

# THE CONCEPT OF VIDEO-BASED LEARNING ON THE MATERIAL OF THE OBJECT SHAPE'S CHANGE AT SD NEGERI LAMPEUNEURUT ACEH BESAR

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## ABSTRACT

Forming fun learning concepts does not necessarily make students have good character, but creative teachers will make students creative and innovative. Student knowledge sources are sources that can improve the quality of learning through methods and implementation. Learning videos conceptualized through science learning help teachers apply learning to the fullest. This research uses a qualitative descriptive method that explains the concept in the form of an idea of a subject matter about material changes in the form of objects. Through this learning video, students can think and are easier to understand, because students can immediately see well and feel that they can implement it in everyday life. From this learning concept, the results of applying video-based learning can improve their learning ability and in the future students can easily practice videos that can be seen, namely changing from liquid to solid, achieving completeness both individually and classically.

Keywords: *Concepts, Videos, Science Learning*

## 1. INTRODUCTION

Education is an effort to form human resources that can improve the quality of life, thus increasingly complex human needs will be met. Through education, a man of character and conscience will be formed who can develop science and technology, to be able to face global struggles. Human resources are one of the important factors in the success of development in all fields. until now education is still believed to be a place in shaping the desired human resources, (Purnama, 2016).

To improve the quality of education in a better direction, teachers are emphasized that they must be able to create an active, creative, and fun classroom atmosphere. One of them is how to apply video-based learning, this can help teachers in moving and explaining the ideal picture of a subject matter, especially in the field of science. The main purpose of learning science is so that students can understand science concepts consciously and can be applied in everyday life. In the current era of globalization, science, and technology continue to develop rapidly, resulting in competition in various areas of life. Therefore, human resources are qualified and can process information that can have a positive and negative impact on mankind. Advances in science and technology have had a huge impact on human life. The use of technology in the learning process can be interpreted as a process to encourage active learning, constructing knowledge in students so that they can communicate remotely with educators and students (Manuaba, 2021).

Natural Science is one of the subjects that exist in elementary school. Science is the concept of learning nature and has a very

extensive relationship related to human life. Science can be defined as an initial exercise for students to be able to think and develop students' thinking power and interest in continuing to learn about themselves and the surrounding nature. Science is a method of observing analytical nature, carefully observing and connecting other phenomena so that all of them can form a new perspective on the observed object, (Pardede *et al.*, 2016). Seeing the importance of education in the formation of human resources, the improvement of the quality of education is something that must be done continuously to answer the changing times.

One of the learning media that can help students in learning is video. Learning videos can help students in learning, especially in understanding certain concepts, because learning videos contain concepts, principles, procedures, and theories. Learning videos can help students understand concepts with real presentations. Through video-based learning, it can help students increase their desires, interests, motivations, and stimuli in the learning process and can mentally influence them. So that it can implement in everyday life, such as the creation of a proactive attitude in improving the quality of education and learning on an ongoing basis. The use of video-based learning media will make it easier for teachers to convey messages or information to students more clearly, interestingly, and innovatively. The development of science learning media is one of the things that can attract children's interest and make it easier for children to understand lessons and realize learning outcomes. an educator is required to be able to provide a learning model that can stimulate children's cognitive abilities so that they can develop the potential that exists in children.

Creative use of media will allow students to be enthusiastic about learning both to improve their performance with the goals to be achieved, Video-based learning media aims to make it easier for students to understand the material changes in the form of objects. Learning videos are also called Audiovisual media. Using video-based learning media can improve student learning outcomes, it can attract students to learn and students easier to understand the material presented so that they are not easily bored in following the learning, (Mardhatillah & Fahreza, 2017).

Therefore, we find students who get bored easily which causes unsatisfactory children's learning outcomes, we all know that the level of understanding of children is different, so the speed of students in digesting the teaching delivered by the teacher is also different. If an educator chooses a learning method that is fun for

the child. Then the children will also be active and creative. one of them is the method of Watching Together and Q & A Learning videos about changing the form of liquid to solid, in addition to the method in choosing media, it must also be appropriate. for example, during the Video Watching process, the teacher's ability to manage the learning and teaching process is needed so that student involvement can be optimal. So that it will have an impact on the acquisition of learning outcomes. For this reason, in learning, a method is needed that is by the level of development of students. By using the Watch Together method about learning videos of changing liquid substances to solids, a student must try to be able to provide a good understanding and children can be actively involved both during the process and after the activity is over, namely by actively asking the teacher when there are things that are still not understood.

Learning is a change experienced by learners in terms of developing the ability to behave in a new way as a result of interaction with their environment. Another meaning of learning is the change or continuous improvement of abilities and development with the environment. If the process of learning and teaching does not get a new understanding, then it can be said that learning is a failure. The learning process is not on the needs of the child and the style of conveying information that is still not understood by students. Although several factors can influence learning, which predominates the influence or style of the learner or the method chosen by an educator. However, students play an important role in active learning, if students are active, it will improve their cognitive abilities (Sutarto, 2017).

## 2. LITERATURE REVIEW

The teaching and learning process so that students get stimulation both attention and student interest in learning, (Amsari, 2018). Learning media is an intermediary tool that is connected with the delivery of message material to the recipient of the message. In this case, the message conveyed is learning material to achieve educational goals. Video learning is a tool used by education in conveying information to students both concretely and non-concretely. so that the learning process runs well in accordance with the lesson plan that has been made by the educator (Yudianto, 2017). Learning media can be said to be a learning aid, namely, everything that can be used to stimulate the thoughts, feelings, attention, and abilities of students so as to encourage the learning process, (Ismania *et al.*, 2022). With the media, an educator will be very easy to teach. Therefore, an educator is required to create a learning model that can stimulate children's cognition. Along with the development of information technology, many internet-based learning media have been created, one of which is Edmodo. Edmodo is needed by students so they can be active in teaching and learning activities both inside and outside the classroom (Gatot, 2013).

### 2.1 The Importance of Media

Learning media which is said to be very important for elementary school children is very true, because basically elementary school children still have abstract thoughts, where they must be given information about material with real objects so they can understand it properly. As an educator, you must be able to choose and plan appropriate learning models and media (Bachtiar, 1984).

### 2.2 Intended Use of Videos

The purpose of learning by using video-based learning media is to improve cognitive, affective, and psychomotor abilities. Cognitive goals are to be able to develop cognitive abilities which include the ability to recognize again and the ability to provide stimulation in the form of motion and sensation. Children can easily apply high-level thinking during video playback because they use their senses of sight and hearing. Affective The purpose is that by using the right techniques and effects, video can be an excellent medium for influencing attitudes and emotions. The psychomotor goal is that video is the right medium for displaying movements that are used as examples in doing exercises that involve body movements, these movements can be slowed down or sped up. Through videos, students can get visual feedback about their abilities so they try these skills as exemplified through the videos (Anderson, 1987).

### 2.3 Advantages and Disadvantages

The advantages and disadvantages are as follows:

1. Can add a new dimension to learning, the video presents the process of changing Liquid Substances into solids so that children can more easily understand. Because step by step is displayed.
2. Videos can present moving images to students in addition to the sound that accompanies the video.
3. Can display phenomena that are difficult for an educator to explain.
4. Improper explanation of the material can cause doubts for the audience in interpreting the images seen.
5. Requires a lot of equipment such as laptop, projector, and cables.
6. If there is an automatic power outage, it cannot be run by video-based teaching and learning activities.

### 2.4 Critical Thinking

7. Critical Thinking is one of the abilities that must be possessed by everyone, critical thinking is one of the Soft Skills needed in improving career and leadership in an organization, critical thinking often has benefits for successful leadership, Critical Thinking is thinking logically and systematically in making decisions or solving existing problems, (Ismania *et al.*, 2022). By thinking critically, a person can organize, adjust, change, or correct his thoughts, so as to make decisions to act accordingly. The ability to think critically in science learning can be developed in schools to colleges, (Joyce & Calhoun, 2014). The ability to think critically includes the ability to identify assumptions obtained, the ability to formulate the subject matter, the ability to determine the consequences of a provision taken, the ability to detect biases based on different points of view, the ability to reveal data, the process of solving problems and the ability to evaluate relevant arguments in solving a problem (Sitompul, *et al.*, 2019).

## 3. METHODS

The research was conducted at SD Negeri Lampeunerut, this research used descriptive qualitative methods, conducting observations, interviews, and documentation. The students who have observed as many as two classes totaling 40 people and made observations with teachers who taught at Lampeunerut State Elementary School. Interviews were conducted with 10 teachers, 7

female teachers, and 3 male teachers regarding data processing in the application of the learning model so far and their responses to the application of the video-based learning model.

#### 4. RESULTS & DISCUSSION

In reality, an educator has a great desire to develop a learning model to stimulate student creativity and improve learning outcomes. Learning is part of a person to add to the ability of both skills and attitudes. In everyday life, we do not become scarce with videos. On this occasion, SD Negeri Lampeuneurut watched together a video learning science material about the change of liquid form to solid, it is hoped that students can understand what form change is and various changes in form. Before watching about liquid to solid form, first, explain the meaning of changing the form of objects. Changes in the form of objects are one of the forms of occurrence of symptoms of changes in an object into a form object from before, be it size, shape, color, and scent changes. Tangible objects can be in the form of liquids or solids that have a molecular motion to move places. The various changes in the form include melting, freezing, yawning, conceiving, crystallizing, and condensing.

During the activity, a teacher carries out the following activities: First, the teacher conveys the theme and purpose of today's activity to students, then the teacher invites students to take out the observation sheets that have been given by the teacher, record the learning process of the videos they watch. from time to time the teacher pauses during video playback to conduct questions and answers with students. to ensure whether students listen well to the process that has been passed.

The activity, the teacher conducts a question and answer, on the process that has been passed together, using open-ended questions. So that children can provide concrete experiences and experiences. Children can mention what materials are needed when practicing or demonstrating. Teachers and students evaluate activities that have taken place. From the results of observations on the process of learning activities using learning videos, students can improve their thinking skills and are easier to understand.

Because children can immediately see well and feel that they can implement it in real life. Through the observation instrument is aimed at learners both those who appear and those who do not appear, during the discussion process. From this activity, it is clear that the participation of students and their activeness is very visible, and even look very enthusiastic. Indeed, the difference is very noticeable when we compare it with the video-based learning process of changing form from liquid to solid. Based on a meeting with 10 teachers, the implementation of a video-based learning model is one of the models that students are very interested (Hamid *et al.*, 2020).

Another look is the role of the teacher, how a teacher moves to do the best for the child, what is seen here is not interest personal but the needs of the students. Conceptualized learning videos can improve children's understanding, creativity, and cognition (Muryanti & Herman, 2021). Because children are required to get information through videos and then practice. With such activities, student activities have improved better. The children were very happy after watching and had a high spirit both in doing and in the process of question and answer. Students are more active (Sitompul *et al.*, 2019). The advantage obtained by the teacher is that it is easy to convey material to children because all children can both witness

and also see firsthand the process which makes students very memorable. From the results of applying video-based learning, students get results that can improve their learning's character, improve cognitive, and creativity and improve children's character, in the future children can easily practice, (Quiroga & Kim, 2020). Through Video-based learning. Then will forming a fun learning concept does not necessarily make students have good character, but creative teachers will make students creative and innovative. Student knowledge sources are sources that can improve the quality of learning through methods and implementation. Learning videos conceptualized through science learning help teachers apply to learn to the maximum to achieve completeness both individually and classically, (Astuti & Febrian, 2019).

Video-based Independent Curriculum Learning Innovation learning at Lampeuneurut Aceh Besar State Elementary School runs in accordance with the RPP that has been made by a teacher, teachers are required to be creative so that they can easily determine the learning model that will be presented to students, either the model or method that will be used during the learning process so that students do not feel bored and saturated. However, by applying science learning videos, children will get a concrete experience. Making it easier for teachers to explain to students also makes it easier for students to understand the activities to be carried out, getting a concrete assessment of student learning outcomes during the activity. Students can understand what form change is, various changes in form, and necessary ingredients when making a liquid change to a solid (Figure 1).



Figure 1. The children's activities when practicing changing liquid form to solid. This simple experiment was carried out to provide students with new knowledge about changing liquids into solids through a solid equilibrium process.

## 5. CONCLUSION

The video-based learning implemented at SD Lampeuneurut regarding changes from liquid to solid has achieved mastery in learning. where children are able to implement activities in daily life, children are able to practice and produce products, children are able to distinguish equipment or equipment used so that it is easy to solidify and vice versa. By applying science learning videos, children will get concrete experiences. so that children can directly practice it in real life. Making it easier for teachers to explain to students also makes it easier for students to understand the activities to be carried out, get a concrete assessment of student learning outcomes during the activity. when the activity takes place, a teacher makes observations and also performs documentation so that all process activities take place can be well documented. making it easier for teachers to group students or student learning outcomes that still need completion.

## 6. REFERENCES

- Hamid, M.A., Ramadhani, R., Masrul, M., Juliana, J., Safitri, M., Munsarif, M., Jamaluddin, J., Simarmata, J. (2020). *Media pembelajaran*. Yayasan Kita Menulis.
- Anshori, S. (2022). Kontribusi Ilmu Pengetahuan Sosial Dalam Pendidikan Karakter. *Jurnal Analisis Sosial*, 3(1), 1–28.
- Amsari, D. (2018). Implikasi Teori Belajar E.Thorndike (Behavioristik) Dalam Pembelajaran Matematika. *Jurnal Basicedu*, 2(2), 52–60.
- Astuti, P., & Febrian, F. (2019). Blended Learning: Studi Efektivitas Pengembangan Konten E- Learning Di Perguruan Tinggi. *Jurnal Tatsqif*, 17(1), 104–119.
- Bachtiar, H. W. (1984). *Media dalam Pembelajaran*. Penelitian selama 60 tahun Gene L. Wilkinson. CV. Rajawali.
- Bruce, J., Weil, M., & Calhoun, E. (2015). *Models of Teaching, 9th Edition*. Pearson.
- Priowijanto, Gatot. (2013). *Materi Simulasi Digital*. Seamolec.
- Manuaba, G. N. G. (2021). *Pengembangan Video Pembelajaran Berbasis Pendekatan Kontekstual pada Muatan IPA Kelas V Sekolah Dasar*. Undergraduate thesis, Universitas Pendidikan Ganesha.
- Ismania, K. A. N., Saputro, A. D., Nurdiana, D., & Bariah, S. H. (2022). Implementasi Media Pembelajaran Berbasis Video Pada Mata Pelajaran Pemrograman di Masa Pandemic- 2022. *Jurnal PETIK*, 8(2), 118–126.
- Ismania, K. A. N., Saputro, A. D., Ammy, P. M., & Wahyuni, S. (2020). Analisis motivasi belajar mahasiswa menggunakan video pembelajaran sebagai alternatif pembelajaran jarak jauh (PJJ). *Jurnal Mathematics Pedagogic*, 5(1), 27–35.
- Joyce, B., & Calhoun, E. (2014). *The 21st-Century Skills. Realizing The Promise Of 21st-Century Education: An Owner's Manual*. Corwin Press.
- Mardhatillah, & Fahreza, F. (2017). Desain Media Pembelajaran Interaktif Bagi Sekolah Dasar. *Bina Gogik*, 4(2), 14– 25.
- Muryanti, E. and Herman, Y. (2022). Studi Perbandingan Sistem Pendidikan Dasar di Indonesia dan Finlandia. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(3), 1146-1156.
- Pardede, E., Suyanti, R. D., Pardede, E., & Suyanti, R. D. (2016). Efek Model Pembelajaran Guided Discovery Berbasis Kolaborasi Dengan Media Flash Terhadap Keterampilan Proses Sains Dan Hasil Belajar Kognitif Tinggi Fisika Siswa Sma. *Jurnal Pendidikan Fisika*, 5(1), 12–17.
- Purnama, B. J. (2016). Optimalisasi Manajemen Sumber Daya Manusia Dalam Upaya Peningkatan Mutu Sekolah Human Resources Management To Improve. *Jurnal Manajemen Pendidikan*, 12(2), 27–36.
- Quiroga, J. M., & Kim, D. (2020). Designing a History Museum Based Outreach Program with Digital Content. *European Journal of Open, Distance and E-Learning*, 22(2), 1–26.
- Anderson, R. H. (1987). *Pemilihan dan Pengembangan Media untuk Pembelajaran*. Rajawali.
- Sitompul, N. M., Ruffi'i, Leksono, I. P., Rejeki, H. W. (2019). Meningkatkan Kompetensi Pendidik di Era Pembelajaran Abad 21 dengan Menjadi Guru Blogger. *JPM (Jurnal Pemberdayaan Masyarakat)*, 4(1), 330–338.
- Sutarto. (2017). Teori Kognitif dan Implikasinya dalam Pembelajaran. *Jurnal Islamic Counseling*, 1(2), 1-26.
- Yudianto, A. (2017). Penerapan Video Sebagai Media Pembelajaran. In *Seminar Nasional Pendidikan 2017*, 234–237.