THE EFFECTIVENESS OF LEARNING VIDEOS ON INFORMATION PROCESSING IN MOSLEM STUDENTS

Muhammad Zulkifli Hariman[1], Raden Ayu Ria Ananda Sari[2], Rani Destari[3], Riska Trilia Utami[4]
Universitas Islam Negeri Raden Fatah Palembang[1-4]
Corresponding email: muhammadzulkiplihariman@gmail.com

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ABSTRACT

This study aims to determine the effectiveness of audio-visual learning on information processing abilities in moslem students. The existence of this research is because there are still many students who have difficulty understanding learning material. The hypothesis put forward is that there is an effect on the effectiveness of learning videos on the information processing abilities of moslem students. The research method used is One Group Pretest-Posttest Design. The subjects in this study were 30 moslem students. Data collection techniques using a questionnaire designed with a scale.

Introduction

Today there are many changes in the dimensions of people's lives, one of which is the advancement of information and communication technology. The application of technology in education is increasingly complex and modern. In keeping with the times, learning methods are now widely using e-learning media and other creative learning methods. This aims to make it easier for students to digest and also process the information conveyed by the teacher or lecturer. Gagne (1985) in information processing theory (information processing theory) argues that in learning there is a process of receiving information and then processing it so as to produce output in the form of learning outcomes.

In carrying out learning activities, a lot of updates are needed regarding learning models and styles, not only by using the lecture method that is usually used. Learning style is a way that is owned by individuals in capturing, organizing, and processing the information obtained. By realizing this, students can absorb and process information easily according to their individual learning styles.There are three modalities (types) in learning styles, namely visual, auditory, and kinesthetic (Deporter & Hernacki, 2000). However, this research only examines audio-visual through learning videos.According to Gresna Ayu (2016: 37-38) "Audio Visual Media is an intermediary in the use of material to absorb information through sight and hearing so as to build a condition that can enable students to gain knowledge, skills, or attitudes."

Learning media through video has a function, namely the function of attention, affective function, cognitive function and compensatory function (Arsyad 2003).

a.   Attentional function, namely video media attracts the attention and focus of the audience's concentration on the video material.

b.   The affective function, namely video media is able to build the emotions and attitudes of the audience.

c.   Cognitive function, which is related to a person's cognitive function in understanding and remembering messages or information contained in images or symbols.

d.   Meanwhile, the compensatory function is to help improve the audience's thinking which is weak in organizing and recalling the information obtained.

So it can be concluded that learning videos are a medium that is used to make it easier for students to understand the intent or information conveyed by the lecturer.

This research was conducted because it paid attention to the high level of students who had started to feel bored with the lecture learning style. Using audio-visual learning media is expected to be a new motivation and enthusiasm for students and students in learning and understanding the subject matter. This research will also focus on studying efficient video media so that it can further increase students' understanding and knowledge. There are many studies that prove the function of applying video in education. Video has become an important component of the world of higher education. Several studies state that technology can improve learning functions, and several specific studies have proven that video can be a very effective learning instrument in education (Kay, 2012; Schmid et al, 2014; Moore & Smith, 2012; Lloyd & Robertson, 2012; Rackaway, 2012; Hsin&Cigas, 2013).

The results of research conducted by Zitun and Aan Nopianah (2015) prove that there is no relationship between students' motivation in learning English and their attitudes towards learning through Quipper School videos. However, in research conducted by Bondan Gayuh Almuazam (2017), it was found that learning outcomes using learning video media were better and more effective than learning outcomes using module books for class VI MI Diponegoro 03 Karangklesem. Likewise with research conducted by Andi Basniati et al (2020) which shows that there is an effect of multimedia video learning on changes in knowledge, attitudes and behavior of menstrual hygiene in young women. So from the explanation above.

Method

This type of research uses experimental methods withtype One Group Pretest-Posttest Design. The design of the research method consists of samples that will be tested twice, namely the initial test (pre-test) and the final test (posttest).Ascase study, the researcher gave treatment using video learning in personality psychology courses. The data analysis method used is paired sample t-test (hypothesis test to see the effect of the independent variable, namely X, on the dependent variable Y).

Table 1 Experimental Design

Group A 01 ----- X ----- 02

Information

Group A	: Experiment Group
01	: Pretest
-----X-----	: Intervention / Treatment
02	: Posttest

The population in this study were moslem students who had difficulty understanding learning material, with a number of subjects30 people.The sample technique used is purposive sampling (Cozby & Bates, 2015).The criteria for the subject of this study are (a) are active moslem students, (b) students in semesters 1-5, (c) have difficulty understanding learning material. Methods of data collection using a questionnaire designed with a scale. The scale is a psychological measurement tool in the form of a collection of attitude statements arranged according to the aspects and variables so that a person's response in the statement can be scored and defined (Azwar, 2011). The scale used in this study is a learning scale based on Bruner's theory.

The variables in this study are divided into two variables, namely as follows

Independent variable (Vx)	: Learning videos
Dependent variable (Vy)	: Information processing

Table 2. Research Variables

Vx (Learning Video) >>>>> Vy (Information Processing)

From previous research the Audio-Visual Media Scale consisted of 18 items with an alpha coefficient of 0.780. This scale is in the form of statements that are unfavorable and favorable which range from numbers 1 to 4. Favorable statements for Strongly Agree (SS) answers are given a score of 4, Agree (S) score 3, Disagree (TS) score 2, and Strongly Disagree Agree (STS) is worth 1. For unfavorable statements, answers from items that show Strongly Agree (SS) are given a score of 1, Agree (S) score 2, Disagree (TS) score 3 and Strongly Disagree (STS) score 4. Where In analyzing the research data, it was assisted by the SPSS (Statistical Package Social Science) application Version 22 for windows.

Results and Discussion
Results

The results of the research conducted obtained mean -9,933 and standard deviation of 7,561 with a minimum score of 36 and a maximum of 62. The measurement uses 3 categories namely low, medium and high. The category is determined based on the subject's

total score as measured using an information processing instrument. The following is a table that contains score information, namely:

Table 3. Descriptive Statistics

			Paired Samples Test						
			Paired Differences						
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pretest - posttest	-9.933	7.561	1.380	-12.757	-7.110	-7.196	29	.000

It can be seen in table 3, namely the parametric statistical analysis of the Paired Sample T-Test, which produces a t test value with a sig = 0.000, which is less than α 0.05. Thus it can be proven that there is an increase in information processing before and after intervention or treatment is carried out and can be declared acceptable.

Table 4. Data Categorization

			Kategori		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rendah	1	3.3	3.3	3.3
	Sedang	26	86.7	86.7	90.0
	Tinggi	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Table 5. Score Increase

SUBJECT	PRETEST	CATEGORY	POSTTEST	CATEGORY	INCREASE
X1	58	Currently	72	Tall	14
X2	54	Currently	60	Tall	6
X3	58	Currently	77	Tall	19
X4	51	Currently	78	Tall	27
X5	60	Tall	64	Tall	4
X6	59	Currently	63	Tall	4
X7	57	Currently	62	Tall	5
X8	55	Currently	73	Tall	18
X9	55	Currently	69	Tall	14
X10	53	Currently	75	Tall	22
X11	54	Currently	62	Tall	8
X12	51	Currently	58	Currently	7
X13	56	Currently	62	Tall	6
X14	59	Currently	59	Currently	-
X15	56	Currently	59	Currently	3

X16	49	Currently	77	Tall	28
X17	58	Currently	71	Tall	13
X18	54	Currently	66	Tall	12
X19	62	Tall	67	Tall	5
X20	53	Currently	58	Currently	5
X21	55	Currently	61	Tall	6
X22	61	Tall	62	Tall	1
X23	58	Currently	68	Tall	10
X24	55	Currently	61	Tall	6
X25	53	Currently	62	Tall	9
X26	56	Currently	61	Tall	5
X27	57	Currently	65	Tall	8
X28	59	Currently	66	Tall	7
X29	36	Low	59	Currently	23
X30	54	Currently	57	Currently	3

Table 6. Descriptive Analysis

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	55.20	30	4.730	.864
	posttest	65.13	30	6.241	1.139

Based on the results of the descriptive analysis above, the average value of the pretest was 55.20 and the posttest was 65.13. It can be seen that there is an increase in information processing after receiving intervention or treatment by watching a learning video about "Psychology of Personality". Thus, it can be concluded that the learning videos presented have a significant effect on information processing.

Discussion

The results of the research conducted proved that learning videos greatly influence the information processing of moslem students. Through the data collected, it can also be seen that there is a significant difference in scores between the pretest and posttest. Based on this and based on the analysis of the data presented previously, the researchers concluded that learning video research could improve information processing for students who experience weakness in understanding the material. According to Arif (2017) this is because learning videos are media that really help facilitate the absorption of information. Where student enthusiasm also increases because of explanations that include animation (pictures) and sound so students don't feel bored during the learning process.

The advantages of learning videos according to Busyaeri et al., (2016) are overcoming distance and time problems, being able to depict past events realistically in a

short time, and developing imagination. Meanwhile, according to Busyaeri et al., (2016), the lack of video learning is that this media costs a lot, emphasizes more on the material than the development process, the broadcast is also related to equipment and technology such as: video player, LCD, etc. The benefits of self-learning videos are that they can clarify the presentation of information thereby increasing student learning outcomes and directing students' attention so as to generate high learning motivation. Kustandi (2013:23).

Based onresearch conducted by Busyaeri et al., (2016) entitled "The Effect of Using Learning Videos on Increasing Learning Outcomes in Subject Science at Min Kroya Cirebon". Student learning outcomes using learning videos on the material of the human digestive system in class VA MIN Kroya Panguragan Cirebon for 27 respondents who were used as research samples, it turned out that the average learning outcomes reached 80.63. So that there are many students who strongly agree that learning the human digestive system is done using learning videos. Useful learning videos make the message conveyed more interesting. In the process of learning attention is important because it can lead to stimulation and motivation to learn so as to make students concentrate and help students' memory (Yulisa, et al.

In 1960, Edgar Dale believed that the use of films could support the learning process, because the use of abstract symbols and ideas could be more easily understood by students. Based on Dale's cone of experience he argues that the use of the sense of sight affects as much as 75%, the sense of hearing 13% and the other senses as much as 12%. According to Dale, students can add an increase of 30% from what they usually receive, if given learning using films/videos. So Dale's theory is used to classify children's learning experiences starting from the most concrete things to the things that are considered the most abstract. (Vuspa, 2017).

Edgar Dale's cone of experience in Nasurllah, et al (2021) there are twelve levels of learning experience using media as follows: 1) Direct Purposeful Experiences: namely experiences that are obtained intentionally/directly, 2) Contrived Experiences, experiences that are obtained through objects /visualization/contrived, 3) Dramatized Experiences, experiences gained through dramatic participation, 4) Demonstrations/shows. 5) field trips or Study Trips, 6) Exhibition, experience gained through exhibitions. 7) experiences from educational TV, 8) moving pictures/motion pictures, 9) still pictures/still pictures, slides, photography, 10) radio broadcasts and sound recordings, 11) visual symbols/ graphics, charts, diagrams, 12. Usually with the lecture method and independent reading. So, it can be concluded that Edgar Dale's cone of experience theory is a form of individual effort in utilizing media as a tool in learning. Starting from the most concrete things to the most abstract, in order to increase the effectiveness of teaching and learning.

Conclusion

In learning activities, lecturers and students are in the process of communicating and delivering information. But in fact the process of conveying this information is only in the

form of verbal communication. The weakness of this form of verbal communication is that it is sometimes difficult for students to interpret what is conveyed by the lecturer due to internal and external factors. These disturbances are called barriers or noise. In overcoming these obstacles need to be assisted with visual media or audio-visual media. Because students will better understand what is conveyed through examples of learning videos that will focus students' attention so that they are better able to process the information conveyed by lecturers/teachers.

Another advantage is that it is easy to repeat videos (replay) and present structured information, so that it can improve students' ability to understand a concept. In addition, the video is also considered fun and can increase student learning motivation, because it does not make students feel bored in learning. This makes video media an effective medium to use in the classroom, especially for elementary school students who need a lot of external motivational support. Video media can also meet the needs of all students who have different learning characteristics (audio, visual, or audio-visual), can present events that students cannot experience outside of school, such as seeing the occurrence of floods, earthquakes, tsunamis, etc.

References

Almuazam, Bondan Gayuh. (2017). The Effectiveness of the Use of Learning Video Media "Rifan Anak Merdeka" on Javanese Language Learning Outcomes Class VI MI Diponegoro 03 Karangklesem. Thesis

Arif Yudianto. (2017). APPLICATION OF VIDEO AS LEARNING MEDIA. In the National Education Seminar.Https://Eprints.Ummi.Ac.Id/354/3/33.%20PEPEPAPAN%20VIDEO%20SEBAGAI%20MEDIA%20PEMBELAJARAN.Pdf

Arylienludjibire, Udageradus, &Josuabire. (2014). THE INFLUENCE OF VISUAL, AUDITORIAL AND KINESTHETIC LEARNING STYLES ON STUDENTS' LEARNING ACHIEVEMENT. Journal of education, 44(2).Https://Doi.Org/10.21831/Jk.V44i2.5307

Come on, Gresna. 2016. PAUD Learning Media, Surakarta: Banua Partners.

Azhar, Arshad. (2003). Instructional Media. Jakarta : PT Raja Grafindo Persada.

Azwar, S. (2011). Preparation of the Psychological Scale. Yogyakarta: Student Libraries

Basniati, Andi ; DKK. (2020). The Influence of Video Learning Multimedia on Knowledge, Attitudes and Behavior of Menstrual Hygiene in Young Women. Oxytocin: Scientific Journal of Obstetrics, Vol. 7, No. 2.

Busyaeri, A., Udin, T., & Zaenudin, A. (2016). The Effect of Using Learning Videos on Increasing Learning Outcomes in Mapel Ipa at Min Kroya Cirebon. Al Ibtida: MI Journal of Teacher Education, 3(1), 116–137.Https://Doi.Org/10.24235/Al.Ibtida.Snj.V3i1.584

Cozby, PC, & Bates, SC (2015). Methods in Behavioral Research (11th ed.). New York, NY: McGraw-Hill.

Deporter, Bobbi ; Hernacki, Mike. (2005). Quantum Learning: Getting used to comfortable and fun learning. Bandung: Kaifa.

Gagne, Ellen, D. 1985. The Cognitive Psychology of School Learning. Boston: Little, Brown & Company.

Kholiqin, K., Yuliana, D., & Jaya, F. (2022). The Influence of Learning Videos on the Enthusiasm of Grade X Tkj Students in Simulation and Digital Communication Subjects at Asembagus Khamas Vocational High School. Edusaintek: Journal of Education, Science and Technology, 9(1), 202–214.Https://Doi.Org/10.47668/Edusaintek.V9i1.242

Kustandi and Sutjipto. (2013). Second Edition Manual and Digital Learning Media. Bogor: Ghalia Indonesia.

Nasurllah, M., Adib, H., & Syafrawi, MS (2021). Dale's Theory and Bruner's Theory (Media Analysis in Wayang Santri Ki Enthus Susmono Performance). Al-Ulum Journal of Islamic Thought and Research, 8(2), 225-238.

Nopianah, Aan ; Zitun. (2015). The Correlation Between Students' English Learning Motivation and Their Attitudes toward Quipper School. Technodik Journal Vol. 19, No. 3.

Rambe, MS, & Yarni, N. (2019). The Influence of Visual, Auditorial, and Kinesthetic Learning Styles on Student Achievement of SMA Dian Andalas Padang. Journal of Education and Teaching Review, 2(2), 291–296.Https://Doi.Org/10.31004/Jrpp.V2i2.486

Susanti, E., Treasure, R., Karyana, A., & Halimah, M. (2018). Designing Effective Learning Videos in Distance Education: Studies at the Open University. Journal of Education and Culture, 3(2), 167–185.Https://Doi.Org/10.24832/Jpnk.V3i2.929

VUSPA, LICIA SIN. (2017). The Influence of Video Learning Media on Students' Learning Motivation in Fiqh Subjects at Mts Patra Mandiri Plaju Palembang. [THESIS] - Eprint of UIN Raden Fatah Palembang. Radenfatah.Ac.Id.Https://Doi.Org/Http://Eprints.Radenfatah.Ac.Id/936/1/LICIA%20 SIN%20VUSPA%20%2812210122%29.Pdf

YENI, Y. (2021). The Effect of Make A Match Cooperative Learning Model Assisted by Video Learning on Understanding Mathematical Concepts in View of Student Learning Motivation - Raden Intan Repository. Radenintan.Ac.Id.Https://Doi.Org/Http://Repository.Radenintan.Ac.Id/13182/1/CO VER%2CBAB1%2C2%20DAPUS%20%20%20%20YENI%20YULIANA.Pdf

Yuliana, D., & Aminullah, NF (2020). The Effect of Youtube Video Media on Students' Motivation and Learning Outcomes in Class Xi Digital Simulation at State Vocational School 1 Suboh. Journal of Education and Entrepreneurship, 8(1), 37–53.https://doi.org/10.47668/pkwu.v8i1.61

Yulisa, Y., Hakim, L., & Lia, L. (2020). The Influence of Physics Learning Videos on Junior High School Students' Concept Understanding. Luminous Journal: Scientific Research in Physics Education, 1(1), 37.https://Doi.Org/10.31851/Luminous.V1i1.3445

Yunita, D., & Wijayanti, A. (2017). The Effect of Learning Video Media on Science Learning Outcomes in View of Student Activity. SOSIOHUMANIORA: Scientific Journal of Social Sciences and Humanities, 3(2), 153–160.Https://Doi.Org/10.30738/Sosio.V3i2.1614