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DEVELOPMENT OF NATURAL SCIENCES LEARNING VIDEOS BASED ON LOCAL WISDOM OF SASAMBO *(SASAK, SAMAWA, MBOJO)* FOR ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

This study aims to develop natural science learning video media based on sasambo local wisdom for elementary school students that is suitable for use in learning based on aspects of validity, practicality, and effectiveness. This research is included in development research (R&D) with the development model used is the 4-D model with 4 stages, namely define, design, development, and disseminate. The instrument used in this study is a validation instrument consisting of media expert validation instruments and material expert validation. Data analysis techniques in this study were analyzed descriptively quantitatively. Data from the validity and practicality questionnaires in the form of numerical scores were converted to qualitative data to be described in five categories. While the aspect of effectiveness is seen based on the results of students' learning tests. The results of this study indicate that the results of the assessment of the media expert validator obtained a score of 44 with very valid criteria, while the material expert validator's assessment obtained a score of 38 with valid criteria. Then the results of the teacher's assessment obtained a score of 78 which was in the range of effective criteria and the learning outcomes of students who fulfilled the KKM were 80% or 13 out of 15 students. Based on these results, it can be concluded that the science learning video media based on local wisdom sasambo is feasible to use.

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1. INTRODUCTION

Education that is increasingly advanced and developing at this time has certainly been carried out in various ways to improve the quality of education. Improving the quality of education, of course there have been many breakthroughs that have been made both with curriculum development, learning innovation, and the fulfillment of educational facilities and infrastructure. Law Number 20 of 2003 states that Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills that are needed by himself, society, nation and state.

To create a learning process that involves the activeness of students, of course it is balanced with the professional abilities of the teacher. One of the competencies that must be possessed by a teacher is the development of media, both audio media, visual media, and audio visual. Competency is mandatory for professional

educators, namely competence in developing teaching materials used in learning, one of the teaching materials is learning media which fully supports the process of teaching and learning activities in the classroom (Erfan, Syazali, Ratu, & Sari, 2022; Magdalena, Prabandani, Rini, Fitriani, & Putri, 2020; Nuryasana & Desiningrum, 2020). Media that is self-developed by educators for use in the learning process will be more effective and obtain maximum results because the media is developed based on the characteristics of the students being taught. Because the use of appropriate media for the characteristics of students will support the success of learning objectives in the classroom.

Characteristics of students aged elementary school children or ages 7 to 12 years is the age of the child at the concrete operational stage. Piaget's theory of cognitive development says that at the concrete operational stage children have begun to adapt and interpret objects and events around them, learn the characteristics and functions of objects or media around children (Agung, 2019; Fadiana & Andriani, 2021; Munir, 2017; Ramlah, 2015). Based on the theory of cognitive development, educators in elementary schools must develop media according to the cognitive development of their students. The use of media is very helpful for educators in conducting teaching in all subjects, especially in teaching natural science content (IPA). In relation to the content of science lessons, the use of media should be done because the structure and content of science requires abstract concepts and principles, so that the media is able to concretize these abstractions according to the cognitive capacity of elementary school children who are still operational-concrete(Wahyu, Edu, & Nardi, 2020). Another expression also states that the content of science lessons is essentially a product, process, attitude and technology, so that learning science must be scientific and supported by the use of learning media by professional educators (Portanata, Lisa, & Awang, 2017; Wahyu et al., 2020). In line with what Purwanti (2015), that the media used must be seen as appropriate to the level of development of students, both in terms of language, the symbols used, the way and speed of presentation and the time of use.

Science lessons are very closely related to the daily environment of students, so they are very useful and support learning that involves the surrounding environment. Learning by linking local cultural wisdom really helps students understand the concept of lessons (Fauzi & Setiawan, 2020). In addition, learning by linking cultural elements can shape the individual character of students (Fauzi, Rahmatih, Sobri, & Widodo, 2020). Based on this explanation, it can be concluded that learning by acknowledging elements of local wisdom culture is in line with the objectives of the curriculum which aims at character education in schools.

Science learning by associating cultural elements is known as ethnoscience. The ethno-science approach to science learning can relate material to the culture in the surrounding environment and is contextual (Fiteriani, Ningsih, Irwandani*, Santi, & Romlah, 2021). An understanding of ethnoscience is also said that learning with an ethnoscience approach is able to bridge the mix between student culture or original knowledge with scientific culture in schools or can streamline student learning processes (Satria & Egok, 2020). The application of ethnoscience-based science learning is applied to certain materials that can be associated with an ethno-science approach. So, the selection of learning media according to the needs of students so that it can support the understanding of science science concepts.

The use of media in science learning is certainly very important for the cognitive development of elementary school students and makes learning meaningful in the classroom. With meaningful learning students will be enthusiastic and actively involved in interacting in the teaching and learning process. However, based on the results of interviews with several elementary school teachers, the teacher had never developed learning media on the grounds that the teacher did not have time to make media. The teacher only uses media available at school such as the Science Kit and media images found on the internet and textbooks.

Based on the results of the preliminary study by interviewing the teacher, media is really needed, which of course is based on the characteristics of elementary school students in science lessons. Therefore, it is necessary to develop media in the form of science learning videos based on local wisdom. In this study, the local wisdom raised is the local wisdom of West Nusa Tenggara province which consists of 3 tribes namely the Sasak tribe from Lombok, the Samawa tribe from Sumbawa and the mbojo tribe from Bima. The three tribes are abbreviated as the Samawa tribe. Learning by associating Samawa cultural elements in the media will help preserve culture so that it is still known by students in the current generation. Therefore, the purpose of this research is to develop video media for learning natural sciences based on sasambo local wisdom for elementary school students that are suitable for use in learning.

2. RESEARCH METHOD

This research method is research and development or Research and Development (R&D). This type of research is called development research because in this research it will produce certain products that have been developed based on the problems that occur (2019). Meanwhile, according to Sugiyono (**Sugiyono2013**), research and development methods are research methods used to produce a particular product that can be tested for the feasibility of the product. In this study, the product developed was natural science learning video media based on SASAMBO local wisdom which was used for 4th grade elementary school students on business material. The development model used in this study is the development model developed by Thiagarajan, namely 4-D from the acronym define, design, development, and dissemination (Erfan et al., 2022; Fitri, 2019). The choice of the 4-D development model is because the development steps in the 4-D model are detailed, systematic, and easy to follow for each development procedure (Darnawati, Jamiludin, Mursidin, & Ili, 2021; Supartini, Weismann, Wijaya, & Helaluddin, 2020). Furthermore, Jatmiko & Fiantika (2017) say that this 4-D development model is programmed with a systematic sequence of activities in solving learning problems related to the development of learning media that suit the needs of students. Here is a picture of the 4-D development model developed by Thiagarajan.

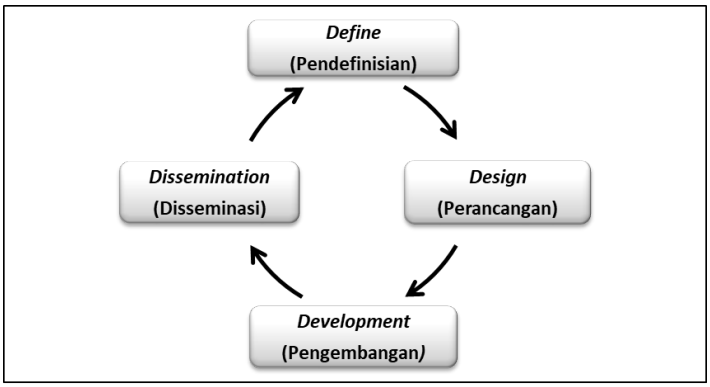

Figure 1. Thiagarajan 4D Development Model

The first stage of development, namely defining, aims to analyze the needs, materials, and characteristics of students needed to develop learning video products. To analyze needs, a preliminary study was used by conducting interviews with elementary school teachers so that the products developed were appropriate. Then material analysis was carried out to determine the material used in the development of learning video products with considerations in terms of the time of research implementation, the level of difficulty of the material, and the suitability of the material with the local wisdom of SASAMBO culture. The material used in this study is the use of natural resources to protect the environment in grade 4 elementary school. Furthermore, an analysis of the characteristics of students is carried out by examining the behavior and characteristics of students at the elementary school level. Where from the results of this analysis, of course, at the age of elementary school children they are still in the concrete operational stage so that the use of media that leads to everyday life and the surrounding environment will make learning meaningful.

The second stage, namely design, aims to prepare the components needed in the development of instructional video media. At this stage, video shooting of local wisdom activities was carried out by 3 tribes in NTB, namely, the Sasak tribe on the island of Lombok, the Samawa tribe on Sumbawa, and the mbojo tribe on Bima. Then at this stage the preparation of the material, video scripts in the form of scripts, and learning video scenarios are developed.

The third stage, namely development, was carried out to develop a product in the form of a science learning video based on SASAMBO local wisdom. The scripts and video scenarios that have been designed are audio recorded first by the researcher with clear audio quality so that they can be heard clearly. After that, video editing is carried out by inserting learning video materials such as the results of script recording, raw videos taken from local wisdom cultural activities, as well as material that has been prepared by researchers. Editing this learning video uses the animaker application in developing products.

The final stage is dissemination, which is the stage of disseminating information. Learning videos that

have been tested for validation and are suitable for use are disseminated, so that anyone can use the learning videos that have been developed to be used for learning in class. In this study, information dissemination was carried out by uploading the results of science learning video products based on local wisdom onto YouTube.

The instruments used in this study were validation sheet questionnaires, teacher evaluation questionnaires on video media, as well as science learning outcomes questions. This validation sheet questionnaire is used to determine the level of validity of the product being developed. The validators used in this study were 2 validators, namely media expert status validators who came from learning media lecturers, and one material expert validator, namely lecturers who teach Elementary Science Education courses. While the teacher's assessment sheet is used to determine the level of practicality of the product. One teacher was involved in providing an assessment of the video media developed, namely a grade 4 elementary school teacher. Meanwhile, to find out the level of product effectiveness, 15 students were given science learning outcomes questions.

Data analysis techniques in this study were analyzed descriptively quantitatively. Data from the validation questionnaire and data from the teacher's assessment of learning video media in the form of numerical scores were converted to qualitative data to be described in five categories. The reference for converting quantitative data to qualitative is adapted from Widoyoko, (2017) as follows:

Table 1. Score Conversion with a Scale of 5

Interval	Category
$X > \bar{X}_i + 1,8\,Sbi$	Very Good
$\bar{X}_i + 0,6\ Sbi < X \leq \bar{X}_i + 1,8\ Sbi$	Good
$\bar{X}_i - 0,6\ Sbi < X \leq \bar{X}_i + 0,6\ Sbi$	Average
$\bar{X}_i - 1,8\ Sbi < X \leq \bar{X}_i - 0,6\ Sbi$	Bad
$X \leq \bar{X}_i - 1,8\,Sbi$	Very Bad

The table above shows that (X) is the total empirical score, $\bar{X}_i$ is the average ideal score by calculating $0.5\times$ (maximum score + minimum score), and ideal standard deviation (Sbi) = 1/6 (maximum score-minimum score). Based on the learning video product validation sheet used, it consists of 12 statements with the highest score for each statement being 4 and the lowest score being 1. So that a maximum score of 12x4=48 is obtained, and the minimum score is 12x1=12, the average ideal score $\bar{X}_i = 30$, and ideal standard deviation (Sbi)=6. Based on this, the validity interval of the sasambo local wisdom-based learning video product is as follows:

Table 2. Product Validity Aspect Interval

Aspect	Interval	Criteria
Validity	$X > 40,8$	Very Valid
	$33,6 < X \leq 40,8$	Valid
	$26,4 < X \leq 33,6$	Average
	$19,2 < X \leq 26,4$	Unvalid
	$X \leq 19,2$	Very Unvalid

From the table above, the SASAMBO local wisdom-based natural science learning video development product is suitable for use by elementary school students in minimal learning from the results of the validator's assessment which is in the valid criteria. Whereas the teacher's assessment sheet for learning video media consists of 19 statement items with a score range of 1 to 5. Then the maximum score is 19 x 5 = 95, the minimum score is 19 x 1 = 19, the average ideal score $\bar{X}_i = 57$ and and ideal standard deviation (Sbi) = 12.67. To find out the practicality criteria of the developed learning video media can be seen in the following table.

Table 3. Product Practicality Aspect Interval

Aspect	Interval	Criteria
Practicality	$X > 79,8$	Very Practicaly
	$64,6 < X \leq 79,8$	Practicaly
	$49,4 < X \leq 64,6$	Practicaly
	$34,2 < X \leq 49,4$	Unpracticaly
	$X \leq 79,8$	Very Unpracticaly

Based on the table above, the practicality criteria for learning video products developed are at least in the practical category. Then from the aspect of the effectiveness of learning videos seen based on the learning

outcomes of students after carrying out a minimum learning process that meets the KKM of 75% of the total students.

3. RESULT AND DISCUSSION

In this study, the processes and procedures for developing SASAMBO local wisdom-based learning videos were carried out using a 4-D development model. The 4-D development model consists of 4 stages, namely define, design, development, dissemination. The following is a description of the learning video development process in this study based on the 4-D model stages.

3.1. Define Stage

At the define stage, the researcher conducted several analyzes, namely needs analysis, student analysis, and material analysis. Needs analysis was carried out through interviews with school class teachers where in the results of the interviews the teacher had never developed learning video media because of limited IT mastery and it took quite a long time to make videos. Therefore, in this study the product developed is a learning video. Then analyze the characteristics of students where at the age of elementary school children, of course, learning will be more interesting if using a media in learning. Then the material analysis, the researcher conducted a study of suitable material for local wisdom on science content material, namely material on the use of natural resources to protect the environment for 4th grade elementary school for one meeting.

3.2. Design Stage

At this stage produce a draft of local wisdom-based learning videos by selecting a video editing application, namely the animaker application, then scenario scripts for learning videos, background designs and templates to be used in the video.

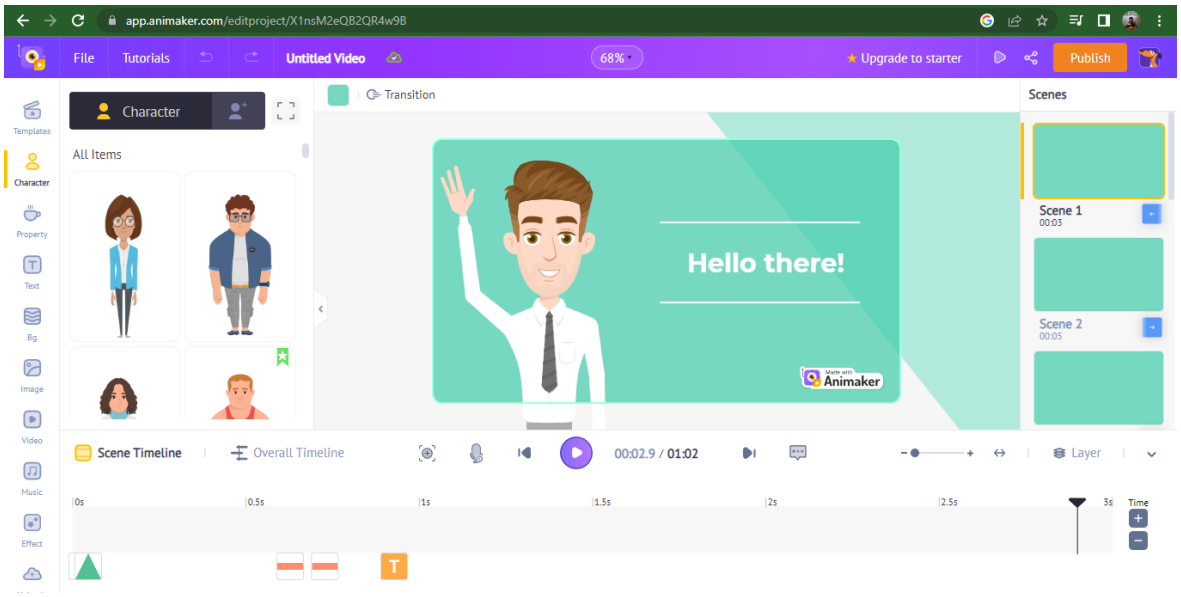

Figure 2. Display of the online animaker application

The image above is a display of the animaker application, which is an application for making learning video media used in development. To access the application, you can use it online on the app.animaker.com website. On the website the researcher enters the animated characters used, voice recordings based on the script, and inputs videos of the activities of the Sasambo community into the animaker application.

3.3. Development Stage

Furthermore, at the development stage, it produces natural science learning video products based on sasambo local wisdom for 4th grade elementary school students on the use of natural resources to protect the

environment. The developed learning video is 9 minutes 22 seconds with an introduction component, delivery of content, and closing. Some views of the learning videos that have been developed by researchers are as follows.

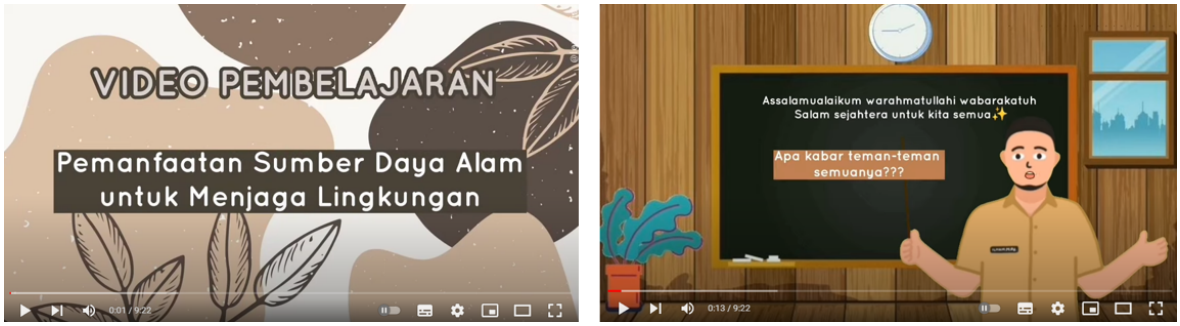

Figure 3. Display of Introduction to Learning Videos

The initial appearance of the learning video is the opening of the learning video by displaying the title of the learning material in the 4th grade science content of elementary schools. Then an animated display of the teacher is presented by greeting and asking students how they are doing. After showing the intro on the video, it continues with the presentation of material by introducing ethnoscience to students first. The following is a review of the display on the video.

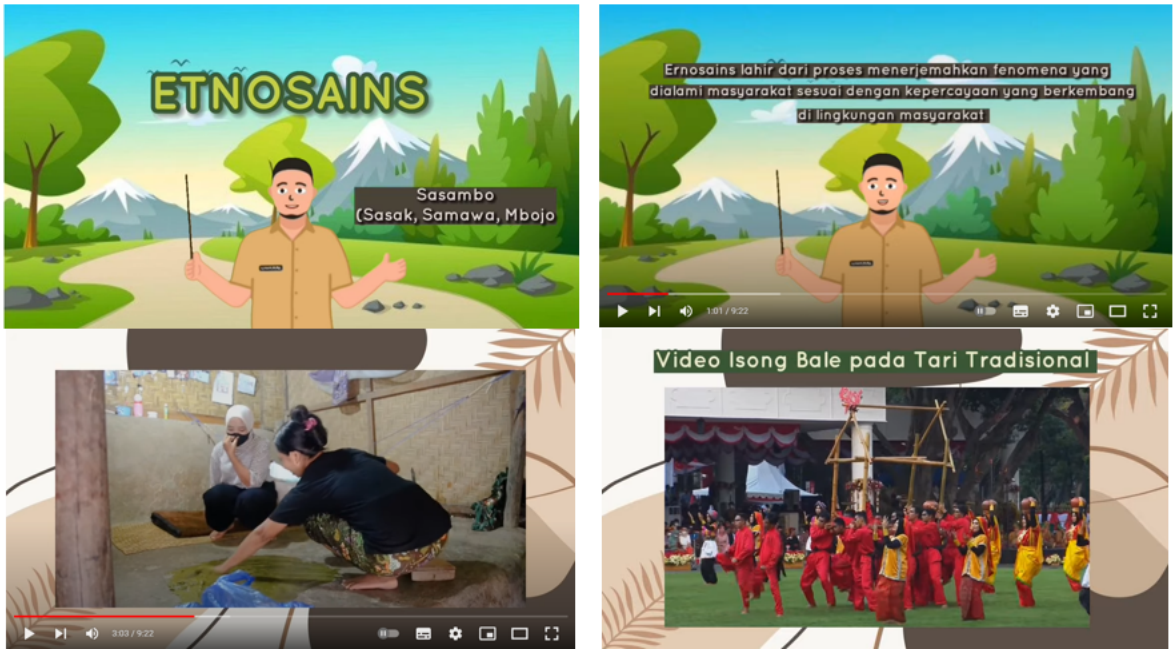

Figure 4. Display of Material Contents in the Video

The material in the science learning video based on local wisdom that was developed is material that relates cultural elements to regions in NTB. First, the animation in the video explains the meaning and concept of ethnoscience. Furthermore, in the learning video media, cultural elements embedded in the people of NTB are presented. This can be seen in the picture above, where the Sasak people in Lombok clean the floors of their houses with cow dung. Then there is the traditional isong bale dance for the Sumbawa people.

After the learning video has been developed, an assessment is carried out by expert lecturers. This stage is carried out before being tested in schools by submitting development products to expert lecturers or

validators. Two validators were used, namely the media expert validator and the material expert validator. The results of media expert validation can be presented in the following table.

Table 4. Results of Media Expert Validation Assessment

No	Aspect	Empirical Score
1	Simplicity	11
2	Comperhensive	10
3	Visualisation	11
4	Cohesion	12
Empirical Score Total		44
Criteria		Very Valid

Based on the table above, the total empirical score obtained from the media expert validator is 44 out of a maximum score of 48. The score is in the interval with the validity criterion being very valid. Furthermore, this learning video product is also validated by material experts regarding the content of learning material contained in the video. The results of the material expert validation assessment are presented in the following table.

Table 5. Results of Media Expert Validation Assessment

No	Aspect	Empirical Score
1	Material suitability	14
2	Presentation of material	12
3	Language Use	12
Empirical Score Total		**38**
Criteria		**Valid**

The table above shows the total empirical score obtained from the material expert validator as much as 38 of the maximum score of 48 which is in the valid interval. Based on the assessment of the 2 validators, it is in accordance with the validity criteria where the learning video product is said to be valid if it meets at least the valid criteria.

Furthermore, to see practicality, it can be seen from the results of the teacher's assessment of the learning video media that was developed. The score obtained from the teacher's assessment results is 78 so that in the conversion table the score is in the practical category. Then to find out its effectiveness is seen from how many students fulfill the KKM when answering the learning outcomes test questions. The learning outcomes of students after using the developed learning videos are as follows.

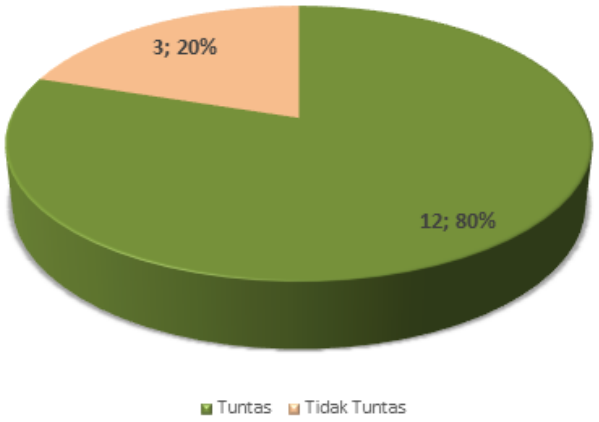

Figure 5. Student Learning Outcomes Diagram

Based on the student learning outcomes diagram, it was obtained that 12 students achieved KKM or 80% and 3 students or 20% did not complete. From these results, the development results meet the effective

criteria where the criteria are at least 75% that meet the KKM. The product developed in the form of a sasambo local wisdom-based learning video meets valid, practical, and effective criteria. This means that in this study the products developed are suitable for use in learning in the science content of class 4 elementary schools on the use of natural resources in protecting the environment.

3.4. Dissemination Stage

The dissemination stages in this study are more focused on disseminating the developed instructional video media. Researchers disseminate learning video products by including the development results that have been validated and revised on the YouTube platform. The link to this learning video can be accessed at the following link https://youtu.be/XdQVRgVlcNs. Researchers chose the YouTube platform to make it easier for students or anyone who needs video media so that it is useful for students, teachers, or others.

Based on the development results obtained, the learning video is suitable for use in the teaching and learning process in class. Learning video media is very important in understanding the concept of a lesson and creating a fun learning atmosphere. In line with what was revealed by Purwanti (2015), that media with video is clearly more likely to easily remember and understand lessons because it does not use one type of sense. Then, some of the advantages of video media in the learning process in the classroom are: (1) fostering students' learning motivation due to an interesting learning atmosphere; (2) learning materials will have a clearer meaning so that students can understand them better, and enable students to master learning objectives better; (3) teaching methods will be more varied; (4) students carry out more learning activities, because they not only listen to the teacher's explanation, but also carry out activities such as observing and demonstrating (Wisada, Sudarma, & Yuda S, 2019).

Furthermore, several reasons for video media are appropriate for use in learning, namely (1) efficient use of class time; (2) more active learning opportunities for students; (3) videos can help explain material clearly; (4) the learning style of each individual is different so that with the video all of these aspects are fulfilled; and (5) reducing the burden on teachers to use the lecture model in the teaching and learning process (Agustini & Ngarti, 2020). In addition, the purpose of learning to use video media is so that students can develop cognitive abilities which involve the ability to recognize again and the ability to provide stimulation in the form of motion and sensation (Andriani, Marhayani, & Utama, 2022; Yuanta, 2020).

4. CONCLUSION

Local wisdom-based instructional video media was developed to meet the needs of the teaching and learning process. Video media in this study was developed using a 4-D model consisting of define, design, development, and disseminate stages. The results of the development in the form of learning video products have met the valid, practical and effective criteria. This means that science learning video products based on sasambo local wisdom are suitable for use by teachers and elementary school students in the learning process. The suggestions in this study are that the instructional video media developed by researchers should be tested, so that the practicality and effectiveness of instructional video media can be measured. Teachers can also download learning videos developed by researchers on the YouTube link that has been featured in the discussion to be tested in their respective schools.

REFERENCES

Agung, R. (2019). Analisis Teori Perkembangan Kognitif Piaget Pada Tahap Anak Usia Operasional Konkret 7-12 Tahun Dalam Pembelajaran Matematika. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, *9*(1), 27–34.

Agustini, K., & Ngarti, J. G. (2020). Pengembangan Video Pembelajaran Untuk Meningkatkan Motivasi Belajar Siswa Menggunakan Model R & D. *Jurnal Ilmiah Pendidikan dan Pembelajaran*, *4*(April 2020), 62–78.

Andriani, A., Marhayani, D. A., & Utama, E. G. (2022). the Effect of Make a Match Learning Model Associated With Video Media on the Ability To Understand Sciences Concept for V Grade Elementary School. *Progres Pendidikan*, *3*(3), 137–141. doi:10.29303/prospek.v3i3.259

Darnawati, D., Jamiludin, J., Mursidin, M., & Ili, L. (2021). Developing online learning guidebook for junior high school level in Kendari City. *Journal of Education and Learning (EduLearn)*, *15*(3), 465–473. doi:10.11591/edulearn.v15i3.18934

Erfan, M., Syazali, M., Ratu, T., & Sari, N. (2022). Edukasi berbasis android pada tema indahnya keragaman di negeriku untuk peserta didik kelas IV sekolah dasar. *Collase: Creatif of Learning Students Elementary Education*, *5*(6), 1139–1146.

Fadiana, M., & Andriani, A. (2021). Metakognisi Siswa Operasional Konkret Dalam Pemecahan Masalah Matematika. *ANARGYA: Jurnal Ilmiah Pendidikan Matematika*, *4*(1). doi:10.24176/anargya.v4i1.6067

Fadillah, A., & Bilda, W. (2019). Pengembangan video pembelajaran matematika berbatuan aplikasi sparkoll videoscribe. *Jurnal Gantang*, *4*(2), 177–182.

Fauzi, A., Rahmatih, A. N., Sobri, M., & Widodo, A. (2020). Etnomatematika : Eksplorasi Budaya Sasak Sebagai. *5*(1), 1–13.

Fauzi, A., & Setiawan, H. (2020). Etnomatematika: Konsep Geometri pada Kerajinan Tradisional Sasak dalam Pembelajaran Matematika di Sekolah Dasar. *Didaktis: Jurnal Pendidikan dan Ilmu Pengetahuan*, *20*(2), 118–128. doi:10.30651/didaktis.v20i2.4690

Fiteriani, I., Ningsih, N. K., Irwandani*, I., Santi, K., & Romlah, R. (2021). Media Poster dengan Pendekatan Etnosains: Pengembangan Bahan Ajar IPA Siswa Sekolah Dasar. *Jurnal Pendidikan Sains Indonesia*, *9*(4), 540–554. doi:10.24815/jpsi.v9i4.20984

Fitri, F. d. A. (2019). Pengembangan Video Pembelajaran Menggunakan Aplikasi Kinemaster pada Pembelajaran Tematik di Sekolah Dasar. *Jurnal basicedu*, *3*(2), 524–532.

Jatmiko, & Fiantika, F. R. (2017). Sebuah Rekam Jejak Proses Pembuatan Perangkat Pembelajaran Berbasis Video Animasi 3D Portofolio. *Jurnal Math Educator Nusantara*, *8*(76), 1–4.

Magdalena, I., Prabandani, R. O., Rini, E. S., Fitriani, M. A., & Putri, A. A. (2020). Analisis Pengembangan Bahan Ajar. *Jurnal Pendidikan dan Ilmu Sosial*, *2*(2), 170–187.

Munir, M. (2017). Tahapan Operasional Konkret Jean Piaget dalam Internalisasi Moral Religius Anak Usia Sekolah Dasar 7 – 12 Tahun. *Ta'limuna Jurnal*, *6*(1), 1–14.

Nuryasana, E., & Desiningrum, N. (2020). Pengembangan Bahan Ajar Strategi Belajar Mengajar Untuk Meningkatkan Motivasi Belajar Mahasiswa. *jurnal Inovasi Penelitian*, *1*(5), 967–974.

Portanata, L., Lisa, Y., & Awang, I. S. (2017). Analisis Pemanfaatan Media Pembelajaran IPA SD. *Jurnal Pendidikan Dasar PerKhasa*, *3*(1), 337–348.

Purwanti, B. (2015). Pengembangan Media Video Pembelajaran Matematika dengan Model Assure. *Jurnal Kebijakan dan Pengembangan Pendidikan*, *3*(1), 42–47.

Ramlah. (2015). Penerapan Teori Perkembangan Mental Piaget Tahap Operasional Konkret Pada Hukum Kekekalan Materi. *Jurnal Pendidikan Unsika*, *3*(2), 218–230.

Satria, T. G., & Egok, A. S. (2020). Pengembangan Etnosains Multimedia Learning Untuk Meningkatkan Kognitif Skill Siswa Sd Di Kota Lubuklinggau. *Jurnal Basicedu*, *4*(1), 13–21. doi:10.31004/basicedu.v4i1.382

Supartini, T., Weismann, I. T. J., Wijaya, H., & Helaluddin. (2020). Development of learning methods through songs and movements to improve children's cognitive and psychomotor aspects. *European Journal of Educational Research*, *9*(4), 1615–1633. doi:10.12973/EU-JER.9.4.1615

Wahyu, Y., Edu, A. L., & Nardi, M. (2020). Problematika Pemanfaatan Media Pembelajaran IPA di Sekolah Dasar. *Jurnal Penelitian Pendidikan IPA*, *6*(1), 107. doi:10.29303/jppipa.v6i1.344

Widoyoko, E. P. (2017). *Evaluasi Program Pembelajaran (Panduan Praktis Bagi Pendidik dan Calon Pendidik)*. Yogyakarta: Pustaka Belajar.

Wisada, P. D., Sudarma, I. K., & Yuda S, A. I. W. I. (2019). Pengembangan Media Video Pembelajaran Berorientasi Pendidikan Karakter. *Journal of Education Technology*, *3*(3), 140. doi:10.23887/jet.v3i3.21735

Yuanta, F. (2020). Pengembangan Media Video Pembelajaran Ilmu Pengetahuan Sosial pada Siswa Sekolah Dasar. *Trapsila: Jurnal Pendidikan Dasar*, *1*(02), 91. doi:10.30742/tpd.v1i02.816