

THE EFFECT OF FACE-TO-FACE LEARNING AND THE USE OF MEDIA ZOOM ON BULLET SHOT LEARNING OUTCOMES AT MUHAMMADIYAH 3 SMP BANYUWANGI

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Abstract:

This research is a causal quantitative research which wants to know the application of face-to-face learning and the use of zoom media on the learning outcomes of shot put in Sports and Health Physical Education subjects. The respondents of this study were students of class 8A SMP Muhammadiyah 3 Banyuwangi school year with a total of 30 students. The research area was determined by purposive sampling method. This research is a quantitative research with a causal design. Data collection tools used questionnaires, tests, and documentation and interview methods. Degree valid and reliable with validity and reliability tests. Instrument analysis test using: 1) descriptive test, 2) normality test 3) homogeneity test. Hypothesis testing using: 1) regression analysis, 2) F test, 3) T test. The results showed that: 1) the sig. From the face-to-face learning variable there is a motivation of 0.000, so the conclusion is sig > 0.05, it means that there is an influence of face-to-face learning media on the interest in learning PJOK in students. 2) the sig value of the influence variable of learning media using zoom media on learning outcomes is 0,000. The conclusion that can be sig > 0.05, it means that there is an effect of learning media using zoom media on learning outcomes of PJOK in students. 3) the results of the regression analysis output obtained F count 29,124 with sig 0,000, because > 0.05, there is an effect of face-to-face learning media and the use of zoom media on learning outcomes of PJOK in students. Input for teachers needs to innovate and be creative in the learning process, especially in using technological advances in delivering mastery of student skill material, given that the abilities of each individual student are different with different means, educators must also be able to optimize technology for the purposes of improving the learning process so that learning outcomes are more maximum.

Keywords: Face-to-face Learning, Use of Zoom Media, Learning Outcomes



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Introduction

Education is the foundation of the nation's future, the use of technological advances must be used by schools and is based on a joint decision of 4 ministers, namely the Ministry of Education and Culture, the Ministry of Religion, the Ministry of Health, and the Ministry of Home Affairs regarding Guidance for the Implementation of Learning in the Academic Year and the New Academic Year in the future. The Corona Virus Disease (Covid-19) pandemic on June 15, 2020 was also added with a Learning Guide in the New Normal era of the Teacher and Education Personnel Team (GTK Team) of the Ministry of Education and Culture of the Republic of Indonesia.

According to Law no. 20 of 2003 concerning National Education System Article 1 Paragraph 20 Learning is a process of interaction between students and educators and learning resources in a learning environment. Gagne (1977) learning is a set of external events designed to support several internal learning processes.

Furthermore, Gagnet (1985) put forward his theory more fully by saying that learning is intended to produce learning, external situations must be designed in such a way as to activate, support, and maintain the internal processes contained in every learning eventr.

1. Use of Media Zoom

Zoom is an application made by billionaire Eric Yuan which was released in January 2003. Zoom is an application that provides remote conferencing services by combining video conferencing, online meetings, chat to mobile collaboration, this application belongs to the company Zoom Video Communications based in San Jose, California. In addition to the application, Zoom can also be accessed through the website, both for OS, Mac, Windows, Linux, iOS and Android.

When registering, you will be in the Basic type which has advantages, such as: 1. Able to hold meetings of up to 100 participants 2. video conferencing for group meetings 3. Virtual background access 4, scheduling and recording the entire meeting 5 dividing participants into several rooms. Zoom has several types of services which include: Zoom Meetings, Zoom Webinars, Zoom Rooms, Zoom Phones and Chat and Marketplace Applications.

As an effort to prevent the Covid-19 pandemic, the government issued a policy that schools ask their students to study from home. Some local governments have decided to implement policies to leave their students and start implementing online (online) or online learning methods. If these schools are ready or not, they must start to really take advantage of technological advances and innovate for the benefit of education by using cellphones, laptops or computers.

2. Bullet Reject Learning Results

Shot put is a sport of throwing numbers which is done by rejecting or pushing bullets or balls made of metal as far as possible from a predetermined point of departure to the landing point using certain techniques. Although it looks easy, this sport cannot be underestimated because it includes the use of heavy equipment that must be mastered by students who do it. There are 3 techniques that must be mastered in the sport of shot put, including: 1) holding the bullet 2) placing the bullet in the neck 3) pushing or pushing the bullet.

The results of the assessment in the shot put lesson are by means of measurement, namely by being taken from the field where students reject the bullet to the place where the bullet first fell with the rules including a) pushing in the field b) using one hand c) when pushing limbs are prohibited from leaving the field d) the bullet falls in the specified sector, which is 34.92 degrees. There are several tools used in the shot put competition including measuring instruments or meters, flags, whistles, lines and balls.

According to Dimiyati and Mudjiono (2006) learning outcomes are the results achieved in the form of numbers or scores after being given a learning outcome test at the end of each lesson. The value obtained by students becomes a reference to see students' mastery in receiving learning materials. Defining student learning outcomes is essentially a change in behavior as a result of learning in a broad sense covering the areas of cognitive, affective and psychomotor Nana Sudjana "2006:26-27". According to Supriono "2009" learning outcomes are patterns of action patterns, values, understanding, attitudes, appreciation and skills.

The sport of shot put has been around since the ancient Greeks, the kick was named weight trowing according to Homer. In the sixteenth century, King Henry VII held almost the same matches, namely hammer throwing and weight throwing. The shot put competition was first documented in Scotland as one of The British amateur Championships in 1866.

METHOD

1. Research Approach

This study aims to determine the influencing relationship between two or more variables, so this study uses a causal associative research design. Furthermore, according to Sugiyono (2014) in Joko causal research is research that aims to analyze the cause-and-effect relationship between independent (influenced) and independent (influenced) variables.

Another opinion regarding causal research is stated by Margono (2010) which states that causal research is research to investigate possible causal relationships between certain factors that may be the cause of the symptoms being investigated. Causal research usually uses experimental methods, namely by controlling the independent variables that will affect the dependent variable in the planned situation.

RESULTS AND DISCUSSION

Research result

1. Data Description

The data obtained include the value of face-to-face learning outcomes consisting of cognitive and affective outcomes and learning questionnaire scores using zoom media in shot put. Data were obtained from class 8A SMP Muhammadiyah 3 Banyuwangi.

Learning using face-to-face and using zoom media by analyzing the results of cognitive tests, affective questionnaires and classifying the learning outcomes of shot put at low and high levels. The data is described in detail as follows:

a. Item Validity Test Results

A test instrument is said to be valid if it can measure what it wants to measure accurately. The validity that is tested in this study is the validity of the item. Item validity is the timeliness of measuring that is owned by an item about the type of cognitive test question. The technique used to determine the validity of the item uses the biserial point correlation technique which is stated as follows:

$$r_{pbis} = \frac{M_p - M_t}{S_t} \sqrt{\frac{p}{q}}$$

information:

Rpbhis : Point biserial correlation coefficient

Mp : Average score of students who answered correctly

Mt : The average of all students

St : Total standard deviation

P : Proportion of students who answered correctly

Q : Proportion of students who answered incorrectly

The price of rpbis obtained is compared with the table with a total with a significant level of 5%. If the rpbis price > rtable, then the item being tested is valid (Suharsini Arikunto, 2007: 79).

a. Uji Reliabilitas

Reliability is the constancy of a test when it is tested on different subjects and at different times. To calculate the reliability coefficient of the objective form of the test, the Kuder-Richardson formula (KR 20) is used as follows

$$KR - 20 = \left(\frac{n}{n-1} \right) \left(\frac{S_t^2 - \sum pq}{S_t^2} \right)$$

Information

r11: Reliability coefficient: the proportion of subjects who answered the item correctly

q : the proportion of subjects who answered the item incorrectly

n : number of items S_1 : standar deviasi

The instrument reliability criteria can be seen from the r/1 price as follows:

0.91-1.00 : Very High (ST)

0.71-0.90 : Height (T)

0.41-0.70: Enough (C)

0.21-0.40 : Low (R)

Negative -0.20 : Very Low (SR)

(Masidjo, 2007:233).

Test Difficulty Level of Questions

A good question is a question that is not too easy and not too difficult (Suharsini Arikunto, 2007: 207). The level of difficulty of the question can be indicated by the difficulty index, which is a number that shows how difficult and easy something is. Test the level of difficulty of the questions using the following formula:

$$IK = \frac{B}{N \times skor \ maksimal}$$

Information :

IK : Difficulty index

B : The number of students' correct answers for an item

N : Student group

Maximum score: The amount of score on a correct answer of an item.

The classification of the difficulty index is as follows:

0.81-1.00 : Very easy (MS)

0.61-0.80 : Easy (Md)

0.41-0.60 : Moderate/ Enough (Sd-C)

0.21-0.40 : Difficult (Sk)

0.00-0.20 : Very difficult SS)

(Masidjo, 2007: 189-192)

Discussion

1. First hypothesis

Ha: There is an effect of face-to-face learning on the learning outcomes of class 8A of SMP Muhammadiyah 3 Banyuwangi in the odd semester of the 2020-2021 school year.

Ho: There is an effect of face-to-face learning on the learning outcomes of class 8A of SMP Muhammadiyah 3 Banyuwangi in the odd semester of the 2020-2021 school year.

Testing the first hypothesis on the effect of face-to-face learning and zoom media on student learning outcomes obtained a significance value of 0.10 for learning face to face and 0.01 using zoom media. Based on the test decision, Ho is accepted on the cognitive results. This means that there is an effect of face-to-face learning and zoom media on the learning outcomes of class 8A shooting at SMP Muhammadiyah 3 Banyuwangi.

The results of this first hypothesis test can be rationalized through the role and function of the learning media itself so that it is not necessarily technological advances, especially zoom media, can boost student learning outcomes. bullets in particular by using the face-to-face method directly.

The role of learning media as a distributor of information as well as a source of information for students will be their learning partners who always adjust to the ability and intensity of learning and subject matter in general psychological functions and it is true that learning media functions include placing media as something that is able to attract and focus students' attention there is learning (in Munadi, 2008), but when and where the media is used in learning media.

Sometimes attention is obtained by paying attention to certain stimuli while discarding other stimuli, this is called selective attention. Next, the affective function is to place learning media as something that can arouse feelings, emotions and the level of acceptance and rejection of something. Learning media will foster students' willingness to accept the learning load, focus their attention and will then lead to student participation in the whole learning process.

And the function of motivation is to place learning media as something that can be used to encourage students to consciously want to carry out learning activities, with the three psychological functions arising from the use of learning media, it is natural that the first hypothesis test is produced. Furthermore, in this study, it is not only the use of learning media but also distance video-based learning media.

Theoretically, video zoom-based learning media will be more interactive and interesting which has an impact on increasing student motivation and learning outcomes, but in physical education and sports subjects, the opposite applies, children are more interested and like learning with a lot of physical practice, preferring face-to-face. face-to-face during learning, in addition to being more detailed in the behavior and character of each student, educators can interact directly if there are complaints or want to correct the movement of skills referred to in the material directly to their students.

According to Sumantri interactive multimedia learning is a learning process in which the delivery of discussion material and learning activities are carried out through computer media or other multimedia tools such as mobile phones.

The formation of character for the next generation of the nation as it is today, face-to-face learning is very much needed because at the time of face-to-face learning there are many character and personality values that will be formed later there, there are values of discipline, independence, courage, responsibility, leadership, honesty and empathy. will grow when children and teachers meet face to face.

Not to mention constrained by different human resources, because not all students will only understand by observing virtually they need direct guidance by the subject teacher in question, plus not all guardians of students have the facilities and infrastructure they have, both in the form of mobile phones. or network, because at the time of learning using zoom media devices such as mobile phones or computers as the means must be connected to the internet network.

At the same time, the economic transition period also affects the level of economic stability where the guardians of students are required to have an adequate internet network and that costs money, especially if every subject teacher uses zoom media in delivering their material..

Second Hypothesis

Ha: There is an effect of learning zoom media on the learning outcomes of class 8A bullet put SMP Muhammadiyah 3 Banyuwangi.

Ho: There is no effect of zoom media learning on the learning outcomes of class 8A bullet put SMP Muhammadiyah 3 Banyuwangi.

Testing the second hypothesis on the effect of learning zoom media on student learning outcomes obtained a significance value of 0.01. Based on the test decision, Ho is rejected on the cognitive results. This means that there is an influence of zoom media learning media on the learning outcomes of class 8A shooting at SMP Muhammadiyah 3 Banyuwangi.

The use of learning media in general can help achieve learning outcomes. However, the suitability between the learning materials and the media used needs to be considered carefully by referring to the principles of using the learning media itself. The use of media that is not appropriate and irrelevant to the material and characteristics of the subject can actually result in hampering learning objectives and outcomes.

The urgency of the use of learning media on learning outcomes as stated by Chaeruddin (2004), namely regarding the meaning and benefits of media in the teaching and learning process, among others, are 1) further clarifying the teaching materials delivered by the teacher. 2) provide real experience to students. 3) stimulate students/students to dialogue with themselves and 4) stimulate students' thinking. This opinion begins to answer the findings in the first hypothesis test, namely the influence of using zoom media on learning outcomes.

As explained that the use of media is not necessarily able to clarify the teaching materials delivered by the teacher, this means that the dominance of the teacher in explaining the face-to-face learning material is very much needed.

The existence of teachers in conducting tutorials directly in front of students because of the instructions that must be clear and can be repeated according to the wishes of students as well as teachers on learning materials, design, variety and decoration are very effective when presented face-to-face directly because of the characteristics of the material.

The advantage of zoom-based learning media is that it can provide real experience to students that technological advances must be utilized to the maximum extent possible, in this case zoom meeting which was previously only carried out by developed countries and certain interests so that they were less familiar, during the COVID-19 pandemic. hit the whole world where all crowd activities are prohibited by all countries including Indonesia, all must change student habits, normal interactions must be via online or study remotely, lesson schedules are fixed.

The school must provide equipment as well as applications that were previously considered useless or have not been utilized optimally, whether or not only students must adapt to educators, teachers who have not been able to take advantage of technological advances must be able and forced to do so, the habit of entering and leaving class now must adapting to the entry and exit of learning applications, training to improve the quality of teachers during the pandemic must be improved so that services to the world of education are more optimal, the virus may exist but education must not stop, not only teachers, guardians of students who have been resigned to schools, can no longer do that it is required to be able to accompany their children when learning at their home, parents must also learn about the applications implemented by the school. They must also know the subject matter at any time when asked by their children for consultation regarding lessons that they cannot afford, related agencies through circulars j Also, school training is required to adapt from the old pattern to the new normal era.

The use of technological advances must be utilized by schools and is also based on a joint decision of 4 ministers namely the Ministry of Education and Culture, Ministry of Religion, Ministry of Health, and Ministry of Home Affairs regarding Guidance for Implementation of Learning in the Academic Year and New Academic Year also added with Learning Guide in The new normal era of the Team of Teachers and Education Personnel (Team GTK) of the Ministry of Education and Culture of the Republic of Indonesia. According to Law no. 20 of 2003 concerning National Education System Article 1 Paragraph 20 Learning is a process of interaction between students and educators and learning resources in a learning environment (Gagne, 1977).

The use of learning media using zoom media is very important to do in the implementation of learning at this time where the safety of life and public health is also very much needed, therefore so that both go hand in hand between life safety and public health, but the learning process can still be carried out by using this zoom media, where students do not need to come in droves to school which actually causes a crowd that causes the spread of covid-19 just to get a lesson but their lives and health are threatened, with this learning method using zoom media they simply stay in their respective homes but can receive learning as it should, so that what the government hopes is that public health is saved but education can also be carried out as it should.

1. Third Hypothesis

Ha: There is an effect of learning zoom media on the learning outcomes of class 8A of SMP Muhammadiyah 3 Banyuwangi in the odd semester of the 2020-2021 school year.

Ho: There is no effect of learning zoom media on the learning outcomes of class 8A of SMP Muhammadiyah 3 Banyuwangi in the odd semester of the 2020-2021 school year.

In this third test, it was concluded that there was an effect of using direct face-to-face learning media on students through zoom media together on student learning outcomes, especially bullet puts in sports and health physical education subjects. This conclusion strengthens that media-based learning technology is important, in the context of preventing transmission during the covid-19 pandemic, it can be appropriate for certain lessons that do not focus on body or physical movements and skills, but in physical education and sports subjects, especially shot put, it is not appropriate, because students are not only required to be able to master knowledge in terms of shot put but also

skills in carrying out technical movements and measurements in shot put and it is needed face-to-face contact directly in this case can only be done through face-to-face learning advance.

In mastering the skills of the students in the shot put material in the subjects of physical education, sports and health, students are more interested in learning the learning material directly face to face rather than through zoom media. The emergence of interest in learning learning materials will automatically affect the achievement and learning outcomes in shot put. Thus, the results of the simultaneous test on the third hypothesis are very logical and rational both in terms of examples and arguments that have been described by the researchers. This is to explain clearly that there is an effect of face-to-face learning and zoom media together on student learning outcomes..

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of data analysis and the discussion in the previous chapter, this research produces the following conclusions:

1. There is an effect of face-to-face learning on the learning outcomes of class 8A of SMP Muhammadiyah 3 Banyuwangi semester.
2. There is an effect of learning the use of zoom media on the learning outcomes of class 8A bullet put SMP Muhammadiyah 3 Banyuwangi.
3. There is an effect of face-to-face learning and the use of zoom media together on the learning outcomes of class 8A shooting at SMP Muhammadiyah 3 Banyuwangi

Implications of Research Results

From the conclusions of the research above, the theoretical and practical implications can be stated as follows:

1. Theoretical Implications

- a) The face-to-face learning method is a very effective way to be used to deliver skills learning materials, especially in the subjects of physical education, sports and health.
- b) The use of zoom media is very much needed in certain subjects, especially the mastery of knowledge as long as natural and human resources are adequate, so that the learning process is more practical and efficient.
- c) In order to get maximum learning outcomes, face-to-face learning is more effective than distance learning through zoom media.

2. Practical Implications

- a) The application of learning with the help of learning media should be adjusted to the conditions and learning materials that will be conveyed, this is because of the different characteristics, human resources, facilities and infrastructure
- b) Technological advances are not necessarily fully used in order to support student learning outcomes, but still pay attention to the material being taught, teacher resources, students, facilities and infrastructure owned by both schools and students

Suggestion

Based on the conclusions and implications in this study, the authors convey the following suggestions:

1. Teachers are individuals who design and control the process of teaching and learning activities in the classroom. Therefore, educators really need to innovate and be creative in the learning process considering the ability of each individual student is different with different means, educators must also be able to optimize technology for the purposes of improving the learning process.
2. The use of technological advances in supporting learning depends on the needs and conditions, not all technology can be used in order to support student learning outcomes. This research is far from perfect, so it needs to be redeveloped, but the results of this study can be used in improving the next research in order to get maximum results.

References

- Anderson, 1976. *Pemilihan dan Pengembangan Media Untuk Pembelajaran*. Jakarta. Rajawali Pres.
- Anonymous. 2014. Materi pelatihan Guru Implementasi Kurikulum 2013 Tahun Ajaran 2014/2015 Mata Pelajaran IPA SMP/MTs. Kementerian Pendidikan dan Kebudayaan.
- Anonymous. 2020. Surat Edaran Nomor 4 Tahun 2020 Tentang Pelaksanaan Kebijakan Sistem Pendidikan Di Masa Covid-19. Kementerian Pendidikan dan Kebudayaan.
- Arif, 1994. *Media Pendidikan, Pengertian, Pengembangan dan Pemanfaatannya*. Jakarta. Gramedia
- Arikunto Suharsimi, 1993. *Prosedur Penelitian Suatu Pendekatan Praktik*. Yogyakarta. Rineka Cipta
- Arsyad, 2013. *Media Pembelajaran*. Jakarta. Raja Grafindo Persada
- Asari Marinda. Y. 2017. Pengaruh Penggunaan Video Pembelajaran Terhadap Motivasi Belajar Menjahit Gaun Pada Siswa Kelas X Jurusan Tata Busana di SMK Diponegoro Yogyakarta. Yogyakarta. UNY
- Balai Pengembangan Media Pendidikan, 2017. *Video Pembelajaran IPA Materi Zat Adtif dan Zat Adiktif*. Jakarta. Kemetrian Pendidikan dan Kebudayaan.
- Briggs, Leslie J, 1997. *Instructional Design Educational Technology Publications Inc*. New Jersey. Englewood Cliffs
- Buchori. M, 1999. *Teknik – teknik Evaluasi Dalam Pendidikan*. Bandung. Jemmars
- Busyaeri Akhmad, dkk. 2016. Pengaruh Penggunaan Video Pembelajaran Terhadap Peningkatan Hasil Belajar Mapel Ipa Di Min Kroya Cirebon. *Jurnal Jurusan PGMI FITK IAIN Syekh Nurjati Cirebon*
- Dimiyati, 2006. *Dasar – dasar Evaluasi Pendidikan*. Jakarta. Bumi Aksara
- Daryanto, 2010. *Media Pembelajaran*. Yogyakarta. Gava Media
- Djaali, 2009. *Psikologi Pendidikan*. Bumi Aksara. Jakarta
- Febriani Corry. 2017. Pengaruh Media Video terhadap Motivasi Belajar dan Hasil Belajar Kognitif Pembelajaran IPA Kelas V Sekolah Dasar. Available online at: <http://journal.uny.ac.id/index.php/jpe>
- Hamalik. O, 1994. *Proses Belajar Mengajar*. Jakarta. Bumi Aksara
- Margono, S. 1997. *Metodologi Penelitian Pendidikan*. Jakarta: Rineka Cipta.
- Mulyono Joko. 2016. Pengaruh Pembelajaran Menggunakan Media Berbasis Video Tutorial Terhadap Motivasi Belajar Dan Hasil Belajar Seni Budaya Kelas VII SMP Negeri 4 Genteng Semester Ganjil Tahun Pelajaran 2015-2016. *Jember. IKIP PGRI Jember*
- Munadi Yudhi. 2008. *Media Pembelajaran*. Jakarta. GP Pres Group
- Mustaqim. 2001. *Psikologi Pendidikan*. Semarang. Pustaka Pelajar
- Ngalim, 2009. *Admistrasi dan Supervisi Pendidikan*. Jakarta. Remadja Karya
- Noor, 2011. *Metodologi Penelitian*. Jakarta. Kencana Prenada
- Purwanto, 2007. *Evaluasi Hasil Belajar*, Yogyakarta. Pustaka Belajar.
- Pramesti Getut, 2016. *Statiska Lengkap Secara Teori dan Aplaksi Dengan SPSS 23*. Jakarta: Elex Media Komputindo

- Rusman. 2014. Model-model Pembelajaran: Mengembangkan profesionalisme Guru. Jakarta: Raja Grafindo Persada
- Rustaman. N, 2003. Strategi Belajar Mengajar Biologi. Bandung. FPMIPA UPI
- Sardiman, 1988. Interaksi dan Motivasi Belajar Mengajar. Jakarta. Raja Grafindo Persada
- Semiawan Cony, 1998. Pendekatan Ketrampilan Proses. Jakarta. Gramedia
- Sugiyono, 2014. Metode Penelitian Kuantitatif, Kualitatif dan RD. Jakarta. Alfabeta
- Sudjana, 2009. Penilaian Hasil Proses Belajar Mengajar. Bandung. Remaja Rosdakarya
- Suleiman, 1985. Media Audio-Visual Untuk Pengajaran, Penerangan dan Penyuluhan. Jakarta: PT Gramedia.
- Sumiharsono Rudy., Ariyanto Dedy. 2017. Metodologi Penelitian. Jember: Pustaka Abadi
- Slameto. 1998. Belajar dan Faktor-faktor yang Mempengaruhinya. Jakarta. Bina Aksara
- Usman, 1998. Teori, Riset dan Praktik Pendidikan. Jakarta. Bumi Aksara
- Utami Fatimah. 2015. Ilmu Pengetahuan Alam Kelas VIII. Klaten. CV Aviva
- Vuspa Licia. S. 2017. Pengaruh Media Pembelajaran Video Terhadap Motivasi Belajar Siswa Pada Mata Pelajaran Fikih di MTS Patra Mandiri Plaju Palembang. Palembang. UIN Palembang