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## The Use of Learning Videos in Order to Increase Student Motivation and Learning Outcomes During The COVID-19 Pandemic

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### ABSTRACTS

The COVID-19 pandemic affects almost all areas of life, one of which is education. In the field of education, the learning process during the pandemic has turned into Distance Learning. Distance learning which is carried out online has many obstacles in its implementation. The learning media used are very influential in the success of online learning during a pandemic. Online learning requires creative learning media so that students don't feel bored and stay motivated in learning. The purpose of this study was to determine the motivation and learning outcomes of students in sixth grade elementary school Kamarung 1, Indonesia on building space material after online learning was carried out using video as a learning media during the COVID-19 pandemic. The subjects of this study were sixth grade students of elementary school Kamarung 1, Indonesia in the 2020/2021 academic year. Data collection techniques through pretest and posttest. The analysis technique used is descriptive qualitative. The results showed that the use of video learning media accompanied by learning assistance could improve the learning outcomes of sixth grade students at elementary school Kamarung 1, Indonesia on building space material.

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## 1. INTRODUCTION

The COVID-19 pandemic affects almost all aspects of life, one of which is education. Currently, Distance Learning which is implemented online is a solution so that learning can continue to be carried out in the midst of the COVID-19 pandemic. Many researchers have reported the ways how to against COVID-19 pandemic (Machmud and Minghat, 2020; Putra and Abidin, 2020; Anggraeni, 2020; Razon, 2020; Hamidah *et al.*, 2020; Hashim *et al.*, 2020; Dirgantari *et al.*, 2020; Mulyanti *et al.*, 2020; Sangsawang, 2020; Nasution and Nandiyanto, 2021). For this reason, creative learning media are needed to overcome these problems.

In a narrow sense, media means the components of materials and tools in the learning system. In a broad sense, media means the maximum use of all system components and learning resources to achieve the desired learning objectives (Miftah, 2013). The selection of appropriate learning media can be a solution to all problems in the teaching and learning process (Tafonao, 2018).

The existence of creative learning media can improve student learning outcomes because it makes the teaching and learning process easy and interesting (Nurrita, 2018).

The use of instructional videos in online learning was appropriate because in the learning videos there were images / animations that made them more interesting and didn't bore students. In addition, even if the students' internet connection is unstable, it is not a problem because the learning videos are flexible and can be repeated. Agustiniingsih (2015) explained that the use of all senses, especially the senses of sight and hearing when studying, can make it easier for students to understand and master the subject matter.

## 2. METHODS

The method used in this research is descriptive qualitative method with data collection techniques in the form of tests (pretest and posttest) on 29 students. The subjects of this study were the sixth grade students of Elementary School Kamarung 1, Indonesia and the object of the research was student learning outcomes after using video as a learning medium.

This research was conducted at Elementary School Kamarung 1 which is located on Jl. Raya Kamarung, Pagaden District, Subang Regency, West Java. The research implementation took place in February-March 2021.

## 3. RESULTS AND DISCUSSION

The media in the learning process has made a major contribution in providing and solving the problems faced in order to provide student learning possibilities (Miftah, 2013). The problem found in Elementary School was the lack of stable internet connection in the area, marked by only 7 students who could attend virtual meetings through the google meet application when the first and second meetings were held. After being asked further what problems were experienced by students, most of them were constrained by unstable connections and full cellphone memory so they could not download the google meet application on their cellphones. So that, all students in grade VI Elementary School Kamarung 1, Indonesia can take part in online learning, the author offers a solution to using video as a learning medium. The use of video as a medium for online distance learning is appropriate because video learning is more flexible in its implementation and can be watched over and over again at any time without limited time.

Before the learning is carried out, students are given a pretest link first. After the pretest is complete, students are given a google drive link containing learning videos on building space materials. After students finished watching the video, students were assigned to

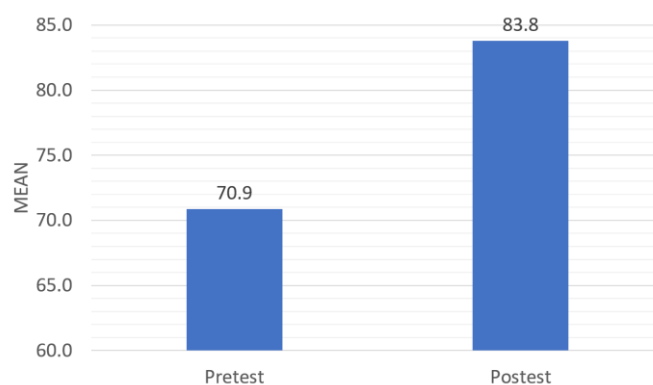
recount what they had learned and ask what they did not understand (during the week). After that, the questions from the students were discussed together and explained thoroughly. The assistance was carried out through the group WhatsApp. The subject matter described is numeration material and the author present it into five parts of the discussion. Part 1 is the introductory material for building spaces and prisms, in the video the writer precedes the lesson with trigger questions about the shapes found in everyday life to stimulate students to think critically. Part 2 contains the material for the shape of the tube space, part 3 contains the material for the shape of the pyramid, part 4 contains the material for the shape of the cone space and part 5 contains the material for the shape of the spherical space. After the material has been completely given out, students are given a posttest link.

After obtaining the pretest and posttest value data, we processed the data using Microsoft Excel. The results of the data are presented in **Figure 1**. We obtained that pretest is 70.90 and posttest is 83.80.

Based on the mean graph of the pretest and posttest above, it can be seen that the mean of the pretest results is 70.9 while the mean of the posttest results is 83.8. The mean posttest score (after learning with video media) is greater than the pretest score (before learning with video media). This shows an increase in student learning outcomes after using video as a learning medium.

#### 4. CONCLUSION

Based on the results and discussion, it can be concluded that the use of video learning media accompanied by student learning assistance can improve learning outcomes for sixth grade students of Elementary School Kamarung 1, Indonesia in the 2020/2021 academic year on Building Space material during the COVID-19 pandemic. The use of video as a learning media makes learning more interesting, this can increase learning motivation and the level of student understanding of the subject matter. However, with this video, it is hoped that it can stimulate students to think critically and be able to find their own concepts from the material, not only given the material by the teacher.



**Figure 1.** Pretest and posttest mean.

#### 5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

## 6. REFERENCES

- Agustiningasih, A. (2015). Video sebagai alternatif media pembelajaran dalam rangka mendukung keberhasilan penerapan kurikulum 2013 di sekolah dasar. *PEDAGOGIA: Jurnal Pendidikan*, 4(1), 50-58.
- Anggraeni, S., Maulidina, A., Dewi, M. W., Rahmadiani, S., Rizky, Y. P. C., Arinalhaq, Z. F., and Al-Obaidi, A. S. M. (2020). The deployment of drones in sending drugs and patient blood samples COVID-19. *Indonesian Journal of Science and Technology*, 5(2), 193-200.
- Dirgantari, P. D., Hidayat, Y. M., Mahphoth, M. H., and Nugraheni, R. (2020). Level of use and satisfaction of e-commerce customers in covid-19 pandemic period: An information system success model (ISSM) approach. *Indonesian Journal of Science and Technology*, 5(2), 261-270.
- Hamidah, I., Sriyono, S., and Hudha, M. N. (2020). A Bibliometric analysis of Covid-19 research using VOSviewer. *Indonesian Journal of Science and Technology*, 5(2), 209-216.
- Hashim, S., Masek, A., Abdullah, N. S., Paimin, A. N., and Muda, W. H. N. W. (2020). Students' intention to share information via social media: A case study of COVID-19 pandemic. *Indonesian Journal of Science and Technology*, 5(2), 236-245.
- Machmud, A., and Minghat, A. D. B. (2020). The price dynamics of hand sanitizers for COVID-19 in Indonesia: Exponential and cobweb forms. *Indonesian Journal of Science and Technology*, 5(2), 176-184.
- Miftah, M. (2013). Fungsi dan peran media pembelajaran sebagai upaya peningkatan kemampuan belajar siswa. *Jurnal Kwangsan*, 1(2), 95.
- Mulyanti, B., Purnama, W., and Pawinanto, R. E. (2020). Distance learning in vocational high schools during the covid-19 pandemic in West Java province, Indonesia. *Indonesian Journal of Science and Technology*, 5(2), 271-282.
- Nasution, A. R. and Nandiyanto, A. B. D. (2021). Utilization of the Google Meet and Quiziz Applications in the Assistance and Strengthening Process of Online Learning during the COVID-19 Pandemic. *Indonesian Journal of Educational Research and Technology*, 1(1), 31-34.
- Nurrita, T. (2018). Pengembangan media pembelajaran untuk meningkatkan hasil belajar siswa. *MISYKAT: Jurnal Ilmu-Ilmu Al-Quran, Hadist, Syari'ah Dan Tarbiyah*, 3(1). 171
- Putra, Z. A., and Abidin, S. A. Z. (2020). Application of SEIR model in COVID-19 and the effect of lockdown on reducing the number of active cases. *Indonesian Journal of Science and Technology*, 5(2), 185-192.
- Razon, B. C. (2020). COVID 19: Impetus for "Community Spirits" among Filipinos. *Indonesian Journal of Science and Technology*, 5(2), 201-208.
- Sangsawang, T. (2020) An instructional design for online learning in vocational education according to a self-regulated learning framework for problem solving during the COVID-19 crisis. *Indonesian Journal of Science and Technology*, 5(2), 283-198.
- Tafonao, T. (2018). Peranan media pembelajaran dalam meningkatkan minat belajar mahasiswa. *Jurnal Komunikasi Pendidikan*, 2(2), 103-114.