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Problem Based Learning (PBL) Video Learning Based on Energy Source Material Videoscribe

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ABSTRAK

Media pembelajaran berperan penting dalam aktivitas belajar untuk mencapai tujuan aktivitas belajar. Namun kebanyakan guru masih kurang memanfaatkan media sehingga menyebabkan rendahnya hasil belajar siswa. Dengan demikian diperlukan media penunjang dalam pembelajaran. Tujuan penelitian ini untuk menciptakan video pembelajaran model Problem Based Learning berbasis VideoScribe muatan IPA. Jenis kajian yang dipergunakan ialah penelitian pengembangan dengan model ADDIE. Uji coba produk dilaksanakan untuk menguji validitas produk oleh ahli materi dan ahli media, uji kepraktisan oleh guru dan uji efektivitas yang diberikan kepada siswa dengan mempergunakan desain one group pretest-post test. Metode pengumpulan data yaitu kuesioner dan tes. Teknik analisa data yang dipergunakan ialah analisis deskriptif kualitatif dan kuantitatif. Hasil kajian memperoleh validitas menurut ahli media 4,70, ahli desain pembelajaran 4,75, kepraktisan respon praktisi 4,80, uji coba perorangan 4,60 dan uji coba kelompok kecil 4,62 dengan kategori sangat baik. Pengujian efektivitas memperoleh bahwa media efektif secara signifikan. Hasil ini sejalan dengan tujuan kajian untuk memperoleh video pembelajaran yang valid serta efektif. Simpulan penelitian yaitu video pembelajaran model PBL berbasis VideoScribe muatan IPA dinyatakan valid serta efektif pada aktivitas belajar dalam meningkatkan hasil belajar IPA siswa kelas III SD.

ABSTRACT

Learning media plays a vital role in learning activities to achieve the goals of learning activities. However, most teachers still need to use media more, causing low student learning outcomes. Thus, supporting media is necessary for learning. This research aims to create learning videos for the Problem-Based Learning model based on VideoScribe for science content. The type of study used is development research with the ADDIE model. Product trials were conducted to test product validity by material and media experts, teachers conducted practicality tests, and effectiveness tests were given to students using a one-group pretest-posttest design. Data collection methods are questionnaires and tests. The data analysis technique used is qualitative and quantitative descriptive analysis. The study results obtained validity according to media experts at 4.70, learning design experts at 4.75, practicality of practitioner responses at 4.80, individual trials at 4.60, and small group trials at 4.62 in the outstanding category. Effectiveness testing found that the media was significantly effective. These results align with the study's aim to obtain valid and effective learning videos. The research concludes that PBL model learning videos based on VideoScribe with science content are declared valid and effective in learning activities to improve science learning outcomes for third-grade elementary school students.

1. INTRODUCTION

Education is an experience to equip students with understanding, insight and self-adaptation so that students can grow and develop (Hazmiwati, 2018; Hidayati, 2016). Teachers are an important part of the implementation of education. A teacher is someone who provides knowledge to students or professionals, which allows students to plan, analyze and summarize the problems they face. Teachers play an important role in directing and implementing the learning process (Diani & Sukartono, 2022; Winda & Dafit, 2021).Teachers can use learning media that makes it easier to present material to students (Gading & Kharisma, 2017; Rahmadani & Taufina, 2020). Teachers must be able to implement relevant modeling, approaches and media in learning activities so that they are in line with the objectives of the 2013

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Curriculum, namely building innovative, creative and critical people.(Setyorini, 2020). The current problem is that there are a number of educators who have not been able to use technology to develop learning media to facilitate student learning (Aka, 2017; Sumantri, 2019).

However, most teachers still do not utilize media in learning activities. Teachers' teaching methods still use a conventional approach (lectures) which results in students experiencing boredom when participating in learning activities (Adawiyah, 2021; Harianja & Sapri, 2022; Saragi et al., 2021). Learning boredom is a condition where the mental condition experiences a feeling of boredom and excessive fatigue, causing feelings of lethargy and lack of enthusiasm in carrying out learning activities (Agustina et al., 2019; Khusumawati & Christiana, 2014; Vera, 2020). Factors that cause learning boredom that students often experience are learning media that are not yet relevant to learning activities, lots of memorization, excessive assignments and pressure from other learning materials so that students face boredom (Damayanti et al., 2020; Rulita et al., 2021). Based on previous research, the results show that students in the learning process experience more emotional fatigue, which makes them quickly bored and less focused on learning, especially if online learning is carried out (Marera, 2022; Rofiq et al., 2022). Therefore, teachers should be able to use learning media so that students do not experience learning boredom and it does not affect their learning outcomes. Based on the results of observations and interviews at SD Negeri 5 Batungsel, it was found that student learning outcomes, especially in class III, in science learning activities were still lacking and still lower than the agreed Minimum Completeness Criteria. 5 students out of 13 total class III students scored below the minimum completeness criteria. The lack of learning outcomes is caused by a number of factors, namely teachers still using a lecture approach during the learning process, there is no harmonious and varied learning media, the lack of active interaction results in teachers not being optimal in presenting the material so that students do not understand the subject matter and quickly feel bored when following. learning activities that cause a lack of enthusiasm and motivation to learn.

The solution to reduce this problem is to develop a learning media that supports science lesson content. Learning media is a means and supporting equipment that can be used by educators to present information (material) so that it can be well received. Its function is to stimulate the urge to learn, enrich the meaning of learning to become clearer so that it is easier for students to understand, learning approaches become more varied, and students are more directly involved in learning activities, not only listening but also observing, acting out, practicing directly and demonstrate it (Magdalena et al., 2021; Nurfadhillah et al., 2021). Learning media plays a very important role in learning activities in order to achieve a learning goal (Rasyid et al., 2022; Widiari & Astawan, 2021). The media developed is in the form of learning videos with Energy Source material. The video contains audio-visual elements that enable students to understand the material being explained. This media development uses the VideoScribe application, an application that can be used to create animated designs that have a white background in a very easy way. With an animated display on a white background, it gives the impression that the teacher is writing on a blackboard and to display images on the video using hand animation (Putra et al., 2021; LGRA Putri et al., 2021). This application has the advantage of being able to combine design, audio and visualization in an interesting way (Widiari & Astawan, 2021). This application can be used by educators as an introduction to learning activities and to help develop thinking skills and combine them through animated videos (Adabiyah et al., 2018; Susanti, 2019). Video development is carried out using the Problem Based Learning (PBL) learning model to maximize the learning process. Problem-based learning is modeling based on constructivist understanding that involves students in learning activities and solving problems (Aiman et al., 2019; Paat et al., 2021). This approach is designed to allow students to experience the realities of life that students will later face.

Previous research findings state that PBL is able to motivate students to recognize learning methods and work together in groups to find solutions to existing problems (Musyadad et al., 2019; Shofiyah & Wulandari, 2018). The VideoScribe learning media that has been developed is suitable for use and there are differences in learning outcomes before and after using the VideoScribe learning media (Aini et al., 2023; LGRA Putri et al., 2021; Saragi, 2022). VideoScribe media is suitable for use and effective in improving student learning outcomes (Aini et al., 2023; Riyanto et al., 2019; Widiari & Astawan, 2021).The novelty of this video media is that it creates problem based learning (PBL) video media based on video writing of science content on energy sources. The aim of this research is to create problem based learning (PBL) video media based on video writing of science content on energy sources.Through the development of VideoScribe-based learning video media containing science material on energy sources for third grade elementary school students, it is hoped that the product developed will be able to foster encouragement and interest in learning so that students can be active, learning will be conducive, meaningful and increase understanding of the material.

2. METHOD

This study is of the Research and Development type with ADDIE modeling which is composed of 5 stages including Analyze or analysis; Design or planning; Development or development; Implementation or implementation; as well as evaluation or evaluation. ADDIE modeling is a modeling that highlights the relationship between each element that interacts with each other in harmony with the stages contained therein (Amania et al., 2021; LGRA Putri et al., 2021). The first research procedure carried out was the analysis stage to determine the needs, characteristics of students, curriculum and teaching materials. The second stage is planning which is carried out by determining the KD and indicators and making an initial design in the form of a sketch of the topic. The third stage is development which is carried out through product development that is in line with existing designs and carrying out product validation. The fourth stage, namely implementation, is carried out to find out the impact, quality and results of the media being developed so as to obtain feedback on the media. And the fifth stage is an evaluation which is carried out to provide feedback to developers so that the development carried out is in line with the results of the evaluation or needs that cannot be met by the product being developed.

The trial subject of this study is a Problem Based Learning (PBL) Model Learning Video based on Videoscribe Science Content on Energy Source Materials in Class III Elementary School. The object of this research is the validity, practicality and effectiveness of the learning media being developed. Product trials are carried out through an assessment of the media being developed by experts to find out whether the media being developed is suitable for use or not. To test the validity of the product, a review was carried out by material experts and media experts. The next stage of testing is a practical test given to teachers. Apart from that, there is an effectiveness test given to students using a one group pretest-post test design. The data collection method used to obtain data and information in this study is using questionnaires and tests. The instruments used in this study are a rating scale to determine the validity and practicality of the product, and a multiple choice test to find out the effectiveness of the product. The grid of this study instrument can be examined in depth Table 1, Table 2, Table 3, and Table 4.

Table 1. The Grilles and Material Expert Instruments

No	Aspect	Indicator	Number of Items	Number of Items
1	Learning	Learning Activity Objectives.	1,2,3,4,5	5
		Presentation of Material.	6,7,8,9	4
		Quality of Providing Motivation.	10,11,12,13	4
2	Material	Relevance of the material.	14,15,16	3
		Material selection.	17,18,19,20,21	5

Table 2. The Media Expert Grids and Instruments

No	Aspect	Indicator	Number of Items	Number of Items
1	Media quality	The quality of the videos presented.	1,2,3,4	4
		User convenience.	5,6	2
		Audio clarity as well as text clarity.	7,8,9,10	4
2	Media use	Quality of language use.	11,12,13	3
		Alignment of sentence positions.	14,15	2
3	Media display	Video delivery.	16,17	2
		Layouts.	18,19,20	2

Table 3. The Practitioner Test Grid

No	Aspect	Indicator	Number of Items	Number of Items
1	Learning activities	The purpose of learning learning activities.	1,2,3,4,5	5
		Presentation of material.	6,7,8,9	4
		The quality of providing motivation.	10,11,12,13	4
2	Material	Material harmony	14,15,16	3
		Material selection.	17,18,19,20,21	5
3	Media quality	The quality of the videos presented.	22,23,24,25	4
		Ease of use of media.	26,27	2

No	Aspect	Indicator	Number of Items	Number of Items
		Voice clarity and text clarity.	28,29,30,31	4
4	Language use	Quality of language use.	32,33,34	3
		Alignment of sentence positions.	35.36	2
5	Media display	Video delivery	37.38	2
		Layouts.	39,40,41	3

Table 4. The Science Learning Outcome Test Instrument Grid

No	Basic competencies	Indicators of Competence Achievement		Number of Questions
3.5	Identify various energy sources, changes in energy forms, and alternative energy sources.	3.5.1	Understand the various forms of energy.	2
		3.5.2	Identify various energy sources.	4
		3.5.3	Explain the benefits of energy sources in everyday life.	4
		3.5.4	Determine behavior that shows obligations at home regarding saving energy sources.	3
		3.5.5	Simulate obligations at home related to saving energy sources.	3
		3.5.6	Find special words/terms related to the concept of saving energy sources.	4

Calculating the percentage of each subject and calculating the percentage of the entire subject is the data analysis used in this study. To be able to follow up in decision making and giving meaning, the provisions listed in Table 5.

Table 5. The Scale Conversion Guidelines 5

Score Range	Predicate
4.22 – 5	Very Valid
3.41 – 4.21	Valid
2.61 – 3.40	Fairly Valid
1.80 – 2.60	Invalid
1 – 1.79	Very Invalid

The data analysis methods and techniques used in this development study are qualitative and quantitative descriptive data analysis. Qualitative descriptive analysis is a method used to study populations and samples through data collection using instruments and data analysis (Iswara et al., 2018; Nana & Elin, 2018). Analysis of the resulting data is in the form of descriptive data or words. This data analysis is used in processing data from assessments from media experts and science material experts regarding VideoScribe-based PBL model learning videos. Quantitative analysis is a method of processing data with a systematic design in the form of numbers or percentages about an object being studied. This approach is used to calculate the validity and practicality of media using the mean formula, as well as the effectiveness of using the correlated t-test.

3. RESULT AND DISCUSSION

Result

Analyze stage, needs analysis is carried out through observations and interviews conducted during Teaching Assistance with class III teachers at SD Negeri 5 Batungsel. Curriculum analysis is carried out through reviewing the contents of the syllabus and lesson plans to find out the core competencies and basic competencies for science learning content in class III. Analyze teachers' and students' books to find out the extent of the material contained in the books so that they can find out which material needs development. Analysis of student characteristics when participating in learning activities in class is carried out through observations or observation during Teaching Assistance activities at SD Negeri 5 Batungsel. Analyze the requirements for media formation that are implemented so that appropriate and appropriate media development can be carried out.

Design stage: This stage is carried out in making a design for the development of PBL Model Learning Videos based on Videoscribe, Science Content, Energy Source Materials for Class III Elementary

School. This stage starts from selecting basic competencies and indicators for the topics that will be discussed. Then form an initial design in the form of a sketch of the topic to be discussed which is made in Microsoft Office Word to determine the layout of the images and text so that the media looks attractive and increases students' interest in learning. After the initial product is designed, the next stage is to provide guidance to the supervisor to obtain suggestions and input that can improve the product. If this stage has been completed, it continues with the learning media development stage. Learning media is created using applications Sparkol VideoScribe. The preparation of the material is made separately to make it easier to prepare the material and edit it during the revision process, both of the content, images and audio used in learning media. Apart from that, the process of editing learning media uses application assistance Adobe Premiere. This application is used to combine video material that has been created. Animated images used in learning media are obtained from various sources on the internet and also personal documentation. Several designs in the form of product images for the development of PBL Model Learning Videos based on Videoscribe. The content of Science Material on Energy Sources in Class III of Elementary School can be seen in Figure 1, Figure 2, Figure 3, and Figure 4.

Figure 1. The Introduction Slide

Figure 2. The Material Contents Slide

Figure 3. The Material Content Slide

Figure 4. The Closing Slide

The development stage, the development of PBL model learning videos based on VideoScribe is carried out in accordance with the design that has been approved by the supervisor. Once completed, it continues to the assessment stage carried out by experts and practitioners. This assessment was carried out to find out the level of validity of the media being developed using the average score obtained from experts. Improvements must be made whenever there are additions and criticism from lecturers and teachers. The results of the validity assessment are presented Table 6.

Table 6. The Validity Assessment Results

No.	Subject	Average	Predicate
1	Materials Expert	4.64	Very Valid
2	Media Expert	4.70	Very Valid
3	Design Expert	4.75	Very Valid

Based on Table 6, The learning material aspect received an average or mean of 4.64 which received a very valid predicate. The learning media aspect obtained an average of 4.70 which received a very valid predicate. Learning design, obtained an average or mean of 4.75 which received a very valid predicate. This shows that Videoscribe-based PBL Model Learning Videos are valid for use in the learning process. Implementation stage, at the implementation stage, the media that has been developed is then implemented in the learning process in order to determine the impact, quality and results of the media that has been developed. This stage aims to obtain feedback on the media that has been developed. The activities that have been carried out in this implementation stage are field trials which are then used as a basis for finding

out the effectiveness of the media so that the final product is produced. The results of teacher and student responses are presented in Table 7.

Table 7. The Results of Teacher and Student Responses

No.	Subject	Average	Predicate
1	Teacher/Practitioner	4.80	Very Valid
2	Individual Trial	4.60	Very Valid
3	Small Group Trials	4.62	Very Valid

Based on Table 7, the practicality of the media obtained an average of 4.80 which received a very valid predicate. Based on the results of individual trials and small group trials, respectively, the scores were 4.60 and 4.62, with a very valid predicate. This shows that Videoscribe-based PBL model learning videos are suitable for use in the learning process. Evaluation stage, the evaluation stage is the final stage in the development procedure. This stage is carried out to provide feedback to developers so that the development carried out is in line with the evaluation results or needs that cannot be met by the product being developed. Evaluation is carried out at each stage of development, where in this study two types of evaluation are carried out regarding the media being developed, namely formative and summative evaluation. Formative evaluation is carried out at the end of each development stage to revise the resulting product. Formative evaluation is carried out to provide an assessment regarding the media being developed which includes validation by experts and product trials by practitioners which will later be used to improve the media that has been developed. The summative type of evaluation aims to find out the effectiveness of the media being developed on learning outcomes before and after the application of the media. Summative evaluation is obtained from the test results presented to all class III students, a total of 13 people. The results can be seen in Table 8.

Table 8. The Effectiveness Test Results

No	Information	Mark	Category
1	Normality Test Results	0.200	Normal
2	Homogeneity Test Results	0.128	Homogeneous
3	Correlated t-test Results	0.000	Significant

The results of the prerequisite tests, namely the normality test and homogeneity test, indicate that the data used in this study has a normal and homogeneous distribution. The results of the correlated t-test received a significance value of 0.000, which means there is a significant difference in the ability to understand energy source material for class III students before learning using Videoscribe-based PBL Model Learning Videos and after using Videoscribe-based PBL model learning videos.

Discussion

The research results show that Videoscribe-based PBL model learning videos are feasible and valid to use. This is seen from several aspects. The first, seen from the aspect of learning materials, Videoscribe-based PBL model learning videos are valid to be implemented in the learning process. The uniqueness of problem-based learning is that it presents concrete problems for students, then these problems are used as teaching material and solved systematically. This problem solving process is based on clear facts and data. Problem-based learning also has characteristics, namely presenting problems directly for students to find solutions independently and providing demonstrations of products that have been studied (Maryati, 2018; Mufangati & Juarsa, 2018). With Videoscribe-based PBL Model Learning Videos, students are able to think critically, study in groups, and solve problems in learning. The delivery of material in this learning media uses lots of illustrations and text, which can help students make it easier to understand the material being explained. In line with the development stages of elementary school students, namely in the concrete operational stage, where students still need the assistance of a medium to better understand the material presented(Amboro et al., 2023; Winarti, 2022). The use of PBL model learning videos based on VideoScribe is a solution to better visualize the material students are learning (Krisnawati et al., 2021; Sofyan, 2019). Learning activities using three learning steps, namely opening, content and closing activities, are able to create student-centered learning activities (student center). The use of this media can make it easier for students to study material on energy sources which is combined with the PBL learning model whose aim is to solve problems in daily life, so that students are able to think critically and hone their knowledge. Learning media contains attractive picture illustrations that make it easier for students to understand the material as if students were watching animation. The application of the PBL video learning model to grow

science learning outcomes because it trains students to think at a higher level, students not only understand and solve problems but are also able to seek insight and skills independently, and are able to improve learning outcomes from behavioral transformation in this learning process which is carried out using the syntax of problem-based learning model (Novi et al., 2021; Sujana et al., 2021; Widiari & Astawan, 2021).

The second, seen from the aspect of learning media, it gets a very valid title. Media experts concluded that the images displayed were very appropriate to the material being taught, showing a strong visual connection to the learning content. The clarity of the video also received a high rating, indicating that the use of video media with VideoScribe provides good clarity in conveying the material. The sound effects/music used are considered clear and appropriate to the material, providing aesthetic value and enhancing the student learning experience. The displayed text is well read and well placed, providing an effective guide to understanding the material. The clarity of words and terms in the learning videos received a positive assessment, making it easier for students to learn the material well (Mahardita & Japa, 2022; Sri Asih Arina & Putu Parmiti, 2021). Learning videos are tailored to student characteristics, taking into account student needs and interests. The voice of the material presenter is considered clear and the background music used is appropriate to the material, creating an atmosphere that supports learning. This PBL Model Learning Video based on Videoscribe can make it easier for students to learn the material because it is summarized in a shorter and more precise method that contains interesting illustrations and audio so that it can foster students' desire to learn (AG Putri et al., 2022; Saragi et al., 2021; Siburian & Sutama, 2021).

The third, seen from the learning design aspect, it received a very valid predicate. Learning design experts conclude that basic competencies and indicators of competency achievement can be achieved using learning media. This shows that there is consistency between learning objectives and media use. Furthermore, learning design experts assess that the alignment between basic competencies and indicators of competency achievement with learning materials is very good. The systematic delivery of material also received a high assessment, showing that there is logic and a clear sequence in learning. Delivery of material accompanied by examples is considered effective, because it can provide a more concrete understanding to students. Learning activities with media are able to provide appropriate motivation for learning and provide space for students to learn independently (Akhmad AR et al., 2021; Asriningsih et al., 2021; Sari, 2021). Presenting material that attracts students' attention is also an aspect that is considered positive. Presentation of material according to student characteristics, considering needs and interests in learning (Diantari & Gede Agung, 2021). Apart from that, the presentation of the material is in line with the logical stages of learning activities, making it easier for students to understand. Videoscribe-based PBL Model Learning Videos are one solution to better visualize the material students are learning. The delivery of material on this learning media uses lots of illustrative images and text, which can help students make it easier for students to learn the material being explained. In line with the development stages of elementary school students, namely in the concrete operational stage, where students still need the assistance of a medium to better understand the material presented (Bujuri, 2018; Krisnawati et al., 2021).

The Fourth, seen from the practical aspect, the media received a very valid title. Practitioners concluded that basic competencies were conveyed clearly in VideoScribe-based learning media. Apart from that, indicators are also presented clearly, ensuring that students are able to learn the objectives of learning activities. Practitioners assessed the delivery of material that was interesting and able to attract students' interest and curiosity. Apart from that, presenting material in learning media can increase student creativity. Practitioners also observe that the material presented is in line with the objectives of learning activities and the level of development of students. PBL-based learning media is considered effective in providing relevant material and motivating students (Handayani et al., 2022; Istiqomah et al., 2022). The clarity of the video displayed and the suitability of the images with the material presented are aspects that receive high evaluation (LGRA Putri et al., 2021; Sukadana & Japa, 2021). The ease of use of VideoScribe-based learning video media is also considered positive, because it makes it easier for practitioners to operate the media. Texts that can be read well also contribute to student understanding. This evaluation shows that learning media can be an effective and practical tool in the learning process. Teachers use media to carry out the learning process. Videoscribe-based Problem Based Learning (PBL) Model Learning Videos are said to be practical if they are able to make students understand the subject matter more easily so that they are worth implementing (Marselina & Anaperta, 2020; Santoso, 2022). PBL video learning models based on VideoScribe are feasible and valid to be developed and implemented for students, especially at the elementary school level. Through these learning videos, it will be easier for educators to present lesson material and can encourage educators to create more interactive, innovative and creative learning media (LGRA Putri et al., 2021; Saragi et al., 2021).

The material is presented clearly, so that it is easy for students to understand. The examples given in the material are also considered easy to understand, providing illustrations that support student understanding. Learning videos are displayed clearly, so students can clearly observe the video content.

Ease of understanding learning videos and easy use were also aspects that received high marks from respondents. A very attractive appearance, with coloring and images that are relevant to the material and varied, providing an effective visual appeal. Apart from that, learning videos are also considered capable of making students enthusiastic about learning and increasing students' attention when studying (Widiyasanti & Ayriza, 2018; Wuryanti & Kartowagiran, 2016). Students can read the letters and writing in the video clearly, making it easier to understand. Students' focus and enthusiasm in watching learning videos is also a positive indicator in evaluation. This evaluation shows that learning media can be effective in supporting learning activities and providing positive learning experiences for students (Cahyadi, 2019; Hidayat & Nizar, 2021). Then, other relevant studies showed that the media developed was suitable for use in learning activities because it had several advantages, namely being interesting, easy to store and easy to apply, and very effective in increasing students' interest in learning. Apart from that, the media presented is easy to remember, can train students' imaginative powers and stimulate students' interest and motivation to learn (Santoso, 2022; Saragi et al., 2021; Wedayanti & Wiarta, 2022).

The Fifth, there is a significant difference in the ability to understand energy source material for class III students before learning using Videoscribe-based PBL Model Learning Videos and after using Videoscribe-based PBL Model Learning Videos. This finding is reinforced by previous research findings stating that the use of Videoscribe-based PBL Model Learning Videos is able to make it easier for students to study energy source material combined with the Problem Based Learning learning model whose aim is to solve problems in daily life so that students are able to think critically and hone their knowledge (Hotimah, 2020; Pamungkas et al., 2019). The development of PBL-based VideoScribe media resulted in the media being developed having criteria that were very worthy of being seen from the material or content (Krisnawati et al., 2021; Rasyid et al., 2022; Santoso, 2022). The advantage of this study is that it is able to answer each problem formulation well. What the researchers found when conducting the research was that students were very enthusiastic about following Videoscribe-based PBL model learning videos. Apart from that, this media is in the form of learning videos which can make it easier for educators to apply them in the classroom to learning activities. Meanwhile, the limitation of this study is that the material developed in the PBL video learning model based on Videoscribe is only on science content material on energy sources for class III, even semester. The number of subjects involved in implementing this product was also limited, namely only 1 group consisting of 13 students using the One Group Pre-Test Post-Test study design. The implication of this research is that PBL model learning videos based on Videoscribe can be used by teachers in the learning process, so that learning outcomes can improve.

4. CONCLUSION

The development of PBL video learning models based on Videoscribe using ADDIE modeling has created learning video products that are valid, practical and effectively implemented in learning activities as an effort to overcome the lack of science learning outcomes for class III elementary school students.

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