

Development of Interactive Media with Using PBL to Improve Student Learning Outcomes in Grade 4th Social Science Subject

DOI: <https://doi.org/10.47175/rielsj.v4i4.865>

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ABSTRACT

This research would show (1) the development of interactive learning media based on problem-based learning in social studies subjects for class IV SD 112300 Kongsixth which has been developed suitable for use for learning, to develop interactive media based on problem-based learning in social sciences lessons in class IV SD Negeri 112300 Kongsienam which was developed effectively to improve the learning result. The model in this development refers to the 4-D (four-D) research and development model which consists of 4 stages namely Defining, Designing, Developing, and Disseminating. The subjects were material expert validators, media experts, language experts and twenty-five students. The data collection techniques used in the research were (1) Validation Sheet, (2) Student Learning Results Test. It used Problem Based Learning as a whole is stated to be adequate. This is proven by the validation results by material experts of 4.35 categorized as valid, media experts with 4.15 categorized as valid and language experts with 4.2 categorized as valid. The average effectiveness of interactive learning media with using PBL is 77.04% and the average effectiveness of learning using print media is 70.64%. The value of the effectiveness of interactive learning media based on problem-based learning is very suitable for use in learning and is effective in improving student learning outcomes.

KEYWORDS

Interactive media development; problem-based learning; learning outcomes

INTRODUCTION

Social sciences are learning that has been taught since primary school contains about event, history, facts, concepts and generalizations related to life. According to Putri et al (2022) Social studies is that focuses on character building students.

Sumaatmadja (1984) social ponders learning is learning fabric that gets it how people utilize exertion to fulfill their fabric needs, fulfill their social needs, their mental needs, utilize the assets accessible on the surface of the soil, control their welfare and government, and so on. And so, on that direct and keep up the life of human society.

Social studies learning is the science that studies human behavior and studies humans as members of society. There are various aspects of behavior in society, such as economic, attitudinal, mental, cultural and social relations aspects, as well as relating to how humans use efforts to meet their needs.

It has a very important role in students' understanding of knowledge and social action in society. According to Rachmah (2014) social studies learning must be introduced from



primary to secondary education levels because social studies learning material includes four dimensions, namely the knowledge, the skills, the values and attitudes and action.

It must be introduced to students at the Primary School to high school levels because it has various functions for students in understanding the social conditions of society, cultural diversity and community norms, communicating and working with others. promote knowledge, values and attitudes in society.

Social studies that discuss the state of Indonesia is found in Beautiful Diversity of My Country material. The material about "*Keanekaragaman Indah Negaraku*" is found in fourth grade (IV) Primary School on the seventh theme. This theme has three sub-themes, one of them is "*keindahan dan keberagaman budaya negeri ku*" which introduces students to the diversity of tribes and cultures that exist in Indonesia, starting from suctom57, traditional houses, and musical instruments so that this sub-theme becomes one of the most important lessons in the effort to introduce students to the culture and tribes in Indonesia, especially the Toba Batak culture, as invaluable wealth.

Learning media may be an exceptionally imperative component in conveying fabric to understudies. Its media to assist accomplish great learning results, but the strategy utilized by instructors in this subject isn't fitting with the utilize of media that's not in understanding with the fabric The Excellence of the Differences of My Nation, which needs appearing parcels of pictures and movements around the differing qualities of Batak tribes and culture. Toba, beginning from conventional clothing and conventional houses. The comes about of interviews gotten from 40 understudies taken as tests, 100% of understudies expressed that they required learning media that was curiously which included them specifically in subject. Understudies feel bored with the current pattern, and are indeed uninterested to social considers lessons, particularly the fabric almost the Excellence of the Differences of My Nation, so it isn't astounding that numerous understudies don't pay consideration to the teacher's explanations. The moo level of understudy the inspiration in social thinks causes moo students' social ponders learning results.

The issue found by analysts at SD 112300 Kongsu Enam within the social considers subject Presentation to the Magnificence of the Differences of My Nation is that the moo understudy learning results can be seen within the students' last semester exams from the 2020/2021 scholarly year. The comes about of the social ponders exam for lesson IV-A out of 25 understudies, as it was 14 understudies had a score of >75 and 11 understudies had a score of <75, meaning that as it were 14 understudies had come to the completeness standard and 11 understudies had not however come to the completeness standard. In the meantime, for understudies in course IV-B, out of 25 understudies, as it was 13 understudies had a score <75 and 12 understudies had a score <75, meaning that as it was 13 understudies had accomplished completeness and 12 understudies had not however come to the completeness standard. In general, analysts see that the learning results of social thinks about understudies are still moo.

This can be since teachers only utilize customary learning media which isn't in understanding with the excellent learning characteristics of social differences which anticipates understudies to be able to recognize and show the societies in Indonesia, especially the Batak Toba culture. Within the learning prepare, there's a need of utilize of media devices, so teachers tend to be dynamic and understudies are inactive. The reason for intuitively learning is that there's amazing interaction amid the educating and learning prepare.

The result about of interviews from two instructors at SD 112300 Kongsu Enam school appear that 100% of homeroom instructors require learning media to form the learning process fuller of feeling. In line with this, Sumiati (2008) said it is a fundamentally portion

of framework which can be utilized to communicate messages, invigorate students' contemplations, sentiments, consideration and capacities.

The interactive principle means that teaching is not just the delivery of material knowledge from the teacher to students, but the process of organizing its process which can stimulate students to learn, the interaction between teachers and students from the interaction process will develop intellectual knowledge in students.

According to Arsyad (2011) interactive learning media is something that creates an imaginative experience in learning in the classroom. This is also in line with the opinion of Anitah (2012) Presenting material via audiovisual to students provides a more controlled positive impact on learning acceptance where students not only hear but can listen through the motion pictures presented by the teacher. This provides a very good alternative in supporting learning, it can attract students' attention to respond to the objects they see so that what the teacher conveys will be better, push over students' motivation in learning.

Several studies conducted on the application of learning media include: by Septiananda, et al (2022) concluding that interactive learning media is very effective as it is proven that explain the learning material that has been captured in the material that has been presented in it. Wibowo, et al (2022) stated that it is very practical because there are two indicators that are achieved, namely very active student responses and improving the learning result because it involves learning and increases persistence in ongoing learning. Setiawan (2018) also said that it made students are more active when it takes place in the classroom in 3D which can improve student in class IV.

In accordance with the 2013 curriculum, teachers are required to be professional 1) designing effective learning, 2) organizing, 3) choosing an approach and establishing criteria for learning success. For the learning process in the classroom, the teacher designs a student-centered learning model in learning. That is centered on students solving and resolving problems is PBL

Ariyani & Kristin (2021) also disclosed it is a learning model that begins with problems found in an environment to collect and integrate new knowledge that will be developed by students. In line with this, according to Fauzia (2018), it is a learning model that focuses on students learning as well as on authentic or relevant problems that will be solved with all the knowledge they have or based on sources.

From the statement above PBL is a model that will solve students' problems authentically (real) in accordance with the subject, so that each student can explain the material they have seen from interactive learning media. The basis for strengthening this research is the results of Nurhayati (2020) research that thematic learning with PBL model can improve students' ability to transfer knowledge, critical thinking and good problem solving. The use of PBL model has increased student learning outcomes in social studies learning about social issues and students become active in discussions and provoke students to express their opinions (Lusnanto, 2018).

It is hoped that the results of the above research will enable the learning process in the classroom using it to increase students' understanding of the beauty of my country's cultural diversity. Because with it students are required to be able to solve problems, and be able to explain again the material they have studied by summarizing the beauty of the cultural diversity of my country. By using it, students are expected to build their own knowledge. In this case the teacher becomes a facilitator in the learning process in the classroom.

RESEARCH METHODS

This type of research is research and development. R&D is a type of research that produces a product (2011). In research and development methods, there are several types of models.

The model used is the development of a 4-D model. 4- D development model (Four D). The modified model of the development model consists of 4 stages, namely: Define, Design, Develop and Disseminate according to Trianto (2014).

The product results developed from this research and development are it used Problem Based Learning in social studies learning which is limited to the beautiful material of Toba Batak cultural diversity to improve student learning outcomes.

RESULTS AND DISCUSSION

Analysis Stage

The observations carried out at SD Negeri 112300 Kongsu Enam, the research found in the process of learning activities, students became the recipients of information from the teacher's oral presentation in the field. It was seen that the teacher used conventional learning media, namely learning activities that were also watching and boring. In most teaching and learning activities for social studies learning, the lecture method is often used, the use of ordinary media and accompanied by writing material on the blackboard.

The methods currently used by teachers have many advantages, especially the efficiency of learning time, however, students often experience a tendency to become bored and bored, resulting in a learning process that is not affective and the class becomes not conducive. Apart from that, the learning methods used by teachers only create short-term memories for students. the need for hard learning when students are faced with tests on certain material, this was seen when researchers observed the learning process taking place, with students faced with reading books and blackboards as teacher writing tools for students to read and write, the teacher also occasionally explained the material verbally. This has a negative impact on students' level of understanding, because students only rely on explanations given by the teacher using verbal explanations, especially considering social studies learning which is a very important subject in social recognition of society. Because the social studies learning taught has been organized for students using a rote learning method.

Then, in the practice of teaching activities, schools and teachers have prepared good teaching materials or media for learning. However, especially for social studies subjects, there is very little or minimal use of media to introduce the cultural diversity of the Toba Batak tribe, of course this situation makes the situation even more difficult for students to understand the material to be studied.

Learner Analysis

Researchers obtained results from observations at SD Negeri 112300 Kongsu Enam, in the implementation of the teaching and learning process teachers in delivering social studies subjects still experienced problems, so the learning process was still less varied because there were only teachers who were the source of student learning, because student learning tended to use books and media images related to the material.

It can be seen in terms of success in learning at SD Negeri 112300 Kongsu Enam, the problem is seen in student learning outcomes in the Social Sciences subject exam which are still low seen from the minimum criteria (KKM) in the 2020/2021 academic year, namely 77. The following is student learning success at this stage preliminary analysis.

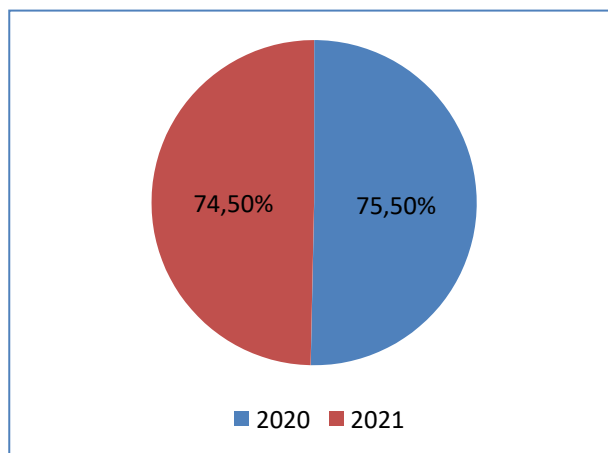


Figure 1. Percentage of Student Learning Results in Initial Analysis

The exam results for class IV social studies show that in 2020 students still got a score of 74 from the minimum completeness criteria (KKM) score of 77 and in 2021 they got a score of 74 from the minimum completeness criteria (KKM), namely 75. In general Researchers see that the learning outcomes in social studies learning are still low. This shows that it is clear that the learning process applied has not yet achieved the expected goals.

Task Analysis

The task analysis stage is by mapping the learning material from concept analysis. The results of the analysis are divided into several materials, so that the material displayed on interactive learning media is arranged into several parts. Each main material will be given several assignments so that students can master learning media in general and in depth. The questions are prepared based on learning objectives that have been prepared and implemented, so that the tests given to students can be measured accurately with the validity of the test consisting of: reliability and differentiation. The questions are also prepared for the purpose of evaluating the use of the media that has been listed, in the learning media, in the learning media there is a section of test questions which are in the form of multiple-choice questions totaling 10 and when you have finished answering you can evaluate yourself when you have answered the questions where you went wrong.

Table 1. Analysis of Learning Objectives

Core Competencies	Learning objectives
KI: Accepting, implementing and respecting religious teachings.	1. Have fair, restrained, capable, courteous, caring and sure behavior in connection with family, companions, instructors and neighbors.
K2: After the instructor clarifies how to utilize intelligently learning media based on issue-based learning, understudies are able to utilize learning applications.	2. After the instructor appears the learning media and tunes in to the intelligently media based on issue based learning containing fabric. The magnificence of the social differing qualities of the Toba Batak tribe, through bunch talks understudies were able to clarify the meaning of the Toba Batak conventional house accurately.
K3: Get it genuine information by watching, hearing, seeing, perusing and inquiring questions based on interest almost himself, God's animals and their exercises, and objects he experiences at domestic, school and play area.	3. After the teacher shows interactive media based on problem based learning which contains material about the beautiful cultural diversity of the Toba Batak tribe, students are able to explain the uniqueness of the Toba Batak traditional house correctly.



K4: Show real information in clear dialect, in tasteful work, in developments that reflect a sound child, and in activities that reflect the behavior of a child who has confidence and respectable character.

4. After the instructor shows interactive media based on problem based learning which contains material about the beautiful cultural diversity of the Toba Batak tribe, learner could correctly state the uniqueness of several Toba Batak traditional houses.
5. After the instructor shows the learning media and listens to interactive media based on problem based learning containing material about the beautiful cultural diversity of the Toba Batak tribe, through group discussions the students are able to explain the meaning of Toba Batak traditional clothing correctly.
6. After the teacher shows interactive media based on problem based learning which contains material about the beautiful cultural diversity of the Toba Batak tribe, students are able to explain the uniqueness of Toba Batak traditional clothing correctly.
7. After the teacher shows interactive media based on problem based learning which contains material about the beautiful cultural diversity of the Toba Batak tribe, students are able to name several traditional clothes Batak Toba correctly.

Student Success in Learning Through Pretest and Posttest, 26 Valid Questions Will Represent All the Indicators Designed

Design Stage

The plan arrange was carried out to plan an introductory draft. The reason was to plan an illustration (model) of intelligently learning media based on problem-based learning in social ponders with the topic of the lovely social differences of my nation, particularly the Toba Batak tribe. This plan action is carried out within the stages of planning tests, selecting media, selecting groups and introductory plans for the learning apparatuses that will be created. This plan is learning media that will be planned based on the fabric.

Test Preparation

The premise for planning the test is assignment investigation and concept investigation depicted within the details for the learning targets. The assessment questions that have been arranged are at that point looked for approval. Substantial questions will be used as assessment questions within the media. Of the 40 different choice tests tried in lesson IV of SD Negeri 112300 Kongsu Enam, as it were around 14 met the angles of legitimacy, unwavering quality, separation of trouble and as it was 26 questions would degree students' level of victory in learning through pre-test and post-test. Since 26 substantial questions will speak to all the pointers outlined.

Media Selection

Analysts decide the choice of program utilized to make intelligently learning media, counting Adobe Debut Master CS6, Corel Draw, Paint, Adobe Photoshop, Adobe CS6, the choice of program is since the devices board bolsters button creation and can combine content, pictures, sound into a learning medium. which has been tried for appropriateness.

Format Selection

The design of learning media made to be Flowchart and Storyboard researchers which has been designed as follows:

1. The main media display before entering will be greeted with a musical intro, there are sentences that show an introduction to “*Indahnya Keberagaman Negeri Ku*”. In the main media section there is UNIMED logo and it is in the login menu.



2. After logging in, the home screen will appear which is a display of interactive learning media based on Problem Based Learning. Inside there are material titles, menus; Learning, materials, maps, quizzes and puzzles.



3. The learning page contains: core competencies, basic competencies, and learning objectives.



4. The page that explains cultural diversity and information about the diversity of Toba Batak traditional houses and Toba Batak traditional clothing. The sub-material is created in accordance with the references that have been collected and is in accordance with the basic competencies of the subject.



5. The map page contains North Sumatra, where this map can be explored by clicking on the North Tapanuli section.



- a. On the test page, there's a task, to be specific a learning assessment by replying numerous choice questions where afterward when replying the questions a score will show up, usually planned to see capacities and survey the fabric. One address has 10 marks so in the event that you reply the address accurately you may get 100 marks.



- b. The puzzle menu is a way for children to play games by matching traditional clothes and traditional houses that have been designed which will be played later by students. This is designed to train students' motor skills.



- c. The next display is a cross menu. This menu functions to indicate whether or not interactive learning media has come out.



Development Stage

This Development Stage will be implemented in August 2023. In the Development Stage, the Interactive Learning Media Based on Problem Based Learning that has been designed will be developed by researchers based on assessments given by validators in the form of scores and input in the form of suggestions or comments to determine the level of feasibility of the beautiful learning media. Cultural diversity of the Toba Batak country.

Validation

Validation is the assessment stage of the learning media being developed. Validation of interactive media based on problem-based learning was carried out by three lecturers at Universitas Negeri Medan where one person was a material expert, one person was a media expert, and one person was a language expert including:

Material Expert Validation

The design of the layout of the learning media developed was tested based on the suitability of the material experts, which was assessed by a lecturer at Universitas Negeri Medan, Mrs. Dr. Syarifah, M.Pd, analysis is used to determine the suitability of the material in the media being developed.

Table 2. Stage I Material Expert Validation

Aspect	Stage	Percentage	Total Score	Average
Suitability Material	I	80%	40 (80%)	4

From table 2, it is found that the results of the score assessment of the 10 indicator aspects get a percentage value of 80% with the score assessment n getting 40 or as much as 80% of the total score if and getting an average result of 4.

Table 3. Stage II Material Expert Validation

Aspect	Stage	Percentage	Total Score	Average
Suitability Material	II	94%	47 (94%)	4,7

Table 3 regarding material expert validation shows that the results of the score assessment of 10 aspects of indicators have changed after carrying out the improvement stage, where the percentage value is 94% and the total score is 47 or 94%, so the average result of material validation is 4.7, so it can be concluded that the assessment in the table above shows a valid (feasible) category for testing on students but there are several errors and suggestions for improvement.

Media Expert Validation

The media appearance of the learning media developed was tested based on the suitability of the material experts, which was assessed by a lecturer at Universitas Negeri Medan, Mrs. Prof. Dr. Samsidar Tanjung, M.Pd, analysis is used to find out the appropriateness of learning media is assessed based on 21 indicators.

Table 4. Stage I Learning Media Expert Validation

Aspect	Stage	Percentage	Total Score	Average
Suitability Material	I	76%	80 (76%)	3,8

Based on the results of stage I validation, 21 indicator learning media experts got a percentage result of 76% with a total score of 80 and 76% with an overall average score of 3.8.

Table 5. Stage II Media Expert Validation

Aspect	Stage	Percentage	Total Score	Average
Suitability Material	II	91%	96 (91%)	4,5

Based on the results of the stage II media expert validation assessment, the assessment obtained a percentage result of 91% with a total score of 96 or 91% with an overall average score of 4.5. This shows the assessment of the feasibility of interactive learning media in the valid (feasible) category to be tested on students with suggestions and criticism for improvements.

Language Validation

The validity test is further strengthened by a language assessment, which provides an assessment of appropriate language use and use based on the student's language level, an assessment from a linguist assessed by Mr. Dr. Wisman Hadi, S.Pd., M.Hum. The following table 6 summarizes the assessment results from stage I language experts.

Table 6. Stage I Language Validation Assessment

Aspect	Stage	Percentage	Total Score	Average
Language Accuracy	I	76%	46 (76%)	3,5

Based on the assessment in the table above regarding the validation results from language experts with a total of 12 indicators in stage I, it shows a percentage result of 76% with a total score of 46 or 76%. This shows that the overall average value is 3.8.

Table 7. Stage II Language Validation Assessment

Aspect	Stage	Percentage	Total Score	Average
Language Accuracy	II	93%	56 (93%)	4,6

Based on the linguist's validation assessment, it shows a percentage result of 93% and a total score of 56. This results in an overall average score of 4.6. From this, it can be concluded that the assessment from language experts is categorized as valid (feasible) to be tested on students.

Overall validation results from the assessment of the interactive learning media developed, each assessment from the validator can be seen in table 8 as follows:

Table 8. Validator Summary Results

No	Validasi	Stage I		Stage II		Average	P%	Criteria
		RTP	P%	RTP	P%			
1	Expert Material	4	80%	4,7	94%	4,35	87%	Very Good
2	Expert Media	3,8	76%	4,5	91%	4,15	83,5%	Very Good
3	Expert Linguistic	3,8	76%	4,6	93%	4,2	84,5%	Very Good

Analysis of the Effectiveness of Learning Media

After the expert validation and feasibility stages of the learning media have been carried out, the next stage is testing the effectiveness through pretests for student learning outcomes. aims to see students' abilities in working on test questions.

Pretest Learning Comes about for Control Lesson and Test Lesson Understudies The field trial organize will get information comes about that will be analyzed to decide the viability esteem of intuitively learning media based on Issue Based Learning in social thinking about subjects which was created based on the comes about the pretest and posttest carried out.

Table 9. Recapitulation of Student Learning Results During Control Class Pretest

No.	Value Interval	IV-A Class	%	Discussion
1	55	1	4%	Not Completed
2	58	4	16%	Not Completed
3	61	1	4%	Not Completed
4	62	3	12%	Not Completed
5	65	2	8%	Not Completed
6	66	1	4%	Not Completed
7	69	4	16%	Not Completed
8	70	2	8%	Not Completed
9	73	2	8%	Not Completed
10	76	1	4%	Not Completed
11	77	1	4%	Not Completed
12	80	1	4%	Complete
13	84	2	8%	Complete
Total		25	100%	

Table 10. Recapitulation of Student Learning Results During the Control Class Pretest

No.	Value Interval	IV-A Class	%	Discussion
1	55	1	4%	Not Completed
2	58	4	16%	Not Completed
3	61	1	4%	Not Completed
4	62	3	12%	Not Completed
5	65	2	8%	Not Completed
6	66	1	4%	Not Completed
7	69	4	16%	Belum Tuntas
8	70	2	8%	Belum Tuntas
9	73	2	8%	Belum Tuntas
10	76	1	4%	Belum Tuntas
11	77	1	4%	Belum Tuntas
Total		25	100%	

Based on the data table above, it shows that the pretest results from class (IV-A) obtained a completeness result of 16% or as many as 21 students, next is the calculation of the pretest results for the control class (IV-B) which obtained a complete pretest result of 7 or as many as 28% of students. and incomplete completion was 72% or as many as 18 students.

Post test Student Learning Results for Control Class and Experiment Class

The following arrangement is conducting a posttest, educating and learning exercises are completed. At this arrangement, we see the degree of students' capacities after the learning fabric has been conveyed. Conveyance of the fabric was carried out for the exploratory course (IV-A) which got the educating and learning handle using the strategy of intelligently using learning media based on issue based learning, and for conveying the fabric using the issue based learning learning demonstration.

Table 11. Student Learning Results During the Experimental Class Post Test

No	Value Interval	IV-A Class	%	Discussion
1	88	2	4	Complete
2	84	7	16	Complete
3	80	4	4	Complete
4	78	4	12	Complete
5	77	1	8	Complete
6	68	2	4	Not Completed
7	67	1	16	Not Completed
8	65	2	8	Not Completed
9	60	2	8	Not Completed
Total		25	100%	

Table 12. Student Learning Results During the Control Class Post Test

No	Value Interval	IV-A Class	%	Discussion
1	88	2	4	Complete
2	80	7	16	Complete
3	78	4	4	Complete
4	77	4	12	Complete
5	76	1	8	Complete

6	75	2	4	Not Completed
7	65	1	16	Not Completed
8	60	2	8	Not Completed
Total		25	100%	

Obtained from the results of the experimental class (IV-A) which used a learning process using interactive learning media based on problem-based learning, there were 7 students or around 28% of students who did not complete, and there were 18 students or around 72% of students who were categorized as complete.

Calculating the post test results for the control class, the learning process uses print media with conventional learning methods, there are 15 students or around 60% of students who have not completed social studies learning and there are 10 students or around 40% categorized as complete. This posttest stage is a learning process that has shown improvement.

CONCLUSION

Problem based learning obtained an average rating of 4.35 for material experts, 4.15 for media experts, 4.2 for language experts. From the overall assessment results of the media being developed it is included in the "very feasible" category. The interactive learning media used is effective in improving social studies learning outcomes for class IV-A students as an experimental class. This can be seen from the result using interactive learning media which are higher than them, namely 6.4% in class IV-B as the control class using print media.

Suggestion

Based on the findings described in the conclusion. As for suggestions by researchers as follows:

1. The school principal, assists and supports in learning tools, especially in the use of learning media using computers as a means of interactive learning.
2. Teachers are expected to master learning media and develop creativity in creating interactive learning tools. Teachers are expected to follow technological developments so they can design creative learning media so that they can help interactive learning.
3. Researchers, this research can be used as a reference in preparing research related to the development of interactive learning media.

REFERENCES

- Arsyad, A. (2011). *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada.
- Ariyani & Kristin. (2021). Model Pembelajaran Problem Based Learning untuk Meningkatkan Hasil belajar IPS Siswa SD. *Jurnal Pendidikan dan Pembelajaran*. 5 (3), 353-361.
- Anitah, Sri. (2012). *Media Pembelajaran*. Surakarta: Yuma Pustaka.
- Fauzia, A. (2018). Penerapan Model Pembelajaran Problem Based Learning Untuk Meningkatkan Hasil belajar Matematika SD. *Jurnal Sekolah Dasar* 7(1), 36-47
- Lusnanto, S. Suropto & wahyudi. (2018). Penerapan Model Problem Based Learning Untuk Meningkatkan Pembelajaran IPS Tentang Masalah Sosial Untuk Siswa Kelas IV SDN I Pejajagan Tahun Pembelajaran Koperatif Tipe Numbered Heads Together di kelas IV SDN Lalong. Kecamatan Tinangkung Utara Kabupaten Banggai Kepulauan. *Jurnal Kreatif Tadulako Online*. 3 (3), 12.
- Nurhayati. C. (2020). Peningkatan Hasil belajar Menggunakan Model Problem Based

- learning (PBL) Pada Peserta Didik Kelas 5 SD Negeri Kertasari 01. Artikel Workshop Inovasi Pembelajaran di SD. 3.(4): 1-12.
- Putri, U., & Arifin. (2022). Rancangan Bangun Media Permainan Monopoli Edukatif “Merkayasa” Untuk Menanamkan Karakteristik Toleransi Dalam Pembelajaran IPS. *Jurnal JPPK*. 11 (8), 836-846.
- Rachmah. (2014). Pengembangan Profesi Pendidikan IPS. Bandung: Alfabeta
- Septiananda, S.N. Imron & Basori. (2022). Pengembangan Multimedia Interaktif IPS Materi Kegiatan Ekonomi Siswa Kelas IV SD Gayam 3. *Jurnal Pendidikan Tabusi*. 6 (1), 397-404
- Setiawan. A. (2018). Aplikasi Media Pembelajaran Interaktif. *Jurnal Teknologi*, 8(3), 1-7.
- Sumiati, A. (2008). Model Pembelajaran. Bandung: Wacana Prima.
- Sumaatmadja, Nursid. (1984). Metodologi Pengajaran Ilmu Pengetahuan Sosial. Bandung: Alumni
- Trianto. (2014). Model-model Pembelajaran Inovatif Berprestasi Konstruktivistik. Jakarta: Bumi Aksara
- Wibowo, K,A. Setiawan., dan A. Suhadi. (2009). Model Pembelajaran Multimedia Interaktif relative Khusus untuk meningkatkan keterampilan generik sains siswa SMA. *Jurnal Pendidikan IPA*. 3(1). 1-12.