasis-masalah-dalam-meningkatkan-kemampuan-berpikir-kritis-siswa-pada-pembelajaran-ips-di-mi-darrusaadah-pandeglang.html>
- Devi, & Maisaroh, S. (2017). Pengembangan Media Pembelajaran Buku Pop-Up Wayang Tokoh Pandhawa Pada Mata Pelajaran Bahasa Jawa Kelas V SD. *Jurnal PGSD Indonesia*, 3(2), 1–16. Retrieved from <http://ojs.upy.ac.id/ojs/index.php/jpi/article/view/985>
- Diyantari, I. A. K. D., Wiyasa, N., & Manuaba, S. (2020). Model Snowball Throwing Berbantuan Media Pop Up Book Berpengaruh Terhadap Kompetensi Pengetahuan Ipa. *Jurnal Ilmiah Pendidikan Profesi Guru*, 3(1), 9–21. <https://doi.org/http://dx.doi.org/10.23887/jippg.v3i1.26973>
- Fadhilah, U. (2017). *Pengembangan Media Papan Point Magnet Pada Subtema Kegiatan Siang Hari*. Universitas Muhammadiyah Malang.
- Fitri, Saparahayuningsih, & Agustriana. (2017). Perencanaan Pembelajaran Kurikulum 2013 Pendidikan Anak Usia Dini. *Jurnal Ilmiah Potensia*, 2(1). <https://doi.org/https://doi.org/10.33369/jip.2.1.1-13>
- Hartini, S., Misbah, Dewantara, D., Oktovian, R. A., & Aisyah, N. (2017). Developing learning media using online prezi into materials about optical equipments. *Jurnal Pendidikan IPA Indonesia*, 6(2), 313–317. <https://doi.org/10.15294/jpii.v6i2.10102>
- Herayanti, L., Habibi, H., & Fuaddunazmi, M. (2017). Pengembangan Media Pembelajaran Berbasis Moodle pada Matakuliah Fisika Dasar. *Jurnal Cakrawala Pendidikan*, 36(2), 210–219. <https://doi.org/10.21831/cp.v36i2.13077>
- Karisma, I. K. E., Margunayasa, I. G., & Prasasti, P. A. T. (2020). Pengembangan Media Pop-Up Book pada Topik Perkembangbiakan Tumbuhan dan Hewan Kelas VI Sekolah Dasar. *Jurnal Ilmiah Sekolah Dasar*, 4(2), 121. <https://doi.org/10.23887/jisd.v4i2.24458>
- Krissandi, & Rusmawan. (2015). KENDALA GURU SEKOLAH DASAR DALAM IMPLEMENTASI KURIKULUM 2013. *Jurnal Pendidikan Indonesia*, 34(3), 457–467. Retrieved from <https://journal.uny.ac.id/index.php/cp/article/view/7409/pdf>
- Kurnia, V. T., Damayani, A. T., & Kiswoyo, K. (2019). Keefektifan Model Pembelajaran Number Head Together (NHT) Berbantu Media Puzzle Terhadap Hasil Belajar Matematika. *Jurnal Ilmiah Sekolah Dasar*, 3(2), 192. <https://doi.org/10.23887/jisd.v3i2.17772>

- Lestari, K. P., Putra, D. K. N. S., & Negara, I. G. A. O. (2018). Pengaruh Model Discovery Learning Berbantuan Media Audio Visual dalam Setting Lesson Study Terhadap Hasil Belajar IPA Mahasiswa PGSD Undiksha UPP Denpasar Tahun 2017. *Jurnal Ilmiah Sekolah Dasar*, 2(1), 40–45. <https://doi.org/http://dx.doi.org/10.23887/jisd.v2i1.13898>
- Majid, A. (2014). *Pembelajaran Tematik Terpadu*. Bandung: PT Remaja Rosdakarya.
- Prabaningrum, I. G. A. I., & Putra, I. K. A. (2019). Pengaruh Model Pembelajaran Kooperatif Team Assisted Individualization Berbantuan Media Semi Konkret Terhadap Kompetensi Pengetahuan Matematika. *Jurnal Ilmiah Sekolah Dasar*, 3(4), 414. <https://doi.org/10.23887/jisd.v3i4.21775>
- Puspitasari. (2018). Metode Pembelajaran Bermain Peran Pada Pembelajaran Bahasa Indonesia. *Jurnal Cakrawala Pendas*, 1(1), 55–64. <https://doi.org/http://dx.doi.org/10.31949/jcp.v1i1.347>
- Qondias, Anu, & Niftalia. (2016). Pengembangan Media Pembelajaran Tematik Berbasis Mind Mapping SD Kabupaten Ngada Flores. *Jurnal Pendidikan Indonesia*, 5(2), 176--182. Retrieved from <https://ejournal.undiksha.ac.id/index.php/JPI/about>
- Rachma. (2018). *Pengembangan Media Papan Misi Pintar Tema Peduli Terhadap Makhluh Hidup*. Universitas Muhammadiyah Malang.
- Rahmayani, A., Siswanto, J., & Arief Budiman, M. (2019). Pengaruh Model Pembelajaran Discovery Learning dengan Menggunakan Mediavideo Terhadap Hasil Belajar. *Jurnal Ilmiah Sekolah Dasar*. <https://doi.org/10.23887/jisd.v3i2.18055>
- Rahmi, M. S. M., Budiman, M. A., & Widyaningrum, A. (2019). Pengembangan Media Pembelajaran Interaktif Macromedia Flash 8 Pada Pembelajaran Tematik Tema Pengalamanku. *International Journal Of Elementary Education*, 3(2), 178–185. <https://doi.org/10.23887/ijee.v3i2.18524>
- Rosidah, A. (2016). Penerapan Media Pembelajaran Visual Untuk Meningkatkan Pemahaman Konsep Siswa Pada Mata Pelajaran Ips. *Jurnal Cakrawala Pendas*, 2(2). <https://doi.org/10.31949/jcp.v2i2.499>
- Siddiq, Sudarma, & Simamora. (2020). Pengembangan Animasi Dua Dimensi Pada Pembelajaran Tematik Untuk Siswa Kelas III Sekolah Dasar. *Jurnal Edutech Undiksha*, 8(2), 49–63. Retrieved from <https://ejournal.undiksha.ac.id/index.php/JEU/article/view/28928>
- Sirait, & Apriyani. (2020). Pengaruh Penggunaan Strategi Pembelajaran Aktif ICM (Index Card Match) Terhadap Hasil Belajar Matematika. *Jurnal Pendidikan Matematika Indonesia*, 5(1), 46–48. <https://doi.org/https://dx.doi.org/10.26737/jpmi.v5i1.1710>
- Sofyan, Rustono, & Hamdu. (2016). Pengembangan Media Pembelajaran Tematik Berbasis Multimedia Interaktif Pada Subtema Ayo Cintai Lingkungan. *PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 3(2). Retrieved from <https://ejournal.upi.edu/index.php/pedadidaktika/article/view/5157>
- Sugiyono. (2015). *Metode Penelitian & Pengembangan Research and Development*. Bandung: Alfabeta.
- Tafqihan, Z. (2011). Karakteristik Dan Pemilihan Media Pembelajaran Dalam E-Learning. *Cendekia: Jurnal Kependidikan Dan Kemasyarakatan*, 9(2), 141–154. <https://doi.org/https://doi.org/10.21154/cendekia.v9i2.871>
- Wulandari, Sudatha, & Simamora. (2020). Pengembangan Pembelajaran Blended Pada Mata Kuliah Ahara Yoga Semester II di IHDN Denpasar. *Jurnal Edutech Undiksha*, 8(1), 1–15. <https://doi.org/http://dx.doi.org/10.23887/jeu.v8i1.26459>